

## General Information

Fresno City College is a college of the State Center Community College District.

| Address | 1101 E. University Avenue <br> 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 2016-2017 Catalog may also be viewed online at: www.fresnocitycollege.edu under Courses and Programs.
Frequently Called Numbers(Area Code 559)
Main Switchboard. ..... 442-4600
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
Athletic Office. ..... 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. ..... 442-8260
Financial Aid ..... 442-8245
Fire Academy ..... 265-5778
Foundation ..... 324-6484
Health Services ..... 442-8268
Honors Program ..... 442-8281
Humanities Division Office ..... 442-8281
International Students ..... 443-8569
Library, Circulation ..... 442-8204
Library, Reference ..... ext. 8764
Mathematics, Science \& Engineering Division Office. ..... 442-8215
Police Academy ..... 442-8277
Public Information Office ..... 489-2218
Records Office ..... ext. 8604
Registration. ..... 442-8228
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 ..... $.324-6467$
Transcripts. ..... ext. 8661
Tutorial Center ..... 442-8209
Veterans Office ..... 442-8224
Catalog StaffDon Lopez .............................................Interim Vice President of Instruction
Cris Monahan Bremer Director of Marketingand Communications

# Fresno City College 2016-2017 Catalog 



## A Public California Community College



## 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 2016 semester and ends with the Summer 2017 session, unless otherwise amended. The college reserves the right to adjust conditions of enrollment, class offerings, and services rendered as dictated by the limits of institutional resources and enrollment conditions.

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

Reference copies of the catalog are available in the Library, Counseling Center, Admissions and Records Office, online, and in the offices of the deans of instruction and educational advisors. Students are encouraged to purchase and use their own copy of the catalog. Personal copies are for sale in the Fresno City College Bookstore.

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

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## INTRODUCTION

Fresno City College is a college of the State Center Community College District, which operates within the broader mission of California's 113 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

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

## Fresno City College Vision Statement

Fresno City College will be a national leader in educational programs, support services, and community partnerships.

## Fresno City College Core Values

## Excellence:

We champion quality while encouraging individuals to share and explore new avenues toward advancing the college's mission and vision.

## Collaboration:

We are dedicated to active involvement on our campus and in our community, developing partnerships and avenues of greater participation.

## Diversity:

We are committed to diversity through respect and celebration of individual differences.

## Professionalism:

We communicate and work together in an ethical, collegial manner in a supportive environment.

## Stewardship:

We are accountable to our community for the responsible use of our resources.

## Fresno City College Ethics Statement

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

Fairness: In our relationships with each other, we will be fair and just in our decisions and actions by carefully weighing the circumstances in an equitable manner.

Civility: We adhere to standard conventions of civility and regard of others. We achieve an open working and learning environment when each community member feels secure enough to participate in the free exchange of ideas. We ensure an honest and supportive climate which serves the interests of the institution and protects the well-being of all individuals.

Integrity: In order to support excellence in learning, we will act in the college's best interests. As a community dedicated to providing education, we demonstrate professional integrity and exemplary behavior in all that we do.

Respect: We demonstrate a high regard for the rights, diverse opinions, and life styles of all community members. It is our responsibility to establish a climate of mutual respect to protect the rights and freedoms of others.

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

Adapted from Humber College Etbics 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 "0" 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 " 0 " Street campus, which it shared with Fresno Technical High School. By 1950, the technical high school program had been phased out and the district began looking for another campus. The junior college district completed negotiations for the purchase of the University Avenue site from Fresno State College, and by 1956 Fresno Junior College had moved to its current location on University Avenue. The name was changed to Fresno City College on May 11, 1958.

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

## The District

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

## Student Right-to-Know and Campus Security Act

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

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

Completion Rate: 15.49\%
Transfer Rate: 10.84\%
Annual reports of criminal activity on campus and procedures for prevention of campus crime, as required by the Crime Awareness and Campus Security Act of 1991, are available, on request, from the district Police Department.

## ACADEMIC CALENDAR

## Fall Semester 2016



April 10-14. $\qquad$ Spring recess
(Classes reconvene April 17)
May 15-19. $\qquad$ Final examinations
May 19 $\qquad$ .End of Spring Semester 2017
May 19 . $\qquad$ Graduation exercises

## Summer Semester 2017

Fresno City College will conduct four sessions:
(subject to change)

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

May 22 $\qquad$ .Instruction begins for 4- and 10 -week classes

May 29 $\qquad$ Memorial Day Holiday (Campus Closed) June 12 $\qquad$ Instruction begins for 8 -week classes June 16 ...........................Final examinations and end of 4 -week classes June 19 $\qquad$ Instruction begins for 6 -week classes
July 4. $\qquad$ Independence Day Holiday
(Campus Closed)
July 28. $\qquad$ Final examinations; end of 6 -week, \& 10 -week classes
August 8 . $\qquad$ End of 8-week classes August 8. $\qquad$ Last day for degree and certificate of achievement candidates to file application for August 2017 completion date

## ADMISSION AND REGISTRATION

## Admission of Students

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

## Who Needs to Apply?

If you have never attended (first time college or transfer student) a college or center within the State Center Community College District (SCCCD); If you previously attended (returning student) a college or center within SCCCD and have been away for two or more semesters; Current high school junior or senior (bigh school enrichment) who wishes to enroll in college courses, must complete a SCCCD application each semester as well as the required Enrichment program application for the campus or center s/he would like to attend.

## General Admission

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

## High School Enrichment Admission

Current high school juniors and seniors may be admitted to the college through the Community College High School Enrichment Program. Information regarding the Enrichment program can be obtained from your high school counselor or contact the College Relations office at (559) 442-8225 for details.

In addition to the fall and spring semesters, high school students are eligible to participate in the Enrichment program for the summer session prior to their junior year and between their junior and senior years.

High school enrichment students must apply for each semester s/he is planning to enroll in college courses.

## International Admission

A person must be 18 years of age or older. Upon completion of the SCCCD admission application, official documents (i.e., evidence of financial responsibility, TOEFL scores, health insurance verification, tuberculosis test results and current measles immunization) and detailed secondary and post-secondary transcripts of record are to be submitted to the International Students office for admission consideration no later than:

- May 15 for Fall admission
- December 15 for Spring admission

A minimum score of 500 on the Test of English as a Foreign Language (TOEFL) is required for admission. TOEFL scores below 500 may be approved be approved by special action. Each student must maintain 12 units or more and successfully complete an English course each semester at Fresno City College until graduation requirements have been met for program completion or for transfer purposes.

An applicant is not officially admitted to the college until written notification is sent by the International Students Office. When the student arrives at Fresno City College, s/he is to report immediately to the International Students Office. If purchases health insurance through the college, payments must be initiated at the International Students Office, Student Services Building, lower level.

## Provisional Admission

A person who is 18 years of age or older and is not a high school graduate may enroll as a provision student for 12 semester or more for one semester, with the stipulation that in order to enroll for subsequent semesters as a full-time student, $\mathrm{s} / \mathrm{he}$ must earn a 1.75 GPA in the units attempted. This regulation does not apply to part-time students.


Yog koj xav paub txog kev pab caum rau kev kawn natwv (Matriculation), thov mus cuag tau Counseling Department.

Si necesita información en español para su matriculación a la universidad comunal, favor de ponerse en contacto con el Departamento de Consejeros.

## Returning Student Admission

A person who previously attended any college or center within SCCCD and has been absent for two or more primary (fall and spring) semesters must complete an admission application for the semester s/he is 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

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

## Summary of Admission Requirements

Any person who intends to obtain a degree or certificate of achievement at Fresno City College or plans to transfer to a four-year college or university shall be required to:

- Complete a SCCCD Admission Application prior to the deadline as specified in the catalog, if applicable.
- Request the last high school attended, if attendance was within the last two years, to send an official transcript of work completed.
- Request each college of attendance to send a complete official transcript of work attempted whether or not credit was earned.
Transcripts should be sent directly to:

> Fresno City College
> Admissions and Records
> 1101 E University Avenue
> Fresno, CA 93741-0001

- Provide GED scores or copy of the CHSPE Certificate to the Admissions and Records office, if taken in the last two years.


## Residency

By law, every student must file a statement declaring his/ her 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

Residence Office, room 111, Student Services Building, lower level. (California Education Code 76160 Rev. 83).

It is recommended that all students whose legal residence is outside of the State Center Community College District have a health and accident insurance policy while attending Fresno City College. If the student does not have health and accident insurance, he/she may sign up and pay for such a policy in the office of the Vice President of Students.

## In-State

Students who have established residency in California for at least one year and one day prior to the beginning of the term in which they enroll.

## Out-of-State/International

Students who have not resided in California for at least one year and one day prior to the beginning of the term in which they enroll.

## Exemption from Nonresident Tuition (AB-540)

Any student, other than a non-immigrant alien, who meets all of the following requirements, shall be exempt from paying nonresident tuition at all public colleges and universities in California:

- Requirements:

0 The student must have attended a high school (public or private) in California for three or more years;
0 The student must have graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED or California High School Proficiency Exam or receive a completion certificate);
0 An alien student who is without lawful immigration status must file an affidavit with the college or university stating that he or she has filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.

- Students who are non-immigrants [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 non-resident may be reclassified as of any residence determination date. A residence determination date is the day immediately preceding the opening day of instruction for any primary semester (fall / spring) or summer session during which the student proposes to attend.

A student 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 non-resident tuition refund after the date of the first census.

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

A student shall be considered financially independent for purposes of residence reclassification if the applicant meets all of the following requirements:

- Has not and will not be claimed as an exemption for state and federal tax purposes by his or her parent in the calendar year prior to the year the reclassification application is made;
- Has not lived and will not live for more than six weeks in the home of his or her parent during the calendar year the reclassification application is made.
A student who has established financial independence may be reclassified as a resident if the student has met the requirements of Title 5 Sections 54020, 54022 and 54024.

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

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

## Appeal Procedure

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

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

## Matriculation

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

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

As a partner in the success of students, and in alignment with the campus matriculation plan, the college will provide the following:

- An admission process
- An assessment of basic educational skills and career goals
- Orientation to college programs, services and procedures
- Counseling to develop a Student Educational Plan
- Counseling on related to student progress with referral to support services as necessary
As a partner in their success, students agree to:
- Complete the placement test and assessment process
- Declare a specific educational objective within a reasonable period of enrollment
- Participate in orientation session
- Participate in counseling-related activities develop and refine a Student Educational Plan


## Matriculation Checklist

 (Steps to Success)
## - APPLICATION/ADMISSION

I have completed and submitted a Fresno City College application.

## - FINANCIAL AID (optional)

I have completed and submitted the FAFSA (Free Application for Federal Student Aid).

## - ORIENTATION

I have completed the new student orientation offered by Fresno City College.

## ASSESSMENT (Placement Test)

I have completed the appropriate assessment tests:

- English Reading/Writing
- English as a Second Language (ESL)
- Mathematics (basic math, algebra, or college level math)


## - COUNSELING and ADVISEMENT

I have met with a counselor for class selection, advising, and the development of a Student Educational Plan (SEP)

## - REGISTRATION

I have registered in classes through one of the registration processes: WebAdvisor, counter registration, or Registration-To-Go.

## - FOLLOW-UP

I have met with a counselor to discuss academic progress, certificates, degrees, majors and/or revise, or complete a Student Educational Plan.

## 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.

## Assessment

Student may be exempt from taking the English and/ or Math placement tests for the following reasons:

- Earned a score of 3 or higher on the Advanced Placement English test or Advanced Placement Calculus test
- Earned a grade of C or higher in high school Algebra 1 course or higher course within the past 2 years
- Earned College Readiness for English or Math on the Early Assessment Program (EAP) test
- Completed an English and/or Math course at another college/university


## Orientation

New students are required to participate in orientation. Students may be exempt from orientation for any of the following reasons:

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


## Counseling/Advising

All students are encouraged to receive counseling/advising services. Students who wish to waive their right to receive counseling services should contact the Counseling Department for information on this process.

## Advising

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

## Assessment

It is highly recommended that students planning to take an English class, a math class or a class that has an English or math prerequisite take an English/math placement test prior to registration if they have not met the class prerequisite by other means. This test is administered at the Assessment Center.

A schedule of testing times and dates is established each month. For test dates, times, and location look online at: www.fresnocitycollege.edu/index.aspx?page $=338$ or call the Assessment hotline at 442-8280.

Test scores are used for counseling purposes and to assist with correctly advising students on class placement. These tests are not entrance examinations, and the results will not prevent any prospective student from admission to the college or from enrolling in any course. If possible, the placement tests should be completed well before registering for classes so that a counselor can advise the student on the appropriate classes to take.

After a student takes the placement test, he/she can discuss the test results and the assessment survey with a counselor. If the student thinks the assessment results do not reflect his/ her true ability, he/she may discuss this with the counselor. A student may decide to retake the test or make a course selection based on the total assessment with the counselor.

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

Students who plan to transfer to a baccalaureate institution prior to the completion of 60 transferable units at Fresno City College are encouraged to take the ACT (American College Test) or the SAT (Scholastic Aptitude
Test) of the college board.
No placement examination is required as a condition for admission to the college. However, see page 14 for information about placement in English and math classes. Students who are unsure of their academic or vocational goals are encouraged to:

1. Go to the Career Center for assistance with career planning. This center offers a series of assessments that include:
True Colors personality exploration

- DISCOVER interest, ability and values inventories
- EUREKA Micro Skills
- Strong Interest Inventory
- Meyers-Briggs Type Indicator

Note: Assessments are offered as components of a selfpaced, individualized career planning process that involves 4-5 sessions in the Career Center, 2nd Floor, Student Services Building in Counseling.
2. See a counselor.
3. Take Counseling 48, Career Planning.
4. Take the placement test for Math and English. Contact the Assessment Center at 442-8280 for further information.

## 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 beginning 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.

| Tier | Groups | Requirements |
| :---: | :---: | :---: |
| 1 | Legally Mandated: Active Military/Neterans, CalWorks, Disabled Student Programs and Services (DSPS), Foster Youth and Former Foster Youth (exempt of academic standards and exceeding 90 units), and Extended Opportunity Programs and Services (EOPS). | - Fully Matriculated <br> - Good academic standing <br> - Do not exceed 90 SCCCD degree applicable units |
| 2 | Students entering last semester for completion of degree, certificate, or transfer: One-time appeal. | Appeal reviewed and approved by a counselor. |
|  | District approved groups per AR 5055: ASG, Athletes, DSPS Note Takers, Future Nurses, Honors, Middle College High School Students, ROTC, \& TRI0 | - Good academic standing <br> - First-time students must be fully matriculated |
| 3 | Continuing students, who have completed a Student Educational Plan (SEP). Beginning Summer/Fall 2016, registration priority will require continuing students to be Fully Matriculated. Based on quality points. | Do not exceed 90 SCCCD degree applicable units |
| 4 | First-time College students | Fully matriculated |
| 5 | Continuing students without Student Educational Plans. Based on quality points. | - Good academic standing. <br> - Do not exceed 90 SCCCD degree applicable units |
| 6 | First-time students not fully matriculated and College Advancement Program. |  |
| 7 | Open Enrollment. Including returning students, transfer students, high school enrichment students, students not in good academic standing or exceeding 90 SCCCD degree applicable units. |  |

## Requirement Definitions:

Fully Matriculated = A student who completes the assessment/placement test, an educational plan (SEP) and college orientation.
Good Academic Standing $=A$ student who is not on academic or progress probation for two consecutive terms. 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.
90 Degree Applicable Units $=$ Based on units earned at all colleges and centers within SCCCD. Excludes units earned from basic skills and special courses.

## Class Schedule Change

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

## Concurrent College Enrollment

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

## Dropping (Withdrawal from) a class or Withdrawing from College

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

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

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

## ${ }^{*}$ Fees are subject to change without notice.

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

Students may drop his/herself using WebAdvisor, provided there are no monetary holds and the student is in GOOD standing, or in person at any college or center Admissions and Records office, or can request to be dropped (withdrawn) by mailing or faxing a signed letter to the college. The letter must be received, by the Admissions and Records office prior to the final drop date of the semester. The mailing address and fax number are available at www.fresnocitycollege/For Students/ Admissions and Records website.

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

## Holds on Records and Registration

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

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

When students have cleared their financial obligations, the "monetary hold" will be removed.

## Intra-District Transfer

Fresno City College students who plan on attending or transferring to a college or center within SCCCD for the ensuing semester will receive the same registration service and priority as currently enrolled students. It is advised that any cross enrolled or transfer student see a counselor.

## Registration Substitutes (Proxy Registration)

The Family Education Rights and Privacy Act (FERPA) makes it illegal for the college to release a student's confidential educational records to anyone without express written permission of the student. If the student is unable to register at his/ her 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 remain on a "WAIT LIST" for a section of a course that will cause a time conflict with a course section already enrolled. Students will be dropped from their wait list.
7. Students cannot be placed on a "WAIT LIST" for a section of a course when already enrolled in another section of that same course.
8. Students should not be on more than one "WAIT LIST" for the same course.
9. 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 be moved into the class and notified by email of the action.
10. 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.
11. 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.

## Student Fees

## Enrollment Fee*

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

## Nonresident and International Tuition

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

## Regular and Summer Sessions

Each full unit taken:
International Student Tuition ........................ $\$ 235^{* *}$
nonresident Student Tuition. $\qquad$ \$235**
Plus enrollment Fee per unit . $46_{6 * *}$
** 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), or 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 Students Office, Student Services Building, room 108.

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

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

[^0]All courses taught at Fresno City College may be offered for either Pass/No Pass or traditional grades, at the discretion of the administration.

## Instructional Materials Fees*

In accordance with Education Codes (E.C. 73365, 81457, 81458, 5CC 59400-59408), Fresno City College may require students to provide materials that are course-related, including, but not limited to, textbooks, tools, equipment and clothing. Such materials will be required if:

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

## Health Fee*

All on-campus students are required to pay a $\$ 19$ health fee for each semester (fall and spring terms) and a $\$ 16$ health fee for the summer session. Off-campus students are required to pay a $\$ 11$ health fee for each term (fall, spring and summer). For students enrolled in both on campus and off-campus sites the health fee is charged at the on-campus rate. Effective Fall 2006, on-campus sites will include Fresno City College, Reedley College, Clovis Community College, and Madera Community College Center. (E.C. 76355).

## Parking Fee*

Student vehicles must display a State Center Community College District parking permit to park in campus parking lots. Parking permits may be purchased at the FCC Bookstore or the College Business Office. The fee for parking on approved parking facilities is $\$ 25$ per semester; summer semester is $\$ 10$. One-day permits may be purchased at walk- and drive-up dispensers and metered parking is also available. Enforcement for parking permits will begin the first day of class. Students requiring handicap parking should contact the Disabled Students Programs and Services Office.

## Transcript Fee*

Requests for transcripts of courses taken at Fresno City College or within the State Center Community College District must, by provision of State and Federal law, be accompanied by the written signature of the student. Students are entitled to obtain two copies of their transcript free of charge; each additional copy is $\$ 5$. Payment must be received before the request will be processed. You may pay by money order, VISA, MasterCard, Discover Card or American express. Payments can be made online at www.fresnocitycollege.edu/payments.html. Cash is accepted at the Cashier's Window. Please do not mail cash with transcript request. Transcripts will not be provided if the student has a "hold" on their permanent file (E.C. 76233).

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

## Associated Student Body 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 $\backslash$ 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 12 units or more are eligible for Associated Student funded emergency loans, work programs and scholarships as available.

## Associated Student Government Representation Fee*

## Student Representation Fee

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

## Use of Student Representation Fee

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

## Right to Request a Waiver

Students have the right to request a waiver of the Student Representation Fee for religious, political, moral, or financial reasons. However, no refunds will be given once the fee is paid.

To request a waiver, the student must fill out a form available at Fresno City College in the Student Activities, or College Business Offices or online at the College Business Office main webpage. At Reedley College, Clovis Community College, Madera and Oakhurst Community College Centers, the forms are available in the College Business Office.

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

[^1]
## Credit by Examination Fee*

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

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

## Refund to Students

## Refund or Reversal of Enrollment Fees

 and TuitionRefund 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 www.fresnocitycollege.edu/refunds.

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 $\qquad$ $100 \%$ refund
- Withdrawal after the second week of the semester. $\qquad$ 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.
*Number of actual $10 \%$ Point class meetings: (rounded down) withdrawal is on or before:
$8 \quad 0.8=0 \quad$ 1st day of class
$16 \quad 1.6=1 \quad 1$ st day of class
$24 \quad 2.4=2 \quad$ 2nd day of class
$38 \quad 3.8=3 \quad 3$ rd day of class
* 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.

[^2]
## 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 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.

## Attendance

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

The faculty places strong emphasis on attendance in all classes. 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 Service office. In these circumstances, the Health Service office will transmit messages to instructors. Students may call the Health Service office at 442-8268.

The Health Service office may exclude any student from campus who is infected with any contagious or infectious disease (Title 5, California Code $\S 48211$ 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 $(A, B, C, D$, and $F$ ). Grade symbols are defined and grade points are earned for units of credit as follows:

## Evaluative Grade Symbols <br> Grade Points per Unit

A Excellent.................................................... 4.0
B Good......................................................... 3.0
C Satisfactory................................................. 2.0
*D Passing, less than satisfactory ..................... 1.0
F Failing....................................................... 0.0
P Pass ......................................................... 0.0
(A passing grade, satisfactory or better)
NP No Pass. 0.0
(Not a passing grade, less than satisfactory or failing)

Y Completion of non-credit course.................. 0.0
N Non Completion of non-credit course........... 0.0

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

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

## Non-evaluative Symbols Grade Points per Unit

I Incomplete................................................ 0.0
W Withdrawal................................................ 0.0
MW Military Withdrawal.................................... 0.0
IP In Progress ................................................ 0.0
RD Report Delayed 0.0

## 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 $W$.

## 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 $M W$ 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

$I P$ 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 $I P$ 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 RDsymbol 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 $N P$, No Pass, instead of traditional letter grades $(A, B, C, D$, or $F)$. Some courses are graded only on a Pass/No Pass basis. In courses graded only on the Pass/ No Passbasis or when a student elects this grading option, the grade of $P, P$ 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 $N P, N o$ 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 $N P$, 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 Passoption 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 www.fresnocitycolleg.edu/formsonline, no later than the end of the fifth week of a full-term course or within the first 30 percent of a shorte-term course. Students who have elected the Pass/No Pass grading option may reverse this decision only within these same deadlines.

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

## For a regular 18-week class By end of fifth week

## For all short-term classes

 (including summer)
## Student Grade Review

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

1. Discuss the grade received with the instructor involved, or
2. Obtain a Student Grade Review Petition from the Admissions and Records Office. Complete the form for processing no later than the last day of the semester (excluding summer sessions) following the semester for which the grade was received. The student will be notified of action taken.
3. If a student wishes to appeal the decision, the student may submit a written grievance. See Student Grievance Procedure on page 55.

## 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 $C R, N C, P, N P, W, I, I P, M W, R D$, 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.

## Articulation with High Schools

Fresno City College has entered into course-specific articulation agreements with a number of local high schools whereby students may waive a prerequisite.

## 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:

## Advanced Placement Program Credit (AP)

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

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

|  | Scores | Equivalent | Units |
| :--- | ---: | ---: | ---: |
| Exam Title | Accepted | FCC Course | Granted |

Fine, Performing, and Communication Arts Division

| Music | 3, 4 or 5 | Music 12 or 13 | 3 |
| :---: | :---: | :---: | :---: |
| Music Theory | 3,4 or 5 | Music 1A | 3 |
| Humanities Division |  |  |  |
| English Comp/Lit | 3,4 or 5 | English 1A \& 1B | 7 |
| English Comp only | 3,4 or 5 | English 1A | 4 |
| French, German or Spanish (Lan | $\begin{array}{r} 3,4, \text { or } 5 \\ \text { 1age part) } \end{array}$ | French, German or Spanish 3/4 | 10 |
| Spanish <br> (Literature part) | 3,4, or 5 | Spanish 5/6 | 8 |
| French <br> (Literature part) | 3,4, or 5 | French 3/4 | 10 |

Mathematics, Science and Engineering Division

| Chemistry | 3,4 or 5 | Chemistry 1A | 5 |
| :--- | ---: | :--- | ---: |
| Calculus AB | 3,4 or 5 | Mathematics 5A | 5 |
| Calculus BC | 3,4 or 5 | Mathematics 5B | 4 |
| Physics B | 3 | Physics 2A | 4 |
| Physics B | 4 or 5 | Physics 2A-B | 8 |
| Physics C | 3 | Physics 4A | 4 |
| Physics C | 4 or 5 | Physics 4A-B | 8 |

## Social Sciences Division

| American History | 3,4 or 5 | History 11-12 | 6 |
| :--- | ---: | :--- | ---: |
| European History | 3,4 or 5 | History 2 | 3 |
| Macroeconomics | 3,4, or 5 | Economics 50 | 3 |
| Microeconomics | 3,4, or 5 | Economics 40 | 3 |
| US Govt \& Politics | 4, or 5 | *Political Science 2 | 3 |
| Psychology | 3,4, or 5 | Psychology 2 | 3 |

*Note: To initiate a Course Substitution for Political Science 2 at Fresno City College through Admissions and Records, the student must successfully submit the following documents for the division to review: 1) Official records of the AP United States Government \& Politics exam indicating a score of 4 or bigher 2)Official transcripts from an accredited college where a student earned a final grade of " $C$ " or higher in a 1 unit (minimum) course covering California State and Local Government/Politics.
Note: AP credit in American Government does meet the U.S. Constitution requirement for teaching credential candidates (Ed. Code Sec. 13132). However, it does NOT satisfy the requirements of Political Science 2 because it does not address state and local requirements (Ed. Code Sec. 40404). Candidates seeking a BA/BS at a California State University must satisfy national, state and local government requirements. The requirements at the University of California vary by campus.

## College-Level Examination Program (CLEP)

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

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

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

|  | Minimum | Equivalent | Units |
| :---: | :---: | :---: | :---: |
| Exam Title | Score | FCC Course Gra | Granted |
| Business Division |  |  |  |
| Financial Accounting | 50 | ACCTG 4A | 4 |
| Business Law | 50 | BA 18 | 4 |
| Intro to Business | 50 | BA 10 | 3 |
| Computer Concepts | 50 | CIT 15 | 3 |
| Humanities Division |  |  |  |
| American Literature | 50 | ENGL 48A \& B | B |
| College Composition | 50 | ENGL 1A | 4 |
| Engl Comp (General | 500 | ENGL 125 | 4 |
| (1978 through April 1986) |  |  |  |
| Engl Comp (General) | 390 | ENGL 125 | 4 |
| (after May 1986 or before 1978) |  |  |  |
| Engl Comp w/Essay | *600 | None |  |
| English Literature | 50 | ENGL 46AB | 6 |
| Humanities (General) | 500 | ENGL 45 \& ART 6 | T6 6 |

Mathematics, Science and Engineering Division

| Trigonometry | 50 | MATH 4A | 4 |
| :--- | ---: | :--- | ---: |
| Microbiology | 50 | BIOL 31 | 5 |
| Natural Sciences (Gen) | 500 | Natural Science | 6 |

Social Sciences Division

| Afro-American History | 50 | AFRAM 1 | 3 |
| :--- | ---: | :--- | :--- |
| American Government ** | 50 | None |  |
| American History I | 50 | HIST 11 | 3 |
| American History II | 50 | HIST 12 | 3 |
| Macroeconomics, Intro | 50 | ECON 50 | 3 |
| Microeconomics, Intro | 50 | ECON 40 | 3 |
| Sociology | 50 | SOC 1A | 3 |
| Psychology, General | 50 | PSY 2 | 3 |
| Western Civilization I | 50 | HIST 1 | 3 |
| Western Civilization II | 50 | HIST 2 | 3 |
| Soc Sci \& Hist (Gen.) | 500 | Soc Sci |  |

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


## 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 he/she applies for credit by examination. Credit by examination will not be allowed if the student has received previous college credit for the course, or if the student previously enrolled and received a grade or W , or is currently enrolled in a course for which the course to be taken by exam is a prerequisite. The college reserves the right to deny credit by examination to any student.

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

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

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

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

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

## Credit for Military Service

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

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

## Army

1 credit hour - Physical Conditioning/Fitness
1 credit hour - Marksmanship
1 credit hour - First Aid

## Navy

1 credit hour - Physical Conditioning/Fitness
1 credit hour - Personal/Community Health
2 credit hours - First aid and safety

## Marines

3 credit hours - Physical Conditioning/Fitness
2 credit hours - Marksmanship
1 credit hour - Outdoors skills
1 credit hour - Personal health and hygiene
1 credit hour - First aid
Air Force or 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 his/her DD 214 or other appropriate documents citing pertinent data to the Fresno City College Veterans Office.

## Individual Study

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

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

Student must register for Individual Study 49 no later than the end of the third week of the semester.

## Travel-Study Credit

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

## Withdrawal/Dropping

## Withdrawal from College

A student may withdraw from all of his/her classes, thereby withdrawing from the college through the last day of the ninth week of instruction (or 50 percent of a term*, whichever is less) by the Web or in person with the Admissions and Records office. The student may also mail or fax a signed letter of request postmarked by the $50 \%$ point to completely withdraw from his/her classes to the Admissions and Records Office (please include student identification and date of birth). Students are encouraged to discuss complete class withdrawals with an academic counselor. Upon submission of a withdrawal form, the student will be withdrawn from all of his/her classes and an entry of " $W$ ' will be recorded for each class in which the student was enrolled. The "Ws" will not be used in calculating grade point averages, but excessive " $W /$ " 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 his/her 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. Petitions for medical withdrawals must be processed through the Health Services Office.
2. The petition for withdrawal must be submitted no later than the end of the semester immediately following the semester in which the extenuating circumstance occurred.
3. The student must petition to withdraw from all classes she/he is enrolled in (consult with Admissions \& Records for certain exceptions that may apply).
4. The student's instructor(s) will be consulted concerning the request for withdrawal.
5. Approved class withdrawals due to extenuating circumstances shall be recorded as a "W." The "Ws" will not be used in calculating grade point averages, but excessive "Ws" will be used as a factor in progress probation and dismissal procedures.
6. Once final grades have been posted, the instructor of record must be consulted for an appropriate grade review.
7. Exceptions may be considered on a case-by-case basis upon appeal to the college's Academic Standards Committee.

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


## Academic Renewal

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

## Course Repetition

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

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

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

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

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

## Repetition of Courses Designated as Non-Repeatable

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

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

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

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

## Petition to Repeat Courses for Alleviation of Substandard Grades

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

Upon petitioning to repeat a course for a third attempt, Fresno City College students are required to meet with a counselor before any action will be taken by the Academic Standards Committee or designee. Only the first two substandard grades will be excluded in computing the GPA.

Upon petitioning to repeat a course for a fourth or more attempt, Fresno City College students are required to meet with a counselor and complete or update his/her student education plan (SEP) and provide statements as to;

- Why s/he has been unable to complete the course work successfully, supporting documentation may be provided as well.
- Why s/he 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, the grade earned in the fourth or more attempts will be averaged with the third grade earned in computing the cumulative grade point average.


## Repetition of Courses with a Satisfactory Grade

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

Reasons for such repetition include but are not limited to:

- significant lapse in time (no less than 36 months since the grade was obtained)
- change in technology;
- Re-certification / training requirement, or other justifiable reasons.
If the petition is approved and a student completes the course, the course and grade will be listed on the academic record, and will be coded with a symbol indicating the course is excluded in the computation of the grade point average.


## Legally Mandated Training

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

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

## Disabled Students

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

When continuing success of the student in other general and/or special classes,

When specific special classes are essential in completing a student's preparation for enrollment into other regular or special classes, or

When the student has a student educational contract which involves a goal other than completion of the special class in question and repetition of the course will further achievement of that goal.

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

## Repetition of Courses Designated as Repeatable

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

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

## Courses Related in Content

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

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

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

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

The course families are:

|  | $\underline{\text { Related Content Groups }}$ |
| :--- | :--- |
| ART | Ceramics, Crafts, Drawing, Painting, <br> Printmaking, Sculpture, Visual Art <br> Fundamentals |
| DANCE | Ballet, Competition/Conference, <br> Flexibility, Performance, Folk, Jazz, <br> Modern, Social, Tap |
| MUSIC | Brass, Chamber Concert Ensemble, <br> Guitar, Jazz Chamber Ensemble, Jazz <br> Large Ensemble, Large Concert <br> Ensemble, Percussion, Piano, <br> Specialty Ensemble, Strings, Voice, <br> Woodwinds |
| PHYSICAL | Archery, Badminton, Basketball, <br> Conditioning, Golf, Swimming, Tennis, <br> EDUCATION <br> Volleyball, Weightlifting, Yoga |
| THEATRE | Acting, Competition/Conference, <br> Performance Practicum, Technical <br> Practicum |
| ARTS |  |

## 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 26). Course work thought to be no longer appropriate for repetition may be alleviated by the student making formal application to the Admissions and Records Office.

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

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

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

Astudent 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

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

## Counseling for Probationary Students

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

## Academic/Progress Dismissal

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

A student who has attempted in at least 12 semester units shall be dismissed for one semester, exclusive of summer session, if during each of three consecutive semesters the student's performance falls under either one or any combination of the following two conditions:

1. The student's cumulative grade point average was 2.0 or less.
2. The percentage of units in which the student was enrolled for which entries of "W," "I," "NP" and "NC" were recorded reached or exceeded fifty percent (50\%).

## Circumstances for Appeal or Exception of Academic Progress Dismissal

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

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

## Readmission Following Academic/ Progress Dismissal

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

Following the student's first dismissal, he/she 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 his/her 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 he/she enrolls, the student will be dismissed again. This third dismissal shall be considered permanent. However, astudent may petition for admission after two years. Students are encouraged to improve their record by attending summer session. Petitions for readmission are available in the Counseling Center. Unit limitations and course selection will be set for readmitted students by the counseling staff.

## Reports to Students

## Final Grade Report

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

## Certifications of Enrollment

Certifications of enrollment shall be requested in writing at www.fresnocitycollege.edu/forms-online. A minimum of five working days for the preparation of certifications is required. Certifications will not be provided if the student has a "monetary hold" on the permanent file.

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

Full-time $\qquad$ .12 units or more

Three quarter-time. .. 9 to 11.5 units
Half-time. .6 to 8.5 units
Limited. .fewer than 6 units

## Honors and Awards*

## Leon S. Peters Honors Program

The Leon S. Peters Honors Program at Fresno City College recognizes and meets the needs of academically gifted students. Students who qualify, and are accepted to enter the Honors Program, benefit from an enriched educational experience
that consists of a specially selected curriculum set within the framework of the transfer programs of all University of California and California State University campuses. Special honors sections of regular classes usually have 25 or fewer students per section. They are taught by specially selected, experienced and highly qualified faculty. The entire program can be completed in four semesters. Entrance into the program is competitive. For additional details about the benefits, requirements, and curriculum, see the Honors Program section in this catalog, and consult with the Honors Program Coordinator, who can be reached by calling 442-8207.

## Dean's List

A 3.0 grade point average for the previous semester with a minimum load of 12 units.

## Honors at Graduation

## High Honors

To be recognized at commencement, a3.3/3.49 cumulative grade point average.

## Highest Honors

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

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

## College Sanctioned Accouterments at Graduation

To insure the best experience possible for graduation, students are asked to adhere to the College traditions when participating in this meaningful ceremony. Decorated mortarboards and/ or gowns are not permitted.
The following are a list of accoutrements officially sanctioned by the College for students to wear in addition to their cap and gown:
African American Graduation Sash
Alpha Gamma Sigma Honor Society Gold Cord
Dean's Medallion
President's Medallion
High Honors
Latino Graduation
Leon S Peters Honors Program
Phi Theta Kappa Honor Society
Veteran Student

Medallion
Medallion
Gold Tassel
Sash
Stoll
Gold Cord
Red, White \&
Blue Cord

## Honor Societies

## Alpha Gamma Sigma

The Alpha Zeta Chapter of Alpha Gamma Sigma is a scholastic honor society of California community colleges. Membership is based on academic achievement, involvement in community service projects and leadership development activities. Members are eligible to participate for credit in a special volunteerism course. Affiliate membership and course participation are open to students who are otherwise ineligible for regular membership. Both regular and affiliate members will be expected to maintain the highest standards of behavior and represent the organization and college in an exemplary manner. Academic qualifications: students entering from high school who are life members of CSF and those with at least a 3.5 GPA are eligible for temporary membership their first semester. Continuing students with a cumulative GPA of 3.0 in at least 12 units are eligible. Students must maintain a 3.0 GPA each semester (a one semester's grace period allowed if GPA is above 2.5). Permanent membership may be awarded to members who have completed 60 units and maintained a cumulative GPA of 3.25 for two semesters or 3.5 for one semester and have participated satisfactorily in chapter activities. Final authority on eligibility rests with faculty advisors. For additional information contact the Honors Program office at 442-8207.

## Phi Theta Kappa

Phi Theta Kappa is the international honor society for community colleges. Theta Beta, the Fresno City College chapter, helps students to advance the society's hallmarks of scholarship, leadership, fellowship, and service on campus and in the community. Phi Theta Kappa offers support from fellow scholars of all ages, ethnic backgrounds, economic levels, and fields of study who share a variety of interests and ideas. The sense of community among members and faculty advisors allows one to take full advantage of opportunities at the college and at state and international meetings. The commonality is superior scholarship and a commitment to continuing excellence and educational opportunities. To be eligible, a student must have completed at least 12 units of college course work with a cumulative GPA of 3.5 or better. Freshmen students are also eligible for provisional membership during their first semester at the college. For further information, contact the Honors Program office at 442-8207.

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


# CERTIFICATE AND DEGREE REQUIREMENTS 

## Catalog Rights

A student may elect to meet the requirements for the associate degree from:

1. The catalog in effect at the time of the student's graduation, or
2. The catalog in effect at the time the student began continuous enrollment leading to graduation.
For this regulation, a student shall be considered to have continuous enrollment if enrolled and active in any graded class at the census point ( $20 \%$ ) of the semester. If a student misses 24 consecutive months, the student loses his/her original catalog rights and is not continuously enrolled.

## Certificates

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

See page 79 for a list of certificates.

## Certificate of Achievement

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

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

See page 79 for a list of certificates of achievement.

## Certificate of Completion

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

See page 79 for a list of certificates of completion.

## Course Classification

Pursuant to revisions to the California Administrative Code, Title 5, Sections 55002 and 55062, all courses listed within the college catalog fall into one of the following classifications:

- Credit, Degree Applicable
- Credit, Nondegree Applicable
- Noncredit

See Course Classification System, page 215, 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 or Associate Vice President of Admissions and Records for pertinent information.

## General Education for the AA/AS Degree

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

Following are the major areas of General Education:
Natural Sciences. Courses in the natural sciences are those which examine the physical universe, its life forms

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

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.
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.
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.

## Multiple Degrees

A student may earn more than one AA and/or AS degree from Fresno City College. Although a course used for a prescribed graduation requirement or to meet general education requirements may count toward more than one degree, no course may count toward the major course requirements for more than one degree major at any college in the district, except for associate degrees for transfer.

## 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://adegreewithaguarantee. com/. Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

## Requirements for AA and AS Degrees

## Associate in Science Degree

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

## Associate in Arts Degree

1. Sixty ( 60 ) units with at least 2.0 ("C") grade point average in all courses applicable to the associate degree.
2. Residence requirements:
(a) A minimum of twelve (12) degree applicable units in residence at district colleges or centers, with attendance during the last semester prior to meeting graduation requirements, or
(b) A total of forty-five (45) units in residence at district colleges or centers if not in attendance during the last semester prior to meeting graduation requirements.
3. At least eighteen (18) units in a discipline (major) or from related disciplines with a grade of "C" or better in each course.
4. Competence in writing, demonstrated by completion of English 1A or 1AH with a grade of 2.0, "C" or better. (The course used to fulfill this requirement may also be used to fulfill area D, Part 1, below, of the general education requirement in language and rationality: composition.)
5. Competence in reading, demonstrated by
(a) Meeting the reading requirement for English 1A, 1AH eligibility by an appropriate placement test score.
(b) Completion of English 1A or 1AH with a grade of " C " or better.
6. Competence in oral communication, demonstrated by the completion of Communication $1,2,4,8$, or 25 with a grade of 2.0 , "C" or better.
7. Competence in mathematics, demonstrated by
(a) An appropriate placement test score or
(b) Completion with a grade of 2.0 , " C " or better one of the following classes: Mathematics $4 \mathrm{~A}, 4 \mathrm{~B}, 5 \mathrm{~A}$, 5B, 6, 7, 10A, 10B, 11, 21, 26, 42, 45, 102, 103.
8. Familiarity with computer concepts and computer use, demonstrated by completing with a grade of "C" (2.0) or better, one of the following:
(a) Applied Technology 10; Business \& Technology 1, 2, 9,10 , or 28 ; Computer Information Technology 12, 15, or 17; Graphic Communications 14, 15, $16,17,18,20,22,23,24,25,27,30,31,34,39 \mathrm{~A}$, 40A, 41, 52, 53; Library Skills 2; or
(b) A course in the student's major that has been designated by the division of that major as meeting the computer literacy requirement; or
(c) A college examination of computer literacy.
9. Awareness of lifetime physical and mental wellness, demonstrated by completion of Health 1, Psychology 2, Psychology 2H, Psychology 33, or Child Development 38/Psychology 38.
10. Two physical education and/or dance classes. The physical education courses that will meet this requirement are PE 3-7, 9, 12-15C, 17, 23, 27, 29B-43B, 29C-31C, $33 \mathrm{C}-43 \mathrm{C}, 45$, and 50-55.

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 $\mathrm{s} / \mathrm{he}$ is not physically able to participate in physical education classes.
0 Exemption forms are available at the Health Services office, Students Services Building, lower level.
0 Must be documented as permanent by student's Physician.
o Once verified, Health Services will forward the completed exemption form to Admissions and Records.

11. Completion of one of the following courses on the principles of national, state, and local government, including the study of American institutions and ideals: Political Science 2, 2H, or 110.
(The course used to fulfill this requirement may also be used to satisfy area B, Part 1, below, of the general education requirement in social and behavioral sciences.)
12. A minimum of eighteen (18) units in general education, including at least three (3) units in each of areas (A) and (C), and at least three (3) units in both parts 1 and 2 of areas (B) and (D).

## A. Natural Sciences (3 units)

Anthropology 1, 1L
Applied Technology 120
Astronomy 10
Biology 3, 3H, 5, 7, 11A/AH, 11B, 20,
21A, 21B, 24, 46
Chemistry 1A, 3A, 3B, 42
Geography $1,7,8$
Geology 1, 1H, 2, 4, 5, 7, 8, 9, 11, 12
Physics 2A, 2B, 4A
Physical Science 11, 42

## B. Social and Behavioral Sciences

(6 units: B.1. $=3$ units; B.2 $=3$ units)

1. Political Science $2 / 2 \mathrm{H}$, or 110
(The course used to fulfill this requirement may also be used to satisfy degree requirement 11, American institutions, above.)
2. Other Social and Behavioral Sciences

African-American Studies 1, 2, 4, 34, 41
American Indian Studies 20, 31, 32, 34
American Studies 11
Anthropology 1, 2/2H, 3, 4, 28
Asian-American Studies 1, 8, 15
Business Administration 20

Chicano-Latino Studies 11, 12, 13, 14, 24 , 28, 29, 30
Child Development 5, 39
Criminology 5
Economics 25, 40/40H, 50/50H
Food and Nutrition 43
Geography 2, 4A, 4B, 20
History $1 / 1 \mathrm{H}, 2 / 2 \mathrm{H}, 3,11,12 / 12 \mathrm{H}, 15,17,18$, $21,22,25,29,30,34$
Human Services 20
Political Science 1, 5, 24, 25
Psychology 5, 15, 25, 36, 39
Sociology 1A/1AH, 2, 10, 14, 31, 32
Women's Studies 10, 24, 41, 43, 47

## C. Humanities (3 units)

African-American Studies 3, 8, 13, 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, 28, 29, 31, 32A, 32B, 55
Chicano-Latino Studies 17A, 18, 20, 21, 27B
Chinese 1, 2
Communication 12
Dance 17A, 20A, 20B, 27B, 30
English 1B, 12, 14, 15A, 15B, 15C, 15D, 17, 20, $36,40,42,44 \mathrm{~A}, 44 \mathrm{~B}, 45,46 \mathrm{~A}, 46 \mathrm{~B}$,
47, 48A, 48B
Film 1, 2A, 2B, 3, 5, 6
French 1, 2, 3
German 1, 2
Graphic Communications 39A, 40A
Hmong 1, 2
Humanities $10 / 10 \mathrm{H}, 11 / 11 \mathrm{H}, 42$
Japanese 1, 2
Journalism 1, 16
Linguistics 10/10H, 11
Music 3, 5, 12, 13, 16, 17, 20, 21, 24, $25,26,27,28,29,30,34,35,40,41$, 42A, 42B, 42C, 42D, 46, 48, 53, 90, 91, 92
Philosophy 1A/1AH, 1B, 1C, 1D, 5, 6
Photography 5, 6, 15, 17, 18, 30, 32, 37, 40
Portuguese 1,2
Spanish 1, 2, 3, 3NS, 4, 4NS, 5, 6, 7, 17
Theatre Arts 12, 23, 25, 27A, 27B, 28, 30, $31,32,35,36,38,41,42,43,44 \mathrm{~A}, 44 \mathrm{~B}, 46$
Women's Studies 36

## D. Language and Rationality

(6 units: D.1. $=3$ units; D.2. $=3$ units)

1. Composition
(The course used to fulfill this general educa-
tion area requirement may also be used to
satisfy degree requirement 4, competence in
writing, above.)
English 1A/1AH
2. Communication and Analytical Thinking Communication and Analytical Thinking Applied Technology 10
Business Administration 10/10H, 18, 30, 33
Communication 25
Computer Information Technology 60, 62, 63, 65, 66, 68, 69
Computer Science 40, 41
Criminology 13
Decision Science 21, 23
Electrical Systems Technology 51
English 3/3H
Graphic Communications 13, 14, 15,
$16,17,18,20,22,23,30,41,51$
Marketing 10
Math $102,103,4 \mathrm{~A}, 4 \mathrm{~B}, 11,42$ or any advanced math class
Philosophy 2, 6
Political Science 13
Psychology 42
Sociology 1B
See a counselor for other courses which fulfill this requirement.

## Application for Associate Degree or Certificate of Achievement

A candidate for an associate in arts degree, associate in science degree or a certificate of achievement must file a graduation application for the degree or certificate. An application for graduation for a degree or certificate of achievement will be accepted when a student is within a year of potential graduation and/or completion. A student who needs a formal evaluation prior to the year of graduation/completion may appeal this policy by providing evidence of special program requirements. Application deadlines are listed in the academic calendar of this catalog. No student is a candidate for graduation until the application is completed. Graduation ceremonies for degree candidates are held at the end of the spring semester each year. Diplomas will be dated at the end of the semester or summer session in which requirements are met. Diplomas and certificates are mailed to successful candidates approximately two months after fulfilling graduation requirements.

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

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

In accordance with Executive Order No. 167 from the Chancellor's Office of the California State Universities, Fresno City College baccalaureate level courses are numbered 1 to 99.

These courses are listed on page 41 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 43. 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 InterInstitutional 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

Students should consult the catalog of the specific college or university which they plan to attend.

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

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

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

## C-ID

Number
ACCT 110
ACCT 120

AJ 110
AJ 120
AJ 122

AJ 124
AJ 140
AJ 150
AJ 160
AJ 200
AJ 220
ANTH 110
ANTH 120
ANTH 130
ANTH 150
ARTH 100
ARTH 110
ARTH 130
ARTH 145

## Fresno City College

Course
Accounting 4A or 4AH, Financial Accounting
Accounting 4B or 4BH, Managerial Accounting
Criminology 1, Introduction to Criminology
Criminology 6, Concepts of Criminal Law
Criminology 4, Principles and Practices of the Justice System
Criminology 3, Legal Aspects of Evidence
Criminology 8, Criminal Investigation
Criminology 9, Crime Scene Investigation
Criminology 5, Community Relations
Criminology 20, Introduction to Corrections
Criminology 11, Juvenile Delinquency
Anthropology 1, Biological Anthropology
Anthropology 2 or 2H, Cultural Anthropology
Anthropology 8, Language and Culture
Anthropology 4, Introduction to Archaeology
Art 2, Art Appreciation
Art 5 or 5H, Art History 1
Art 55, Introduction to Asian Art
Chicano-Latino Studies 22, Art of the
Ancient Americas

| ARTS 100 | Art 3, Two-Dimensional Design |
| :--- | :--- |
| ARTS 101 | Art 4, Three-Dimensional Design |
| ARTS 110 | Art 7, Beginning Drawing |
| ARTS 200 | Art 8, Beginning Figure Drawing and Anatomy |
| ARTS 205 | Art 17, Intermediate Drawing |
| ARTS 210 | Art 9, Beginning Painting: Oil/Acrylic |
| ARTS 280 | Art 12A, Craft Workshop: Living Traditions |
| BIOL 110B | Biology 20, Human Anatomy |
| BIOL 115S | Biology 21A + Biology 21B, Human Anatomy |
| \& Physiology |  |

ARTS 100
ARTS 101
ARTS 110
ARTS 200 ARTS 205 ARTS 210 ARTS 280 BIOL 110B BIOL 115 S

BIOL 120B
BIOL 130S

BIOL 140
BIOL 190

BUS 110

BUS 120

CDEV 100

CDEV 110

CHEM 10

CHEM 110 CHEM 120S

CHEM 140

Computer Science 26, Discrete Mathematics for Computer Science

ECON 202

Child Development 1, Principles and Practices of Teaching Young Children Child Development 3, Introduction to Curriculum
Child Development 20, Observation and Assessment
Child Development 37A, Early Childhood Practicum
Child Development 6, Health, Safety and Nutrition in Early Childhood Education
Child Development 15, Diversity and Culture in Early Childhood Education Programs
Economics 40 or 40 H , Introduction to Microeconomics

Economics 50 or 50 H , Introduction to Macroeconomics
English 1A or 1AH, Reading and Composition
English 3 or English 3H, Critical Reading \& Writing
English 1B, Introduction to the Study of Literature

English 48A, Introduction to American Literature to World War I

English 48B, Introduction to American Literature from World War I to the Present

English 44A, World Literature to the Renaissance
English 44B, World Literature since the Renaissance
English 46A, English Literature to 1800
English 46B, English Literature from 1800 to the Present
English 15A + English 15B, Creative Writing: Poetry and Creative Writing: Fiction
Geography 1, Physical Geography
Geography 2, Cultural Geography
Geography 4A + Geography 4B, World Geography and World Geography
Geography 20, Geography of California
Geology 1 or 1H, Physical Geology
Geology 2, Historical Geology
Geology 2L, Historical Geology Lab
Geology 9, Introduction to Earth Science
Geology 4, Geology of California
History 11, History of the United States to 1877
History 12 or 12H, History of the United States since 1877

History 20, World History I, to 1600
History 23, World History II, since 1500

| HIST 170 | History 1 or 1H, Western Civilization to 1648 | MUS 145 |
| :---: | :---: | :---: |
| HIST 180 | History 2 or 2H, Western Civilization since 1648 | MUS 150 |
| ITIS 120 | Computer Information Technology 15, | MUS 155 |
|  | Computer Concepts | MUS 160 |
| JOUR 100 | Journalism 1, Introduction to Mass | MUS 160 |
|  | Communication | MUS 160 |
| JOUR 110 | Journalism 3, Newswriting | MUS 160 |
| JOUR 120 | Journalism 14, Multimedia Reporting |  |
| JOUR 130 | Journalism 4, Writing for the College | MUS 160 |
|  | Newspaper |  |
| JOUR 130 | Journalism 11A, Beginning Media Writing | MUS 160 |
|  | Practicum |  |
| JOUR 130 | Journalism 11C, Advanced Media Writing | MUS 160 |
|  | Practicum |  |
| JOUR 130 | Journalism 11D, Editorial Leadership | MUS 160 |
| JOUR 131 | Journalism 11B, Intermediate Media |  |
|  | Writing Practicum | MUS 160 |
| JOUR 131 | Journalism 11C, Advanced Media Writing |  |
|  | Practicum | MUS 160 |
| JoUR 131 | Journalism 11D, Editorial Leadership |  |
| J0UR 160 | Photography 30, Editorial Photography | MUS 160 |
| JOUR 210 | Journalism 13, Advanced Reporting |  |
|  | and Writing | MUS 160 |
| KIN 100 | Physical Education 62, Introduction to Kinesiology |  |
|  |  | MUS 160 |
| KIN 101 | Health Science 2, First Aid and Safety |  |
| MATH 110 | Decision Science 23, Business Statistics | MUS 160 |
| MATH 110 | Mathematics 11, Elementary Statistics |  |
| MATH 110 | Mathematics 42, Statistics for the | MUS 160 |
|  | Behavioral Sciences |  |
| MATH 120 | Mathematics 10A, Structure and Concepts in Mathematics | MUS 180 |
|  |  | MUS 180 |
| MATH 130 | Mathematics 21, Finite Mathematics | MUS 180 |
| MATH 151 | Mathematics 4B, Pre-Calculus | MUS 180 |
| MATH 160 | Computer Science 26, Discrete Mathematics for Computer Science | MUS 180 |
|  |  | MUS 180 |
| MATH 210 | Mathematics 5A, Mathematical Analysis I | MUS 180 |
| MATH 220 | Mathematics 5B, Mathematical Analysis II | MUS 180 |
| MATH 230 | Mathematics 6, Mathematical Analysis III | MUS 180 |
| MATH 240 | Mathematics 7, Introduction to |  |
|  | Differential Equations | MUS 180 |
| MATH 250 | Mathematics 26, Elementary Linear Algebra |  |
| MATH 851 | Mathematics 4A, Trigonometry | MUS 180 |
| MATH 900S | Mathematics 5A and 5B, Mathematical | MUS 180 |
|  | Analysis I and Mathematical Analysis II | MUS 180 |
| MUS 100 | Music 12, Music Appreciation | MUS 180 |
| MUS 120 | Music 1A, Music Theory I | MUS 180 |
| MUS 125 | Music 7A, Ear Training I | MUS 180 |
| MUS 130 | Music 1B, Music Theory II | MUS 180 |
| MUS 135 | Music 7B, Ear Training: Level II | MUS 180 |
| MUS 140 | Music 2A, Music Theory III | MUS 180 |

Music 7C, Ear Training: Level III
Music, 2B, Music Theory IV
Music 7D, Ear Training: Level IV
Music 22, Intermediate/Advanced Piano
Music 26, Intermediate/Advance Voice
Music 29, Intermediate/Advanced Guitar
Music 42A, Intermediate/Advanced Brass
(Brass Choir)
Music 42B, Intermediate/Advanced
Woodwinds (Woodwind Choir)
Music 42C, Intermediate/Advance
Strings (String Orchestra)
Music 42D, Intermediate/Advanced
Percussion (Percussion Ensemble)
Music 73A, Intermediate/Advanced
Chamber Ensemble (Brass)
Music 73B, Intermediate/Advanced
Chamber Ensemble (Woodwinds)
Music 73C, Intermediate/Advanced
Chamber Ensemble (Strings)
Music 73D, Intermediate/Advanced
Chamber Ensemble (Percussion)
Music 74A, Intermediate/Advanced Brass
Performance Practices
Music 74A, Intermediate/Advanced
Woodwind Performance Practices
Music 74A, Intermediate/Advanced
Strings Performance Practices
Music 74A, Intermediate/Advanced
Percussion Performance Practices
Music 30, College Choir
Music 34, Fresno Chorale
Music 39A, Baroque/Classical Opera
Music 39B, Romantic and Modern Opera
Music 40, Concert Band
Music 41, Jazz Ensemble
Music 46, Symphony Orchestra
Music 47, Jazz Combo
Music 47A, Jazz Combo: New Orleans,
Swing and Bop
Music 47B, Jazz Combo: Cool and
Mainstream
Music 47C, Jazz Combo: Modern and Fusion
Music 47D, Jazz Combo: World Music
Music 54, Afro-Latin Ensemble
Music 55, Afro-Caribbean Ensemble
Music 60, Symphonic Choir
Music 61, A Cappella Choir
Music 70, Contemporary Jazz Ensemble
Music 71, Lab Jazz Ensemble
Music 72, Jazz Composer’s Orchestra

MUS 180
MUS 180
MUS 180
MUS 180
MUS 180
MUS 180
MUS 180
NUTR 110
NUTR 120

PHIL 100

PHIL 120
PHIL 210
PHYS 100S

PHYS 105
PHYS 110
PHYS 140

PHYS 200S

PHYS 205

PHYS 210
PHYS 215
POLS 110

POLS 120

POLS 130
POLS 140
POLS 150
PSY 110
PSY 115

PSY 120
PSY 130
PSY 150
PSY 170
PSY 180

PSY 200

SOCI 110

SOCI 115
SOCI 130

SOCI 150

Music 75, Community Orchestra Music 76, College Philharmonic Orchestra Music 77, Studio Jazz Combo Music 78, Lab Jazz Combo Music 90, Jazz Composers Workshop Music 91, Jazz Composers Ensemble Music 92, Vocal Jazz Ensemble Food and Nutrition 40, Nutrition Food and Nutrition 1, Principles of Food Preparation
Philosophy 1A or 1AH, Theories of Knowledge and Reality
Philosophy 1C, Ethics
Philosophy 6, Symbolic Logic
Physics 2A and 2B, General Physics 1 and General Physics 2
Physics 2A, General Physics 1
Physics 2B, General Physics 2
Natural Science 1A, Integrated Science:
Physics and Chemistry
Physics 4A + Physics $4 \mathrm{~B}+$ Physics 4C, Physics for Scientists and Engineers Physics 4A, Physics for Scientists and Engineers
Physics 4B, Physics for Scientists and Engineers Physics 4C, Physics for Scientists and Engineers Political Science 2 or 2H, American Government
Political Science 3, Introduction to Political Theory and Thought
Political Science 5, Comparative Government
Political Science 24, International Relations
Political Science 1, Modern Politics
Psychology 2 or 2H, General Psychology
Psychology 33, Personal and Social Adjustment
Psychology 16, Abnormal Psychology Psychology 25, Human Sexuality Psychology 36, Biological Psychology Psychology 5, Social Psychology Psychology 38 or Child Development 38, Lifespan Development
Psychology 45, Introduction to Research Methods in Psychology
Sociology 1A or 1AH, Introduction to Sociology
Sociology 1B, Global Social Problems
Sociology 32, Introduction to Marriage and Family

SPAN 100
SPAN 110
SPAN 200
SPAN 210
SPAN 220

SPAN 230

THTR 111
THTR 112
THTR 113

THTR 114
THTR 151
THTR 151

THTR 152
THTR 171
THTR 173

THTR 174
THTR 175
THTR 191
THTR 192

Spanish 1, Beginning Spanish
Spanish 2, High-Beginning Spanish
Spanish 3, Intermediate Spanish Spanish 4, High-Intermediate Spanish Spanish 3NS, Intermediate Spanish for Spanish Speakers
Spanish 4NS, High-Intermediate Spanish for Spanish Speakers
Theatre Arts 30, Theatre Appreciation
Theatre Arts 30, Theatre Appreciation
Theatre Arts 31, Theatre History and Dramatic Literature I
Theatre Arts 38, Script Analysis
Theatre Arts 41, Beginning Acting
Theatre Arts 42, Beginning Acting for Theatre Majors
Theatre Arts 43, Intermediate Acting
Theatre Arts 25, Stagecraft
Theatre Arts 27B, Introduction to Lighting Design
Theatre Arts 36, Costume Design
Theatre Arts 28, Introduction to Stage Makeup
Theatre Arts 40 , Performance Practicum
Theatre Arts 23, Technical Theatre Practicum

## Transfer to California State University (CSU)

## Transfer Requirements to California State University (CSU)

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

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


## California State University (CSU) Admission

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

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

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

Students who have completed 60 or more CSU transferable semester 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., you are eligible to re-enroll.
- Meets the admission requirements for a first-time freshman or have successfully completed necessary courses to make up the deficiencies you had in high school if you did not complete the 15 unit pattern of college preparatory subjects.
- Meets the eligibility index required of a freshman.

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

## Upper Division Transfer Students

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

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


## General Education

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

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

## Fresno City College CSU General Education - Breadth 2016-2017

## Area A: English Language Communication and Critical Thinking

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

- Area A1, Oral Communication

Communication 1, 2, 4, 8

- Area A2, Written Communication

English 1A/1AH

- Area A3, Critical Thinking

Communication 25
Criminology 13
English 3/3H
Philosophy 2, 6
Political Science 13

## Area B: Scientific Inquiry and Quantitative Reasoning

Nine semester units minimum with at least one course in $B 1, B 2$, 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, 7(L), 8(L)
Geology 1(L), 1H(L), 2, 4, 5, 7, 8, 12
Natural Science 1A(L)
Physical Science 11
Physics 2A(L), 2B(L), 4A(L), 4B(L), 4C(L)

- Area B2, Life Science

Anthropology 1
Biology $3 / 3 \mathrm{H}(\mathrm{L}), 4(\mathrm{~L}), 5(\mathrm{~L}), 6(\mathrm{~L}), 7(\mathrm{~L}), 11 \mathrm{~A} / 11 \mathrm{AH}(\mathrm{L})$,
$11 \mathrm{~B}(\mathrm{~L}), 20(\mathrm{~L}), 21 \mathrm{~A}(\mathrm{~L}), 21 \mathrm{~B}(\mathrm{~L}), 22(\mathrm{~L}), 24(\mathrm{~L}), 31(\mathrm{~L})$

- Area B3, Laboratory Activity

Chemistry 29A, 29B
Geology 2L

- Area B4, Mathematics/Quantitative Reasoning
Computer Science 26
Decision Science 21, 23
Mathematics 4A, 4B, 5A, 5B, 6, 10A, 10B, 11,
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, 13, 15
American Indian Studies 35
Architecture 15A, 15B
Art $2,3,5 / 5 \mathrm{H}, 6 / 6 \mathrm{H}, 7,9,10,11,12 \mathrm{~A}, 12 \mathrm{~B}, 14,15,17$, 55, 60
Chicano-Latino Studies $+17 \mathrm{~A}, 20,22$, +27 B
Communication 12
Dance $+17 \mathrm{~A}, 20 \mathrm{~A},+27 \mathrm{~B}, 30$
Film 1, 2A, 2B, 6
Music 3, 12, 13, 14, 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 $1 / 1 \mathrm{H}, 2 / 2 \mathrm{H}$
Hmong 1, 2
Humanities $10 / 10 \mathrm{H}, 11 / 11 \mathrm{H}, 42$
Japanese 1, 2
Linguistics 10/10H
Philosophy $1 \mathrm{~A} / 1 \mathrm{AH}, 1 \mathrm{~B}, 1 \mathrm{C}, 1 \mathrm{D}, 5$
Political Science 3
Portuguese 1, 2
Spanish 1, 2, 3, 3NS, 4, 4NS, 5, 6, 7, 9, 17
Theatre Arts 32
Women's Studies 36

## Area D: Social Sciences

Nine semester units minimum from three sub-areas (D0-D9) and from at least two disciplines. Disciplines are: African-American Studies, American Indian Studies, American Studies, Anthropology, Asian-American Studies, Business Administration, Chicano-Latino Studies, Child Development, Economics, Geography, History, Human Services, Journalism, Political Science, Psychology, Sociology, Women's Studies.

- Area D0, Sociology and Criminology

Human Services 10
Sociology 1A/1AH, 1B, 2, 10, 32

- Area D1, Anthropology and Archaeology

Anthropology 2/2H, 3, 4, 8

- Area D2, Economics

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

- Area D3, Ethnic Studies

African-American Studies 1,34
American Indian Studies 20, 31, 34
Asian-American Studies 1, 15
Chicano-Latino Studies 11, 12
History 34
Journalism 16

- Area D4, Gender Studies

History 22
Journalism 16
Women's Studies 10, 47

- Area D5, Geography

Geography 2, 4A, 4B, 20

- Area D6, History

African-American Studies 4, 34
Chicano-Latino Studies 29
History $1 / 1 \mathrm{H}, 2 / 2 \mathrm{H}, 3,11,12 / 12 \mathrm{H}, 15,17,18,20,21$, $22,23,25,29,30,34$

- Area D7, Interdisciplinary Social or Behavioral Science
American Studies 10
Child Development 30, 39
Journalism 1
Psychology 39
- Area D8, Political Science, Government \& Legal Institutions
American Studies 11
Business Administration 20
Political Science 1, 2, 2H, 3, 5, 24
- Area D9, Psychology

Child Development 38, 39
Psychology 2/2H, 38, 39

## Area E: Lifelong Learning and Self-

## Development

Three semester units minimum.
Business Administration 30
Child Development 38, 39
Food and Nutrition 35, 40
Health Science 1
Psychology 2/2H, 25, 33, 38, 39
Total Minimum Units Required for Certification.
Notes: Courses listed in more than one area or sub-area may only be used one time.
The same course, e.g. CLS/DANCE 27, can be counted only once.
Some CSU campuses have restrictions on when courses in AREAS $A$ and 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 or 2 H . These courses may also be used simultaneously to satisfy course requirements on the CSU GE-Breadth pattern. (See pages 40 and 41)

## 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 $4 \mathrm{~A} / 4 \mathrm{AH}, 4 \mathrm{~B} / 4 \mathrm{BH}, 19,32 \mathrm{~A}, 34,51,52,53,54 \mathrm{~A}$, 55, 56, 57, 61, 70, 73
Aerospace Studies 1A, 1B, 2A, 2B, 3, 5
African-American Studies $1,2,3,4,5,6,8,13,15$, 17, 34, 36, 41
Air Conditioning 50, 51, 52, 53, 54, 55, 56, 57, 60A
American Indian Studies 20, 31, 32, 34, 35
American Sign Language $1,2,3,4,5,6,7,8,20$, 21,22
American Studies 10, 11
Anthropology 1, 1L, 2/2H, 3, 4, 8, 13, 15, 16A, 16B, 24, 28, 30
Applied Technology 10, 11, 19, 21, 40
Architecture 10, 11, 12, 14, 15A, 15B, 20, 21, 22, 24, 30, 31,
32, 34, 40, 41A, 42
Armenian 1, 2, 3
Art $2,3,4,5 / 5 \mathrm{H}, 6 / 6 \mathrm{H}, 7,8,9,10,11,12 \mathrm{~A}, 12 \mathrm{~B}, 13$, $14,15,16,17,18,19,20,21,22 \mathrm{~B}, 23,24 \mathrm{~A}, 24 \mathrm{~B}$, 24C, 24D, 25, 28, 29, 31, 32A, 32B, 36A, 38A, 52, 55, 60
Asian-American Studies 1, 8, 10, 15, 20, 25, 30
Astronomy 10
Automotive Technology 9, 19, 51, 51L, 52, 53, 54, 55, 56, 57, 58, 58A, 58B, 58C
Automotive Technology - General Motors ASEP
51, 51L, 52, 53, 54, 55, 56, 57
Biology 3/3H, 4, 5, 6, 7, 11A/11AH, 11B, 20,
21A, 21B, 22, 24, 31, 46, 47
Business Administration 5, 10, 10H, $18,19,20,25,27,28,30,31,33,34$, $35,38,40,43,44,48,49,50,51,52,58$

Business \& Technology 1, 2, 5, 6, 7, 9, 10, 11, $13,18,19,23,24,25,26,28,29,33,43$
Chemistry 1A, 1B, 3A, 3B, 8A, 18L, 20, 28A, 28B, 29A, 29B, 42
Chicano-Latino Studies $11,12,13,14,17 \mathrm{~A}, 17 \mathrm{~B}, 18$, 20, 21, 22, 24, 27A, 27B, 28, 29, 30, 33
Child Development $1,3,5,6,9,10,11,12$, $15,16,17 \mathrm{~A}, 17 \mathrm{~B}, 19,20,30,37 \mathrm{~A}, 37 \mathrm{~B}, 38,39$, 40A, 40B, 42, 43, 45, 47, 48, 53, 60
Chinese 1, 2
Communication 1, 2, 4, 8, 12, 20, 25, 26
Computer Aided Drafting and Design 6A, 6B, 14, 16, 22, 24, 26A, 28, 32, 36A, 42
Computer Aided Manufacturing 10, 15, 20, 25, 26
Computer Information Technology 12, 15, 17, 19, $20,21,23,24,26,28,31,40,45,48,50,51,52,55,57$, 58A, 58B, 58C, 58D, 58E, 58F, 60, 62, 63, 65, 66, 68, $69,80,81,82,85,90,93,94,95$
Computer Science 26, 40,41
Construction 14, 18, 19, 50A, 50B, 51, 52A, 52B, 53, 55, 56, 56A, 56AL, 56B, 56BL, 60, 65
Counseling 43, 48, 53, 54
Criminology $1,3,4,5,6,7,8,9,11,12,13,15,16$, $18,19,20,21,23,24,25,36$

## Cultural Studies 10

Dance $8,9,10 \mathrm{~A}, 10 \mathrm{~B}, 11,12 \mathrm{~A}, 12 \mathrm{~B}, 13 \mathrm{~A}, 13 \mathrm{~B}, 14,15,16$, 17A, 17B, 18, 20A, 20B, 21, 22, 25, 26, 27A, 27B, 28, 28B, 30, 31, 32
Decision Science 21, 23
Dental Hygiene 1A, 1B, 1C, 1D, 2, 3A, 3B, 4, 5A, 5B, 5С, 6A, 6B, 7A, 7B, 8A, 8B, 9, 10, 11, 12, 13, 14
Drafting 12
Economics 25, 40/40H, 50/50H
Education 6, 7, 19, 30
Electrical Systems Technology 19, 50, 51, 52, $53,54,55 \mathrm{~A}, 55 \mathrm{~B}, 55 \mathrm{C}, 56 \mathrm{~A}, 56 \mathrm{~B}, 56 \mathrm{C}, 57 \mathrm{~A}, 57 \mathrm{~B}$, $57 \mathrm{C}, 58,59,60,61,62,63,64,80,81,82 \mathrm{~A}, 82 \mathrm{~B}$, 96A, 96B, 96C, 96D
Engineering 1A, 1B, 2, 4, 6, 8, 10, 11
English $1 \mathrm{~A} / 1 \mathrm{AH}, 1 \mathrm{~B}, 3 / 3 \mathrm{H}, 12,14,15 \mathrm{~A}, 15 \mathrm{~B}$, 15C, 15D, 17, 20, 36, 40, 42, 44A, 44B, 45, 46A, 46B, 47, 48A, 48B
English for Multi-Lingual Students 67, 68
Fashion Merchandising 19, 27, 28
Film 1, 2A, 2B, 3, 5, 6
Fire Technology 1, 2, 3, 4, 5, 8, 9, 14
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 $1,2,4 \mathrm{~A}, 4 \mathrm{~B}, 7,8,10,12,18,20,30$

Geology 1/1H, 2, 2L, 3, 4, 5, 7, 8, 9, 12
German 1, 2
Graphic Communications $14,15,16,17,18,20$, $22,23,24,25,27,28,30,31,32,34,39 \mathrm{~A}, 40 \mathrm{~A}$, 41, 51, 52, 53
Health Information Technology 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15
Health Science 1, 2,
History $1 / 1 \mathrm{H}, 2 / 2 \mathrm{H}, 3,11,12 / 12 \mathrm{H}, 15,17,18,20,21$, $22,23,25,29,30,34$
Hmong 1, 2
Honors 1A, 1C, 1D, 1E, 1F, 1G
Human Services 10, 18, 19A, 19B, 20, 24, 25, 30, 35, $40,42,43,44,60$
Humanities $10 / 10 \mathrm{H}, 11 / 11 \mathrm{H}, 42$
Individual Study 49
Interior Design 7
Japanese 1,2
Journalism 1, 2, 3, 4, 5, 6, 9, 11A, 11B, 11C, 11D, $12,13,14,15,16,19$
Learning Assistance 1, $2 \mathrm{~A}, 2 \mathrm{~B}$
Library Skills 1, 2
Library Technology 51, 52A, 52B, 54, 55, 56, 57
Linguistics $10 / 10 \mathrm{H}, 11$
Marketing 10, 11, 12, 14, 17, 19, 21, 22
Mathematics 4A, 4B, 5A, 5B, 6, 7, 10A, 10B, 11, 21, 26, 42,45
Medical Assisting 1, 2, 4, 5, 6A, 6B, 19
Military Science 1, 2, 11, 12, 50A, 50B
Music 1A, 1B, 2A, 2B, 3, 4, 5, 6, 7A, 7B, 7C, 7D, 8, 9, 10A, 10B, 12, 13, 16, 17, 18, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 34, 35, 39A, 39B, 39C, 39D, $40,41,42 \mathrm{~A}, 42 \mathrm{~B}, 42 \mathrm{C}, 42 \mathrm{D}, 46,47 \mathrm{~A}, 47 \mathrm{~B}, 47 \mathrm{C}$, 47D, 48, 49, 53, 54, 55, 57, 59, 60, 61, 63, $64,66,67,68,69,70,71,72,73 \mathrm{~A}, 73 \mathrm{~B}, 73 \mathrm{C}$, 73D, 74A, 74B, 74C, 74D, 75, 76, 77, 78, 90, 91, 92

## Natural Science 1A

Nursing 19, 31, 32, 32A, 33, 33I, 35A, 35B, 41, 42, 42A, $45,46,51,52,52 \mathrm{~A}, 53,55,56,61,62,62 \mathrm{~A}, 65,66$
Paralegal 1, 2A, 2B, $3,4,5,6 \mathrm{~A}, 6 \mathrm{~B}, 7,8,10,11,12,13$, $14,15,17,18,19,20$
Philosophy $1 \mathrm{~A} / 1 \mathrm{AH}, 1 \mathrm{~B}, 1 \mathrm{C}, 1 \mathrm{D}, 2,5,6$
Photography 5, 6, 12, 15, 17, 18, 23, 26, 27, 30, 32, 37, 40, 45, 47, 57
Physical Education 3, 4, 5, 6, 7, 9, 12, 13, 14, $15 \mathrm{~A}, 15 \mathrm{~B}, 15 \mathrm{C}, 17,20,23,24,26,27,29 \mathrm{~A}, 29 \mathrm{~B}, 29 \mathrm{C}$, 30A, 30B, 30C, 31B, 31C, 32B, 32C, 33B, 33C, 34B, $34 \mathrm{C}, 35 \mathrm{~B}, 36 \mathrm{~B}, 36 \mathrm{C}, 37 \mathrm{~B}, 37 \mathrm{C}, 38 \mathrm{~B}, 38 \mathrm{C}, 39 \mathrm{~B}, 39 \mathrm{C}$, $40 \mathrm{~B}, 40 \mathrm{C}, 41 \mathrm{~B}, 41 \mathrm{C}, 42 \mathrm{~B}, 42 \mathrm{C}, 43 \mathrm{~B}, 43 \mathrm{C}, 45,50,51$, 52, 53, 54, 55, 62

Physical Science 11, 42
Physics 2A, 2B, 4A, 4B, 4C
Political Science 1, 2/2H, 3, 5, 13, 24, 25
Portuguese 1, 2
Psychology 2, 2H, 5, 12, 16, 18, 25, 33, 36, 38,
39, 42, 45
Radiologic Technology 1A, 1B, 1C, 1D, 2A, 2B, 2C, 2D, $3,4 \mathrm{~A}, 4 \mathrm{~B}, 4 \mathrm{C}, 5 \mathrm{~A}, 5 \mathrm{~B}, 5 \mathrm{C}$
Real Estate 40, 41
Recreation 19, 20, 21, 23
Respiratory Care 16, 17, 18, 20, 21, 22, 23, 24, 25
Sociology 1A/1AH, 1B, 2, 5, 7, 10, 14, 31, 32
Spanish 1, 2, 2NS, 3, 3NS, 4, 4NS, 5, 6, 7, 8, 9, 13, 17
Special Studies 47
Theatre Arts $12,15 \mathrm{C}, 23,25,27 \mathrm{~A}, 27 \mathrm{~B}, 28,29 \mathrm{~A}$,
29B, 30, 31, 32, 35, 36, 38, 39A, 39B, 40, 41, 42,
$43,44 \mathrm{~A}, 44 \mathrm{~B}, 45,46,48 \mathrm{~A}, 48 \mathrm{~B}$
Welding $1,2 \mathrm{~A}, 2 \mathrm{~B}, 3 \mathrm{~A}, 3 \mathrm{~B}, 4 \mathrm{~A}, 4 \mathrm{~B}, 56$
Women's Studies $5,7,10,24,25,30,36,41,43$, 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) presentation of appropriate college courses completed with a "C" grade or better in the "A-F" subjects not completed in high schools. Up to two units of credit may be waived if (1) and (2) are satisfied.

An alternative to the criteria in (3) above may be used. A student may present one college course in mathematics, one in English, and one in either U.S. History, a laboratory science, or a foreign language. These courses must be passed with a grade of " C " or better. Courses other than mathematics must be transferable to the university. To meet the mathematics eligibility requirements, the student should have completed three years of high school mathematics through intermediate algebra or complete a college course with a prerequisite of intermediate algebra.

## UC Transfer Admission Guarantee (Guaranteed Admission)

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

## University of California Transfer Course List (UC)

Fresno City College courses that are acceptable for transfer credit at the University of California are as follow.
Accounting 4A/4AH, 4B/4BH
Aerospace Studies *1A, *1B, *2A, *2B, *3
*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, 13, 15, 17, 34, 36, 41
American Indian Studies 31, 32, 34, 35
American Sign Language 1, 2, 3, 4, 6, 7, 8, 22
American Studies 10, 11
Anthropology 1, 1L, 2/2H, 3, ${ }^{* *} 4,8,13$, *16A, *16B, 24,28
*16, 16B and 24 combine: maximum credit, 2 units.
**No credit for 4 if taken after 3.
Architecture 10, 11, 15A, 15B, 20, 30
Armenian 1, 2
Art $2,3,4,5 / 5 \mathrm{H}, 6 / 6 \mathrm{H}, 7,8,9,10,11,13,14,15$,
$16,17,18,19,20,21,23,24 \mathrm{~A}, 24 \mathrm{~B}, 24 \mathrm{C}, 24 \mathrm{D}$,
$25,28,29,31,36 \mathrm{~A}, 52,55,60$
Asian-American Studies 1, 8, 10, 15, 20, 25, 30
Astronomy 10
Biology *3/3H, 4, 5, 6, 7, 11A/11AH, 11B, 20, 21A, 21B, 22, 31
*No credit for 3/3H if taken after 11A/11AH.
Business Administration $10 / 10 \mathrm{H}, * 18,20$
*18 and 21 combined: maximum credit, 1 course
Chemistry *1A, 1B, *3A, 3B, 8A, 18L, 20, 28A, 28B, 29A, 29B
*1A and 3A combined: maximum credit, 1 course.
Chicano-Latino Studies 11, 12, 13, 14, 17A, 18, 20,
21, 22, 24, 27B, 28, 29, 30
Child Development 30, 38, 39
Chinese 1, 2
Communication 1, *4, 8, 12,*25

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

Computer Information Technology *12, *15, 60, 62, 63, 66, 68
*12 and 15 combined: maximum credit, 1 course.
Computer Science 26, 40, 41
Criminology 1, 5, 13
Cultural Studies 11
Dance *9, 10A, 10B, 11, 12A, 12B, 13A, 13B, 14, 15, 16, 17A, 18, 20A, 20B, 21, 22, 27B, 28, 30, 31, 32

* Any or all of these PE Activity courses combined; maximum credit, 4 units.
Decision Science 21, *23
*23, Math 11, 42 and Psychology 42 combined: maximum credit, 1 course.
Economics 40/40H, 50/50H
Education 30
Engineering $1 \mathrm{~A}, 1 \mathrm{~B}, 2,4,6,8,10$
English 1A/1AH, 1B, 3/3H, 12, 14, 15A, 15B,
$15 \mathrm{C}, 15 \mathrm{D}, 17,20,36,40,42,44 \mathrm{~A}, 44 \mathrm{~B}, 45,46 \mathrm{~A}$, 46B, 47, 48A, 48B
Film 1, 2A, 2B, 3, 5, 6
Food and Nutrition 35, 40
French 1, 2, 3
Geography *1, 2, 4A, 4B, *7, 8, 10, 20
*1 and 7 combined: maximum credit, 1 course.
Geology 1/1H, 2, 2L, 3, 4, 5, 7, 8, *), 12
* No credit for 9 if taken after 1, 1H, 2/2L, 3, 4, 5, 8 or ASTRO 10.
German 1, 2
Graphic Communications 34
Health Science 1,2
History $1 / 1 \mathrm{H}, 2 / 2 \mathrm{H}, 3,11,12 / 12 \mathrm{H}, 15,17,18,20,21$, 22, 23, 25, 29, 30, 34
Hmong 1, 2
Honors Studies \#1A, *1C
\#Variable topics; evaluation completed by individual campuses after admission.
*1C must be taken concurrently with PHIL 1AH, HUMAN 10H, HUMAN 11H, HIST 1H, HIST 2H, ENGL 1BH, ENGL 3H, ART 5H or ART $6 H$ for credit.
Human Services 10, 20
Humanities $10 / 10 \mathrm{H}, 11 / 11 \mathrm{H}, 42$
Individual Study \#49
\#Variable topics; evaluation completed by individual campuses after admission.
Japanese 1, 2
Journalism 1, 16
Latin American Studies 10
Linguistics 10

Mathematics $4 \mathrm{~B}, 5 \mathrm{~A}, 5 \mathrm{~B}, 6,7,{ }^{*} 10 \mathrm{~A},{ }^{*} 10 \mathrm{~B},{ }^{\circ} 11$, $21,26,{ }^{\circ} 42,45$
*10A and 10B combined: maximum credit, 1 course.
${ }^{\circ}$ 11, 42, Decision Science 23, and Psychology 42 combined: maximum credit, 1 course.
Military Science *1, *2, *11, *12
*Any or all of these courses and Aerospace Studies 1A, 1B, 2A, 2B, 3 combined: maximum credit, 8 units.
Music 1A, 1B, 2A, 2B, *3, 4, 7A, 7B, 7C, 7D, 9, 12, 13, 16, 17, $18,20,21,22,24,25,26,27,28,29,30,34,35$, 39A, 39B, 39C, 39D, 40, 41, 42A, 42B, 42C, 42D, 46, $47 \mathrm{~A}, 47 \mathrm{~B}, 47 \mathrm{C}, 47 \mathrm{D}, 48,49,53,54,55,73 \mathrm{~A}, 73 \mathrm{~B}, 73 \mathrm{C}$, 73D, 74A, 74B, 74C, 74D, 90, 91, 92
*No credit for 3 if taken after 1A.

## Natural Science 1A

Philosophy 1A/1AH, 1B, 1C, 1D, 2, 5, 6
Photography 5, 17
Physical Education $+3-17,20,23, * 24,+29 B-42 B$,
$+29 \mathrm{C}-42 \mathrm{C},+50,+51,+52,+53,+54,+55,62$
*Any or all of these courses combined: maximum credit, 8 units.
+Any or all of these PE Activity courses combined; maximum credit, 8 units.
Physical Science *11
*No credit if taken after a college level course in Physics or Astronomy.
Physics *2A, *2B, *4A, *4B, *4C
*2A and $2 B$ and 4A, 4B, 4C combined: maximum credit,
1 series. Deduct credit for duplication of topics.
Political Science 1, 2/2H, 3, 5, 13, 24
Portuguese 1, 2
Psychology 2/2H, 5, 16, 25, 33, 36, 38, 39, *42, 45
*42, Math 11, 42 and Decision Science 23 combined: maximum credit, 1 course.
Sociology 1A/1AH, 1B, 2, 10, 14, 32
Spanish 1, \#2, \#2NS, *3, *3NS, +4, +4NS, 5, 6, 7, 8, 17 \#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.
Theatre Arts $12,15 \mathrm{C}, 23,25,27 \mathrm{~A}, 27 \mathrm{~B}, 28,29 \mathrm{~A}$, 29B, 30, 31, 32, 35, 36, 38, 39A, 39B, *41, *42, 43, 44A, 44B, 46
*41 and 42 combined: maximum credit, 1 course.

Women's Studies 10, 24, 30, 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 <br> CSU-Three courses required, one each from 1A, 1B, and 1C (nine semester units minimum); <br> UC-Two courses required, one each from Group 1A and 1B (six semester units minimum).

## 1A English Composition <br> One course, three semester units. <br> **English 1A/1AH, Reading and Composition.

 .. 41B Critical Thinking - English Composition One course, three semester units. **English 3/3H, Critical Reading and Writing $\qquad$
Philosophy 2, Critical Reasoning and Analytic Writing. .. 3
1C Oral Communication(CSU only: One course, three semester units)
Communication 1, Intro to Public Speaking. .....  3
**Communication 4, Persuasion .....  3
Communication 8, Group Communication ..... 3
**Communication 25, Argumentation .....  3
Area 2 - Mathematical Concepts and Quantitative Reasoning
One course required (three semester units minimum).Computer Science 26, Discrete Mathematics forComputer Science.4
Decision Science 21, Finite Mathematics. ..... 3
Decision Science 23, Business Statistics .....  4
Mathematics 4B, Pre-Calculus ..... 4
Mathematics 5 A , Mathematical Analvsis I ..... 5
Mathematics 5B, Mathematical Analysis II .....  4
Mathematics 6, Mathematical Analysis III ..... 4
**Mathematics 10A, Structure and Concepts in Mathematics I ..... 3
**Mathematics 10B, Structure and Concepts in Mathematics II ..... 3
**Mathematics 11, Elementary Statistics ..... 4
Mathematics 21, Finite Mathematics .....  3
Mathematics 26, Elementary Linear Algebra. ..... 3
**Mathematics 42, Statistics for the Behavioral Sciences ..... 4
**Psychology 42, Statistics for the Behavioral Sciences .....  4

## Area 3 - Arts and Humanities

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

## 3A Arts

African-American St 3, African-American Art............... 3
African-American St 13, African-American Music from Pre-Slavery to 1940. 3
African-American St 15, African-American Music from 1940 to Present .....  3
American Indian St 35, American Indian Art. .....  3
Architecture 15A, History of Architecture I .....  3
Architecture 15B, History of Architecture II .....  3
Art 2, Art Appreciation. ..... 3
**Art 5/5H, Art History 1 .....  3
**Art 6/6H, Art History 2 ..... 3
Art 55, Introduction to Asian Art ..... 3
Art 60, Art of the Ancient Americas. ..... 3
Chicano-Latino St 20, Chicano Art .....  3
Chicano-Latino St 22, Art of the Ancient Americas .....  3
Dance 30, Dance Appreciation ..... 3
Film 6, Film Genres ..... 3
**Music 3, Music Fundamentals .....  3
Music 12, Music Appreciation .....  3
Music 13, History of Music .....  3
Music 16, Jazz History and Appreciation. .....  3
Music 17, History of Rock .....  3
Theatre Arts 30, Theatre Appreciation .....  3
Theatre Arts 31, Theatre History and Dramatic Lit I .... 3Theatre Arts 32, Theatre History and DramaticLiterature II
$\qquad$

## 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 .....  5
Asian-American Studies 8, Chinese Culture. .....  3
Chicano-Latino St 21, Chicano Literature. .....  3
Chinese 2, High-Beginning Chinese .....  5
**English 1B, Introduction to the Study of Literature... .....  3
English 12, The Bible as Literature .....  3
English 14, Folklore .....  3
English 17, African-American Literature .....  3
English 36, Women in Literature .....  3
English 42, Classic Myths .....  3
English 44A, World Literature to the Renaissance. .....  3
English 44B, World Literature Since the Renaissance.. ..... e.. 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 World War I .....  3
English 48B, Introduction to American Literature from World War I 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 1/1H, Western Civilization to 1648 .....  3
**History 2/2H, Western Civilization since 1648 .....  3
Hmong 2, High-Beginning Hmong .....  5
**Humanities $10 / 10 \mathrm{H}$, Classical Humanities. .....  3
**Humanities 11/11H, Modern Humanities ..... 3
Humanities 42, Classic Myths ..... 3
Japanese 2, High-Beginning Japanese ..... 5
Linguistics 10, Introduction to Language ..... 3
**Philosophy 1A/1AH, Theories of Knowledge and Reality .....  3
Philosophy 1B, Social and Political Philosophy. .....  3
Philosophy 1C, Ethics .....  3
Philosophy 1D, World Religions. .....  3
Philosophy 5, Philosophy of Religion. ..... 3
Portuguese 2, High-Beginning Portuguese ..... 55
Spanish 2, High-Beginning Spanish ..... 5
**Spanish 3, 4, Intermediate Spanish ..... 5-5
**Spanish 3NS, 4NS, Intermediate Spanish for SpanishSpeakers5-5
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 ...Women's Studies 36, Women in Literature 3
Area 4 - Social and Behavioral Sciences
At least three courses from at least two different disciplines (nine semester units minimum).
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
$4 B$ Economics
**Economics 40/40H, Introduction toMicroeconomics. 3
**Economics 50/50H, Introduction toMacroeconomics.3
4C Ethnic StudiesAfrican-American St 1, Introduction to African
American Studies .....  3
African-American St 34, History of the American Civil Rights Movement ..... 3
American Indian St 20, Native People of California .... 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 toAsian-Americans. 3
Chicano-Latino St 11, Introduction to
Chicano-Latino Studies ..... 3
Chicano-Latino St 12, Mexican American History .....  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, African Civilization ..... 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 $12 / 12 H$, 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
American St 10, American Pluralism:A Search for Common Ground in aMulticultural Society 3
Child Development 30, Child, Family, and Community .....  3
Child Development 39, Child Growth and Development ..... 3
Journalism 1, Introduction to Mass Communication.. 3Psychology 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 $1 \mathrm{~A} / 1 \mathrm{AH}$, Intro to Sociology .....  3
Sociology 2, American Minority Groups .....  3
Sociology 10, Introduction to Aging Studies .....  .3
Area 5 - Physical and Biological SciencesAt least two courses, one Physical Science and one BiologicalScience (seven to nine semester units minimum). One coursemust have a lab component (indicated by " $L$ ").
5A Physical Sciences
Astronomy 10(L), Basic Astronomy .....  3
**Chemistry $1 \mathrm{~A}(\mathrm{~L}), 1 \mathrm{~B}(\mathrm{~L})$, General Chemistry ..... 5-5
**Chemistry 3A(L), Intro General Chemistry . .....  4
Chemistry 8A, Elementary Organic Chemistry .....  3
Chemistry 28A/29A(L), Organic Chemistry I ..... 3-2
Chemistry 28B/29B(L), Organic Chemistry II ..... 3-2
**Geography 1, Physical Geography .....  3
**Geography 7(L), Physical Geography - Earth Surface ..... 4
Geography 8(L), Physical Geography -
Weather/Climate .....  4
Geology 1/1H(L), Physical Geology .....  4
Geology 2, Historical Geology .....  3
Geology 4, Geology of California ..... 3
Geology 5, Introduction to Oceanography .....  3
Geology 7, Natural History of Dinosaurs .....  3
Geology 8, Geology of Moons and Planets .....  3
Geology 12, Environmental Science .....  3
**Physical Science 11, Intro Physical Science .....  3
**Physics 2A(L), General Physics 1 .....  4
**Physics 2B(L), General Physics 2 .....  4
**Physics 4A(L), 4B(L), 4C(L), Physics for Scientists and Engineers ..... 4-4-4

## 5B Biological Sciences

Anthropology 1, Biological Anthropology $\qquad$ 3
**Biology 3/3H(L), Introduction to Life Science. .....  4
Biology 4(L), Principles of Zoology .....  5
Biology 5(L), Human Biology. .....  4
Biology 6(L), Principles of Botany. .....  5
Biology 11A/11AH(L), Biology for Science Majors I..... 5
Biology 11B(L), Biology for Science Majors II .....  5
Biology 20(L), Human Anatomy. .....  4
Biology 21A(L), Human Anatomy and Physiology .....  4
Biology 21B(L), Human Anatomy and Physiology II ..Biology 22(L), Human Physiology
$\qquad$Biology 31(L), Microbiology
$\qquad$
5C Science Laboratory
Chemistry 29A, Organic Chemistry Lab I. .....  2
Chemistry 29B, Organic Chemistry Lab II .....  2
Geology 2L, Historical Geology Lab .....  1
Area 6 - UC Requirement in Language Other than English

Proficiency equivalent to two years of bigh 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).
American Sign Language 1, Beginning AmericanSign Language 4
American Sign Language 2, High-Beginning American Sign Language .....  4
American Sign Language 3, Intermediate American Sign Language .....  4
American Sign Language 4, High-
Intermediate American Sign Language. .....  4
Armenian 1, Beginning Armenian .....  5
Armenian 2, High-Beginning Armenian .....  5
Chinese 1, Beginning Chinese. .....  5
Chinese 2, High-Beginning Chinese .....  5
French 1, Beginning French .....  5
French 2, High-Beginning French .....  5
French 3, Intermediate French .....  5
German 1, Beginning German .....  5
German 2, High-Beginning German .....  5
Hmong 1, Beginning Hmong .....  5
Hmong 2, High-Intermediate Hmong .....  5
Japanese 1, Beginning Japanese .....  .5
Japanese 2, High-Beginning Japanese .....  5
Portuguese 1, Beginning Portuguese .....  5
Portuguese 2, High-Beginning Portuguese .....  5
Spanish 1, Beginning Spanish .....  5
Spanish 2, High-Beginning Spanish. .....  5
**Spanish 3, Intermediate Spanish ..... 5
**Spanish 3NS, Intermediate Spanish for SpanishSpeakers 5
**Spanish 4, High-Intermediate Spanish .....  .5
**Spanish 4NS, High-Intermediate Spanishfor Spanish Speakers 5
Spanish 7, Advanced Spanish: Compositionand Grammar. 4

## Area 7 - CSU Graduation Requirement in U.S. History, Constitution, and American Ideals

One course from each group (six semester units minimum). 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.

## Group 1:

Political Science 2, 2H, American Government. . .3

## Group 2:

History 11, 12, History of the United States to 1877, or
History of the United States Since 1877. ... 3

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$3 B$ and 6 A.
2. ${ }^{* *}$ Indicates that transfer credit may be limited by either UC or CSU or both. Please consult with a counselor for additional information.
3. All courses listed for IGETC are approved for CSU GE and are transferable to UC.
4. Advanced Placement credit: Exam scores of 3, 4 or 5 can be used to meet IGETC subject areas and English Composition but not Critical Thinking.
5. This pattern should not be used for the following majors at the University of California campuses listed. It either will not be accepted or contains more courses than are required. Use the GE-Breadth requirement for the individual program in the campus catalog. It is critical for admission that students complete all lower division major preparation in addition to the GE-Breadth requirement selected.
The following information is taken from the University of California's website at www. universityofcalifornia.edu.

## U.C. Berkeley

## Colleges of Chemistry and Engineering

In general, IGETC is not appropriate.

## College of Environmental Design

IGETC is acceptable with full certification to fulfill CED's
breadth requirements.

## College of Letters and Science

Either IGETC or the college's requirements are acceptable.

## College of Natural Resources

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

## Haas School of Business

IGETC is not accepted.

## U.C. Davis

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

## U.C. Irvine

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

## U.C. Los Angeles

The Henry Samueli School of Engineering and Applied Science does not accept IGETC.

## U.C. Merced <br> School of Engineering and School of Natural Sciences

IGETC is not recommended.
School of Social Science, Humanities, and Arts
IGETC is recommended, and students are encouraged to complete as much lower-division major preparation as possible prior to transfer.
U.C. Riverside

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

## College of Natural and Agricultural Sciences

IGETC is not accepted.
The Marlan and Rosemary Bourns College of Engineering

IGETC is accepted; some additional coursework may be required after enrollment.

## School of Business Administration

IGETC is required.

## U.C. San Diego

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

## Eleanor Roosevelt and Revelle Colleges

IGETC is accepted; some additional coursework may be required after enrollment.

## U.C. Santa Barbara

## College of Creative Studies and College of Letters

 and ScienceIGETC is accepted.

## College of Engineering

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

## U.C. Santa Cruz

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

## Transfer Requirements of Private/Independent and Out-of-State Colleges and Universities

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

## ADMINISTRATIVE POLICIES

## Student Conduct Standards

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

## State Center Community College District (SCCCD) Policy Statement

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

These conduct standards, and Administrative Regulation 5520 which defines discipline procedures, apply to all students who are enrolled in courses offered by either college of the State Center Community College District. Any student will be subject to discipline who, in any way:

1. prevents other students from pursuing their authorized curricular or co-curricular interests;
2. interferes with or disrupts faculty and administrators who are fulfilling their professional responsibilities;
3. prevents classified employees from fulfilling their prescribed duties;
4. disrupts presentations by authorized guests; or
5. deliberately endangers the safety of persons, or the security of college property.

## Student Assembly

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

## Exercise of Free Expression

In stating its policy on the distribution of materials, the governing board of this district has assumed that each student is responsible for his/her 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 he/she 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, he/she 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 he/she 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 his/her own risk. $\mathrm{He} /$ she 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 (www.scccd.edu/index.aspx?page=142). 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, he/she is subject to removal from the computer facility as well as discipline as a student.

## No Smoking in Campus Buildings

In order to provide a healthier climate for teaching, learning and study, smoking and use of tobacco products is prohibited within 20 feet from building entry and in all campus buildings. Additionally, tobacco products are not sold on campus.

## Drug Abuse Policy

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

## Academic Freedom

## General Principles

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

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

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

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

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

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

## Academic Dishonesty

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

## Cheating

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

## Plagiarism

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

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

## Authority and Disciplinary Actions

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

1. Causing, attempting to cause, or threatening to cause physical injury to another person.
2. Possession, sale or otherwise furnishing any firearm, knife, explosive or other dangerous object, including but not limited to any facsimile firearm, knife or explosive, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from the Vice President of Student Services.
3. Unlawful possession, use, sale, offering to sell or furnish, furnishing, or being under the influence of, any controlled substance listed in California Health and Safety Code Section 11053 et seq., an alcoholic beverage, or an intoxicant of any kind or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia as defined in California Health and Safety Code Section 11014.5.
4. Committing or attempting to commit robbery or extortion, or gambling.
5. Causing or attempting to cause damage to District property or to private property on campus. Stealing or attempting to steal District property or private property on campus or knowingly receiving stolen District property or private property on campus.
6. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the college or the District.
7. Committing sexual harassment as defined by law or by District policies and procedures.
8. Engaging in harassing or discriminatory behavior based on race, sex, religion, age, national origin, disability, or any other status protected by law.
9. Willful misconduct that results in injury or death to a student or to District personnel or which results in cutting, defacing, or other damage to any real or personal property owned by the District or on campus.
10. Disruptive behavior, willful disobedience, habitual profanity or vulgarity, the open and persistent defiance of the authority of, or persistent abuse of, college personnel.
11. Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty as defined by the Office of Instruction.
12. Dishonesty, forgery, alteration or misuse of District documents, records or identification, or knowingly furnishing false information to the District.
13. Unauthorized entry upon or use of District facilities.
14. Lewd, indecent, or obscene conduct, or expression on District-owned or controlled property, or at District sponsored or supervised functions.
15. Engaging in expression which is obscene, libelous, or slanderous or which so incites students as to create a clear and present danger of the commission of unlawful acts on District premises.
16. Violation of lawful District regulations or the substantial disruption of the orderly operation of the District.
17. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
18. Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to digital or electronic recording or handwritten or typewritten class notes except as permitted by any District policy or administrative procedure.
19. Other good cause as shown.

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

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

## Student Rights

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

## Removal from Class by Instructor

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

## Grievance Policy for Students

Students who reasonably believe a college decision or action has adversely affected his or her status, rights, or privileges may file a student grievance form and submit it to the Office of the Vice President of Student Services Office (Student Services Building, Room 224). 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. Student grievance forms are located in the Office of the Vice President of Student Services.

## 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<br>U.S. Department of Education<br>221 Main Street, Suite 1020<br>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 pólítica 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 solicitor 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. Contacte 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.

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

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

## 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 txawv ntawm haiv neeg, ntawm nqaij-taw, tuaj txawv tej chaws tuaj, poj-niam, txiv-neej, neeg xiam oob khab, laus-hluas, los yog qhov kev xaiv ntawm tej kev nkauj nraug li cas nyob rau hauv nws txoj cai, kev khiav dej-num, los yog kev coj, kom raws li txoj cai Title VI ntawm Civil Rights Act ntawm 1964 (uas hais txog ntawm haiv neeg, nqaij-taw, thiab tuaj txawv teb chaws tuaj), Title IX ntawm qhov Education Amendments ntawm xyoo 1972 (hais txog poj niam-txiv neej), Section 504 ntawm Rehabilitation Act ntawm xyoo 1973 (hais txog neeg xiam oob khab), qhov Americans with Disability Act 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-lwm nyob hauv college tej programs thiab lwm yam rau txhua tus, nrog rau kev kawm hauj lwm nyob hauv tsev kawm ntawv. Yog xav paub txog txoj cai vaj-huam sib luag no, muaj kev tsis txaus siab los sis xav tau ib daim ntawv qhia txog txoj cai ntawm kev tawm suab txog tej kev tsis txaus siab thaum raug neeg ntxub ntxaug ntawd no, mus cuag tau rau:

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Vice President of Student Services
Fresno City College
1101 E. University Avenue
Fresno, CA 93741
(559) 442-4600, ext. 8595
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Lub tsev kawm ntawv paub txog nws lub luag dej num hais tias yuav tsum tau muaj program nyob thoob plaws hauv tsev kawm ntawv rau cov neeg xiam oob khab. Hu rau Dean of Students, rau tej kev pab 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 kawm ntawv thiab kawm hauj lwm nyob rau hauv tsev kawm ntawv nqib siab no li.

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

Office for Civil Rights
U.S. Department of Education

221 Main Street, Suite 1020
San Francisco, CA 94105

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

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

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

The law authorizes the release of directory information in the absence of student objection. Please contact the Vice President of Student Services for this information. Directory information includes name, address, telephone number, date and place of birth, major field of study, participation in activities, dates of attendance, degrees and awards, and last institution attended. 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 "Update Address, Telephone" on WebAdvisor or submitting an "Address Change" form at www.fresnocitycollege.edu/ forms-online.

## Other Policies

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

# STUDENT SUPPORT SERVICES 

Fresno City College is a community college that cares about students' success. As a FCC student, you will find a bost of services to belp 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.fresnocitycollege.edu/bookstore.

## 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 http://mycampushub.com. 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 and 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 Workforce Development at (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 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 courses 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.

## Career and Employment Center

The Career Center offers information on thousands of occupations and provides assistance with career planning. Trained staff are available to provide guidance and direction in the use of materials and services.

Services include career assessments, individualized career counseling, workshops and two computer-based career information systems. In addition, the Career Center maintains a library of career books college catalogs, occupational files, and other reference materials.

In a changing job market, knowledge of the world of work and career planning skills are essential. The Career Center is an excellent place to start gathering information and exploring possibilities for the future. Most services are free to current students. For more information, visit the Career Center or call (559) 442-8291. Visit our website at www.fresnocitycollege.edu/ careercenter.

## 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.

The Transfer Center is located on the second floor of the Student Services Building (ST/Bldg10). For more information visit our website at: fresnocitycollege.edu/transfercenter.

## Disabled Students Programs and Services (DSP\&S)

Fresno City College offers services designed to assist students with disabilities in their pursuit of a community college education. Such students are assigned to a disabled student counselor who can arrange such services as college program planning, vocational career information, priority registration, special parking permits, learning disabilities testing, interpreters for the deaf, notetakers and other appropriate supportive services. Students will develop a specialized educational contract.

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 his/her 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 mustsign 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.)

Medical verification of disability must be provided to the Disabled Students Programs \& Services office to qualify for any of the following supportive services:

1. Special classes
2. On campus mobility assistance
3. Use of special equipment (i.e., tape recorders and adaptive software)
4. Alternate media production
5. Special parking permit
6. Priority registration
7. Interpreters for the deaf
8. Notetakers
9. Liaison/Referral with community agencies
10. Test taking accommodations

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 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.

## Employment Resource Center

Fresno City College recognizes that many students desire part-time employment to help finance their education and that it is necessary to provide full-time employment opportunities for continuing education students and graduates. The Employment Resource Center strives to provide a broad range of services not only for students and alumni of the college but also for employers who wish to list job openings. Services include job listings, employment advising, job search workshops, on-campus interviews with employers, job fairs and a job search resource center.

Employment information and applications are available in the Employment Resource Center located in the Learning Resources Center, LI-147. Employers may list job openings by calling 442-8294.

## Extended Learning Center-Reading, Writing and Math Lab

The Extended Learning Center has upper-division and graduate student tutors available to help with any reading and writing projects students will encounter at Fresno City College. The math lab will equally serve to help students solve mathematical problems and understand mathematical concepts with qualified tutors.

## Extended Opportunity Programs and Services (EOPS)

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

Services include academic counseling, personal advisement, special instruction, career guidance, tutorial assistance, academic mentoring, financial aid assistance, college transfer counseling, book grants, emergency loans, vocational internships, and priority registration. EOP\&S students, who are single heads of household, with a child under the age of 14 receiving public assistance for themselves or the child are eligible for the Cooperative Agencies Resources for Education (CARE) program.

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

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

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
- Academic Competitive Grant
- Federal Direct Student Loans
- Boards of Governors Enrollment Fee Waiver
- Cal Grants
- Extended Opportunity Programs and Services (EOPS)
- Bureau of Indian Affairs Scholarships
- Other Institutional and Noninstitutional Scholarships

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 April 15 of each year. For more information, call 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

Astudent, who withdraws from all their classes within $60 \%$ 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
- Beca Academic Competitive Grant
- Préstamos federales directos para estudiantes
- Exención del cargo de inscripción de la Junta de Gobernadores
- Becas Cal Grant
- Programa Extended Opportunity Programs and Services (EOPS)
- Becas de la Oficina de Asuntos Indígenas
- 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 parael semester 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 del 15 de abril de cada año. Para obtener más información, llame al 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 $60 \%$ 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 academic satisfactorio en un programa orientado a conseguir un título o un certificado en el collegue o un pase para transferencia a una institución de cuatro años. Los estudiantes deben mantener al menos un 2.0 y completar como mínimo el 67 por ciento de las unidades iniciadas cada semestre de conformidad con la Política de Avance Académico Satisfactorio para la Asistencia Financiera. Los estudiantes dejarán de ser elegibles para obtener asistencia financiera una vez que hayan intentado el 150 por ciento de las unidades requeridas necesarias para su objetivo educativo. Además, tampoco se podrán proporcionar fondos para un estudiante por más de 30 unidades de clases de recuperación. El estudiante debe estar inscrito en un programa elegible en Fresno City College, y las clases de recuperación deben ser necesarias para que el estudiante prosiga con un programa de educación pos-secundaria elegible.

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

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

# Chaw Pab Nyiaj Kawm Ntawv (Financial Aid) 

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

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

- Qhov Nyiaj Tsoom Fwv Muab Pab (Federal PELL Grants)
- Qhov Nyiaj Tsoom Fwv Them Ua Hauj Lwm (Federal Work Study)
- Qhov Nyiaj Pab Ntxiv Rau Kev Kawm Ntawv (Federal Supplemental Educational Opportunity Grants)
- Qhov Nyiaj Tau Los Ntawm Kev Kawm Tau Ntawv Zoo (Academic Competitive Grant)
- Qhov Nyiaj Txais Los Ntawm Tsoom Fwv (Federal Direct Student Loans)
- Qhov Kev Zam Tsis Kom Yus Them (Boards of Governors Enrollment Fee Waiver)
- Qhov Nyiaj Pab Los Hauv Xeev California (Cal Grants)
- Qhov Nyiaj Pab Rau Kev Kawm Ntawv Los Hauv Koom Haum EOPS Los (Extended Opportunity Programs and Services (EOPS)
- 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 ntaw, nqi khiav mus los, thiab lwm yam. Qhov qhia seb ib tug neeg kawm ntawv twg yuav siv nyiaj thaj tsam pes tsawg no muaj qhia nyob ntawm www. fresnocitycollege.edu/financialaid/.

Muaj cov ntawv ua mus thov cov nyiaj no thiab muaj cov ntaub ntawv qhia txog cov qhoos kas pab nyiaj no nyob hauv loos kam Financial Aid Office, chav 201, Hauv lub tsev hu ua Student Services Building.

Cov neeg kawm ntawv yuav tsum ua cov ntaub ntawv thov cov nyiaj no tuaj ua ntej lub 3 hlis tim 2 txhua xyua thiaj yuav tau txais cov nyiaj los kawm ntawv rau thaum lub 8 hli yog lawv muaj feem txais taus. Cov neeg kawm ntawv uas thov rau lub caij hais no yog cov yuav xub tau txais, yog lawv muaj feem, tabsis rau lwm lub xeev thiab lwm yam kev pab los hauv tsoom fwv los ces tsuav tuaj txog hauv Loos Kam Financial Aid Office ua ntej lub 4 hlis, tim 15 xwb ces tau lawm. Yog xav paub ntau tshaj nov, hu tau rau 442-8245.

## Cov Hoob Uas Rov Qab Kawm Tau

Cov neeg kawm ntawv tsuas tau them rau cov hoob uas lawv kawm dhau xwb, tabsis tsuas pub 2 zaug xwb. Yog ib tug neeg kawm ntawv xav rov qab kawm dua zaum 3, nws qhov qhab nias yuav muab rho tawm los hauv qhov qhab nias uas nws muaj feem txais tau raws li txoj cai Title IV. Txawm tau tus "D" xwb los hauv qhov chaw muab nyiaj pab no yuav tsis xam lawm txawm muaj lwm txoj cai txwv los tsis ua cas.

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

Thaum ib tug neeg kawm ntawv muab nws cov hoob rho tawm txog 60 feem puatauj ib tog xyoo lawm, Loos Kam Pab Nyiaj Financial Aid Office mam txiav txim seb nws cia pes tsawg thiab muab pes tsawg rov qab mus rau tsoom fwv.

## Chaw Pab Nyiaj Qhov Kev Ncaj Ncees

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

Cov neeg kawm ntawv tus qhab nias yuav tsum tsis txhob poob qis tshaj 2.0 thiab yuav tsum kawm tsawg kawg yog 67 feem pua ntawm cov hoob uas koj mus cuv npe kawm thiaj yuav txais tau cov nyiaj pab raws li qhov chaw muab nyiaj Financial Aid Satisfactory Academic Progress Policy txoj cai tau hais. Thaum cov neeg kawm ntawv no kawm tau qhab nias txog 150 feem pua los ntawm cov lawv yuav tsum tau kawm lawm ces luag yuav tsis muab cov nyiaj pab rau nws txoj kev kawm lawm. Dhau ntawd, luag yuav tsis kam pab nyiaj rau cov hoob uas kawm tos lwm hoob yog ntau tshaj 30 qhab nias lawm. Nws yuav tsum nkag mus koom nyob rau Tsev Qhia Ntawv Fresno City College qhov qhoos kas saib xyuas cov hoob no thiab cov hoob uas kawm txhawb no yuav tsum pab tau koj mus kawm rau ib siab ntxiv.

Tag nrho cov neeg kawm ntawv uas raug txiav tsis pab nyiaj rau lawv lawm ces yuav tsis muaj feem nkag tau rau qhov qhoos kas pab nyiaj no lawm vim lawv kawm tsis tau ntawv los sis kawm tsis tau qhab nias zoo muaj cai sau ntawv tuaj foob qhov kev txiav txim no tau. Pab neeg saib xyuas qhov kev foob (The Financial Aid Appeal Com $\neg$ mittee) yuav ua tib zoo saib tus neeg kawm ntawv no cov kev kawm thiab yuav txiav txim seb tus neeg kawm ntawv no puas muaj feem yuav nkag tau rau lub qhoos kas pab nyiaj no. Muaj daim ntawv kos npe tsis txaus siab (Petitions) nyob hauv loos kam pab nyiaj (Financial Aid Office).

The Fresno City College
Athletic Department offers 19 intercollegiate teams for both men and women. The FCC Rams have a rich and successful history that includes numerous conference and regional titles along with state championships in several sports.

Pib kiag xyoo kawm ntawv 2012-13 no mus, cov neeg kawm ntawv uas muaj feem txais pob nyiaj pub dawb hu ua Pell grant no yuav tau txais kom puv 12 zaug rau them kawm ntawv(12 full-time semesters). Tag nrho cov uas twb tau txais pob nyiaj Pell grant no dua lawm los tseem yuav xam tib si nrog rau cov hais lub sijhawm no. Thaum ib tug neeg kawm ntawv twg siv nws pob nyiaj Pell grant no tag lawm ces nws yuav tsis tau txais ib qho dabtsi ntxiv li lawm tsis hais yuav mus lub tsev kawm ntawv twg li. Tsis muaj kev yuav foob tau qhov uas luag pub rau koj noj tas mus li no.

## Food Services

The dining center offers an inviting atmosphere to share ideas or study. Fast food is available at the Campus Café, which features cooked-to-order breakfast and lunch items. Gourmet coffees, juices, baked pastries and snack items are also available. The Campus Café is open for breakfast, lunch and dinner Monday through Thursday and breakfast and lunch on Friday.

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

Taher Food Services offers catering services for campus functions.

The Pacific Cafe offers students "Japanese style" menu items. Their menu also includes a selection of breakfast and lunch sandwiches, snack items and drinks. An outdoor patio adjoins The Pacific Cafe, which is located in the Bookstore Building. Hours are 7:30 a.m. to 9:00 p.m. Monday through Thursday and 7:30 a.m. to 3:30 p.m. on Fridays.

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

## Health Services

The Health Service 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 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 443-8688 for more information.

## Learning Resources Center (LRC)

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

## 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. A vend-card copying and printing service is available. For more information call 442-8208.

## Library

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

The library has a computer lab with 30 computers that are loaded with standard software and also provide access to the Internet. There are also a limited number of audiovisual materials that can be played on the lab's CD and DVD players. Vend-card operated copiers and printers are also available. The library has handicapped accessible workstations and equipment. For more information, call 442-8205.

## Tutorial Services - LI-134

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

The Tutorial Center provides class-specific study and review sessions through the Extending the Class (ETC) program as well as campus-wide academic success workshops. Online tutoring is also available. For more information call 442-8209.

## Writing and Reading Center

The Writing and Reading Center assists students with any writing or reading assignment for any class at any stage in the development process. Our trained tutors provide a friendly, supportive atmosphere for all students. Students can drop-in or make an appointment. A limited number of computers are also available. For more information call 442-4600 ext. 8188.

## 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
- $\quad$ Stress and anger management
- Mental illness
- Substance abuse
- Eating disorders

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

## Public Information

The Public Information Office provides on- and off-campus public relations, marketing and promotion for the college. All advertising, media relations and sports information are the responsibility of the Public Information Office. Brochures, class schedules, the college catalog, press releases, videos, sports programs, the college web site and the monthly campus newsletter, City at Large, are all produced by the Public Information Office, using the most advanced techniques in desktop publishing.

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 of 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 442-4600, ext. 8643.


## Puente Project

The Puente Project at Fresno City College provides students with accelerated writing instruction, sustained academic counseling, and mentoring by professionals from the community. Students participate in the program for three consecutive semesters. The program consists of English 125, English 126, Counseling 43 and Chicano Latino Studies 11 during the first semester; English 1A and Counseling 48 during their second semester; and English 3 and optional Chicano Latino Studies 21 during their third semester. The course content of the Puente classes has a Chicano/Latino emphasis. Throughout both semesters, Puente students also maintain contact with their assigned Puente mentor.

The purpose of the Puente Project is to increase the number of Fresno City College Puente 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 442-4600, ext. 8644.

## Strengthening Young Men by Academic Achievement (SYMBAA)

The SYMBAA program, with emphasis on the African American male experience, assists students in achieving success through a coordinated program of courses and support. The program develops work habits and study skills, provides the education tools to be successful, and provides the opportunity to participate in 240-1080 hours of community service. At the end of the program, students will have completed 60 units of college credit and graduate or be ready to transfer to a four-year college or university.

## 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 both English instruction and counseling services and is designed to increase the number of Southeast Asian-American students who transfer from Fresno City College to four-year universities or institutions. Students also have the opportunity to participate in activities designed to prepare them for reaching transfer goal.

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

Student Services Building, 2nd floor. For more Information, please contact us at (559) 442-8226, extension 8639 or Victor Yang, Program Coordinator, at (559) 442-8226, extension 8624 or email: victor.yang@fresnocitycollege.edu.

## TRIO Programs

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

## Student Support Services Program (SSSP)

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

## Upward Bound Program

The FCC Upward Bound program is an intensive pre-college enrichment program designed to help first generation, economically disadvantaged high-school students improve their academic performance, and prepare for college. The long term goal is to pursue careers that require a bachelors' 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. Pay telephones are available for out-going calls around the campus. 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 bas 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, executive and legislative vice presidents, president pro tempore, 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:

- Abilities Club
- Alpha Gamma Sigma (AGS)
- American Institute of Architects (AIA)
- Anime Club
- American Sign Language Club (ASL)
- Art for Community Transformation (ACT)
- Asian American Club
- Bonsai Club
- CADD Club
- Circle K Club
- CITZer0 Computer Technology Club
- Collegiate Entrepreneurs Organization (CEO)
- Diversity Club
- Early Childhood Education \& Educators Club (ECEE)
- Electrical Systems Technology Club (EST)
- Fresno City Guitar Society
- Hmong American Student Association
- History Club
- IDILE
- Lambda Alpha Epsilon (LAE)
- Literature \& Arts Society
- M.E.Ch.A.
- Mu Beta Phi - Miss Black Fresno
- Muslim Student Association of FCC (MSA)
- Native American Intertribal Students Association (NAISA)
- Outdoors Club
- Philosophy Club
- Pho Theta Kappa (PTK)
- Photography Club
- Pre-Health Society
- RN Pinning Committee
- Science \& Engineering Club
- Social Work Student Association (SWSA)
- Student Nurses' Association (SNA)
- Student Paralegal Association (SPA)
- Sustainable Action
- Students for Life
- Student Success Club
- S.Y.M.B.A.A.
- Tabletop Gaming Club
- Teachers of Tomorrow
- TOMS Club
- Volunteer Club

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.

## 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 are basketball, cross country, golf, soccer, tennis, and track and field. Volleyball, water polo, badminton and softball are offered for women only, and football, baseball and wrestling are offered for men only. A physical examination by the team physician and a statement of existing medical insurance are required before participation in collegiate sports.

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

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

## Publications

## About Ourselves

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

## IntenseCity

The college offers students opportunities to work on publications through the production of the college magazine, IntenseCity.

IntenseCity is a magazine published every semester at Fresno City College by students of the college's journalism courses. The online magazine addresses a breadth of ideas and issues that range from college life to the Fresno community.

## The Ram's Tale

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

## The Rampage

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

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

## Forensics

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

## Museum of Anthropology

The Social Sciences Division is home to the Fresno City College Anthropology Museum and Archaeological Curation Facility. Located in S0-128, the museum presents exhibits about human culture drawn from both its ethnographic and archaeological collections. The museum is free to students, faculty, staff, and community members. Fresno City College students also have the opportunity to participate in museum operation, learn about exhibit development, and the curation of museum collections. Tours and activities at the museum are led by FCC student docents. For hours of operation or to arrange a tour, please contact Beth Wengerd at (559) 442-8210 ext. 8343. For information about exhibits and collections, please contact Dr. Jill Minar at (559) 442-8210 ext. 8360.

## Music Activities

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

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

## Theatre Arts and Dance

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

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

## SPECIAL AREAS OF STUDY

## Allied Health

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

Students complete the appropriate Academic Summary Form for consideration for acceptance into a health care career program. Students must also meet the normal admission requirements as fully matriculated regular students at Fresno City College.

## Career \& Technology Center

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

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

## AUTOMOTIVE COLLISION REPAIR (ACRCTC)

## 371 FUNDAMENTALS OF WELDING TECHNOLOGY AND WORKING SHEET METAL

2.78 lecture hours, 13.89 lab hours, (300 total hours), (Repeats = 3), (Pass/No Pass), (Open Entry/Open Exit) PREREQUISITE: None.
Theory and practice in MIG welding, oxyacetylene welding, steel rod, brazing rod, plasma cutter, metal shrinking, working sheet metal, welded panel replacement, restoring corrosion protection, hand tool technology, shop safety and efficiency, job success and ASE certification.

## 372 BODY WORK TECHNOLOGY

2.78 lecture hours, 13.89 lab hours,
(300 total hours), (Repeats = 3), (Pass/No
Pass), (Open Entry/Open Exit)
PREREQUISITE: None.
Collision repair introductions and careers. Includes estimating repair costs, vehicle construction and power tool technology, service specification and measurements, using body filler, doing hood, bumper, fender, lid, door, roof, and glass service. Looks 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.
Review of the following: compressed air technology, refinishing materials and fasteners, repairing plastics, refinishing equipment technology, vehicle surface preparation and masking, refinishing procedures, color matching and custom painting, and paint problems and final detailing.

## AUTOMOTIVE MECHANICS (AMCTC)

## 371 ENGINE REPAIR

11.11 lecture hours, 22.33 lab hours, (600 total hours), (Repeats = 3), (0pen Entry/Open Exit), (Pass/No Pass),
(Formerly AMVTC 71)
Preparation for ASE certification in engine repair.
Practical and theoretical training in general engine diagnosis, cylinder heads, valve train, engine block, lubrication, and cooling systems.

## 372 ENGINE PERFORMANCE

16.67 lecture hours, 33.33 lab hours,
(900 total hours), (Repeats = 3), (Open
Entry/Open Exit), (Pass/No Pass),
(Formerly AMVTC 72)
Basic skills necessary for an entry level job. Competency based similar to those operations performed by automotive shop professionals. Prepares students to take the ASE certification tests.

## INDUSTRIAL TRAINING (ITCTC )

## 371 WAREHOUSE AND DISTRIBUTION CAREERS

2 lecture hours, 3 lab hours, ( 90 total hours), (Repeats = 3), (Open Entry/Open Exit), (Formerly ITVTC 71)
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 AND DISTRIBUTION CAREERS

2 lecture hours, 3 lab hours, ( 90 total
hours), (Open Entry/Open Exit),
(Repeats = 3)
PREREQUISITE: None.
Provides forklift operation and safety skills necessary for employment in warehouse environment. Warehouse inventory and processing procedures utilizing computer based related programs, mathematics and proper packaging techniques to industry standards.

## MAINTENANCE MECHANIC (ммстс)

## 370 FUNDAMENTALS OF WELDING AND MACHINE

 SHOP5.55 lecture hours, 11.11 lab hours,
(300 total hours), (Repeats = 3), (Formerly MMVTC 70)
Basic gas, arc, MIG, TIG (mild steel only). Precision measurement, hand tools, engine lathe, drilling, milling.

## 371 FUNDAMENTALS OF HYDRAULICS AND PNEUMATICS

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

## 372 ELECTRICAL FUNDAMENTALS

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

## MANUFACTURING MECHANIC (MFGMCTC)

351 INTRODUCTION TO MANUFACTURING
0.5 lecture hours, ( 9 hours), (Pass/No

Pass)
PREREQUISITE: None.
Career in manufacturing, local job market, pay scales; basic mechanical skills required throughout the industrial areas; safety and safe working environment will be stressed.

## 352A TRADE MATHEMATICS

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

## 352B PROGRAMMABLE CONTROLLERS

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

## 352C JOB PREPARATION

0.25 lecture hours, 0.75 lab hours, (18 hours), (Pass/No Pass)
PREREQUISITE: None.
Preparing resumes, portfolios, and improving employ-ment-seeking skills.

## 352D TECHNICAL REPORT WRITING

0.25 lecture hours, 0.75 lab hours,
(18 hours), (Pass/No Pass)
PREREQUISITE: None.
Identify and write various manufacturing types of reports; analyze data, and record data that are associated with production work.

## 353A FLUID POWER FUNDAMENTALS

0.5 lecture hours, (9 hours),
(Pass/No Pass)
PREREQUISITE: None.
Fundamentals of fluid power; physics principles pertaining to fluid power; various differences in hydraulics and pneumatics; characteristics of liquids and gases.

## 353B PNEUMATIC FUNDAMENTALS

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

## 353C HYDRAULIC FUNDAMENTALS

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

## 354A POWER TRANSMISSION

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

## 354B WELDING FUNDAMENTALS

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

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

## Developmental Education Program

The Developmental Education Program is designed to prepare students for degree credit instruction. The program is recommended for students who are assessed as not meeting the skills requisites for Mathematics 201 or English 125 and 126. It is not recommended for students who are learning English as a second language or who have identified learning disabilities. Course credits earned in the program do not count for the associate degree but do count for determining full- or part-time student status (i.e., workload credit). The particular courses a student takes depend upon the individual needs of the student.

## Entrance into the Program

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

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

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

## Benefits of the Program

Developmental Education students enjoy the following benefits:

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


## Developmental Education Curriculum

## ENGLISH WRITTEN EXPRESSION UNITS <br> English 252, Writing Improvement <br> $\qquad$

ENGLISH READING
English 260, Basic Reading. $\qquad$
English 262, Reading Improvement. $\qquad$

## MATHEMATICS

Math 260A-260D, Arithmetic Review $\qquad$ Maximum of 6 or Math 250, College Arithmetic. $\qquad$

## English for Multi-Lingual Students (EMLS) Program

## Purpose

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

## Description

There are four levels of EMLS in the program: Low-intermediate (EMLS 263R/263W), intermediate (EMLS 264R/264W), advanced-intermediate (EMLS 265R/265W), and advanced (EMLS 67 and 68). EMLS 263R, 264R, and 265R offer instruction in vocabulary and reading. EMLS 263W, 264W, and 265W offer instruction in grammar and writing. EMLS 68 emphasizes reading skills and EMLS 67 emphasizes writing skills.

## Placement

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

## Fire Academy

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

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

## Honors Program

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

## Benefits

Honors students enjoy the following benefits:
Special sections of regular classes

- Specially selected, experienced, and highly qualified faculty
- Faculty mentors
- Registration, counseling, and transfer assistance
- Scholarships
- Priority acceptance at a University of California or California State University campus
- Opportunities to participate in cultural, social, and intellectually-stimulating activities
- Recognition on transcripts


## Requirements for Consideration of Acceptance

Requirements for Acceptance for high school seniors:

- G.P.A. of 3.50 ( 4.00 scale), or
- G.P.A. ranking within the top 25 th percentile of your high school class, or
- Combined scores of 1650 on the SAT or a composite score of 24 on the ACT, and
- Eligibility for English 1A.


## Requirements for Acceptance for current college

 students who have completed at least 12 trans-fer-level college units:- College G.P.A. of 3.30, and
- Eligibility for English 1A.


## Application requirements include:

- Two letters of recommendation, and
- Superior performance on an essay.

For details regarding the Honors Program, please refer to page 172 in this catalog or consult with Honors Program staff at 442-8207

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


## ROTC Studies - U.S. Army and U.S. Air Force

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

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

Consult the Military Studies Department (244-2638) at Fresno City College or the Aerospace Studies Department (2782593) at California State University, Fresno for information on courses offered and class meeting times.

## Veterans Services

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

## Educational Benefits for Veterans and Dependents

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

1. Veterans who were separated from active duty with the armed forces within the past 10 years.
2. Spouses or children (under 26 years of age) of veterans who were either killed while serving in the armed forces or were totally and permanently disabled while on active duty.
3. Widows or children of veterans who were residents of California at the time of entering the service and have a 50 percent disability may qualify for Cal Vet benefits.
4. Persons in one of the armed forces reserve programs who meet the minimum requirements of a special benefit program may be entitled to receive some educational and/or financial assistance.
5. Post 9-11 benefits will pay eligible individuals:

- Tuition and fees directly to the school, not to exceed the maximum in-state tuition and fees at a public Institution of Higher Learning.
- A monthly housing allowance based on the Basic Allowance for Housing for an E-5 with dependents at the location of the school.
- An annual books and supplies stipend of $\$ 1,000$ paid proportionately based on enrollment.
Veterans are required to go on-line to learn more about this program in order to make an informed choice.

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

## 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, Student Services building, lower level, Room 108.

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

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

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

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

## Academic Limitations

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

## Work Experience (Cooperative) Education

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

The Cooperative Work Experience Education Program can be an important motivating experience, especially for those who have had inadequate opportunities to learn about the working world. The students meet weekly with an instructor/ coordinator who is well prepared professionally to assist in the development of job skills. The coordinator makes on-site job visitations at which time he/she confers 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 one enrollment period.
2. Occupational work experience education: A maximum of eight credit hours may be earned during on 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, including 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, Part VI, Division 6, Chapter 3, Section 55311 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
- Applied Technology
- Automotive Technology
- Business Administration
- Business \& Technology
- Child Development
- Computer Information Technology
- Construction (Carpentry)
- Criminology
- Education
- Electrical Systems Technology
- Fashion Merchandising
- Food Service Management
- Human Services
- Journalism
- Marketing
- Medical Assisting
- Paralegal
- Recreation
- Registered Nursing

Note: Actual class offerings vary by semester.

## AREAS OF STUDY BY DIVISION

## ALLIED HEALTH, PHYSICAL EDUCATION, AND ATHLETICS DIVISION

Dental Hygiene
Health Information Technology
Medical Coding
Health Science
Medical Assistant - Clinician
Medical Laboratory Technician
Nursing, Registered
Physical Education
Radiologic Technology
Recreation
Recreation Leadership
Respiratory Care
APPLIED TECHNOLOGY DIVISION
Aerospace Studies
Air Conditioning
Air Conditioning Technology Overview
Commercial Air Conditioning, Heating, and Duct Systems
Digital Air Conditioning Controls Industrial Refrigeration - CARO/EPA Section 608
Mechanical and Electrical Systems
Applied Technology
Architecture
Basic Architectural Contract Document
Basic Architectural Design
Basic Architectural Office Practice
Basic Architectural Skills 1
Basic Architectural Skills 2
Basic Digital Architecture
Automotive Technology
Auto Tech: GM ASEP
Chassis Technician
Chassis Technician I
Chassis Technician II
Emission Technician
Emission Technician I
Emission Technician II
Powertrain Technician
Powertrain Technician I
Powertrain Technician II

Computer Aided Drafting and Design
2D CAD Technician
CAD Technician I
Computer Aided Manufacturing
Construction
Drafting
Electrical Systems Technology
Automation Control Technician
CISCO Certification
Communications Technology
Control Systems
Electrical Systems Technology
Industrial Controls
Network Security
Networking/Computer Technician
Wireless Networks
Graphic Communications
Digital Media Option
Digital Video Option
Graphic Communications
Graphic Design Option
Visual Communication
Web Design
Industrial Arts and Technology
Industrial Technology
Construction Option
Manufacturing Option
Interior Design
Photography
Commercial Photography
Digital Photography
Fine Art Photography
Photojournalism
Professional Photography
Welding Technology
Metal Fabrication Option
Multi-Process
Pipe and Structural Steel Certificate Option
Welding Design and Fabrication

## BUSINESS DIVISION

Accounting
Computerized Accounting
Full Charge Bookkeeper
Business Administration
Entrepreneurial Ventures
Human Resources Management
Logistics and Distribution Management
Retail Management
Business \& Technology
Business Office English
Business office Math Fundamentals
Clerical Training
Computer Applications Software
Foundations for the Office Professional
Legal Office Professional
Medical Office Assistant
Medical office Professional
Microsoft Office Foundations
Microsoft Word
Office Professional I
Office Professional II
Business Management
Business Finance and Accounting
Business Finance and Investments
Human Relations and Communications
Human Resources and Relations
Management and Supervision
Personal Finance and Investments
Small Business Management
Computer Information Technology
Android Application Developer
Apple iOS Developer
Computer Information Systems
Information Security I
Information Security II
MCTE Networking
Microcomputer Software Specialist
Networking/Computer Technician
Preparation in Microsoft Office
System Support Specialist
Web Page Development Option
Web Developer
Decision Science
Marketing
$\quad$ Advertising
Fashion Merchandising
Personal Sales
Retailing
Paralegal

CAREER \& TECHNOLOGY CENTER AND WORKFORCE DEVELOPMENT
Administration of Justice/Police Academy
Adult Correctional Officer Core
Basic Police Academy
Basic Supervisors
Juvenile Correctional Officer Core
Probation Core Course
Requalification Basic Course
Safety Dispatcher's Basic Course
Auto Collision Repair Technology
Auto Mechanics
Fire Technology
Basic Fire Academy
Emergency Medical Technician I
Emergency Medical Technician I Refresher Paramedic
Industrial Training, Warehouse and Distribution Careers
Maintenance Mechanic
Manufacturing Mechanic
FINE, PERFORMING, AND
COMMUNICATION ARTS DIVISION
Art
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)
Vocational ESL

## Areas of Study by Division

Foreign Language
American Sign Language
Armenian
Chinese
French
German
Hmong
Japanese
Portuguese
Spanish
Humanities
Latin American Studies
Linguistics
Philosophy
MATHEMATICS, SCIENCE,
AND ENGINEERING
DIVISION
Astronomy
Biology
Botany
Chemistry
Computer Science
Engineering
Environmental Studies
Geography, Physical
Geology
Mathematics
Natural Resources
Physical Science
Physics
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
Criminology
Administration of Justice for Transfer
Correctional Science Option
Forensic Evidence Option
Law Enforcement Option
Pre-Academy Training Option

Culinary Arts

## Advanced

Basic
Intermediate
Cultural Studies
Dietetic Service Supervision
Economics
Education
Education Paraprofessional
Elementary Teacher Education for Transfer
Food Services
Food and Nutrition
Food Service Management
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History
Human Services
Alcohol and Drug Abuse Counseling Option
Pre-Social Work Option
Liberal Arts
Military Science
Political Science
Psychology
Sociology
Women's Studies
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Counseling
General Work Experience
Developmental Education Program
Developmental Services
Honors Studies
Individual Study
Laboratory Assistant
Library Skills
Library Technology
Special Studies
Supervised Tutoring

## Associate Degree and Certificate Programs

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AA-T Associate in Arts for Transfer

AS-T Associate in Science for Transfer

AA Associate in Arts
AS Associate in Science

CA Certificate of Achievement

CC Certificate of Completion

C Certificate


## Associate Degree and Certificate Programs

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AA-T Associate in Arts for Transfer

AS-T Associate in Science for Transfer

AA Associate in Arts
AS Associate in Science

CA Certificate of Achievement

CC Certificate of Completion

C Certificate
AA-T Associate in Arts

AS-T Associate in Science for Transfer

AA Associate in Arts
AS Associate in Science

CA Certificate of Achievement

CC Certificate of Completion

C Certificate

## Associate Degree and Certificate Programs

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## DIVISIONS

## Allied Health, Physical Education and Athletics Division

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

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

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 307, 340 and 350.

## Health Care Career Programs

All students must complete the appropriate Academic Summary Form for consideration for acceptance into a health care career program. Students must also meet the normal admission requirements as fully matriculated regular students at Fresno City College. See page 13 for a list of these requirements.

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

Upon entry to the Dental Hygiene, Radiologic Technology, Registered Nursing, Respiratory Care Practitioner, Health Information Technology and Medical Assistant —Clinician programs, students may be required to obtain a background check.

Due to changes expected from the state, students will be considered for entry into a health care career program under the requirements listed in the current catalog or catalog supplement. Although the catalog is a one-year catalog, a catalog supplement is published each year. It is important that students understand that the college will use the criteria for program eligibility based on the catalog or the catalog supplement in effect at the time of submission of the Academic Summary Form, not the initial registration at Fresno City College.

See academic requirements under the appropriate health career program in the college catalog and/or catalog supplement. Additional information may be obtained by contacting a Fresno City College health career counselor. To keep current on changes, students are expected to contact a health career counselor on a regular basis or to attend the health science orientation each semester.

Allied Health,
Physical Education and Athletics Division
Lorraine Smith
Dean of Instruction
Division Office: Health Sciences Building, HS-1 Phone: (559) 244-2604
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## Applied Technology Division

## Applied Technology Division

Vacant
Dean of Instruction Division Office: Applied Technology, T-100 Phone: (559) 442-8273

Fax: (559) 498-8350
Division E-mail: at@fresnocitycollege.edu

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 air conditioning, architectural drafting, automotive collision repair technology, automotive technology, General Motors Technology GM ASEP, Cisco, computer aided drafting and design, computer aided manufacturing, construction, electrical systems, graphic communications, networking/ computer technician, photography, and welding/metal fabrication.

Transfer college programs in architecture and industrial technology are available.

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

## Associate in Science Degree

Generally, the two-year program leading to the associate in science degree provides the specialized skills and related information necessary to enable the graduate to find employment and to advance in his/her chosen field. Trade preparatory majors in the Applied Technology Division must complete the specified courses as outlined for each program.

Courses required for each degree program are generally offered each semester but are subject to cancellation or change. Students are advised to seek assistance from their counselors and/or faculty advisors in planning their programs.

Associate in science degree requirements can be found under degree requirements on page 32 .

## 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.

## Air Conditioning

1. Industrial Refrigeration-CARO/EPA Section 608 (AC 55, AC 353) (Major \#8231)

## Electrical Systems Technology

1. Industrial Control (EST 50 or MMCTC 371, EST 55A, EST 58, EST 59) (Major \#8180)
2. Wireless networks (EST 61, 62, 269B) (Major \#8178)

## 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 work. Inquire through your instructor or see a counselor.

## 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 in arts in Business Administration, and a number of short-term certificate programs.

The Business Division is equipped to offer the following opportunities for our students:

- Lower division courses for students planning to transfer to four-year colleges and universities.
- Short, intensive programs for those who wish to specialize in one area with immediate employment in mind.
- Career training and retraining.
- Electives for students in other divisions.

The regular two-year program with a transfer objective leads to the associate in arts degree. Occupational preparation, on the other hand, demands in-depth concentration over a like period of time culminating in an associate in science degree. A certificate of achievement is available in all programs for those who choose not to complete all of their general education requirements and to take only the classes required by the major.

## Classroom to Worksite

## Collaboration

The Business Division faculty and staff coordinate the school and the job by bringing to the classroom the latest information on business methods and employers' needs. Leaders from business are invited to the class as guest speakers and counsel students concerning career opportunities, standards, work habits and attitudes. We also work with local businesses to further meet the educational needs of their employees.

## Employment Available

A full-time job placement officer is housed within the Business Division and is available to help business students secure part-time positions to help finance their education and full-time jobs for those completing their training.

Students planning to seek employment upon graduation from Fresno City College, as well as those who plan a short, intensive training period, will find the suggested curricula on the following pages a guide in planning their courses.

## The Future

The suggested courses of study offered by the Business Division prepare the student for transfer to a four-year university and/or immediate employment in business.

## Associate in Arts Degree

The associate in arts degree is offered primarily for transfer students in the area of business administration. Associate degree requirements are listed on page 32 .

## Associate in Science Degree

The associate in science degree programs, as listed in the following pages, show the designated course requirements and the departmental recommendations for elective courses. These electives are supportive and carry a strong recommendation. Associate degree requirements are listed on page 32.

## Certificate of Achievement

For a listing of certificate of achievement programs see page 79.

## Certificates

Certificate programs are listed below.

## Business Administration

1. Business Finance and Accounting (ACCTG 4A/4AH, 4B/4BH; BA 35) (Major \#2031)
2. Business Finance and Investments (BA 34, 35) (Major \#2271)
3. Entrepreneurial Ventures (BA 50, 51, 52) (Major \#2041)
4. Human Relations and Communications (BA/BT 5, BA 33) (Major \#2510)
5. Human Resource Management Assistant ( $\mathrm{BA} 31,33$, BT 9/BT 25/CIT 20) (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. Small Business Management (BA 38, 51) (Major \#2030)

## Business Division

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Division Office:
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## Business and Technology

1. Clerical Training (BT 370A, 370B) (Major 247V)
2. Computer Applications Software (BT 9, 10, 33, 106) (Major \#2202)
3. Microsoft Word (BT 28, 29) (Major \#2323)

## Computer Information Technology

1. Information Security (CIT 57, 58A, 58B, 58C) (Major \#2714)
2. Information Security II (CIT 58D, 58E, 58F) (Major \#2715)
3. Preparation in Microsoft Office (BT 28, 29, 127; CIT 20, 23, 24, 26) (Major \#2710)
4. System Support Specialist (CIT 40, 45, 48; EST 60) (Major \#2723)
5. Web Page Development (CIT 82, 85, 93) (Major \#2741)

## Marketing

1. Advertising (MKTG 10, 12, 21) (Major \#2113)
2. Fashion Merchandising (MKTG 14, 17, 22) (Major \#2152)
3. Personal Sales (BA 33, MKTG 10, 11) (Major \#2114)
4. Retailing (BA 33, MKTG 10, 14) (Major \#2116)

## Co-Curricular Activities

As an integral part of the instructional program, the Business Division supports three co-curricular groups. The effort is represented by 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.

These 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.

## Career \& Technology Center and Workforce Development

Career \& Technology Center and Workforce Development
TImothy Woods, Ph.D.
Dean of Instruction 2930 E. Annadale Avenue Fresno, CA
Phone: (559) 265-5700 Division E-mail: wfd@fresnocitycollege.edu

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

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

## Courses and Programs

Most classes run six hours a day, five days per week, for the number of weeks indicated. Enrollment is taken on an open-entry basis, and class beginning and ending dates are calculated for each individual enrollee.

Students are required to attend an orientation before being allowed to register.

A student may not register for a course subsequent to another course without having first successfully met the performance requirements of the former course.

Partial credit will not be given to students who do not complete a course/program.

## Satisfactory Progress Standards

## Satisfactory Progress

State law requires students to maintain satisfactory progress while enrolled at a community college. Students who do not complete courses in which they enroll, will be penalized as follows:

## Placement on Progress Probation

A student will be placed on progress probation if:

1. His/her absences total 30 hours in Automotive Collision Repair, engine Performance, Maintenance Mechanic: 20 hours in engine Repair, 10 hours in Industrial Training
Or
2. He/she 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. His/her accumulated absence hours total 60 in Automotive Collision Repair, engine Performance, Maintenance Mechanic; 40 in engine Repair; 17 in Industrial Training

Or
2. His/her 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 his/her initial dismissal, the student shall be dismissed for two cycles of the course. If he/she fails to complete the course after the second dismissal, he/she shall be dismissed again. The third dismissal shall be considered permanent.

Veterans are required to complete the course/program for full benefit payment.

## Certificate of Achievement

A certificate of achievement will be awarded to students who have completed the designated subjects in the program major.

Courses required for each certificate program are generally offered each semester but are subject to cancellation or change. Students are advised to seek assistance from their counselors and/or faculty advisors in planning their certificate program.

## Certificates

A certificate will be awarded to students successfully completing the following course(s) or training program with a minimum " $C$ " grade.

## Administration of Justice

1. Adult Correctional Officer Core (AJ 280) (Major \#8941)
2. Basic Supervisors (AJ 276) (Major \#8924)
3. Juvenile Correctional Officer Core (AJ 286) (Major \#8943)
4. Probation Core Course (AJ 285) (Major \#8942)
5. Public Safety Dispatcher's Course (AJ 278) (Major \#8970)
6. Requalification—Basic Course (AJ 219) (Major \#8925)

## Fire Technology

1. Emergency Medical Technician 1 (FIRET 131) (Major \#8842)
2. Emergency Medical Technician 1 Refresher (FIRET 261) (Major \#8843)

## Certificates of Completion

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

## Automotive Collision Repair

(Major \#807V) Hours
Automotive Collision Repair 371,
Fundamentals of Welding Technology and Working Sheet Metal 300
Automobile Collision Repair 372, Body Work Technology 300

Automotive Collision Repair 373, Automotive Refinishing Technology 300

Program Total 900

## Automotive Mechanics

(Major \#811V) Hours
Auto Mech 371, Engine Repair 600
Auto Mech 372, Engine Performance 900

## Industrial Training

(Major \#852V)
Hours
Indust Train 371, Warehouse and Distribution Careers 90

Indust Train 372,
Warehouse and Distribution Careers
90
Maintenance Mechanic
(Major \#806V) ..... Hours
Maint Mech 370, Weld/Machine Shop ..... 300
Maint Mech 371, Hydraulics/Pneumatics ..... 300
Maint Mech 372, Electrical Fund ..... 300
Program Total ..... 900
Manufacturing Mechanic
(Major \#8301) Hours
MFG Mechanic 351, Intro to Manufacturing ..... 9
MFG Mechanic 352A, Trade Mathematics ..... 18
MFG Mechanic 352B, Programmable Controllers ..... 18
MFG Mechanic 352C, Job Preparation ..... 18
MFG Mechanic 352D, Technical Report Writing ..... 18
MFG Mechanic 353A, Fluid Power Fundamentals ..... 9
MFG Mechanic 353B, Pneumatic Fundamentals ..... 18
MFG Mechanic 353C, Hydraulic Fundamentals ..... 18
MFG Mechanic 354A, Power Transmission ..... 9
MFG Mechanic 354B, Welding Fundamentals ..... 45
MFG Mechanic 354C, Electrical Fundamentals ..... 45
Program Total ..... 225

## Apprenticeship Programs/Courses

Apprenticeship classes and programs are organized in cooperation with the joint apprenticeship committee of the respective craft for training of apprentices approved by the State of California, Division of Apprenticeship Standards.

## Admission to the Academy Programs

Admission of students into Fresno City College Peace Officers and Fire Technology Academy programs is in accordance with the "Admission of Students" from the Fresno City College catalog, page 11 , with the following exceptions:

1. Basic Police Academy: Students must successfully complete the POST standardized Reading Comprehension and Writing Skills test and the POST Physical Agility Test, or be sponsored by a law enforcement agency. A medical exam, driver's license check and criminal history check are mandatory. (Requires special counseling.)

## 2. Advanced Officer Courses

All Advance Officer Training courses presented by the Police Academy, the students shall meet each individual course's prerequisites.

## 3. PC 832 Courses:

Students must be able to demonstrate physical ability to use a firearm and to preform arrest and control techniques safely. Student must obtain a Department of Justice clearance for firearms possession prior to the firearms portion of this class.
4. Basic Fire Academy: Medical exam conducted by a California licensed physician, including resting EKG \& physician's written explanation of EKG printout. ADVISORY: eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
5. Fire Instructor IB: Completion of Fire Instructor IA.

## Note: All academy units will be counted as elective credit unless otherwise designated.

The nonaffiliated students attending basic peace officer's academies will be responsible for providing the following items (for his/her own use): California Penal Code and Vehicle Code, an approved firearm, ammunition and leather gear, notebook, paper, pens, pencils, uniform, physical training shorts, teeshirts, 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.
Basic Academy Range fee .......................... $\$ 120.00^{*}$
Basic Academy Driving fee ........................ $\$ 200.00^{*}$
P.C. 832 Range fee ...................................... $\$ 45.00^{*}$
Basic Academy, Module I ..................... $\$ 45.00^{*}$
Basic Academy, Module I Driving fee ...... $\$ 200.00^{*}$
Basic Academy, Module II Range fee ........ $\$ 60.00^{*}$
Basic Academy, Module III Range fee....... $\$ 45.00^{*}$
Basic Academy, Module III Driving fee...... $\$ 50.00^{*}$

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

## Fine, Performing, and Communication Arts Division

The Fine, Performing, and Communication Arts Division offers a rich variety of courses to acquaint students with the arts. The courses in the division examine the breadth of human experience through the study, analysis, and discussion of art, film, music, theater, and interpersonal communication.

## Associate in Arts Degree

Art
Communication for Transfer
Dance
Journalism
Journalism for Transfer
Music for Transfer
Music, Guitar
Music, Instrumental
Music, Vocal
Theatre Arts
Theatre Arts for Transfer

## Associate in Science Degree

Music, Commercial Music

## Certificate of Achievement

Studio Art
Music, Commercial Music

## Communication Arts

The Communication Arts Department offers courses in film, communication, and journalism. Students may select courses to fulfill general education requirements and courses for majors in communication and journalism. Students enrolled in the journalism program have the opportunity to gain valuable experience in the production of the college newspaper, The Rampage and the college magazine, IntenseCity.

The Forensic program at Fresno City College has long been recognized as one of the most outstanding programs among
community colleges in both the state and the nation. Students in the program compete in several tournaments during the academic year, which lead to competition in the state and national tournaments for invited students.

All students enrolled in communication classes have the opportunity to participate in an intramural competition held during Showcase, the Fresno City College open house in the spring.

## Fine and Performing Arts

Students have the opportunity to complete lower division requirements for transfer in art, music, theatre arts, and dance. In addition to an examination of the creative process and an introduction to theoretical models, students are able to participate in several venues that spotlight student work.

## Art Space Gallery

A juried exhibition of student work is held and prizes are awarded during the spring semester.

## Music

Students have several options to participate in performance groups, including the Fresno City College Jazz Band, Concert Band, City Singers, and College Choir.

## Dance

Original works by students and faculty are staged twice during the academic year. Students may also be invited to participate in the American College Dance Festival during the spring semester.

## Theatre Arts

Students gain valuable experience in all facets of production by participating in the staging of four productions during the year. During the spring semester the department hosts the High School Drama Festival. Students may also have an opportunity to attend the American College Theatre Festival during the spring semester.

Fine, Performing, and Communication Arts
Neil Vanderpool,
Dean of Instruction Division Office: OAB-110
Phone: (559) 442-8260
Fax: (559) 443-8539
Division E-mail: fpca@fresnocitycollege.edu

## Humanities Division

Humanities Division
Jennifer Johnson, Ph.D., Dean of Instruction Division Office:
Humanities Office, F0-41 Phone: (559) 442-8281 Fax: (559) 443-8547 Division E-mail: hum@fresnocitycollege.edu

The Humanities Division offers courses which enrich students' lives, while improving basic skills in reading and writing; courses that meet general education requirements; and courses of study to complete various associate degrees and lower division transfer requirements.

An integrated program of study in the humanities provides students with a foundation in the liberal arts that prepares them for further study in many different disciplines. The varied courses in the division examine the breadth of human experience through the study, analysis, and discussion of creative writing, composition, reading, literature, foreign languages, and philosophy in their cultural and historical contexts.

## Departments

## Composition

This department offers English 1A (Reading and Composition) and English 105 (Grammar and Punctuation). English 1 A is required for students wishing to transfer to colleges or universities.

## Foreign Language

Our Foreign Language Program offers courses in American Sign Language, Armenian, Chinese, French, German, Hmong, Japanese, Spanish, Spanish for native Speakers and Swahili, all with emphasis on communicative competence. Students learn the necessary skills that allow them to communicate in many different situations.

## Letters

Letters courses provide students with skills to analyze and appreciate great works of literature, philosophy, and the arts. In addition, our Letters Program offers creative writing courses in poetry, fiction, autobiography, and play writing.

## Linguistics/English for MultiLingual Students

The Linguistics/EMLS Department offers two distinct programs. For English for Multi-Lingual Students needing to develop their reading, writing, and study skills, the department offers a sequential program designed to prepare students for an AA/AS degree and university transfer level courses. Additionally, the department offers linguistics courses that satisfy transfer level area requirements.

## Preparatory English

For students needing to develop their reading and writing skills, Preparatory English offers a sequential program of study designed to prepare students for AA/AS degree and university transfer courses.

## Associate in Arts Degrees

## English

The English degree program offers students lower division subjects they will study as English majors in four-year college or university programs and/or prepares students for entry into career options requiring expertise in English language and literature.

## Humanities

The Humanities major is for students seeking an integrated Liberal Arts education, either as a preprofessional major or a self-enrichment program. This sequence of courses will satisfy requirements for the AA degree and for GE transfer certification for the state university system.

## Philosophy

The Philosophy major develops students' critical thinking and creative reasoning skills, enhances their ability to read complex material, and improves communication skills. These are valuable assets for transfer and career oriented students.

## Spanish

The Spanish major prepares students for entry into a variety of career options requiring intermediate or better levels of fluency. The Spanish major also acquaints students with Spanish-speaking cultures.

## Certificate of Achievement

## Sign Language Interpreting Preparation

This program is intended to prepare students for entrylevel ASL interpreting positions in a variety of settings such as schools, social service agencies and limited medical situations.

## Math, Science and Engineering Division

The Math, Science and Engineering Division includes the departments of Biology, Chemistry, Computer Science, Engineering, Mathematics, Physics, and the Physical Sciences. 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 six 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.

The specified field requirement for the associate in science degree with a major in the life sciences can be fulfilled by completing the following:

## 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.

## Math, Science and Engineering Division

Shirley McManus, Dean of Instruction Division Office: Math, Science and Engineering Building, S-51
Phone: (559) 442-8215
Fax: (559) 497-8814
Division E-mail: mse@fresnocitycollege.edu

## Biology

Math, Science and
Engineering Building, S-155
(559) 442-4600, ext. 8396

## Chemistry

Math, Science and
Engineering Building, S-255
(559) 442-4600, ext. 8397

Mathematics
Math, Science and
Engineering Building
(559) 442-4600, ext. 8215

Physical Sciences
Math, Science and
Engineering Building, S-255
(559) 442-4600, ext. 8397

## Math, Science and Engineering Web Site Addresses

Division: www.fresnocitycollege.edu/mathscience/

## Biology, Chemistry, and Mathematics

www.fresnocitycollege.edu/mathscience/biology/index.html www.fresnocitycollege.edu/mathscience/chemistry/index.html www.fresnocitycollege.edu/mathscience/mathematics

## Sciences: Engineering, Geology, and Physics

www.fresnocitycollege.edu/mathscience/sciences/engcourses.html
www.fresnocitycollege.edu/mathscience/sciences/geolcourses.html
www.fresnocitycollege.edu/mathscience/sciences/phycourses.html

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 year's 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 Discrete Mathematics for Computer Science (CSCI 26), Computer Programming Concepts and Methodology in C++ I (CSCI 40), Computer Programming Concepts and Methodology in C++ II (CSCI 41), and Programming Concepts and Methodology in JAVA (CSCI 40J).

The Mathematics Department is housed in the Science Building on the Southeast side of campus.

## Engineering and Physical Science

The Physical Sciences Department includes Engineering, Geology, Physics, Physical Science, and Physical Geography. The two-year associate degree programs in these areas are primarily transfer programs.

Engineering (Major \#3010) applies the theories and principles of science and mathematics to practical technical problems. Mathematics, physics, chemistry, and introductory engineering courses such as circuit analysis, surveying, and statics make up the bulk of the engineering classes. The classes are designed so there is a smooth transfer to the candidate's chosen college or university.

## Geology

Geology is the study of the structure, composition, and history of the earth's crust. By examining the surface of rocks and drilling to recover rock cores, the geologist is able to determine the types and distribution of rocks beneath the earth's surface.

Geological training is also valuable in the pursuit of rock and mineral identification, conduct of geological surveys, drawing of maps, and collecting geological data and measurements. Knowledge of geology is invaluable in predicting future geological events such as earthquakes and volcanic eruptions

## Physics

Physics, the fundamental science, conceptualizes the principles of the universe and establishes the foundation for astronomy, chemistry, and geology. The beauty of physics is in a small number of powerful concepts which expand our view of the world around us and which lead to many engineering applications from which humans derive many benefits.

## Social Sciences Division

The aim of social sciences is to provide an appreciation of the rich diversity and the fundamental commonality of all human experience. The Social Sciences constitute studies in human behavior, both past and present, individual and collective, legal and illegal, distant and local. The intention is to search for greater social justice, personal freedom and mutual understanding. The Division is divided into six departments:

- Anthropology, Economics and Geography, including:
Archaeology
- Cultural and Women's Studies including:

African-American Studies
American Indian Studies
American Studies
Asian-American Studies
Chicano-Latino Studies
Women's Studies

- History and Political Science
- Child Development and Education
- Psychology
- Criminology, Human Services, Sociology, including:
Culinary Arts
Food and Nutrition
Food Service Management
Courses offered satisfy transfer and associate degree general education requirements.


## Career Training

The Social Sciences Division also offers career training in:

- Alcohol and Drug Abuse Counseling
- Archaeology Technician
- Child Development
- Child Nutrition
- Corrections
- Criminology
- Culinary Arts
- Dietary Aide
- Dietetic Service Supervisor
- Food Service Management
- Law Enforcement
- Social Work

Students may select a training program leading to a certificate, a certificate of achievement or an associate in science degree. Certificate programs require occupational courses only and vary between 6 and 40 units of course work. The associate in science degree mandates a minimum of 60 units, consisting of the major, electives, and required courses in general education.

The Social Sciences Division is also home to the Fresno City College Anthropology Museum and the Child Development Center. It coordinates programs in Foster Care, Independent Living, and programs for foster youth.

## Social Sciences Division

M.E. Mericle, Ph.D.,

Dean of Instruction
Division Office:
Social Sciences Building, S0-123
Phone: (559) 442-8210
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soc@fresnocitycollege.edu

## DISTRICT COURSES AND PROGRAMS

Fresno City College is a sister institution of Reedley College and Clovis Community College within the State Center Community College District, and students may register at one institution or all institutions concurrently. As the registration procedures may differ slightly, students interested in enrolling for courses at Fresno City College should contact the Admissions Office on either campus for further information and direction.

Each college of the District offers certain programs/courses which are unique and not offered at the other campus. Following is a partial list of those programs/courses offered at Fresno City College that are not offered on the Reedley College campus:

- Administration of Justice
- Aerospace Studies
- African-American Studies
- Air Conditioning
- American Studies
- American Indian Studies
- Applied Technology
- Architecture
- Asian-American Studies
- Automotive Collision Repair Technology
- Automotive Technology

General Motors ASEP

- Business \& Technology
- Computer Aided Drafting and Design
- Construction
- Cultural Studies
- Dental Hygiene
- Drafting
- Electrical Systems Technology
- Fire Technology
- Graphic Communications
- Health Information Technology
- Latin American Studies
- Marketing
- Military Science
- Networking/Computer Technician
- Paralegal
- Police Academy
- Real Estate
- Radiologic Technology
- Respiratory Care


## Career \& Technology Center

Career \& Technology Center is a significant resource to both its students and the community. CTC staff identifies job skills employers in local industry need and then provides training to help students acquire those skills. Year-round registration is in effect. noncredit, open-entry classes are offered in:

- Auto Collision Repair
- Engine Performance/emission Control
- Engine Repair
- Industrial Training
- Maintenance Mechanic
- Manufacturing Mechanic

For additional information, write or call the center.
Career \& Technology Center
2930 East Annadale Avenue, Fresno, CA 93725
(559) 265-5760

## Reedley College

Additional programs/courses available only at Reedley College in Reedley:

- Aeronautics
- Agri-Business
- Animal Science
- Dental Assisting
- Forest/Park Technology
- General Agriculture
- Landscape Horticulture
- Mechanized Agriculture
- Natural Resources
- Office Technology
- Plant Science: Grape and Tree Fruit Management

Further information on these programs/courses can be obtained by writing or calling:

## Reedley College <br> 995 North Reed Avenue <br> Reedley, CA 93654 <br> (559) 638-0300

## Madera Community College Center

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

## Madera Community College Center

30277 Avenue 12, Madera, CA 93638
(559) 675-4800

## Oakhurst Community College Center

The Oakhurst Community College Center is located in the Central Business District of Oakhurst. The various programs are taught in relocatable classrooms arranged into a small campus setting. Students can complete courses leading to an associate degree and/or transfer program.

Oakhurst Community College Center 40241 Highway 41, Building Site G,<br>\section*{Oakhurst, CA 93644}<br>(559) 683-3940

## Clovis Community College

Clovis Community College is located at Willow and International avenues in Fresno across the street from the Clovis Unified School District Third Education Center. The college offers over 400 courses annually in 40 areas of study.

Clovis Community College<br>10309 N. Willow<br>Fresno, CA 93730<br>(559) 325-5200

# ASSOCIATE DEGREES FOR TRANSFER 



## Associate Degree for Transfer <br> A Degree with a Guarantee.w

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 bttp://adegreewithaguarantee.com. Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

## 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) 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

## 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 COURES ( 3 courses or 9 units minimum) Units
ANTHRO 1 Biological Anthropology ......................................... 3
ANTHRO 2/2H Cultural Anthropology, or
Honors Cultural Anthropology ............................. 3
ANTHRO 4 Introduction to Archaeology .................................... 3
Select 3-4 units from the following: Units
ANTHRO 3 Archaeology and World Prehistory ........................... 3
ANTHRO 8 Language and Culture, or
LING 10 Introduction to Language
3
ANTHRO 13 Anthropology of Magic, Witchcraft, and Religion.... 3
Select one of the following course or any course not used in the section above with a minimum of four units: Units
BIOL 20 Human Anatomy.................................................. 4
GEOL 1/1H Physical Geology, or Honors Physical Geology. $\qquad$
PSY/MATH 42 Statistics for the Behavioral Sciences, or MATH 11

Elementary Statistics
$\qquad$ ..... 4
Select three units from the following or any course not used in the selections above: Units
ANTHRO 15 Laboratory Methods in Archaeology ..... 4
ANTHRO 16A Field Archaeology I ..... 2
ANTHR0 16B Field Archaeology II .....  2
ANTHRO 24 Doing Archaeology: Hands-On! ..... 1.5
ANTHRO/CLS 28 Ancient Mexico .....  3

## ART

## STUDIO ARTS FOR TRANSFER - MAJOR \#5250

An Associate in Arts in Studio Arts for Transfer is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. An Associate in Arts in Studio Arts for Transfer is a great way to develop critical and creative problem solving skills, enhance an ability to analyze complex visual information, and improve communication skills. These 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) ..... Units
*ART 3 Two-Dimensional Design ..... 3
*ART 4 Three-Dimensional Design ..... 3ART 6/6H Art History 2, or
Honors Art History .....  3
*ART 7 Beginning Drawing. .....  3
LIST A: Select One (3 units) ..... Units
History I, or
Honors Art History I ..... 3
ART 55 Introduction to Asian Art ..... 3
LIST B: Select three courses (9 units)
Select one course from three of the followingareas (Drawing, Painting, Printmaking, Ceramics,Sculpture, or Applied Drawing) Units
ART $8 \quad$ Beginning Figure Drawing and Anatomy, or
ART 17 Intermediate Drawing, or
ART 18 Intermediate Figure Drawing and Anatomy......... 3
ART 9
ART 13
ART 19
ART 29
ART14
ART 24A
ART 24B
ART 24C Relief Printmaking, or
ART 24D Screenprinting................................................. 3
ART 10
ART 20
ART 11
ART 15
ART 21
ART 12A
ART 12B Intermediate Craft Workshop: Living Traditions, or
ART 22B Craft Workshop: Concepts in Fibers, or
ART 32A Beginning Jewelry and Metalsmithing ................. 3
[^3]
## BUSINESS ADMINISTRATION FOR TRANSFER - MAJOR \#2049

Business is an exciting major for students with a variety of interests and career goals including options in entrepreneurship, marketing, business law, management, computer information systems, accounting, and finance. The Associate in Science in Business Administration for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Science in Business Administration degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 27-28 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 36-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Business Administration for Transfer degree.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Apply knowledge of major business functions (accounting, quantitative, law, computer, and business concepts) and its methodologies and ethical applications in common business situations.
2. Apply professional behaviors in both business and personal situations.

REQUIRED CORE Units
$\begin{array}{ll}\text { ACCTG 4A/4AH } & \text { Financial Accounting, or } \\ & \text { Honors Financial Accounting ............................ }\end{array}$
$\begin{array}{ll}\text { ACCTG 4B/4BH } \quad \text { Managerial Accounting, or } \\ & \text { Honors Managerial Accounting .......................... } 4\end{array}$
BA 18 Business and the Legal Environment....................... 4
CIT 15 Computer Concepts ................................................ 3
*ECON 40 Introduction to Microeconomics ............................. 3
*ECON 50 Introduction to Macroeconomics ............................ 3
Choose 2 of the following: Units
BA 10/10H Introduction to Business, or Honors Introduction to Business......................... 3
*DS 21 Finite Mathematics ................................................. 3
*DS 23 Business Statistics.................................................. 4
*May be used to fulfill General Education requirements.

CHILD DEVELOPMENT

## EARLY CHILDHOOD EDUCATION FOR TRANSFER - MAJOR \#5605

Majoring in Child Development prepares students for jobs in a variety of early care and education settings as well as in related fields working with children and families. The associate in science in Early Childhood Education for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the associate in science transfer degree, students must complete 60 semester or 90 quarter units that are eligible for transfer to the CSU including either IGETC or CSU GE Breadth and at least 18 units, as defined by the community college, in a major or area of emphasis. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor for more information on transfer requirements and university admission.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education of young children.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.
4. Develop strategies that promote partnerships between programs, teachers, families and their communities.
5. Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the early care and education profession.
REQUIRED COURSES Units
CHDEV $1 \quad$ Principles and Practices of Teaching Young
Children................................................................ 3
CHDEV 3 Introduction to Curriculum.................................... 3
CHDEV 6 Health, Safety and Nutrition in Early Childhood Education .. 3
CHDEV 15 Diversity and Culture in Childhood Education Programs.3

CHDEV 20 Observation and Assessment .................................... 3
CHDEV 30 Child, Family and Community................................. 3
CHDEV 37A Early Childhood Practicum .................................... 3
CHDEV 39 Child Growth and Development ............................... 3
Total
24

## COMMUNICATION FOR TRANSFER

## FORMERLY SPEECH - MAJOR \#5432

The Associate in Arts in Communication Studies for Transfer degree program is designed to prepare students for further study or employment in fields requiring effective and ethical human communication. Communication courses focus on how people use messages to generate meanings within and across various contexts, cultures, channels and media.

The Associate in Arts in Communication Studies for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Comm. Studies AA-T degree, students must complete a minimum of 60 required semester units of CSU-transferable coursework, including (i) the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements, and (ii) the 18 semester units specified by the Communication Studies degree. These requirements must be obtained with a minimum GPA of 2.0. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Demonstrate understanding of core communication theories and principles.
2. Organize, develop, and deliver an effective presentation.
3. Critically evaluate various communication situations.

REQUIRED CORE COURSES Units
COMM 1 Introduction to Public Speaking .............................. 3
COMM 2 Interpersonal Communication................................ 3
COMM 4 Persuasion.......................................................... 3
COMM 8 Group Communication.......................................... 3
COMM 25 Argumentation..................................................... 3
Total 15
Choose 3 units from the following: Units
COMM 20 Community Involvement......................................2-3
COMM 26 Intercollegiate Forensics Laboratory ......................1-3
JOURN 1 Introduction to Mass Communication..................... 3
JOURN 3 Newswriting.......................................................... 3

## CRIMINOLOGY

ADMINISTRATION OF JUSTICE FOR TRANSFER<br>- 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.
3. Define and utilize key terms, concepts, and theories in the criminal justice system.
4. Interpret, assess, and compare competing types of evidence and data.
5. Effectively communicate orally and in writing the results of their analysis and conclusions.

## REQUIRED CORE <br> Units

CRIM 1 Introduction to Criminology ................................... 3
CRIM 6 Concepts of Criminal Law........................................ 3


EDUCATION

## ELEMENTARY TEACHER EDUCATION FOR <br> 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 |  |
| :---: | :---: |
| BIOL 3/3H | Introduction to Life Science, or |
|  | Honors Introduction to Life Science ................ 3.5 |
| CHDEV 39 | Child Growth and Development ........................... 3 |
| COMM 1 | Introduction to Public Speaking .......................... 3 |
| EDUC 19 | Work Experience (Cooperative), Occupational......... 1 |
| EDUC 30 | Introduction to Teaching.................................... 3 |
| ENGL 1A/1AH | Reading and Composition, or <br> Honors Reading and Composition $\qquad$ |
| ENGL 1B/1BH | Introduction to the Study of Literature, or Honors Introduction to the Study of Literature .... 3 |
| GEOG 4A | World Geography.............................................. 3 |
| GEOG 4B | World Geography............................................. 3 |
| GEOL 9 | Introduction to Earth Science.............................. 4 |
| HIST 11 | History of the United States to 1877....................... 3 |
| HIST 20 | World History I, to 1600 ...................................... 3 |
| MATH 10A | Structure and Concepts in Mathematics I................ 3 |
| NATSCI 1A | Integrated Science: Physics and Chemistry ............. 4 |
| POLSCI 2/2H | American Government, or |
|  | Honors American Government.......................... 3 |

List A: Select 1 course from the following: Units
ENGL 3/3H Critical Reading \& Writing, or
Honors Critical Reading \& Writing..................... 3
PHIL 2 Critical Reasoning and Analytic Writing.................. 3
List B: Select 1 course from the following: Units
ART 2 Art Appreciation..................................................... 3
ART 5/5H Art History I, or
Honors Art History I ........................................... 3
ART 6/6H Art History II, or
Honors Art History II.......................................... 3
MUS 12 Music Appreciation................................................. 3
TA 30 Theatre Appreciation............................................. 3
List C: Select 3 courses from the following: Units
ART 7 Beginning Drawing................................................ 3
ART 9 Beginning Painting: Oil/Acrylic .............................. 3
ART 10 Beginning Ceramics.............................................. 3
ART 11 Beginning Sculpture ............................................... 3
CHDEV 38 Lifespan Development............................................ 3
CIT 12
CIT 15 Computer Concepts........................................... 3
GEOG 2 Cultural Geography................................................ 3
HIST 1/1H Western Civilization to 1648, or Honors Western Civilization to 1648 .3
HIST 12/12H History of the United States since 1877, or
Honors History of the United States since 1877 .... 3

LING 11 Introduction to Language for Educators................... 3

## MATH 10B

Structure and Concepts in Mathematics II $\qquad$ 3
SOC 1A/1AH

TA 12 Fundamentals of Oral Interpretation ....................... 3
TA 41
WSTS 10
Introduction to Sociology, or
Honors Introduction to Sociology ... 3

Beginning Acting................................................... 3
Changing Roles of Women . ... 3

## 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 $1 \mathrm{~A} / 1 \mathrm{AH}$ is a prerequisite to major core courses; it also meets writing/reading competency and general education area D1.
MAJOR CORE
Units
ENGL 1B/1BH Introduction to the Study of Literature, or Honors Intro to the Study of Literature................ 3
ENGL 3/3H Critical Reading and Writing, or Honors Critical Reading and Writing .................. 3

Total 6

## MAJOR COURSE OPTIONS - Section A

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

| ENGL 44A | World Literature to the Renaissance, and |
| :--- | :--- |
| ENGL 44B | World Literature since the Renaissance, or |
| ENGL 46A | English Literature to 1800, and |
| ENGL 46B | English Literature from 1800 to the Present, or |
| ENGL 48A | Introduction to American Literature to <br>  <br> ENGL 48B$\quad$World War, and <br> Introduction to American Literature from <br> World War I to the Present.................................. 6 |

MAJOR COURSE OPTIONS - Section B Units
Select either six (6) from Section B, or three (3) units from Section B and three (3) units from Section C (Courses taken to meet Section A above cannot be used to fulfill Section B):
ENGL 14 Folklore 3
ENGL 15A Creative Writing: Poetry .......................................... 3
ENGL 15B Creative Writing: Fiction ......................................... 3
ENGL/TA15C Creative Writing: Playwriting................................... 3
ENGL/AFRAM 17 African-American Literature ................................... 3
ENGL/ASAMER 20 Asian-American Literature...................................... 3
ENGL/HUM 42 Classic Myths .......................................................... 3
ENGL 44A World Literature to the Renaissance......................... 3
ENGL 44B World Literature since the Renaissance..................... 3
ENGL 45 Contemporary World Literature............................... 3
ENGL 46A English Literature to 1800 ....................................... 3
ENGL 46B English Literature from 1800 to the Present............. 3
ENGL 48A Introduction to American Literature to World War I 3
$\begin{array}{ll}\text { ENGL 48B } & \text { Introduction to American Literature from } \\ & \text { World War I to the Present................................... } 3\end{array}$
LING 10 Introduction to Language....................................... 3
SECTION C Units
ENGL 12 The Bible as Literature ............................................ 3
ENGL 15D Creative Writing: Autobiography.............................. 3
ENGL/WSTS 36 Women in Literature.............................................. 3
ENGL 40 Critical Thinking about Literature ........................... 3
ENGL 47 Introduction to Shakespeare................................... 3

## GEOLOGY FOR TRANSFER - MAJoR \#6070

Geology is a useful major for students with a variety of interests and career goals in the earth sciences including geology, hydrogeology, astrogeology, paleontology, mineralogy, engineering geology, geophysics, geochemistry, petroleum geology, oceanography and environmental science. The Associate in Science in Geology for Transfer program is designed for students who plan to complete a bachelor's degree in a similar major a CSU campus. To earn the Associate in Science in Geology for Transfer program, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 27 units within the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. Students must have a minimum grade point average of 2.0. Students must earn a C or better in all courses required for the major.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Identify distinguishing characteristics, properties, and origin of common rocks and minerals.
2. Explain the processes of plate tectonic theory and identify associated geologic features and events.
3. Determine the age relationships of rocks and fossils using various dating techniques.


CHEM 1A General Chemistry................................................. 5
CHEM 1B General Chemistry and Qualitative Analysis ............. 5
GEOL 1/1H Physical Geology, or Honors 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 $4 A$ and Physics $4 B$ (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)

HISTORY FOR TRANSFER - MAJOR \#7380
History is our changing perspective on the past. Historians attempt not only to understand the causes and significance of human actions in the past but also to interpret those past actions to others, through teaching, publications, lectures, exhibits, documentaries, and conversations. Knowledge of history provides insight into human nature, enhances our understanding of the present, and guides choices for the future. The Associate in Arts in History for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Arts in History for Transfer degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 units within the major, with a minimum GPA of 2.0 . ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Analyze and evaluate the validity and significance of historical information from multiple primary and secondary sources.
2. Demonstrate a familiarity with the main figures, events and concepts in the histories of multiple societies.
3. Assess the relative significance of several factors (e.g. race, class, gender, technological change) in shaping the history of multiple societies.

## REQUIRED UNITED STATES HISTORY COURSES Units

HIST 11 History of the United States to 1877.......................... 3
HIST 12 History of the United States since 1877...................... 3
LIST A - Select one of the following: Units
HIST 1/1H Western Civilization to 1648, or
Honors Western Civilization to 1648.................... 3
HIST 20 World History I, to 1600 .......................................... 3
LIST B - Select one of the following: Units
$\begin{array}{ll}\text { HIST } 2 / 2 \mathrm{H} \quad \text { Western Civilization since 1648, or } \\ & \text { Honors Western Civilization since 1648............... } 3\end{array}$
HIST 23 World History II, since 1500..................................... 3
LIST C - Select one of the following: Units
HIST 20 World History I, to 1600 ........................................... 3
HIST 22 History of American Women .................................... 3
HIST 23 World History II, since 1500.................................... 3
$\begin{array}{ll}\text { HIST } 29 & \text { History of Mexico, Colonial to Contemporary } \\ \text { Period ............................................................... } 3\end{array}$
HIST 34 History of the American Civil Rights Movement ....... 3
History 20 or 23 may be used for list $C$ only if not used in lists $A$ or $B$.

LIST D - Select one from the following: Units
HIST 3 History of Ancient Rome ......................................... 3
HIST 15 History of the British Isles ....................................... 3
HIST 18 History of Ancient Greece ........................................ 3
HIST 21 United States Civil War............................................ 3
HIST 25 History of Religion in the United States.................... 3
HIST 30 California History ................................................... 3

## JOURNALISM FOR TRANSFER

- MAJOR \#5355

The Associate in Arts in Journalism for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Arts in Journalism for Transfer degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Demonstrate an understanding of journalistic responsibility.
2. Describe how the major mass media operate and analyze its impact on American society and its diverse communities.
3. Demonstrate the uses of photography, graphics and multimedia tools in media productions.
4. Report, write and edit news stories for multimedia and meet journalistic deadlines.

| 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, or |  |
| JOURN 4 | $\quad$ Writing for the College Newspaper....................... 3 |  |

LIST A - Select 3 units or 1 course from the following:
Units
JOURN 11C Advanced Media Writing Practicum ......................... 3
JOURN 11D Editorial Leadership ................................................ 3
JOURN 13 Advanced Reporting and Writing.............................. 3
JOURN 14 Multimedia Reporting............................................. 3
PHOTO 30 Editorial Photography............................................. 3

LIST B - Select 6-7 units or 2 courses from the following: Units
COMM 1 Introduction to Public Speaking .............................. 3
COMM 25 Argumentation ...................................................... 3
ENGL 3/3H Critical Reading \& Writing, or
Honors Critical Reading \& Writing...................... 3
Introduction to Microeconomics, or Honors Introduction to Microeconomics, or Introduction to Macroeconomics, or Honors Introduction to Macroeconomics............. 3
JOURN 16 Race, Gender and the Media.................................... 3
MATH/PSY 42 Statistics for the Behavioral Sciences........................ 4
PHIL 6
Symbolic Logic
POLSCI 2/2H
American Government, or Honors American Government.3

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:

## MATHEMATICS FOR TRANSFER

- FORMERLY MATHEMATICS - MAJOR \#6250

The Associate in Science in Mathematics for Transfer is designed to prepare students for further study in mathematics or in the sciences at the university level. It is also intend to provide students with a solid mathematics background in preparation for graduate level study or research in most majors. The Associate in Science in Mathematics for Transfer is specifically designed for students who plan to complete a bachelor's degree in mathematics at a CSU campus. To earn the Associate in Science in Mathematics for Transfer, students must complete 60 required semester units of CSU-transferable coursework, CSU-GE Breath or IGETC requirements and 20-21 semester units within the major. Students must maintain a minimum 2.0 GPA , including grades of C or higher in each course taken to fulfill the major. The local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admissions and transfer requirements.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Students will solve application problems in the natural sciences, management sciences, and social sciences using sound mathematical principles.
2. Students will demonstrate algebraic proficiency when using the concepts taught in each course to solve multi-step problems.
3. Students will use limits, derivatives, and integrals to solve problems such as probability density functions.

| REQUIRED CORE COURSES |  | Units |
| :---: | :---: | :---: |
| MATH 5A | Mathematical Analysis I. | ...... 5 |
| MATH 5B | Mathematical Analysis II.. | .. 4 |
| MATH 6 | Mathematical Analysis III. | 4 |
|  |  | 13 |

GROUP A: Select a minimum of seven units from Groups A \& B with at least three units from Group A. Units
MATH 7 Introduction to Differential Equations..................... 4
MATH 26 Elementary Linear Algebra ..................................... 3
GROUP B: Select a minimum of four units from Group B if less than seven units in Group A were selected. Units CSCI $40 \quad$ Programming Concepts \& Methodology I................ 4 MATH 11 Elementary Statistics, or MATH 42 Statistics for the Behavioral Sciences................... 4
PHYS 4A
Physics for Scientists and Engineers......................... 4

## MUSIC FOR TRANSFER - MAJOR \#5805

The Associate in Arts in Music for Transfer degree is intended for students who plan to complete a Bachelor's degree in music studies at a CSU campus. Students completing the transfer degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts this degree will be required to complete no more than 60 units after transferring to earn a bachelor's degree. The Associate in Arts in Music for Transfer degree may not be the best option for students intending to transfer to a particular CSU campus or a university that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Perform music of at least three different time periods.
2. Hear, analyze, read, and write music.
3. Ability to distinguish historical musical styles while interpreting appropriate conducting patterns.

## REQUIRED CORE COURSES <br> Units

MUS 1A Music Theory I ..................................................... 3
MUS 1B Music Theory II...................................................... 3
MUS 2A Music Theory III.................................................... 3
MUS 2B Music Theory IV .................................................... 3
MUS 7A Ear Training I........................................................ 1
MUS 7B Ear Training: Level II............................................. 1
MUS 7C Ear Training: Level III ............................................ 1
MUS 7D Ear Training: Level IV ............................................ 1

Two Units of Intermediate/Advanced class requirement to be selected from the following: Units
MUS 22 Intermediate/Advanced Piano ................................ 1
MUS 29 Intermediate/Advanced Guitar ................................ 1
MUS 42A Intermediate/Advanced Brass (Brass Choir) ............. 1
MUS 42B Intermediate/Advanced Woodwinds
(Woodwind Choir) .. 1
MUS 42C Intermediate/Advanced Strings (String Orchestra) .. 1
MUS 42D Intermediate/Advanced Percussion
(Percussion Ensemble) .. 1
MUS 73A Intermediate/Advanced Chamber Ensemble
(Brass) .................................................................... 1
MUS 73B Intermediate/Advanced Chamber Ensemble
(Woodwinds) .......................................................... 1
Intermediate/Advanced Chamber Ensemble
(Strings) .............................................................. 1
Intermediate/Advanced Chamber Ensemble
(Percussion) ................................................................... 1
MUS 74A Intermediate/Advanced Brass Performance Practices .. 1
MUS 74B Intermediate/Advanced Woodwind Performance Practices ..

MUS 74C Intermediate/Advanced String Performance Practices ... 1

MUS 74D Intermediate/Advanced Percussion Performance Practices .. 1
For the Large Ensemble requirement, all music majors
select four units from the following: Units
MUS 30 College Choir......................................................... 1
MUS 34 Fresno Chorale .................................................... 1
MUS 40 Concert Band....................................................... 1
MUS 41 Jazz Ensemble ...................................................... 1
MUS 46 Symphony Orchestra.............................................. 1
MUS 60 Symphonic Choir ........................................................... 1
MUS 61 A Cappella Choir.................................................... 1
MUS 68 Symphonic Band................................................... 1
MUS 69 Wind Band............................................................ 1
MUS 70 Contemporary Jazz Ensemble................................. 1
MUS 71 Lab Jazz Ensemble ................................................ 1
MUS 75 Community Orchestra............................................. 1
MUS 76 College Philharmonic Orchestra............................. 1

## PHILOSOPHY FOR TRANSFER

## - MAJOR \#5341

An Associate in Arts in Philosophy for Transfer is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. An Associate in Arts in Philosophy for Transfer is a great way to develop critical and creative reasoning skills, enhance an ability to read complex materials with comprehension, and improve communication skills. These assets will be valuable as a transfer student to a four-year institution, whether you major in philosophy or some other field, and will enhance your preparation for a wide range of career opportunities. To earn the Associate in Arts in Philosophy for Transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Demonstrate independent and critical thinking regarding important topics in philosophy.
2. Analyze and evaluate arguments, both philosophical and non-philosophical, in accordance with the standards taught in our philosophy courses.

## REQUIRED CORE COURSES

Units

## PHIL 1A/1AH Theories of Knowledge and Reality, or Honors Theories of Knowledge and Reality.......... 3

PHIL 1C Ethics .................................................................. 3
PHIL 6 Symbolic Logic...................................................... 3
Select three of the following courses Units
(min. two PHIL):
HIST 1/1H Western Civilization to 1648, or Honors Western Civilization to 1648.................... 3
HIST 2/2H Western Civilization since 1648, or Honors Western Civilization since 1648................ 3
PHIL 1B Social and Political Philosophy............................... 3
PHIL 1D World Religions.................................................... 3
PHIL 2 Critical Reasoning and Analytic Writing.................. 3
PHIL 5 Philosophy of Religion.......................................... 3

## 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
Units
PHYS 4A Physics for Scientists and Engineers......................... 4
PHYS 4B Physics for Scientists and Engineers......................... 4
PHYS 4C Physics for Scientists and Engineers......................... 4
MATH 5A Mathematical Analysis I......................................... 5
MATH 5B Mathematical Analysis II ........................................ 4
MATH 6 Mathematical Analysis III...................................... 4

## 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: Units
POLSCI 2/2H American Government, or Honors American Government.

LIST A: Select three of the following: Units

MATH/PSY 42 Statistics for the Behavioral Sciences........................ 4
POLSCI 1 Modern Politics ...................................................... 3
POLSCI 3 Introduction to Political Theory and Thought......... 3
POLSCI 5 Comparative Government...................................... 3
POLSC 24 International Relations........................................... 3
LIST B: Select two of the following: Units
BA 20 Law and the Legal System....................................... 3
ECON 25 Introduction to Economics..................................... 3
POLSIC 13 Legal and Judicial Reasoning.................................. 3
SOC 1B Critical Thinking about Social Problems................. 3

PSYCHOLOGY FOR TRANSFER

\author{

- 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 <br> Units

$\begin{array}{ll}\text { PSY 2/PSY 2H } \quad \text { General Psychology, or } \\ & \text { Honors General Psychology ............................... } 3\end{array}$
PSY 36 Biological Psychology ............................................. 3
PSY/MATH 42 Statistics for the Behavioral Sciences........................ 4
PSY 45 Introduction to Research Methods in Psychology...... 3
Select one of the following course: Units
BIOL 5 Human Biology .................................................. 3.5
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 Units
PSY 5 Social Psychology.................................................. 3
PSY 16 Abnormal Psychology ............................................ 3
PSY 25 Human Sexuality .................................................. 3
PSY 33 Personal and Social Adjustment.............................. 3

## SOCIOLOGY FOR TRANSFER - MAJor \#7600

The associate in arts in Sociology for Transfer degree is designed to acquaint students with tools to understand the functioning of the society in which they live. The degree offers students a broad and multicultural perspective of the world around them and also provides them with a solid foundation for further study in sociology. Sociology can assist in occupations such as teaching, social work, drug and alcohol counseling, police work, probation aides, juvenile hall counseling, medical work, international business, and any other occupation that places you in contact with people of diverse backgrounds. The associate in arts in Sociology for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. To earn the associate in arts in Sociology for Transfer degree, students must complete the following requirements: Completion of 60 semester units that are eligible for transfer to the California State University, including all of the following: Students must earn a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements (CSU-GE). Completion of a minimum of 18 semester units in the associate in arts degree in Sociology for Transfer as identified by the Fresno City College catalog. Students must earn a "C" or better in all of the courses required for this degree.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcome:

1. Understand the complexity of social life, including an understanding of the social forces that shape institutions in society, sources of societal problems, and remedies to address those problems.

## REQUIRED COURSES Units

PSY 5 Social Psychology.................................................. 3
PSY/MATH 42 Statistics for the Behavioral Sciences, or
MATH 11 Elementary Statistics. $\qquad$ .4
SOC 1A/1AH
Introduction to Sociology, or Honors Introduction to Sociology 3
SOC 1B Critical Thinking about Social Problems ..... 3
SOC 32 Introduction to Marriage and Family ..... 3
Choose one of the following 3-unit courses: Units
AMST 10 American Pluralism: A Search for Common Ground in a Multicultural Society. ..... 3

ANTHRO 2/2H

HS 20
SOC 2
SOC/WSTS 5
SOC/WSTS 7
SOC/HS 10
SOC/CLS 14
SOC 31
WSTS 10

Cultural Anthropology, or Honors Cultural Anthropology3
Introduction to Social Welfare. ..... 3
American Minority Groups. ..... 3
Sociology of Rape. ..... 3
Domestic Violence: Abuse within the Family. .....  3
Introduction to Aging Studies. .....  3
Sociology of the Mexican American Community .....  3
The Child in Society: A Social Problems Approach .....  3Changing Roles of Women 3

## 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 24 semester units within the major. Students must maintain a minimum 2.0 GPA , including grades of C or higher in each course taken to fulfill the major. The local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admissions and transfer requirements.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Engage in conversation using the Spanish in the daily life situation.
2. Read with a certain depth of understanding magazine or newspaper articles, short stories, and literacy excerpts written in Spanish.
3. Write at the advanced level in a variety of modalities including personal and professional letters, short narratives, and descriptive essays.
4. Recognize and understand cultural similarities and differences between U.S. culture and that of the Spanish speaking world. Distinguish simple behavioral patterns that represent these cultures and behave in culturally appropriate ways in specific situations.


## 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
Units

| TA 30 | Theatre Appreciation, or |
| :---: | :---: |
| TA 31 | Theatre History and Dramatic Literature I ........... 3 |
| TA 40 | Performance Practicum, or |
| TA 23 | Technical Theatre Practicum.............................. 3 |
| TA 41 | Beginning Acting, or |
| TA 42 | Beginning Acting for Theatre Majors.................. 3 |

Elective Courses: Select 9 Units from the
Following Courses: Units
Note: TA 23 or TA 40 can be taken in thi section only if they were not taken aspart of the core.
TA 23 Technical Theatre Practicum .................................. 3
TA 25 Stagecraft.............................................................. 3
TA 27B Introduction to Lighting Design.............................. 3
TA 28 Introduction to Stage Makeup................................. 3
TA 36 Costume Design.................................................... 3
TA 38 Script Analysis ........................................................... 3
TA 40 Performance Practicum......................................... 3
TA 43 Intermediate Acting............................................... 3

## ASSOCIATE DEGREE AND CERTIFICATE PROGRAMS

## ACCOUNTING

## ACCOUNTING - MAJOR \#2010

The AS Degree in Accounting qualifies the student for entry-level accounting positions in business, government, industry, and financial institutions. Students interested in pursuing a BS Degree in Accounting should consult the catalog of the institution to which they wish to transfer for the specific requirements of that program.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Operate and maintain an integrated accounting system in both a manual and a computerized environment.
2. Develop and analyze accounting information to meet the needs of both external and internal users.
3. Demonstrate proficiency in accounting theory, functions, and skills.

REQUIRED COURSES Units
*ACCTG 4A/4AH Financial Accounting, or
Honors Financial Accounting .4
*ACCTG 4B/4BH Managerial Accounting, or Honors Managerial Accounting 4

ACCTG 19

Work Experience (Cooperative), Occupational. .....  1

ACCTG 32A

Computerized Accounting. .....  1
ACCTG 34 Accounting Spreadsheets, or
Spreadsheet Fundamentals .....  2
*ACCTG 51 Intermediate Accounting .....  3
*ACCTG 52 Cost Accounting .....  3
ACCTG 70 QuickBooks Fundamentals, orACCTG 73Sage 100/ MAS 90 Fundamentals ........................ 2
BA 10/10H
BT 123Introduction to Business, orHonors Introduction to Business 3
CIT 15Ten-Key Skillbuilding0 .5Computer Concepts 3
Select 3 of the following courses: 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
*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 courrses to satissy that CPA exam requirement as well as to satisfy the AS degree requirements.
Note: Associate degree requirements are listed on page 32.

## 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/4AH Financial Accounting, or
$\qquad$
*ACCTG 4B/4BH Managerial Accounting, or Honors Managerial Accounting 4
ACCTG 19 Work Experience (Cooperative), Occupational .....  1
ACCTG 32A Computerized Accounting. .....  1
ACCTG 34CIT 23
*ACCTG 51 Intermediate Accounting ..... 3 2
*ACCTG 52 Cost Accounting
Total ..... 10.5

| ACCTG 70 | QuickBooks Fundamentals, or |  |
| :---: | :---: | :---: |
| ACCTG 73 | Sage 100/ MAS 90 Fundamentals |  |
| BA 10/10H | Introduction to Business, or |  |
|  | Honors Introduction to Business....................... 3 |  |
| BT 123 | Ten-Key Skillbuilding |  |
| CIT 15 | Computer Concepts |  |
|  | Total | 10.5 |
| Select 3 of the following courses: |  | Units |
| *ACCTG 53 | Tax Accounting |  |
| * ACCTG 54A | Principles of Auditing........................................ 3 |  |
| *ACCTG 56 | Payroll Accounting........................................... 3 |  |
| *ACCTG 57 | Governmental Accounting ................................... 3 |  |
| *ACCTG 61 | Forensics Accounting .......................................... 3 |  |
| *The advanced accounting courses noted above may also be used to satisy the uniteligibility 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 - MAJOR \#2405

The Computerized Accounting 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. Record and enter transactions into an accounting system in both a manual and a computerized environment.
2. Develop accounting information to meet the needs of both external and internal users.
3. Demonstrate an understanding of accounting functions and skills required of account clerks.

## REQUIRED COURSES <br> Units

ACCTG 4A/4AH Financial Accounting, or Honors Financial Accounting, or
BT 131
Applied Accounting.
3.5-4

ACCTG 19 Work Experience (Cooperative), Occupational......... 3
ACCTG 34 Accounting Spreadsheets, or
CIT 23
ACCTG 55
Spreadsheet Fundamentals
Accounting Methods. .2

ACCTG 70
ACCTG 73
QuickBooks Fundamentals, or
Sage 100/MAS 90 Fundamentals 2

Job Search and Workplace Skills 3
BT 104 Ten-Key Calculations .....  2
BT 106 Computer Keyboarding ..... 1.5
BT 112 Business English ..... 3
BT 126 Automated Business Records ..... 1
BT 127 Microsoft Outlook and E-Mail ..... 1

## FULL CHARGE BOOKKEEPER - MAJOR \#2012

The Full-Charge Bookkeeper Certificate of Achievement is designed to provide knowledge and skills to individuals seeking employment as bookkeeper.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Analyze, record, and enter transactions into an integrated accounting system in both a manual and a computerized environment.
2. Develop and provide accounting information to meet the needs of both external and internal users.
3. Demonstrate an understanding of accounting functions and skills for full-charge bookkeepers.
REQUIRED COURSES Units
$\begin{array}{ll}\text { ACCTG 4A/4AH } \quad \text { Financial Accounting, or } \\ & \text { Honors Financial Accounting ............................. } 4\end{array}$
$\begin{array}{ll}\text { ACCTG 4B/4BH } \quad \text { Managerial Accounting, or } \\ & \text { Honors Managerial Accounting........................... } 4\end{array}$
ACCTG 19 Work Experience (Cooperative), Occupational......... 1
ACCTG 51 Intermediate Accounting ............................................. 3
ACCTG 56 Payroll Accounting................................................ 3
ACCTG $70 \quad$ QuickBooks Fundamentals, or ACCTG 73 Sage 100/MAS 90 Fundamentals
.. 2
Total 17

## ADAPTIVE ORNAMENTAL HORTICULTURE SKILLS - MAJOR \#1060

The adaptive ornamental horticulture skills 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 Outcome:

1. Discuss potential employment opportunities based on their educational and horticultural skills.

## FIRST YEAR

| First Semester |  |
| :--- | :--- |
| DEVSER 262 | Group Interaction for Students with Disabilities........ 2 |
| DEVSER 275 | Horticulture Skills I............................................... 2 |
|  |  |
| Sotal | 4 |
| Second Semester |  |
| Units |  |

DEVSER 262 Group Interaction for Students with Disabilities....... 2

DEVSER 276 Horticulture Skills II ............................................... 2
SECOND YEAR
First Semester ..... Units
DEVSER 282 Greenhouse Workforce Prep .....  3
Total ..... 3
Second Semester ..... Units
DEVSER 282 Greenhouse Workforce Prep .....  3
Total ..... 3
ADMINISTRATION OF JUSTICE
ADULT CORRECTIONAL OFFICER CORE

- MAJOR \#8941

Designed for the student needing to complete the Standards and Training for Corrections (STC) Adult Correctional Officer Core Course to become a County Correctional Officer in the State of California.

## CERTIFICATE

## Student Learning Outcomes:

1. Qualified to enter an employee training program for a County Correctional Detention Facility in the State of California.
2. Identify the organizational operation and process of confinement and care for adult or juvenile prisoners.
3. Apply the philosophy of the correctional system at a local level.

## REQUIRED COURSE <br> Units

AJ 280 Adult Correctional Officer Core.............................. 10

## 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.

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
Units
AJ 270A Basic Police Academy - Part 1 ............................... 24
AJ 270B Basic Police Academy - Part 2 ............................ 27.5
Total 51.5
OR
AJ 272
Regular Basic Course Module III........................... 10
AJ 273 Regular Basic Course Module II ............................ 13
AJ 274 Regular Basic Course Module I ........................... 25.5
Total 48.5

## BASIC SUPERVISOR - MAJOR \#8924

Designed for the student needing to complete the California Commission on Peace Officer Standards and Training (POST) required 80-hour course to become a supervisor for a California public safety agency.

## CERTIFICATE

## Student Learning Outcomes:

1. Satisfies all the required mandated training for California Peace Officers Standards and Training (POST) to become a supervisor.
2. Identify methodologies of supervision related to the law enforcement profession.
REQUIRED COURSE Units
AJ 276 Basic Supervisors ..... 4.5
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 Units

AJ 286 Juvenile Correctional Officer Core ........................... 7

## PROBATION CORE COURSE - MAJOR \#8942

Designed for the student needing to complete the Standards and Training for Corrections (STC) Probation Officer Core Course to become a County Probation Officer in the State of California.

## CERTIFICATE

## Student Learning Outcomes:

1. Identify the responsibilities of a County Probation Officer for the State of California.
2. Distinguish the responsibilities of the probation officer when a minor is taken into custody using the Welfare and Institutions Codes 625, 627 , and 627.5 .
REQUIRED COURSE ..... Units
AJ 285 Probation Core Course ..... 10
PUBLIC SAFETY DISPATCHER - MAJOR \#8970
Designed for the student needing to complete the Peace Officer Standards and Training (POST) Pubic 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 ..... Units
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 Units
AJ 219 Requalification - Basic Course ................................ 6

## AFRICAN-AMERICAN STUDIES <br> - MAJOR \#7640

The African-American degree is a social science based program designed to focus on the history, heritage, and social culture of African-Americans and African people of the diaspora. African-American Studies provides the knowledge and skills necessary to help students understand, communicate, and appreciate the rich cultural diversity in American society through the study of the African-American community.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Evaluate and analyze the historical and cultural contributions made by African-Americans to the American system.
2. Demonstrate a positive self-image based on the study of various subject areas of art, music, literature, and history of African-American people.
3. Evaluate and assess the historic roles of Africa and African people throughout the world.
4. Analyze and evaluate contemporary social, political, and economic issues of the African-American community.
5. Demonstrate academic success and positive community involvement.

Total Units Required................................................ 27
REQUIRED CORE COURSES: Select 24 units Units
AFRAM 1 Introduction to African American Studies................. 3
AFRAM 2 Cultural Adaptation of the African-American ........... 3
AFRAM 3 African-American Art.............................................. 3
AFRAM 4 Classical and Pre Colonial Africa............................. 3
AFRAM 5 The Africans of the New World................................. 3
AFRAM 6 African Cultures and Languages.............................. 3
AFRAM 13 African-American Music to 1940 .............................. 3
AFRAM 15 African-American Music 1940 to present.................. 3

| COURSE OPTIONS: Select 3 units |  | Units |
| :---: | :---: | :---: |
| AFRAM 8 | African-American Creative Workshop | 3 |
| AFRAM 17 | African-American Literature |  |
| AFRAM 36 | Contemporary Africa | 3 |
| AFRAM/WSTS 41 | The African-American Women's Studi | 3 |
| Notes: An associate completes 60 at least $27 u$ | in arts degree will be awarded to any candida units. The 60 units must include associate degree its of course work as listed above. | ccessfully <br> nents and |

AIR CONDITIONING - MAJOR \#8030
The program provides training in troubleshooting, maintenance, repair, and installation of heating, cooling, and refrigeration systems. The curriculum will emphasize fundamental and advanced skills in both classroom and lab activities. Students will train on residential and commercial systems similar to those found in the workplace. Upon successful completion of the program, students may take the Air Conditioning and Refrigeration Institute's (ARI) Industry Competency Examination(s), the North American Technician Excellence (NATE) core section of the certification exam, R-410A safety certification exam, and EPA approved certification under provisions of the Federal Clean Air Act, Section 608.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Identify and describe the function of the major and auxiliary refrigerant system components.
2. Interpret HVAC wiring diagrams to be used in the electrical troubleshooting process of related equipment.
3. Calculate air volume (CFM) and system capacity by measuring velocity pressure using a pitot tube and incline manometer along with wet and dry bulb readings on the psychrometric chart.
4. Diagnose and repair electrical and refrigerant circuit problems in an air conditioning system.
5. Certification of students' ability as an entry level air conditioning technician.
6. Flare, swage, silver braze and solder copper pipe and fittings while observing all safety precautions.

## FIRST YEAR

First Semester Units
AC $50 \quad$ Principles of Mechanical Refrigeration..................... 3
AC 51 Electrical Systems................................................ 6.5
AC 53 Measurements and Diagnosis............................... 6.5
AT 10 Technical Computer Applications............................ 3
Total 19

Second Semester Units
AC 22 Heating Systems .................................................... 6
AC 54 Commercial Systems........................................... 6.5
AC 55 Technician Testing \& Certification.......................... 1
AC 56 Duct Systems ......................................................... 3
Total 17
SECOND YEAR
First Semester Units
AC 57 System Configuration \& Control .............................. 2
AT 21 Occupational Safety \& Health.................................. 2
WELD 1 Exploring Welding/Metals ....................................... 3 Total 7
Second Semester Units
AT 40 Preparing for Employment Opportunities................. 3
AT 120 Industrial Science ................................................. 3
EST 55A Digital Concepts .................................................... 3
EST 55B Facility Automation................................................ 3
Total $\quad 12$
Note: $\quad$ 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 32 of the catalog, upon application, will be awarded the associate in science degree.

## AIR CONDITIONING - MAJOR \#8030

The program provides training in troubleshooting, maintenance, repair, and installation of heating, cooling, and refrigeration systems. The curriculum will emphasize fundamental and advanced skills in both classroom and lab activities. Students will train on residential and commercial systems similar to those found in the workplace. Upon successful completion of the program, students may take the Air Conditioning and Refrigeration Institute's (ARI) Industry Competency Examination(s), the North American Technician Excellence (NATE) core section of the certification exam, R-410A safety certification exam, and EPA approved certification under provisions of the Federal Clean Air Act, Section 608.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Identify and describe the function of the major and auxiliary refrigerant system components.
2. Interpret HVAC wiring diagrams to be used in the electrical troubleshooting process of related equipment.
3. Calculate air volume (CFM) and system capacity by measuring velocity pressure using a pitot tube and incline manometer along with wet and dry bulb readings on the psychrometric chart.
4. Diagnose and repair electrical and refrigerant circuit problems in an air conditioning system.
5. Certification of students' ability as an entry level air conditioning technician.
6. Flare, swage, silver braze and solder copper pipe and fittings while observing all safety precautions.

## FIRST YEAR

First Semester Units
AC $50 \quad$ Principles of Mechanical Refrigeration.................... 3
AC 51 Electrical Systems................................................ 6.5
AC 53 Measurements and Diagnosis............................... 6.5
AT 10 Technical Computer Applications............................ 3
Total 19
Second Semester Units
AC 52 Heating Systems ................................................... 6.5
AC 54 Commercial Systems............................................ 6.5
AC 55 Technician Testing \& Certification........................... 1
AC 56 Duct Systems ........................................................ 3
Total $\quad 17$
SECOND YEAR
First Semester Units
AC 57 System Configuration \& Control ............................. 2
AT 21 Occupational Safety \& Health.................................. 2
AT 130 Industrial Mathematics........................................... 3
WELD 1 Exploring Welding/Metals ...................................... 3 Total 10
Second Semester
Units
AT 40 Preparing for Employment Opportunities................. 3
AT 120 Industrial Science ................................................. 3
EST 55A Digital Concepts ................................................... 3
EST 55B Facility Automation................................................ 3
Total 12
Note: $\quad$ Students qualify for the certificate of achievement upon completion of the major requirements listed above.

## AIR CONDITIONING TECHNOLOGY OVERVIEW - MAJOR \#8033

This curriculum provides training in the principles of mechanical refrigeration, residential and commercial system configurations, electrical fundamentals, motors and controls, heating systems, and troubleshooting procedures.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Identify and describe the function of the major and auxiliary refrigeration, electrical and air delivery system components.
2. Interpret HVAC wiring diagrams to be used in the electrical troubleshooting process of related equipment.
3. Explain the combustion process and demonstrate the ability to install, adjust and troubleshoot natural gas furnaces.
4. Analyze refrigerant and electrical readings to diagnose and repair heating and cooling equipment.

REQUIRED COURSES
Units
AC 60A Fund of Refrigeration............................................. 3
AC 260B Electricity for Air Conditioning............................... 3
AC 260C Residential Heating................................................ 3
AC 260D Troubleshooting Procedures ................................... 2
AT 10
Technical Computer Applications............................ 3
Total
14

## COMMERCIAL AIR CONDITIONING, HEATING, AND DUCT SYSTEMS - MAJOR \#8031

This curriculum provides training in three-phase power, motors, refrigerant flow controls typically used in commercial applications, $\mathrm{Na}-$ tional Electrical Code requirements related to the $\mathrm{HVAC} / \mathrm{R}$ industry, heating systems (gas, electric, and heat pumps), and the design and installation of residential duct systems. Successful completion of the program includes industry recognized licensing/certifications.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Explain the combustion process and demonstrate the ability to adjust and troubleshoot natural gas furnaces.
2. Analyze refrigerant and electrical readings to diagnose and repair heating, cooling and refrigeration equipment.
3. Design circuitry for a heating, cooling unit and wire per guidelines.
4. Properly size branch conductors and over current protection devices based on the NEC, National Electrical Code.
5. Properly size and select thermal expansion valves based on temperature and capacity requirements.
6. Design a residential air conditioning duct system (given Title 24 calculations).

| REQUIRED COURSES |  | Units |
| :---: | :---: | :---: |
| AC 52 | Heating Systems ............................... | ... 6.5 |
| AC 54 | Commercial Systems....................... | ..... 6.5 |
| AC 56 | Duct Systems .......................... | ..... 3 |
|  | Total | 16 |

## DIGITAL AIR CONDITIONING CONTROLS <br> - MAJOR \#8034

This curriculum provides training in the use of direct digital controls in commercial HVAC applications, examines various system configurations, control strategies, and introduces total building automation.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Write a program to control an air conditioner and a variable air volume box.
2. Define and map the hardware and software points required for network operation and monitoring.
3. Install a variable air volume controller using approved guidelines, selecting appropriate sensors and final drive devices.
4. Create a network of digital air conditioning controllers and verify their communication.
5. Download and upload digital air conditioning devices and network controllers.
6. Recommend appropriate control strategies given a typical air conditioning system configuration.

## REQUIRED COURSES Units

AC 57 System Configuration \& Control .............................. 2
AC 250 Digital Unitary Controls......................................... 2
AC 251 Digital VAV Controls............................................ 0.5
AC 252 DDC Network Controllers ........................................ 2
AT 10 Technical Computer Applications............................ 3
EST 55A Digital Concepts .................................................... 3
EST 55B Facility Automation............................................... 3
Total 15.5

## INDUSTRIAL REFRIGERATION -CARO/EPA- SECTION 608 CERTIFICATE <br> - MAJOR \#8231

This program is intended for the entry-level operator with little or no experience in industrial refrigeration. The curriculum provides instruction in the principles of mechanical refrigeration in an industrial setting and related safety issues. The coursework is intended to help the student prepare for the Refrigerating Engineers \& Technicians Association's (RETA) Certified Assistant Refrigeration Operators (CARO) examination. Students will also receive instruction to prepare them for the EPA-section 608 certification exam.

## CERTIFICATE

## Student Learning Outcomes:

1. Identify major and auxiliary refrigerantsystem components and describe their function.
2. Quantify the relationship between pressure and saturation temperature of a refrigerant using manufacturers pressure-temperature charts and identify the location within an active system where the values apply.
3. List seven elements of a standard operation procedure (SOP) for an ammonia refrigeration system.
4. Using gage or absolute pressure readings, calculate compression ratio and describe procedures to reduce excessive compression ratios.
5. Pass the EPA section 608 proper refrigerant handling techniques certification exam.
6. Pass the RETA Refrigerating Engineers \& Technicians Association practice CARO, Certified Assistant Refrigeration operator exam.

## REQUIRED COURSES <br> Units

AC 55 Technician Testing \& Certification........................... 1
AC 353 Principles of Industrial Refrigeration. ... 0

## MECHANICAL AND ELECTRICAL SYSTEMS - MAJOR \#8032

This curriculum provides training in the principles of mechanical refrigeration, electrical fundamentals, single-phase motors and controls, reading wiring diagrams, airflow measurement, and the use of psychometrics as a diagnostic tool.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Identify and describe the function of the major auxiliary refrigeration system components.
2. Calculate air volume (CFM) and system capacity by measuring velocity pressure using a pitot tube and incline manometer along with wet and dry bulb readings on the psychrometric chart.
3. Illustrate electrical components using the correct electrical symbol and read and interpret pictorial and ladder wiring diagrams.
4. Plot return and supply air state points on a psychrometric chart, measure external static pressure and determine CFM and system capacity using manufacture's specification tables.
5. Troubleshoot and wire single phase motors and their starting components.
6. Flare, swage, silver braze and solder copper pipe and fittings while observing all safety precautions.
REQUIRED COURSES
Units
AC $50 \quad$ Principles of Mechanical Refrigeration.................... 3
AC 51 Electrical Systems............................................... 6.5
AC 53 Measurements and Diagnosis............................... 6.5
Total $\quad 16$

## AMERICAN INDIAN STUDIES

- MAJOR \#7680

Fresno City College is located in an area that is rich in the history and contemporary cultures of American Indians. California has the highest American-Indian population in the United States, and has several Indigenous communities in our immediate area. American Indian Studies exists to serve Indian and non-Indian students who will be working in any service field, academic or social institution. The program leading to the associate in arts degree will also provide a foundation in American Indian Studies for students wishing to pursue a higher degree in the subject at a four-year university. In recent years, several graduate programs have begun in American-Indian Studies at universities in California and elsewhere.

Student must complete 12 units of required basic core courses. Select 9 units from the course options listed below for a total of 21 units for an associate in arts degree.

## ASSOCIATE IN ARTS DEGREE <br> 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 Units
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 12
COURSE OPTIONS: Select a minimum of 9 units Units
AFRAM 5 The Africans of the New World................................ 3
AMIND 20 Native Peoples of California.................................... 3
$\begin{array}{ll}\text { AMST } 10 & \text { American Pluralism: A Search for Common } \\ & \text { Ground in a Multicultural Society........................... } 3\end{array}$
ANTHR0/CLS 28 Ancient Mexico ....................................................... 3
CLS 11 Introduction to Chicano-Latino Studies................... 3
ENGL 14 Folklore................................................................ 3
GEOG 2 Cultural Geography................................................ 3
SOC 2 American Minority Groups.................................... 3
Notes: 1. An associate in arts degree will be awarded to any candidate who successfully completes a total of 60 units. The 60 units must include associate degree requirements and 23 units in course work as listed above.
7. Associate degree requirements are listed on page 32 of this catalog. General Education requirements for transfer certification are on pase 40.

## AMERICAN SIGN LANGUAGE STUDIES

## - MAJOR \#5505

This degree is designed to prepare students for transfer as a junior to a baccalaureate degree program in American Sign Language (ASL), Deaf Studies or Interpreting.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Demonstrate ability to carry on a Sign Language conversation consistent with the ability of a 4th semester second language learner with a Deaf individual or groups of Deaf people.
2. Categories and describe characteristics that impact a Deaf person's life in the following areas: the world of work, education, family, language and social development.
3. Identify and compare beliefs, values, norms, traditions and attitudes reflected in Deaf culture, their subgroups and other cultures.
4. Organize a plan to utilize career development tools and resources for use in the Deaf community.
REQUIRED CORE COURSES Units
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 8 American Sign Language Literature/Folklore........... 3
ELECTIVE COURSE (6 Units) Units
ASL 7 Deaf History, and .................................................. 3
ASL 20 Introduction to Interpreting, or
CHDEV $30 \quad$ Child, Family and Community, or
LING 10/10H Introduction to Language, or Honors Introduction to Language ....................... 3

## ANTHROPOLOGY

- MAJOR \#7100

A program designed to acquaint students with human diversity, anthropology offers a broad approach to the study of people including the prehistoric, biological, and cultural perspectives. Because of its wide coverage, anthropology provides a versatile background, which can serve as a solid foundation not only for transfer students in anthropology but for many fields and vocations.

Students planning for a career in anthropology will need to earn at least a Bachelor's degree. Therefore students are strongly encouraged to meet with a counselor about transfer requirements (IGETC/CSU certification) early in their program. Anthropology students should also meet with anthropology faculty about course/program offerings as soon as possible once the major has been declared in order to complete the program in a timely manner.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Identify the primary goals of the discipline of anthropology.
2. Demonstrate understanding of the primary methods of the discipline of anthropology.
3. Demonstrate understanding of human cultural diversity and biological variation.


## 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

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 COURES ( 3 courses or 9 units minimum)
Units
ANTHRO 1 Biological Anthropology ......................................... 3
ANTHRO 2/2H
Cultural Anthropology, or
Honors Cultural Anthropology............................. 3
ANTHR0 4 Introduction to Archaeology .................................... 3
Select 3-4 units from the following: Units
ANTHRO 3 Archaeology and World Prehistory ........................... 3
ANTHRO 8 Language and Culture, or
LING 10 Introduction to Language.................................. 3
ANTHRO 13 Anthropology of Magic, Witchcraft, and Religion..... 3
Select one of the following courses or any course not used in the section above with a minimum of four units:

Units
BIOL 20 Human Anatomy................................................... 4
$\begin{array}{ll}\text { GEOL 1/1H } \quad \text { Physical Geology, or } \\ & \text { Honors Physical Geology................................... } 4\end{array}$
PSY/MATH 42 Statistics for the Behavioral Sciences, or
MATH $11 \quad$ Elementary Statistics ...................................... 4
Select three units from the following or any course not used in the selections above: Units
ANTHRO 15 Laboratory Methods in Archaeology ......................... 4
ANTHR0 16A Field Archaeology I................................................. 2
ANTHR0 16B Field Archaeology II ............................................... 2
ANTHRO 24 Doing Archaeology: Hands-On! ............................. 1.5
ANTHRO/CLS 28 Ancient Mexico ...................................................... 3

## 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 minimum) Units ANTHRO 1 Biological Anthropology ......................................... 3
ANTHRO 2/2H Cultural Anthropology, or

Honors Cultural Anthropology .....  3ANTHRO 4 Introduction to Archaeology.
3ANTHRO 15 Laboratory Methods in Archaeology
ANTHRO 16A Field Archaeology I 4
ELECTIVES (3 units minimum) ..... UnitsStudents must complete a minimum of three units from the followinglist of electives. Other courses may be substituted based on the student'sarea of focus with faculty approval.
AMIND 20 Native Peoples of California. ..... 3
ANTHRO 3 Archaeology and World Prehistory ..... 3
ANTHRO 16B Field Archaeology II ..... 2
ANTHRO 24 Doing Archaeology: Hands-On! ..... 1.5
ANTHRO 28 Ancient Mexico .....  3
ANTHRO 30 Topics in Anthropology ..... 1-4
GEOG 10 Introduction to GIS. .....  3
*GEOL 1/1H Physical Geology, or Honors Physical Geology. .....  4
HIST 3 History of Ancient Rome .....  3
HIST 18 History of Ancient Greece ..... 3
*This course is highly recommended for archaeology students.

## SUGGESTED SEQUENCE OF COURSES

Recommended ANTHRO 2 be taken prior to other anthropology courses. ANTHRO 4 should be taken prior to ANTHRO 16A. Other courses may be taken in any sequence.

## ARCHITECTURE

## ARCHITECTURE - MAJOR \#6810

This curriculum is designed to prepare students for employment with architects, engineers, interior designers, building contractors, building material companies and government agencies. It is also designed as basic coursework for transferring into advanced degree programs in architecture and related fields. Courses may or may not be transferable based on school to which you are transferring, course content, and quality/quantity of the student portfolio. Students are encouraged to take courses in the order listed. Not all courses are offered each semester. Students wishing to transfer into an advanced degree program should contact that particular college or university for all specific transfer requirements including, but not limited to Math and English. Additional courses are necessary to fulfill the requirements for the Associate in Science degree. Please refer to the current catalog for more information.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Synthesize alternative solutions to a specific problem.
2. Design and complete an architectural education portfolio.
3. Draw a floor plan, foundation plan, roof framing plan, sections, and elevations.

## FIRST YEAR

Fall Semester Units ARCH 10 Architectural Design and Visualization I.............. 3 ARCH 11 Introduction to Architecture and Environmental Design 2

ARCH 12 ..... 3
Architectural Practice I

## ARCH 14

Spring Semester
2
Digital Tools for Architects ..... 10
ARCH 20 Architectural Design and Visualization II. .....  3
ARCH 21 Materials of Construction. ..... 3
ARCH 22 Architectural Practice II ..... 3
ARCH 24 Building Information Modeling ..... 3

## SECOND YEAR

Fall Semester
ARCH 30
ARCH 31
ARCH 32
ARCH 34
Spring Semester
ARCH 40
ARCH 41A Office Practices ................................................ 3
ARCH 42
Units
Architectural Design and Visualization III ........... 3
Building Codes.................................................... 3
Statics and Strength of Materials ......................... 3
Digital Rendering ............................................... 3
Total 12
Units
.. 3 3 .. 3

Total
9
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 32 of the catalog, upon application, will be awarded the associate in science degree.

## ARCHITECTURE - MAJOR \#6810

This certificate of achievement is designed to prepare students for employment with architects, engineers, interior designers, building contractors, building material companies and government agencies. It is also designed as basic coursework for transferring into advanced degree programs in architecture and related fields. Courses may or may not be transferable based on school to which you are transferring, course content, and quality/ quantity of the student portfolio. Students are encouraged to take courses in the order listed. Not all courses are offered each semester. Students wishing to transfer into an advanced degree program should contact that particular college or university for all specific transfer requirements including, but not limited to Math and English.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Synthesize alternative solutions to a specific problem.
2. Design and complete an architectural education portfolio.
3. Draw a floor plan, foundation plan, roof framing plan, sections, and elevations.

## FIRST YEAR

Fall Semester
Units
ARCH 10
Architectural Design and Visualization I .. 3

ARCH 11
Introduction to Architecture and Environmental Design 2

ARCH 12 Architectural Practice I...................................... 3
ARCH 14
Digital Tools for Architects 2

Spring Semester
Units
ARCH 20 Architectural Design and Visualization II............. 3
ARCH 21 Materials of Construction................................... 3
ARCH 22 Architectural Practice II ..................................... 3
ARCH 24 Building Information Modeling ........................... 3
Total
12
SECOND YEAR
Fall Semester
ARCH 30
ARCH 31
ARCH 32
ARCH 34
Spring Semester
Architectural Design and Visualization III ........... 3
Building Codes.
.. 3
Statics and Strength of Materials ......................... 3
Digital Rendering............................................... 3
Total $\quad 12$

ARCH 40
Architectural Design and Visualization IV
Units

ARCH 41
Office Practices
.. 3

ARCH 42
Timber and Steel Structures $\qquad$
Total

-
Note: Students qualify for the certificate of acbievement 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, woodframe construction.
2. Apply the correct accessibility regulations to a given project.
3. Calculate actual and allowable stresses.

REQUIRED COURSES Units
ARCH 12 Architectural Practice I .......................................... 3
ARCH 22 Architectural Practice II......................................... 3
ARCH 32 Statics and Strength of Materials.3

ARCH 42 Timber and Steel Structures..................................... 3
Total
12

## 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.
2. Design and complete an educational portfolio.

REQUIRED COURSES Units
ARCH 10 Architectural Design and Visualization I................... 3
ARCH 20 Architectural Design and Visualization II ................. 3
ARCH $30 \quad$ Architectural Design and Visualization III................ 3
ARCH 40 Architectural Design and Visualization IV................. 3
Total $\quad 12$

## 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 <br> Units

$\begin{array}{ll}\text { ARCH } 11 & \text { Introduction to Architecture and Environmental } \\ & \text { Design.............................................................. } 2\end{array}$
ARCH 21 Materials of Construction........................................ 3
ARCH 31 Building Codes ..................................................... 3
ARCH 41A Office Practices ....................................................... 3
Total 11

## BASIC ARCHITECTURE SKILLS 1 - MAJOR \#6814

This curriculum is designed to provide beginning knowledge and skills to individuals in the areas of architectural design, practice and CAD.

## CERTIFICATE

## Student Learning Outcomes:

1. Use problem solving and visualization techniques to synthesize solutions to specific design and drawing problems.
2. Compare different careers in architecture and related fields.
3. Demonstrate through drawing the technical elements of light, woodframe and 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 Units
ARCH 10 Architectural Design and Visualization I................... 3
$\begin{array}{ll}\text { ARCH } 11 \text { Introduction to Architecture and } \\ & \text { Environmental Design .......................................... } 2\end{array}$
ARCH 12 Architectural Practice I ......................................... 3
ARCH 14 Digital Tools for Architects ...................................... 2
Total 10

## 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 Units
ARCH 20 Architectural Design and Visualization II ................. 3
ARCH 21 Materials of Construction....................................... 3
ARCH 22 Architectural Practice II.......................................... 3
ARCH 24 Building Information Modeling.............................. 3
Total 12

## 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 Units
ARCH 14 Digital Tools for Architects. .. 2
ARCH 24 Building Information Modeling.............................. 3
ARCH 34 Digital Rendering.
.. 3
Total 8

## ART

ART - FORMERLY TWO-DIMENSIONAL ART - MAJOR \#5205
The art degree signifies the completion of a comprehensive course of study in the visual arts. It provides a platform from which to build a career in the visual arts and further advancement towards a baccalaureate degree. An Associate in Art is a great way to develop critical and creative problem solving skills, enhance an ability to analyze complex visual information, and improve communication skills.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Apply knowledge of art fundamentals in order to identify, formulate and resolve basic art and design problems.
2. Understand and use a variety of media and processes to accomplish artistic goals.
3. Demonstrate an ability to critique and analyze artwork visually, orally and in writing.
4. Understand the impact of art making in a global societal context.

REQUIRED CORE COURSES (15 units) Units
*ART 3 Two-Dimensional Design........................................ 3
*ART 4 Three-Dimensional Design.................................... 3
ART 5/5H Art History 1, or Honors Art History 1........................................... 3
ART 6/6H Art History 2, or Honors Art History 2
*ART $7 \quad$ Beginning Drawing, or ART 8 Beginning Figure Drawing and Anatomy............. 3
Select a Minimum of 12 Units: Units
+ART 7 Beginning Drawing................................................ 3
+ART 8 Beginning Figure Drawing and Anatomy ................. 3
ART 9 Beginning Painting: 0il/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: 0il/Acrylic ........................... 3
ART 20 Intermediate Ceramics........................................... 3
ART 21 Intermediate Sculpture .......................................... 3
ART 22B Craft Workshop: Concepts in Fibers.......................... 3
ART 23 Intermediate Watercolor Painting........................... 3
ART 24A Intaglio Printmaking............................................ 3

ART 24B Lithograph Printmaking........................................ 3
ART 24C Relief Printmaking ................................................ 3
ART 24D Screenprinting...................................................... 3
ART 25 Mural Painting...................................................... 3
ART 28 Advanced Figure Drawing and Anatomy ................... 3
ART 29 Advanced Painting: Oil/Acrylic ................................. 3
ART 31 Advanced Sculpture................................................ 3
ART 32A Beginning Jewelry and Metalsmithing ...................... 3
ART 32B Intermediate Jewelry and Metalsmithing................. 3
ART 36A Intermediate Wheel Throwing................................ 3
ART 38A Intermediate Hand-Building.................................. 3
ART 55 Introduction to Asian Art........................................ 3
ART 60 Art of the Ancient Americas..................................... 3
*ART 3, ART 4, and ART 7 should be taken before other courses in the major. +If not taken as part of the core.


Associate Degree for Transfer
A Degree with a Guarantee.w

## 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.


## AUTOMOTIVE COLLISION REPAIR TECHNOLOGY

- FORMERLY BODY AND FENDER MECHANIC
- MAJOR \#8071

Training in this field is designed to prepare the student for employment as an advanced apprentice trainee in body repairing, reconstruction finishing.

## ASSOCIATE IN SCIENCE

## Student Learning Outcomes:

1. Straighten and fill damaged sheet metal.
2. Mix and apply body fillers, puttys and plastic repair systems.
3. Remove and reattach body panels and align.

FIRST YEAR
First Semester
Units

| ACRT 151 | Basic ACR, or |
| :---: | :---: |
| ACRT 151A | Basic ACR...................................................4.5-9 |

AT 21 Occupational Safety and Health ............................... 2
WELD 2A Introduction to Welding Technology........................ 6 Total 12.5-17
Second Semester Units

| ACRT 153 | Advanced ACR, or |
| :--- | :---: |
| ACRT 151B | Basic ACR....................................................5-9 |

AT 11 Basic Electricity ..................................................... 3
Total 7.5-12
SECOND YEAR
First Semester Units
*ACRT 153A Advanced ACR..................................................... 4.5
AT 10 Technical Computer Applications............................ 3
AT 131 Technical Report Writing........................................ 3 Total 6-10.55
Second Semester Units
*ACRT 153B Advanced ACR........................................................ 4.5
AT 40 Preparing for Employment Opportunities................. 3
AT 120 Industrial Science ................................................. 3 Total 6-10.5
Recommended Electives: ACRT 155; AUT0T 19, 54

* If continuing ACRT 151A/B and 153A/B

Note: Associate degree requirements are listed on page 32.

## AUTOMOTIVE COLLISION REPAIR <br> 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. Safely work with hazardous materials and equipment.
2. Properly use hand, air, electric and hydraulic powered tools.
3. Straighten and fill damaged sheet metal.
4. Mix and apply body fillers, puttys and plastic repair systems.
5. Identify body styles and frame configurations.
6. Service compressed air supply equipment.

REQUIRED COURSES Units
ACRT 151 Basic ACR, or
ACRT 151A Basic ACR, and
ACRT 151B Basic ACR......................................................... 9
ACRT 153 Advanced ACR, or
ACRT 153A Advanced ACR, and
ACRT 153B Advanced ACR .
AT 10
AT 11
AT 21
AT 40 Preparing for Employment Opportunities.
2
............ 3
Industrial Science .................................................. 3
Industrial Mathematics.......................................... 3
Technical Report Writing........................................ 3
Introduction to Welding Technology........................ 6
WELD 2A Introduction to Welding Technology
Recommended Electives: ACRT 155; AUTOT 19, 54, 282A

* If continuing ACRT 151A/B and 153A/B


## 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.
REQUIRED COURSES 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 TECHNOLOGY

## AUTOMOTIVE TECHNOLOGY - MAJOR \#8051

Satisfactory completion of this curriculum prepares the student for entry-level employment as a skilled technician in the automotive service and repair industry. Students will perform actual service and repair procedures in the automotive laboratory. This curriculum has been certified by the National Automotive Technicians Education Foundation (NATEF).

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Student will demonstrate the appropriate repair procedure for a given system to industry standards.

## FIRST YEAR

$\begin{array}{ll}\text { First Semester } \\ \text { AUTOT } 9 & \text { Automotive Essentials ........................................... } 3\end{array}$
AUTOT $51+\quad$ Principles of Engine Theory and Service................... 3
AUTOT 51L $+\quad$ Automotive Engine Laboratory................................ 2
Second Semester Units

AT 10 Technical Computer Applications............................. 3
AT 21 Occupational Safety and Health .............................. 2
AUTOT 52 Automotive Electrical Systems................................. 5
AUTOT 53 Engine Performance .............................................. 5
Third Semester Units
AT 40 Preparing for Employment Opportunities................. 3
$\begin{array}{ll}\text { AUTOT } 55 & \text { Power Trains: Transmissions/Transaxles, } \\ & \text { Differentials, and Driveaxles...................................... } 6\end{array}$
AUTOT 57 Automotive Heating, Ventilation, Air Conditioning, $\begin{aligned} & \text { and Advanced Electronics ....................................... } 5\end{aligned}$
SECOND YEAR
First Semester Units
AUTOT 19 Work Experience (Cooperative), Occupational......... 4
MATH 102 Plane Geometry..................................................... 3
Second Semester Units
AUTOT 19 Work Experience (Cooperative), Occupational......... 4
AUTOT 54 Suspension, Steering, and Wheel Alignment............. 5
AUTOT 56 Automotive Braking Systems .................................. 5
Third Semester Units
$\begin{array}{ll}\text { AUTOT 161A } & \text { Level } 1 \text { - Engine and Emission Control } \\ & \text { Fundamentals ......................................................... } 3\end{array}$
AUTOT 161B Level 2 - Smog Check Procedures Training .......... 1.5
WELD 1 Exploring Welding/Metals ....................................... 3
Electives ...................................................................................... 4
Total 69.5
Electives: AUT0T 58, 58A, 58B, 58C.
+Course offered during summer session

## AUTOMOTIVE TECHNOLOGY - MAJOR \#8051

Satisfactory completion of this curriculum prepares the student for entry-level employment as a skilled technician in the automotive service and repair industry. Students will perform actual service and repair procedures in the automotive laboratory. This curriculum has been certified by the National Automotive Technicians Education Foundation (NATEF).

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Student will demonstrate the appropriate repair procedure for a given system to industry standards.

## FIRST YEAR

First Semester Units
AT 21 Occupational Safety and Health ............................... 2
AUTOT 9 Automotive Essentials ............................................. 3
AUTOT 51+ Principles of Engine Theory and Service................... 3
AUTOT 51L+ Automotive Engine Laboratory................................ 2
AUTOT 52 Automotive Electrical Systems ................................. 5
AUTOT 53 Engine Performance.............................................. 5
Second Semester Units
AT 10 Technical Computer Applications............................. 3
AUTOT 19 Work Experience (Cooperative), Occupational......... 8
AUTOT 55 Power Trains: Transmissions/Transaxles,
Differentials, and Driveaxles . .6
AUTOT 57 Automotive Heating, Ventilation, Air
Conditioning, and Advanced Electronics.................. 5
Industrial Mathematics.......................................... 3
AT 131 Technical Report Writing............................................. 3
SECOND YEAR
First Semester Units
AT 40 Preparing for Employment Opportunities................. 3
AUTOT 19 Work Experience (Cooperative), Occupational......... 0
AUTOT 54 Suspension, Steering, and Wheel Alignment............. 5
AUTOT 56 Automotive Braking Systems ................................... 5
Second Semester Units
**AUTOT 19 Work Experience (Cooperative), Occupational......... 0
AUTOT 161A Level 1 - Engine and Emission Control Fundamentals3

AUTOT 161B Level 2- Smog Check Procedures Training............. 1.5
WELD 1 Exploring Welding/Metals ....................................... 3
Electives ..................................................................................... 4

| Electives from: |  |
| :---: | :---: |
| AUTOT 58 | Individualized Skills Training (IST) |
|  | Chassis System I Laboratory ................................ 1 |
| AUTOT 58A | Individualized Skills Training (IST) |
|  | Chassis System II Laboratory ............................... 1 |
| AUTOT 58B | Individualized Skills Training (IST) |
|  | Engine/Propulsion Systems Laboratory ................. 1 |
| AUT0T 58C | Individualized Skills Training (IST) |
|  | Power Train Systems Laboratory.......................... 1 |
| HLTH 1 | Contemporary Health Issues................................ 3 |
| PHOTO 5 | Introduction to Photography ............................... 3 |
|  | Total 72.5 |
| +Course offered during | summer session. |
| **Students must comple one or more semesters for | lete at least 8 units of work experience. AUTOT 19 may be taken in for total of 8 units. |

## CHASSIS TECHNICIAN - MAJOR \#8053

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

## CERTIFICATE

## Student Learning Outcomes:

1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.
Completion of the following courses and 3 units of work experience: Units
AUTOT 19 Work Experience (Cooperative), Occupational......... 3
AUT0T 282A Suspension and Wheel Alignment........................... 3
AUTOT 282B Automotive Braking Systems ................................... 3
AUT0T 283B Electrical Systems.................................................. 3
AUTOT 284 Automotive Air Conditioning ................................... 3
Total 15

## 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. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.

REQUIRED COURSES Units
AUTOT 19 Work Experience (Cooperative), Occupational......... 2
AUTOT/ATGM 54 Suspension, Steering, and Wheel Alignment............. 5
AUTOT/ATGM 56 Automotive Braking Systems ................................... 5
Total 12
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. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.

## REQUIRED COURSES <br> Units

AUTOT 19 Work Experience (Cooperative), Occupational......... 2
AUTOT/ATGM 52 Automotive Electrical Systems ..
AUTOT/ATGM 57 Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics $\qquad$ .. 5 Total 12

## EMISSION TECHNICIAN - MAJOR \#8054

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

## CERTIFICATE

## Student Learning Outcomes:

1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.
REQUIRED COURSES Units
AUTOT 161A Level 1 - Engine and Emission Control Fundamentals 3

AUTOT 161B Level 2 - Smog Check Procedures Training .......... 1.5
AUTOT 261 BAR Specified Diagnosis and Repair Training .......... 3
AUTOT 283A Engine Performance and Diagnosis......................... 3
AUTOT 283B Electrical Systems................................................. 3

## 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. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.
REQUIRED COURSES ..... Units
AUTOT/ATGM 52 Automotive Electrical Systems ..... 5
AUTOT/ATGM 53 Engine Performance ..... 5
AUTOT 261 BAR Specified Diagnosis and Repair Training ..... 3

## EMISSION TECHNICIAN II - MAJOR \#8057B

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

## CERTIFICATE

## Student Learning Outcomes:

1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.
REQUIRED COURSES ..... Units
AUTOT 19 Work Experience (Cooperative), Occupational......... 2
AUTOT 161A Level 1 - Engine and Emission Control Fundamentals .....  3
AUTOT 161B Level 2 - Smog Check Procedures Training ..... 1.5
Total ..... 6.5
POWERTRAIN TECHNICIAN - MAJOR \#8055

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

## CERTIFICATE

## Student Learning Outcomes:

1. Students will create a diagnostic path for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.

REQUIRED COURSES
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 - MAJ0R \#8058A

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

## CERTIFICATE

## Student Learning Outcomes:

1. Students will create a diagnostic path for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.
REQUIRED COURSES
Units
AUTOT $19 \quad$ Work Experience (Cooperative), Occupational 2
AUTOT/ATGM 51 Principles of Engine Theory and Service................... 3
AUTOT/ ATGM 51L Automotive Engine Laboratory ................................ 2
AUTOT/ATGM 53 Engine Performance............................................. 5
Total 12

## POWERTRAIN TECHNICIAN II - MAJOR \#8058B

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

## CERTIFICATE

## Student Learning Outcomes:

1. Students will create a diagnostic path for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.
REQUIRED COURSES

Units

AAUTOT 19 Work Experience (Cooperative), Occupational 2
AUTOT/ATGM 52 Automotive Electrical Systems . .5
$\begin{array}{ll}\text { AUTOT/ATGM } 55 & \text { Power Trains: Transmissions/Transaxles, } \\ & \text { Differentials, and Driveaxles............................... } 6\end{array}$ .6

## 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 Automotive Technicians Education Foundation (NATEF) and General Motors Corporation certify this curriculum.
Seventy-five and a half (75.5) units required for this associate degree.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Student will demonstrate the appropriate repair procedure for a given system to industry standards.

## FIRST YEAR

Fall Semester Units
AT 10 Technical Computer Applications............................. 3
ATGM 54 Suspension, Steering, and Wheel Alignment............. 5
ATGM 56 Automotive Braking Systems ................................... 5
AUTOT 9 Automotive Essentials ............................................ 3
MATH 102 Plane Geometry.................................................... 3
Electives ........................................................................... 2
Spring Semester Units
ATGM 52 Automotive Electrical Systems ................................. 5
AUTOT 19 ** Work Experience (Cooperative), Occupational......... 5
ENGL 1A/1AH Reading and Composition, or
Honors Reading and Composition 4
Electives .....  .2
Summer Semester ..... Units
ATGM $51 \quad$ Principles of Engine Theory and Service .....  3
ATGM 51L Automotive Engine Laboratory .....  2
AUTOT 19 ** Work Experience (Cooperative), Occupational ..... 0
Electives ..... 2
SECOND YEAR
Fall Semester ..... Units
ATGM 53 Engine Performance ..... 5
AUTOT 19 ** Work Experience (Cooperative), Occupational .....  5
Electives .....  2
Spring Semester ..... Units
ATGM 55 Power Trains: Transmissions/Transaxles, Differentials, and Driveaxles .....  6
AUTOT 19 ** Work Experience (Cooperative), Occupational .....  0
AUTOT 161A Level 1 - Engine and Emission ControlFundamentals3

AUTOT 161B Level 2 - Smog Check Procedures Training .......... 1.5
Electives ............................................................................ 2
Summer Semester Units

| ATGM 57 | Automotive Heating, Ventilation, Air |
| :--- | :--- |
|  | Conditioning, and Advanced Electronics.................. 5 |

Electives ............................................................................ 2
Electives from:
Units
AUTOT 58 Individualized Skills Training (IST)
Chassis System I Laboratory .1
AUT0T 58A Individualized Skills Training (IST)
Chassis System II Laboratory ... 1

AUTOT 58B Individualized Skills Training (IST)
Engine/Propulsion Systems Laboratory $\qquad$
AUTOT 58C Individualized Skills Training (IST)
Power Train Systems Laboratory..
HLTH 1 Contemporary Health Issues ................................... 3
PHOTO 5 Introduction to Photography................................... 3 Total 75.5
**Students must complete at least 10 units of work experience.

## BILINGUAL/CROSSCULTURAL SPANISHENGLISH MAJOR - MAJoR \#7690

This curriculum is designed to prepare students for entry into a variety of career options requiring expertise in bilingual/cross-cultural skills.

## CERTIFICATE

## Student Learning Outcomes:

1. Recognize and understand cross-cultural attitudes and behaviors affecting Latinos in the USA.
2. Use (apply) English and Spanish for both academic purposes and communicative tasks.

## REQUIRED CORE COURSES <br> Units

CLS/SOC 14 Sociology of the Mexican American Community ..... 3
CLS 17A Beginning Mexican Folk Dance, or
MUS $3 \quad$ Music Fundamentals, or
MUS 20 Beginning Piano: Level I, or
MUS $27 \quad$ Beginning Guitar: Level I.
$.1 .5-3.5$
LAST 10
CLS 21
ENGL 1B/1BH

ENGL 44A
ENGL 44B
ENGL 45
ENGL 46A
ENGL 46B English Literature from 1800 to the Present, or

| ENGL 48A | Introduction to American Literature to |
| :---: | :---: |
|  | World War I, or |
| ENGL 48B | Introduction to American Literature |
|  | World War I to the Present............................... 3 |
| LING 10 | Introduction to Language................................... 3 |
| 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 |
|  | Total 21-23 |

Note: For Associate degree requirements refer to page 32 for details. English 3 recommended. Required for full General Education Certification.

## BIOLOGY - FORMERLY LIFE SCIENCE DEGREE MAJOR \#6082

This program is designed to provide students with foundational knowledge in biological principles and concepts. This two year associate degree program is intended for transfer students majoring in the biological sciences.

The Biological and Life Sciences Program at Fresno City College provides entry level instruction in the following: fulfillment of prerequisites for entry into allied health fields, fulfillment of prerequisites for students transferring into biological sciences and fulfillment of general education requirements for transfer to four-year institutions.

Specific biology courses to meet degree requirements (14 units total).

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Evaluate scientific literature and apply the scientific method to obtain and interpret data.
2. Describe the classes of organic molecules found in organisms and discuss their importance in biological systems.
3. Understand cellular processes and relate organelle structure to function.
4. Understand the structure and function to genetic material and apply the principles of genetics as they relate to organisms.
5. Appreciate biodiversity and understand the impact of human activity on ecological systems.
6. Explain the mechanisms of evolution and evaluate the scientific evidence to support it.
Specific Biology courses to meet degree requirements:(14 units total) Units
BIOL 4 Principles of Zoology. ..... 5
BIOL 5 Human Biology ..... 3.5
BIOL 6 Principles of Botany ..... 5
BIOL 7 Field Biology. .....  4
BIOL 11A/11AH Biology for Science Majors I, orHonors Biology for Science Majors I 5
BIOL 11B Biology for Science Majors II. .....  .5
BIOL 20 Human Anatomy .....  4
BIOL 21A Human Anatomy \& Physiology I .....  4
BIOL 21B Human Anatomy \& Physiology II ..... 5
BIOL 22 Human Physiology. .....  5
BIOL 31 Microbiology. .....  4.5
BIOL 46 Elementary Horticulture ..... 3.5
Specific Physical Science courses to meet degree requirements: (6 units total) ..... Units
ASTRONOMY
ASTRO 10 Basic Astronomy. ..... 3
CHEMISTRY
CHEM 1A General Chemistry. .....  5
CHEM 1B General Chemistry and Qualitative Analysis .....  5
CHEM 3A Introductory General Chemistry .....  4
CHEM 3B Introductory Organic \& Biological Chemistry ..... 3
CHEM 8A Elementary Organic Chemistry ..... 3
GEOGRAPHY
GEOG 1 Physical Geography. ..... 3
GEOG 7 Physical Geography: Earth's Surface. .....  4
GEOG 8 Physical Geography: Weather and Climate. .....  4
GEOLOGY
GEOL 1//1H 4
GEOL 2 Historical Geology ..... 3
GEOL 4 Geology of California ..... 3
GEOL 5 Introduction to Oceanography ..... 3
GEOL 12 Environmental Science. ..... 3
PHYSICS
PHYS 2A General Physics 1 ..... 4
PHYS 2B General Physics 2 .....  4
PHYS 4A Physics for Scientists and Engineers ..... 4
PHYS 4B Physics for Scientists and Engineers ..... 4

## BUSINESS ADMINISTRATION

## BUSINESS ADMINISTRATION - MAJOR \#2050

The following courses are required for the Associate in Arts degree in Business Administration.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Demonstrate the ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
2. Assist in the formulation and implementation of a corporate strategy.
3. Demonstrate the appropriate application of ethics, laws and soft skills required for the work environment including customer service, teambuilding, conflict management, time management, communication, and professional behavior.
4. Demonstrate the appropriate application of management theory relating to the functions of planning, organizing, leading and controlling for established businesses and entrepreneurial ventures.

## FIRST YEAR

| First Semester |  | $\begin{array}{r}\text { Units } \\ \\ \\ \\ \hline\end{array}$ |
| :---: | :---: | :---: |
| **BA 10/10H | Introduction to Business, or |  |
|  | Honors Introduction to Business... |  |
| *CIT 15 | Computer Concepts ....... | ..... 3 |
| *DS 21 | Finite Mathematics ... |  |
|  | Total | 9 |
| Second Semester |  | Units |
| *BA 18 | Business and the Legal Environment.... | ....... 4 |
| *DS 23 | Business Statistics................................. | ...... 4 |
|  | Total | 8 |

## SECOND YEAR

First Semester
Units
*ACCTG 4A/4AH Financial Accounting, or Honors Financial Accounting ............................. 4
****BA 20 Law and the Legal System...................................... 3
*ECON 50/50H
Introduction to Macroeconomics, or Honors Introduction to Macroeconomic ... 3
Honors Introduction to Macroeconomic .............. 3

## Second Semester

Units
*ACCTG 4B/4BH Managerial Accounting, or Honors Managerial Accounting $\qquad$ .. 4
*ECON 40/40H Introduction of Microeconomics, or Honors Introduction of Microeconomics ... 3
Total 7
*CSU, Fresno transfer courses required to enter the School of Business at CSUF
**Transfers as an elective
****Satisfies CSUF's GE, D.8, and FCC's GE, B. 2
Note: Associate degree requirements are listed on page 32.

Associate Degree
for Transfer
A Degree with a Guarantee.w

## BUSINESS ADMINISTRATION FOR TRANSFER - MAJOR \#2049

Business is an exciting major for students with a variety of interests and career goals including options in entrepreneurship, marketing, business law, management, computer information systems, accounting, and finance. The Associate in Science in Business Administration for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Science in Business Administration degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 27-28 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 36-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Business Administration for Transfer degree.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Apply knowledge of major business functions (accounting, quantitative, law, computer, and business concepts) and its methodologies and ethical applications in common business situations.
2. Apply professional behaviors in both business and personal situations.

REQUIRED CORE Units
ACCTG 4A/4AH Financial Accounting, or
Honors Financial Accounting .............................. 4
$\begin{array}{ll}\text { ACCTG 4B/4BH } \quad \text { Managerial Accounting, or } \\ & \text { Honors Managerial Accounting .......................... } 4\end{array}$
BA 18 Business and the Legal Environment....................... 4
CIT 15 Computer Concepts ............................................... 3
*ECON 40/40H Introduction to Microeconomics, or Honors Introduction to Microeconomics.............. 3
*ECON 50/50H Introduction to Macroeconomics, or Honors Introduction to Macroeconomics. .3

Choose 2 of the following:
Units

BA 10/10H Introduction to Business, or Honors Introduction to Business .3
*DS $21 \quad$ Finite Mathematics ................................................ 3
*DS 23 Business Statistics................................................... 4
*May be used to fulfill General Education requirements.

## ENTREPRENEURIAL VENTURES - MAJOR \#2041

This certificate is designed to provide musicians, skilled 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. Mastery of course content sufficient to complete a business plan.
2. Appropriate application of management theory relating to the functions of planning, organizing, leading and controlling.
3. Ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
4. Formulate and implement business strategy as applied to e-ship.
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.

## COURSES Units

Business Concepts .. 2

BA 51 Business Planning \& New Venture Launch............ 1.5
BA 52
Introduction to Entrepreneurship
... 3
Total

## 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 Units
BA 31 Human Resource Management............................... 4
BA 33 Human Relations in the Workplace ......................... 3
BT 9
BT 25
CIT 20
Computer Applications I, or
Microsoft Office, or
Microsoft Office................................................3-4 Total 10-11

## 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 IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Appropriate application of management theory relating to the functions of planning, organizing, leading, and controlling as it relates to existing business and entrepreneurial ventures.
2. Ability to create and analyze the four basic financial statements and budgets, ability to perform time value of money calculations and recognize and evaluate opportunity and risk.
3. Assist in formulation and implementation of a corporate strategy.
4. Demonstrate basic workplace written, verbal, and non-verbal communication skills including the proper use of appropriate technologies, written reports, and formal presentations.
5. Demonstrate the appropriate application of ethics, laws and soft skills required for the work environment.
REQUIRED CORE COURSES Units
ACCTG 4A/4AH Financial Accounting, or
Honors Financial Accounting, or
Applied Accounting..........................................-.
$\begin{array}{cc}\text { BT } 131 & \text { Applied Accounting......................................................................................................... } \\ \text { BA/BT } 5 & \text { Workplace Communication....... }\end{array}$
BA 10/10H

BA 18
BA 30
BA 31
BA 33
*BA 40
BA 43
CIT 15
MKTG 10
Introduction to Business, or
Honors Introduction to Business.......................... 3
Business and the Legal Environment....................... 4
Personal Finance.................................................... 4
Human Resource Management............................... 4
Human Relations in the Workplace ......................... 3
Supervision and Leadership, or
Principles of Management................................. 3
Computer Concepts ................................................. 3
Principles of Marketing.......................................... 3 Total $\quad 34$
ELECTIVES: Select 6 Units Units
**ACCTG 4A/4AH Financial Accounting, or
Honors Financial Accounting .............................. 4
BA 28 E-Law \& Ethics...................................................... 3
BA 34 Fundamentals of Investing..................................... 3
BA 35 Financial Management for Entrepreneurs and Small Business3
*BA 40

BA 38

Operation of the Small Business............................. 3

Supervision and Leadership.................................... 3

| *BA 43 | Principles of Management |
| :---: | :---: |
| BA 52 | Introduction to Entrepreneurship ......................... 3 |
| **BT 131 | Applied Accounting .......................................... 3.5 |
| MKTG 11 | Selling and Sales Managemen |
| MKTG 12 | Advertising and Promotion................................. 3 |
| MKTG 14 | Retailing |
| MKTG 21 | Digital Marketing.............................................. 3 |
| RE 40 | Real Estate Principles......................................... 3 |
| RE 41 | Real Estate Practice |
| *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 $4 A$ or BT 131 may be taken as a required course. The other class option may be taken as an elective course. |  |
| Note: Associa | requirements are listed on page 32. |


| BA 28 | E-Law \& Ethics .................................................. 3 |
| :---: | :---: |
| BA 30 | Personal Finance............................................... 4 |
| BA 31 | Human Resource Management............................ 4 |
| BA 34 | Fundamentals of Investing................................. 3 |
| BA 35 | Financial Management for Entrepreneurs and Small Business. $\qquad$ .. 3 |
| BA 38 | Operation of the Small Business........................... 3 |
| *BA 40 | Supervision and Leadership................................. 3 |
| *BA 43 | Principles of Management.................................. 3 |
| 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 |
| MKTG 11 | Selling and Sales Management ............................ 3 |
| MKTG 12 | Advertising and Promotion................................. 3 |
| MKTG 14 | Retailing.......................................................... 3 |
| MKTG 21 | Digital Marketing............................................. 3 |
| RE 40 | Real Estate Principles........................................ 3 |
| RE 41 | Real Estate Practice........................................... 3 |
| * Either BA 40 <br> taken as an | 3 may be taken as a required course. The other class option may be urse. | 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/4AH Financial Accounting, or Honors Financial Accounting . .4

ACCTG 4B/4BH Managerial Accounting, or Honors Managerial Accounting .4
BA 35 Financial Management for Entrepreneurs and Small Business

## BUSINESS FINANCE AND INVESTMENTS <br> - MAJOR \#2271

A step incentive for those seeking an entry level position in banking or finance.

## CERTIFICATE

## Student Learning Outcomes:

1. Ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
2. Assist in the implementation of a corporate strategy as applied to finance and investment issues including capital budgeting and working capital management.
3. Demonstrate skill proficiency in appropriate technologies, written reports, and formal presentations with respect to finance and investments.
4. Ability to identify and discriminate between different financial markets, institutions and products and determine appropriateness to market participants and short-term and long-term financial management and investment objectives.
REQUIRED COURSES Units
BA 34 Fundamentals of Investing.................................... 3
BA 35 Financial Management for Entrepreneurs and Small Business ................................................. 3

## HUMAN RELATIONS AND COMMUNICATIONS - MAJOR \#2510

A step incentive certificate signifying proficiency in workplace human relations and communications.

## CERTIFICATE

## Student Learning Outcomes:

1. Demonstrate effective communication skills through speaking, writing, and other common forms of business communication including the appropriate use of communication devices.
2. Describe how to make personal responsibility for professional and effective workplace relationships.
3. Describe and identify goal-setting theories and its influence on workplace performance.

## REQUIRED COURSES <br> Units

BA/BT 5 Workplace Communication......................................... 3
BA 33
Human Relations in the Workplace 3

## HUMAN RESOURCE MANAGEMENT AND HUMAN RELATIONS - MAJOR \#2520

A step incentive certificate signifying proficiency in entry-level human resource management skills.

## CERTIFICATE

## Student Learning Outcomes:

1. Demonstrate the appropriate application of State and Federal HR laws to business situations.
2. Demonstrate the appropriate application for each of the primary HR functions.
3. Demonstrate effective communication skills through speaking, writing, and other common forms of business communication including the appropriate use of communication devices.
4. Demonstrate how to take personal responsibility for professional and effective workplace relationships.
5. Demonstrate an understanding of motivation and goal-setting theories and its influence on workplace performance.
REQUIRED COURSES Units
BA 31 Human Resources Management .............................. 4
BA 33 Human Relations in the Workplace ......................... 3

## MANAGEMENT AND SUPERVISION <br> - MAJOR \#2182

A step incentive certificate signifying proficiency in basic knowledge and skills required for a general management position. Awarded for the successful completion of courses listed with a minimum grade of "C" in each required course.

## CERTIFICATE

## Student Learning Outcomes:

1. Identify key functions, skills, and competitive goals of effective managers.
2. Demonstrate the appropriate application of State and Federal HR laws to business situations.
3. Define and describe common operational issues and appropriate supervisory responses to these issues.
4. Define and describe strategic and tactical issues and appropriate managerial responses to these issues.
5. Take personal responsibility for professional and effective workplace relationships.
6. Demonstrate effective communication skills through speaking, writing, and other common forms of business communication.
REQUIRED COURSES Units
BA 40 Supervision and Leadership.................................... 3
BA 43 Principles of Management....................................... 3

## PERSONAL FINANCE AND INVESTMENTS <br> - MAJOR \#2032

Astep incentive demonstrating a basic understanding of personal finance and investments.

## CERTIFICATE

## Student Learning Outcomes:

1. Ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
2. Ability to identify and discriminate between different financial markets, institutions and products and determine appropriateness to market.
3. Ability to describe the impact of exogenous factor inputs such as
monetary and fiscal policy and changes in interest rates on financial management.
4. Ability to describe the basic principles of credit, insurance, large asset investments, saving and investing for the future, career development strategies, goal setting with respect to achievement of personal and lifelong financial objectives and business objectives.

## REQUIRED COURSES <br> Units

BA 30 Personal Finance................................................... 4
BA 34 Fundamentals of Investing..................................... 3

## SMALL BUSINESS MANAGEMENT - MAJOR \#2030

Certificate designed to prepare students to successfully launch and operate a small business.

## CERTIFICATE

## Student Learning Outcomes:

1. Appropriate application of management theory relating to the functions of planning, organizing, leading and controlling
2. Create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
3. Assist in the formulation and implementation of a business strategy.
4. Demonstrate soft skills required for workplace success as applied to customer service, teambuilding, conflict management, time management, communication, and professional behavior.
5. Demonstrate basic workplace written, verbal, and non-verbal communication skills required for the workplace, including the proper use of appropriate technologies, written reports, and formal presentations.
6. Manage new venture launch and continuing entrepreneurial operations.

## REQUIRED COURSES Units

BA 38 Operation of the Small Business.............................. 3
BA 51 Business Planning and New Venture Launch 1.5

## BUSINESS \& TECHNOLOGY PROGRAM

## OFFICE PROFESSIONAL I

## OFFICE PROFESSIONAL I - FORMERLY CLERICAL EMPHASIS - MAJOR \#2062

Training is designed to provide skills for employment in a variety of professional office environments. Students may earn more than one certificate in addition to the associate in science degree and are required to earn grades of "C" or better in the Office Professional I courses.

## ASSOCIATE IN SCIENCE

## Student Learning Outcomes:

1. Use technology and office equipment effectively in an office environment.
2. Type a minimum of 40 words per minute.
3. Key a minimum of 110 correct strokes per minute on a ten-key calculator.
4. Maintain confidentiality and appropriate work habits including punctuality, teamwork, professional appearance, and positive attitude.
First Semester
BT 1 Computer Document Processing I ..... 3
BT 6 Records Management .....  3
BT 104 Ten-Key Calculations .....  2
BT 112 Business English ..... 3
BT 115 Refresher Math ..... 3
Second Semester ..... Units
BT 2 Computer Document Processing II ..... 3
BT 9 Computer Applications I ..... 4
BT 11 Today's Office. ..... 3
BT 23 Job Search and Workplace Skills .....  3
BT 122 Typing Skillbuilding ..... 0.5
BT 123 Ten-Key Skillbuilding ..... 0.5
Total ..... 28
Note: Requires additional general education units for AS degree.
OFFICE PROFESSIONAL I - FORMERLY CLERICAL EMPHASIS - MAJOR \#2062

Training is designed to provide skills for employment in a variety of professional environments. Students are required to earn grades of "C" or better in the Office Professional I courses.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Use technology and office equipment effectively in an office environment.
2. Type a minimum of 40 words per minute.
3. Key a minimum of 110 correct strokes per minute on a ten-key calculator.
4. Maintain confidentiality and appropriate work habits including punctuality, teamwork, professional appearance, and positive attitude.
First Semester ..... Units
BT 1 Computer Document Processing I ..... 3
BT 6 Records Management ..... 3
BT 104 Ten-Key Calculations .....  2
BT 112 Business English ..... 3
BT 115 Refresher Math ..... 3
Second Semester ..... Units
BT 2 Computer Document Processing II ..... 3
BT 9 Computer Applications I .....  4
BT 11 Today's Office .....  3
Job Search and Workplace Skills ..... 3
Typing Skillbuilding ..... 0 .5
BT 122
Ten-Key Skillbuilding ..... 0.5

## OFFICE PROFESSIONAL II

## OFFICE PROFESSIONAL II - FORMERLY ADMINISTRATIVE ASSISTANT EMPHASIS - MAJOR \#2214

Training is designed to provide advanced skills for employment in a variety of professional environments. Students may earn more than one certificate in addition to the associate in science degree and are required to earn grades of "C" or better in the Office Professional I and emphasis courses.

## ASSOCIATE IN SCIENCE

## Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Use technology applications and software in a professional setting.
3. Construct short, effective business letters, memos and reports with correct meaning, tone, grammar, punctuation, and complete information.

## REQUIRED CORE COURSES (Office Professional I) Units

BT 1 Computer Document Processing I............................ 3
BT 2 Computer Document Processing II .......................... 3
BT 6 Records Management ............................................ 3
BT 9 Computer Applications I ......................................... 4
BT 11 Today's Office........................................................ 3
BT 23 Job Search and Workplace Skills ............................. 3
BT 104 Ten-Key Calculations ............................................. 2
BT 112 Business English ................................................... 3
BT 115 Refresher Math..................................................... 3
BT 122 Typing Skillbuilding ............................................ 0.5
BT 123 Ten-Key Skillbuilding ........................................... 0.5
EMPHASIS AREA COURSES Units
BT 10 Computer Applications II........................................ 4
BT 13 Applied Business Correspondence............................ 2
BT 19 Work Experience (Cooperative), Occupational......... 2
BT 33 Social Media and Emerging Technologies in the
Workplace. 3

BT 131 Applied Accounting .............................................. 3.5
Total 42.5
Note: Requires additional general education units for AS degree.

## OFFICE PROFESSIONAL II - FORMERLY ADMINISTRATIVE ASSISTANT EMPHASIS - MAJOR \#2214

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 the Office Professional I and emphasis courses.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Use technology applications and software in a professional setting.
3. Construct short, effective business letters, memos and reports with correct meaning, tone, grammar, punctuation, and complete information.
REQUIRED CORE COURSES (Office Professional I) Units
BT 1 Computer Document Processing I. ..... 3
BT 2 Computer Document Processing II .....  3
BT 6 Records Management ..... 3
BT 9 Computer Applications I ..... 4
BT 11 Today's Office. ..... 3
BT 23 Job Search and Workplace Skills ..... 3
BT 104 Ten-Key Calculations ..... 2
BT 112 Business English ..... 3
BT 115 Refresher Math .....  3
BT 122 Typing Skillbuilding ..... 0.5
BT 123 Ten-Key Skillbuilding ..... 0.5
EMPHASIS AREA COURSES ..... Units
BT 10 Computer Applications II .....  4
BT 13 Applied Business Correspondence .....  2
BT 19 Work Experience (Cooperative), Occupational. .....  2
BT 33 Social Media and Emerging Technologies in the
Workplace .....  3
BT 131 Applied Accounting ..... 3.5
Total ..... 42.5
LEGAL OFFICE PROFESSIONAL
LEGAL OFFICE PROFESSIONAL - FORMERLY LEGAL ADMINISTRATIVE ASSISTANT EMPHASIS - MAJOR \#2103

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 IN SCIENCE

## Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Demonstrate the advanced features of MS Word by creating documents with special features such as charts, headers and footers, AutoCorrect, Quick Parts, fields, themes, styles, references, specialized tables and indexes, sharing and protecting documents.
3. Describe the basic organizational structure, operational principles and administrative processes associated with the law office environment.
REQUIRED CORE COURSES (Office Professional I) Units
BT 1 Computer Document Processing I............................ 3
BT 2 Computer Document Processing II .......................... 3
BT 6 Records Management ........................................... 3
BT 9 Computer Applications I .......................................... 4
BT 11 Today's Office........................................................ 3

| BT 23 | Job Search and Workplace Skills .......................... 3 |
| :---: | :---: |
| BT 104 | Ten-Key Calculations ........................................ 2 |
| BT 112 | Business English ............................................... 3 |
| BT 115 | Refresher Math .................................................. 3 |
| BT 122 | Typing Skillbuilding ........................................ 0.5 |
| BT 123 | Ten-Key Skillbuilding ...................................... 0.5 |
| EMPHASIS AREA COURSES Units |  |
| BT 19 | Work Experience (Cooperative), Occupational......... 2 |
| BT 28 | Microsoft Word I................................................ 2 |
| BT 29 | Microsoft Word II................................................ 2 |
| BT 140/PLEGAL 156 | Legal Document Processing................................ 3 |
| PLEGAL 7 | Law Offices Practices .......................................... 3 |
| PLEGAL 14 | Law Office Computing ....................................... 3 |
|  | Total 43 |

Note: $\quad$ Requires additional general education units for AS degree.

## LEGAL OFFICE PROFESSIONAL - FORMERLY LEGAL ADMINISTRATIVE ASSISTANT EMPHASIS - MAJOR \#2103

Training is designed to prepare students for employment in a legal office environment. Students may earn more than one certificate and are required to earn grades of "C" or better in the Office Professional I and emphasis courses.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Demonstrate the advanced features of MS Word by creating documents with special features such as charts, headers and footers, AutoCorrect, Quick Parts, fields, themes, styles, references, specialized tables and indexes, sharing and protecting documents.
3. Describe the basic organizational structure, operational principles and administrative processes associated with the law office environment.
REQUIRED CORE COURSES (Office Professional I) Units
BT 1 Computer Document Processing I........................... 3
BT 2 Computer Document Processing II .......................... 3
BT 6 Records Management ............................................ 3
BT 9 Computer Applications I ........................................ 4
BT 11 Today's Office........................................................ 3
BT 23 Job Search and Workplace Skills ............................. 3
BT 104 Ten-Key Calculations .............................................. 2
BT 112 Business English ................................................... 3
BT 115 Refresher Math..................................................... 3
BT 122 Typing Skillbuilding ............................................ 0.5
BT 123 Ten-Key Skillbuilding .......................................... 0.5


## MEDICAL OFFICE PROFESSIONAL

## MEDICAL OFFICE PROFESSIONAL <br> - FORMERLY MEDICAL ADMINISTRATIVE ASSISTANT EMPHASIS - MAJOR \#2382

Training is designed to prepare students for employment in a medical office environment. Students may earn more than one certificate in addition to the associate in science degree and are required to earn grades of " C " or better in the Office Professional I and emphasis courses.

## ASSOCIATE IN SCIENCE

## Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Demonstrate the use of intermediate Windows and software skills
3. Perform medical administrative duties.

REQUIRED CORE COURSES (Office Professional I) Units
BT 1 Computer Document Processing I........................... 3
BT 2 Computer Document Processing II .......................... 3
BT 6 Records Management ............................................. 3
BT 9 Computer Applications I ........................................ 4
BT 11 Today's Office........................................................ 3
BT 23 Job Search and Workplace Skills ............................. 3
BT 104 Ten-Key Calculations .............................................. 2
BT 112 Business English .................................................... 3
BT 115 Refresher Math ..................................................... 3
BT 122 Typing Skillbuilding ............................................ 0.5
BT 123 Ten-Key Skillbuilding ........................................... 0.5
EMPHASIS AREA COURSES Units
BT 10 Computer Applications II........................................ 4
BT 19 Work Experience (Cooperative), Occupational......... 2
BT 143 Medical Office Vocabulary....................................... 1
BT 144 Medical Administrative Assistant ........................... 2.5
BT 148 Medical Insurance and Billing Concepts............... 2.5
Total 40
Note: Requires additional general education units for AS degree.

## MEDICAL OFFICE PROFESSIONAL - MAJOR \#2382

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 in the Office Professional I and emphasis courses.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Demonstrate the use of intermediate Windows and software skills.
3. Perform medical administrative duties.

REQUIRED CORE COURSES (Office Professional I) Units
BT 1 Computer Document Processing I........................... 3
BT 2 Computer Document Processing II .......................... 3
BT 6 Records Management ............................................ 3
BT 9 Computer Applications I ......................................... 4
BT 11 Today's Office......................................................... 3
BT 23 Job Search and Workplace Skills ............................. 3
BT 104 Ten-Key Calculations ............................................. 2
BT 112 Business English .................................................... 3
BT 115 Refresher Math...................................................... 3
BT 122 Typing Skillbuilding ............................................ 0.5
BT 123 Ten-Key Skillbuilding ........................................... 0.5
EMPHASIS AREA COURSES Units
BT 10 Computer Applications II......................................... 4
BT 19 Work Experience (Cooperative), Occupational......... 2
BT 143 Medical Office Vocabulary....................................... 1
BT 144 Medical Administrative Assistant ........................... 2.5
BT 148 Medical Insurance and Billing Concepts............... 2.5
Total 40

## BUSINESS OFFICE ENGLISH - MAJOR \#2372

This certificate is designed to improve English grammar, speaking, writing, and presentation skills needed in the office.

## CERTIFICATE

## Student Learning Outcomes:

1. Use correct English grammar to communicate effectively when speaking, writing, and presenting in business settings.
2. Identify problems and revise business communication to improve meaning, tone, and clarity.
REQUIRED COURSES Units
BT 5 Workplace Communication..................................... 3
BT 13 Applied Business Correspondence............................ 2
BT 112
Business English ... 3

## BUSINESS OFFICE MATH FUNDAMENTALS

- MAJOR \#2328

This certificate is designed to improve computational and critical thinking skills needed in the office.

## Student Learning Outcome:

1. Apply fundamental mathematics computation skills to solve business-related problems with or without a ten-key calculator.
REQUIRED COURSES Units
BT 104 Ten-Key Calculations ............................................. 2
BT 115 Refresher Math ...................................................... 3
Total 5

## COMPUTER APPLICATIONS SOFTWARE

- MAJOR \#2202

This certificate option prepares students for computer applications certification. Students are required to earn grades of "C" or better.

## CERTIFICATE

Student Learning Outcome:

1. Demonstrate proficiency in office applications software. COURSES Units
BT 9 Computer Applications I ........................................ 4
BT 10 Computer Applications II........................................ 4
BT 33 Social Media and Emerging Technologies in the
Workplace ............................................................. 3
Computer Keyboarding ......................................... 1.5
Total 12.5

## FOUNDATIONS FOR THE OFFICE PROFESSIONAL - MAJOR \#2326

The Foundations for the Office Professional will allow students to gain fundamental skills needed to work as an Office Professional.

## Student Learning Outcomes:

1. Type 20 words per minute.
2. Exhibit positive interpersonal skills.
3. Use professional terminology in verbal and written communication.

REQUIRED COURSES Units
BT 28 Microsoft Word I....................................................... 2
BT 106 Computer Keyboarding ........................................ 1.5
BT 115 Refresher Math ..................................................... 3
BT 116 Spelling and Vocabulary Building............................ 2
BT 121 Working Relationships.......................................... 1.5
BT 127 Microsoft Outlook and E-Mail ................................. 1
BT 134 Exploration of Careers in Business.......................... 1

## MEDICAL OFFICE ASSISTANT

- MAJOR \#2243 - FORMERLY MEDICAL BILLING ASSISTANT

This certificate option is designed to meet the training needs for qualified entry level employment in the medical office setting. Students are required to earn grades of "C" or better in all courses.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Perform basic administrative duties in a medical office using appropriate technology.
2. Support billing and collections by applying knowledge of coding and procedures and insurance programs.
3. Communicate effectively and according to legal guidelines in a professional health care setting.
COURSES Units
BT 1 Computer Document Processing I............................ 3
BT 23 Job Search and Workplace Skills .............................. 3
BT 24/CIT 31 Beginning Excel................................................... 1
BT 104 Ten-Key Calculations ............................................. 2
BT 112 Business English .................................................... 3
BT 127 Microsoft Outlook and E-Mail ................................ 1
BT 134 Exploration of Careers in Business, or
BT 19 Work Experience (Cooperative), Occupational .1-2
BT 143 Medical Office Vocabulary...................................... 1
BT 144 Medical Administrative Assistant ........................... 2.5
BT 147 Medical Management Software ............................... 2
BT 148 Medical Insurance \& Billing Concepts.................. 2.5
Total 22-23

## 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 <br> Units

BT 24
Beginning Excel, or Computer Applications I 1-4
BT 9
BT 28
Microsoft Word I .. 2

BT 126 Automated Business Records, or
BT 9
BT 127

Computer Applications I .1-4

BT 130
BT 9
Beginning PowerPoint, or
Computer Applications I
.1-4
Total 6-9

## 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.
. 2
BT 29
Microsoft Word II
... 2
Total

## 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

Hours
BT 370A
Office Assistant Applications. 300
BT 370B Office Assistant Applications ................................. 300
Total 600

## CHICANO-LATINO STUDIES

- FORMERLY CULTURAL STUDIES, LA RAZA - MAJOR \#7661

This program is designed to focus on Mexican-American history, heritage, and culture. Chicano-Latino Studies offers a broad interdisciplinary approach to the study of society and culture. The curriculum provides students with the strong academic background helpful to those planning careers in law, health, education, social work, business, and industry. Chicano-Latino Studies provides the knowledge and skills necessary to help students understand, communicate, and appreciate the rich cultural diversity in American society through the study of the Mexican-American and broader Latino community.

## ASSOCIATE IN ARTS DEGREE <br> Student Learning Outcomes:

1. Students will demonstrate critical thinking and problem solving skills across disciplines as they relate to the Chicano-Latino community.
2. Students will demonstrate competency in oral, written, and research skills.
3. Students will demonstrate an understanding of, and an ability to critically analyze and interpret, cultural expressions of Chicanos and Latinos.
4. Students will acquire a comprehensive knowledge and understanding of Chicano-Latino history, culture, arts, and socio-political issues.
5. Students will demonstrate a commitment to active citizenship, and develop leadership skills and an understanding of social justice principles and their application in order to promote positive social change in the Chicano-Latino community and the broader society.

## REQUIRED CORE COURSES Units

CLS 11 Introduction to Chicano-Latino Studies.................... 3
CLS 12 Mexican American History...................................... 3
CLS/SOC 14 Sociology of the Mexican American Community ..... 3
CLS 21 Chicano Literature ................................................. 3
Total 12
COURSE OPTIONS: Select 8 Units Units
$\begin{array}{ll}\text { AMST } 10 & \text { American Pluralism: A Search for Common } \\ & \text { Ground in a Multicultural Society............................ } 3\end{array}$
CLS 13 Politics and the Chicano-Latino Community ........... 3
CLS 17A Beginning Mexican Folk Dance ............................ 3.5
CLS 18 Latin Jazz Ensemble............................................... 2
CLS $20 \quad$ Chicano Art.......................................................... 3
CLS 22 Art of the Ancient Americas.................................... 3
CLS/WSTS 24 La Chicana and Latina .......................................... 3
CLS 27B Advanced Mexican Folk Dance .............................. 3.5
CLS/ANTHRO 28 Ancient Mexico ....................................................... 3
$\begin{array}{ll}\text { CLS/HIST } 29 & \text { History of Mexico, Colonial to Contemporary } \\ & \text { Period .............................................................. } 3\end{array}$
$\begin{array}{ll}\text { CLS } 30 & \text { The Mexican-American Family: Social and } \\ & \text { Psychological Perspective ....................................... } 3\end{array}$
CLS 33 Community Leadership........................................... 3
Recommended Electives: Students are encouraged to include Spanish classes as part of their college program.

Note: An associate in arts degree will be awarded to the candidate who successfully completes a total of 60 units. The 60 units must include associate degree requirements and 20 units of course work as listed above. Associate degree requirements are listed in the Graduation Requirements section of this catalog. General Education requirements for transfer certification are listed in the Transfer Requirements section of this catalog.

## CHILD DEVELOPMENT

## CHILD DEVELOPMENT - MAJOR \#5615

The Associate in Science degree in Child Development is designed to prepare students to work with young children in a variety of early care and education settings. Completion of the requirements for the Associate in Science degree will fulfill the requirements to obtain the California Child Development Permit at the Teacher level which qualifies the student to work in a State of California funded child development center or preschool.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.
4. Develop strategies that promote partnerships between programs, teachers, families and their communities.
5. Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the early care and education profession.
REQUIRED COURSES Units
$\begin{array}{ll}\text { CHDEV } 1 & \text { Principles and Practices of Teaching Young } \\ & \text { Children........................................................... } 3\end{array}$
CHDEV 3 Introduction to Curriculum.................................... 3
CHDEV 6 Health, Safety and Nutrition in Early Childhood Education .3
CHDEV 15 Diversity and Culture in Early Childhood Education Programs.3

CHDEV 20 Observation and Assessment................................... 3
CHDEV 30 Child, Family and Community................................ 3
CHDEV 37A Early Childhood Practicum ..................................... 3
CHDEV 39 Child Growth and Development.............................. 3
Course Options - Group A: Select 3 units Units
CHDEV 16 Introduction to Early Intervention ........................... 3
CHDEV 17A Infant and Toddler Practicum................................. 3
CHDEV 37B Advanced Practicum in Early Childhood Education3

Course Options - Group B - Select 3 Units
(Courses taken to meet Section A above cannot be used to fulfill Section B) Units
CHDEV 5 Parent Education ................................................... 3
CHDEV 9 Music, Movement and Drama for Young Children ... 3
CHDEV 10 Science and Math for Young Children...................... 3
CHDEV 11 The Young Child With Special Needs ....................... 3
CHDEV 12 Child Abuse .......................................................... 3
CHDEV 16 Introduction to Early Intervention.......................... 3
CHDEV 17B Advanced Infant and Toddler Development.............. 3
CHDEV 37B Advanced Practicum in Early Childhood Education .... 3
CHDEV 38 Lifespan Development............................................ 3
CHDEV 40A Administration I: Programs in Early Childhood Education. ... 3
CHDEV 40B Administration II: Personnel and Leadership in Early Childhood Education ..................................... 3
CHDEV 43 Children's Literature ............................................. 3
CHDEV 45 Adult Supervision and Mentoring in Early Care and Education .. .3
CHDEV 47 Emergent Literacy. .....  3
CHDEV 48 Children with Challenging Behaviors .....  3
CHDEV 53 Family Child Care Programs .....  3
CHDEV 60 Introduction to Child Welfare .....  3

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 CORE COURSES
Units
$\begin{array}{ll}\text { CHDEV } 1 & \text { Principles and Practices of Teaching } \\ & \text { Young Children .................................................... } 3\end{array}$
CHDEV 3 Introduction to Curriculum..................................... 3
CHDEV 6 Health, Safety and Nutrition in Early Childhood Education. .. 3
CHDEV 15 Diversity and Culture in Early Childhood Education Programs. 3
CHDEV 20 Observation and Assessment.................................. 3
CHDEV 30 Child, Family and Community ................................ 3
CHDEV 37A Early Childhood Practicum ..................................... 3
CHDEV 39 Child Growth and Development ............................... 3
Total
24

Associate Degree for Transfer A Degree with a Guarantee.w

## EARLY CHILDHOOD EDUCATION FOR TRANSFER - MAJOR \#5605

Majoring in Child Development prepares students for jobs in a variety of early care and education settings as well as in related fields working with children and families. The associate in science in Early Childhood Education for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the associate in science transfer degree, students must complete 60 semester or 90 quarter units that are eligible for transfer to the CSU including either IGETC or CSU GE Breadth and at least 18 units, as defined by the community college, in a major or area of emphasis. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor for more information on transfer requirements and university admission.

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education of young children.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.
4. Develop strategies that promote partnerships between programs, teachers, families and their communities.
5. Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the early care and education profession.

| REQUIRED COURSES |  |
| :--- | :--- |
| CHDEV 1 | Principles and Practices of Teaching Young |
| Children..................................................................................................................................... 3 |  |

## CHILD DEVELOPMENT - FORMERLY CHILD DEVELOPMENT 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 Units

CHDEV 1 Principles and Practices of Teaching Young | Children......................................................... 3 |
| :--- |

CHDEV 3 Introduction to Curriculum.................................... 3
CHDEV 19 Work Experience (Cooperative), Occupational......... 3
CHDEV 30 Child, Family and Community ............................... 3
CHDEV 39 Child Growth and Development ................................ 3
Total

## EARLY INTERVENTION ASSISTANT

 - MAJOR \#5617The 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 IN SCIENCE DEGREE

Student Learning Outcomes:

1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.
4. Develop strategies that promote partnerships between programs, teachers, families and their communities.
5. Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the early care and education profession.
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 Units
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 Programs3
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 Children with Challenging Behaviors ..... 3
Total ..... 30

EARLY INTERVENTION ASSISTANT

- MAJOR \#5617

The Certificate of Achievement in Early Intervention Assistant is designed to prepare students to work with infants, toddlers and young children with disabilities and other special needs in early intervention settings and inclusive early care and education settings. A student who completes the certificate is qualified to work at the Early Intervention Assistant I level of the California Early Start Personnel Model.*

Completing the Early Intervention Assistant Certificate plus the associate degree in Child Development qualifies a student to work at the Early Intervention Assistant II level of the California Early Start Personnel Model. The Early Intervention Assistant certificate units apply to the associate degree in Child Development and Associate Degree for Transfer in ECE.**

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.
4. Develop strategies that promote partnerships between programs, teachers, families and their communities.
5. Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the early care and education profession.
6. Develop and apply strategies that provide support and early intervention to infants, $0-3$, who have disabilities and other special needs and their families, in the natural environment.

## REQUIRED COURSES Units

CHDEV 3 Introduction to Curriculum.................................... 3
$\begin{array}{ll}\text { CHDEV } 6 & \text { Health, Safety and Nutrition in Early } \\ \text { Childhood Education..................................................... }\end{array}$
CHDEV 11 The Young Child With Special Needs ....................... 3
$\begin{array}{ll}\text { CHDEV } 15 & \text { Diversity and Culture in Early Childhood } \\ & \text { Education Programs .......................................... } 3\end{array}$
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 Children with Challenging Behaviors ....................... 3
Total $\quad 30$
** 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 become family child care providers, individuals who are licensed to care for children in their homes. Completion of the Certificate of Achievement fulfills the coursework requirements for the California Child Development Permit at the Associate Teacher level.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight.
2. Design, implement and evaluate environments and activities that support positive developmental play outcomes for young children.
3. Apply effective guidance and interaction strategies that support children's social and emotional development.
4. Apply ethical standards and professional behaviorals that promote partnerships between programs, teachers, families and their communities.

## REQUIRED COURSES <br> Units

CHDEV 3 Introduction to Curriculum..................................... 3
CHDEV $6 \quad$ 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

## CHILD WELFARE - FORMERLY FOSTER CARE - MAJOR \#5581

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 Units
CHDEV 12 Child Abuse ............................................................ 3
CHDEV 30 Child, Family and Community ............................... 3
CHDEV 39 Child Growth and Development ............................... 3
CHDEV/HS 60 Introduction to Child Welfare.................................. 3
HS 20 Introduction to Social Welfare................................. 3
Total
15
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, $9,10,37 \mathrm{~A} / \mathrm{B}, 43$ (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 bas completed Cbild Care Health and Safety Training must be on the premises of a child development center at all times. Cbild 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 berein after the date of publication.

Associate Degree for Transfer
A Degree with a Guarantee.w

## COMMUNICATION FOR TRANSFER -

## FORMERLY SPEECH - MAJOR \#5432

The Associate in Arts in Communication Studies for Transfer degree program is designed to prepare students for further study or employment in fields requiring effective and ethical human communication. Communication courses focus on how people use messages to generate meanings within and across various contexts, cultures, channels and media.

The Associate in Arts in Communication Studies for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Comm. Studies AA-T degree, students must complete a minimum of 60 required semester units of

CSU-transferable coursework, including (i) the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements, and (ii) the 18 semester units specified by the Communication Studies degree. These requirements must be obtained with a minimum GPA of 2.0. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Demonstrate understanding of core communication theories and principles.
2. Organize, develop, and deliver an effective presentation.
3. Critically evaluate various communication situations.

REQUIRED CORE COURSES
Units
COMM 1 Introduction to Public Speaking .............................. 3
COMM 2 Interpersonal Communication................................ 3
COMM 4 Persuasion........................................................... 3
COMM 8 Group Communication.......................................... 3
COMM 25 Argumentation...................................................... 3
Total 15
Choose 3 units from the following: Units
COMM 20 Community Involvement.....................................2-3
COMM 26 Intercollegiate Forensics Laboratory ......................1-3
JOURN 1 Introduction to Mass Communication..................... 3
JOURN 3 Newswriting.......................................................... 3

## 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 |  | Units |
| :---: | :---: | :---: |
| AT 10 | Technical Computer Applications........ | ......... 3 |
| CADD 14 | 2D CAD I ....................................... | ....... 3 |
| CADD 16 | 3D Solid Modeling I .................... | ...... 3 |
| DRAFT 12 | Drafting Practices.. | . 3 |
|  | Total | 12 |
| Second Semester |  | Units |
| CADD 22 | Mechanical Drawing I ................ | ....... 3 |
| CADD 24 | 2D CAD II. | ... 3 |
| CADD 26A | 3D Solid Modeling II...................... | ....... 3 |
| CADD 28 | Product Development I..... | .... 3 |
|  | Total | 12 |
| SECOND YEAR |  |  |
| First Semester |  | Units |
| CADD 32 | Reverse Engineering I ......................... | $\ldots$ |
| CADD 36A | 3D Solid Modeling III ........ | $\ldots$ |
|  | Total | 6 |
| Second Semester |  | Units |
| CADD 42 | Mechanical Drawing III............... | ......... 3 |
|  | Total | 3 |

## 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.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. In an applied setting, given instructions, demonstrations, media presentations and hands-on projects the student will be able to create a portfolio representing their abilities to industry standards as determined by the instructor.
2. In an applied setting, given instructions, demonstrations, media presentations and hands-on projects the student will be able to create a presentation model from a solid model assembly using various CAD systems to industry standards as determined by the instructor.

## FIRST YEAR

First Semester Units
AT 10 Technical Computer Applications............................ 3
CADD 14 2D CAD I .............................................................. 3
CADD 16 3D Solid Modeling I ................................................ 3
DRAFT 12 Drafting Practices................................................... 3

| Second Semester |  | Units |
| :---: | :---: | :---: |
| CADD 22 | Mechanical Drawing I ...................... | $\ldots$ |
| CADD 24 | 2D CAD II. | ...... 3 |
| CADD 26A | 3D Solid Modeling II.................... | ...... 3 |
| CADD 28 | Product Development I ... | ... 3 |
|  | Total | 12 |
| SECOND YEAR |  |  |
| First Semester |  | Units |
| CADD 32 | Reverse Engineering I........................ | $\ldots$ |
| CADD 36A | 3D Solid Modeling III ................. | ...... 3 |
|  | Total | 6 |
| Second Semester |  | Units |
| CADD 42 | Mechanical Drawing III............. | ...... 3 |
|  | Total | 3 |

## 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 2 D drafting/CAD.

## CERTIFICATE

## Student Learning Outcomes:

1. Use orthographic projection methods to sketch the three standard views of objects.
2. Modify geometry on existing CAD drawings.
3. Create and modify symbols (blocks) in a drawing.

## FIRST YEAR

| First Semester | Units |
| :---: | :---: |
| AT 10 | Technical Computer Applications......................... 3 |
| CADD 14 | 2D CAD I ........................................................ 3 |
| DRAFT 12 | Drafting Practices............................................. 3 |
|  | Total 9 |

## FIRST YEAR

Second Semester Units
CADD 24 2D CAD II.............................................................. 3
Total 3

## CAD TECHNICIAN I - MAJOR \#3052

These courses provide students with the basic skills and knowledge of drafting and CAD.

## CERTIFICATE

## Student Learning Outcomes:

1. Use orthographic projection methods to sketch the three standard views of objects.
2. Modify geometry on existing CAD drawings.
3. Draw 2D sketches with dimensions and geometric relations used to create features.
REQUIRED COURSES Units
CADD 14 2D CAD I.............................................................. 3
CADD 16 3D Solid Modeling I ............................................... 3
DRAFT 12 Drafting Practices.................................................. 3
Total $\quad 9$

## COMPUTER AIDED MANUFACTURING - FORMERLY MANUFACTURING TECHNOLOGY \& MACHINIST

 - MAJOR \#8271The CAM Program is designed for students who have a strong interest in hands-on experience both in the classroom as well as in the industry. Core courses ensure students with a knowledgeable foundation to operate and setup computer numerical control machines using our Computer Aided Manufacturing laboratory. MasterCAM software is the designing software used to generate G and M codes for product prototyping. The CAM program prepares students for an entry level job as a CNC operator or as CNC programmer. The software and machines give students the most experiences possible, and helps develop skills for our local manufacturing workforce. A comprehensive set of undergraduate courses are offered for students interested in working towards the completion of proficiency awards, such as, Certificate of Achievement in CNC Operation and CAD/CAM programming.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Demonstrate the ability to interpret and apply technical information from mechanical blueprints for the process of machining.
2. Perform precision measurements on manufactured products.
3. Setup and operate Computer Numerical Control Machines.
4. Analyze and apply shop safety.
5. Demonstrate basic knowledge of computer applications.

## FIRST YEAR

First Semester Units

AT 10 Technical Computer Applications............................ 3
CAM 10 CNC Mill Programming \& Operation I .................. 6.5 Total 9.5
Second Semester Units
CAM 20 CNC Mill/Programming \& Operation II ................ 6.5
DRAFT 12 Drafting Practices.................................................. 3
Total 9.5

## SECOND YEAR

First Semester Units
AT 40 Preparing for Employment Opportunities................. 3
CAM 15 Computer Aided Machining for CAD Users................ 3
CAM 26 Lathe Programming and Operation II...................... 3 Total $\quad 9$


Associate degree requirements are listed on page 32.

## COMPUTER AIDED MANUFACTURING - MAJOR \#8271

The CAM Program is designed for students who have a strong interest in hands-on experience both in the classroom as well as in the industry. Core courses ensure students with a knowledgeable foundation to operate and setup computer numerical control machines using our Computer Aided Manufacturing laboratory. MasterCAM software is the designing software used to generate G and M codes for product prototyping. The CAM program prepares students for an entry level job as a CNC operator or as CNC programmer. The software and machines give students the most experiences possible, and helps develop skills for our local manufacturing workforce. A comprehensive set of undergraduate courses are offered for students interested in working towards the completion of proficiency awards, such as, Certificate of Achievement in CNC Operation and CAD/CAM programming.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Demonstrate the ability to interpret and apply technical information from mechanical blueprints for the process of machining.
2. Perform precision measurement on manufactured products.
3. Setup and operate Computer Numerical Control Machines.
4. Analyze and apply shop safety.
5. Demonstrate basic knowledge of computer applications.

## FIRST YEAR

First Semester Units
AT 10 Technical Computer Applications............................ 3
CAM $10 \quad$ CNC Mill Programming \& Operation I ................. 6.5 Total 9.5
Second Semester Units
CAM 20 CNC Mill/Programming \& Operation II ................6.5
DRAFT 12 Drafting Practices.................................................. 3
Total $\quad 9.5$

## SECOND YEAR

First Semester Units
AT 40 Preparing for Employment Opportunities................. 3
AT 130 Industrial Mathematics, or
MATH 201 Elementary Algebra (or higher level) ................3-5
CAM 15 Computer Aided Machining for CAD Users................ 3
CAM 26 Lathe Programming and Operation II...................... 3

Second Semester Units
AT 21 Occupational Safety and Health .............................. 2
CADD 16 3D Solid Modeling I ............................................... 3
CADD 25 CNC Operation and Setup for CAD Users ................... 3
Total
8
Associate degree requirements are listed on page 32.

COMPUTER INFORMATION TECHNOLOGY - FORMERLY INFORMATION SYSTEMS

## COMPUTER INFORMATION SYSTEMS <br> - MAJOR \#2701

This program provides a strong academic preparation in Information Systems and Computer Science. The courses give students the fundamentals in current programming languages and platforms. This major will prepare students for transfer as an Information Systems major to most transfer schools as well as entry-level employment as a computer programmer. Transfer students should obtain complete information on transfer requirements as they plan their program.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcome:

1. Given a business related problem, design and develop a software solution using a programming language.
REQUIRED COURSES ..... Units

ACCTG 4A/4AH Financial Accounting, or
Honors Financial Accounting ............................. 4
BA 28 E-Law and Ethics ................................................... 3
CIT 15 Computer Concepts ................................................ 3
Select Two of the Following: Units
CIT 60 Beginning Visual Basic ........................................... 4
CIT 62 Beginning Objective C Programming ...................... 4
CIT 63 Beginning Java Programming................................ 4
CIT 66 Beginning C++ Programming............................... 4
Select Two of the Following: Units
CIT 28 Client/Server Databases........................................... 3
Android Programming Applications........................ 4
Advanced Programming Applications ...................... 4
$\begin{array}{ll}\text { CIT } 68 & \text { Advanced Programming Applications ...................................................................... }\end{array}$
Note: Requires additional general education units for AS degree.

## ANDROID APPLICATION DEVELOPER - MAJor \#2730 <br> Designed to assist students who would like to develop mobile applications for Android devices. <br> CERTIFICATE <br> Student Learning Outcome: <br> 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. <br> REQUIRED CORES <br> Units <br> CIT 15 Computer Concepts ................................................ 3 <br> CIT 63 Beginning Java Programming................................. 4 <br> CIT 65 Android Programming Applications......................... 4 <br> Total 11

## APPLE IOS DEVELOPER - MAJOR \#2731

Designed to assiststudents 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 CORES Units

CIT 15 Computer Concepts ................................................ 3
CIT 62 Beginning Objective C Programming ...................... 4
CIT 69 iOS Programming Applications............................... 4
Total 11

## 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+, Security Certified Professional (SCP) and others.

## CERTIFICATE

## Student Learning Outcome:

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 CORES Units
CIT 57 Wireless Networking for Home and Office................. 3
CIT 58A Principles of Information Security ........................... 3
CIT 58B Operating System Security ........................................ 3
CIT 58C Network Security Fundamentals.............................. 3
Total 12

## 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 Units
CIT 58D Network Defense and Countermeasures .................... 3
CIT 58E Firewalls and Network Security................................ 3
CIT 58F Ethical Hacking.................................................... 3
Total 9

## MCTS NETWORKING - MAJOR \#2722

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 MCTS certification tests.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Students will be able to describe the logical and physical components of Active Directory, plan and implement an organizational unit structure, plan and implement a Group Policy strategy to centrally manage users and computers in an enterprise, implement sites to manage and monitor Active Directory replication, plan and manage operations masters, and plan and implement an Active Directory infrastructure that is based on a directory service design provided by an enterprise architect.
2. Students will be able to install and upgrade to Windows XP Professional, configure and manage files systems, configure the desktop environment, use profiles to control desktop customization, configure Windows XP Professional to operate on Windows networks, and configure Windows XP Professional for mobile computing.
3. Students will be able to describe the process for designing an Active Directory infrastructure and a network infrastructure that supports Active Directory, design a site infrastructure that meets the needs of an organization, design 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.
4. Students will be able to outline best practices for the information security goals of confidentiality, integrity and availability, explain ethical practices, define vocabulary/terminology related to information security, explain the importance of planning and administrative controls, identify security threats, vulnerabilities, and countermeasures, and identify procedures for security risk management.
REQUIRED COURSES ..... Units
CIT 50 Fundamentals of Networking .....  4
CIT 51 MCTS Network Infrastructure ..... 4
CIT 52 MCTS Directory Services .....  4
CIT 55 MCTS Network Security ..... 4
Total ..... 16
MICROCOMPUTER SOFTWARE SPECIALIST

- MAJOR \#2705

Designed for the nontransfer student leading to employment as a microcomputer software specialist or similar computer specialist. Completing the program with the college graduation requirements leads to an AS degree; without the graduation requirements, student is eligible for a certificate of achievement.

## ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Given a computer related application software problem, troubleshoot, identify, research, and (if possible) fix the problem.
2. Install and update software.
3. Given a business scenario, select and use an appropriate program to create a file, database, document, macro and/or program to obtain a solution addressing the scenario.

| FIRST YEAR |  | Units |
| :---: | :---: | :---: |
| CIT 15 | Computer Concepts ...................... | .... 3 |
| CIT 17 | Windows 7 | 2 |
| CIT 23 | Spreadsheet Fundamentals.. | . 2 |
| CIT 26 | Database Fundamentals | 2 |
| CIT 161 | Microsoft Windows Skills | .... 1 |
|  | Total | 10 |
| SECOND YEAR |  | Units |
| CIT 20 | Microsoft Office ...... | .... 3 |
| CIT 28 | Client/Server Databases........... | ...... 3 |
| CIT 40 | Computer Operating Systems............. | ....... 4 |
| CIT 50 | Fundamentals of Networking .......... | .......... 4 |
|  | Total | 14 |

## NETWORKING/COMPUTER TECHNICIAN - MAJOR \#2720

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

## ASSOCIATE IN SCIENCE DEGREE AND

 CERTIFICATE OF ACHIEVEMENT
## Student Learning Outcomes:

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
3. Define and apply digital numbering systems.
4. Explain how networks are interconnected and understand how operating system software affects the hardware.
5. Install and configure the network server operating system software, and manage servers, users, and resources with a server manager utility, and monitor network system performance.

## REQUIRED CORE COURSES <br> Units

*BT 23 Job Search and Workplace Skills ............................. 3
BT 112 Business English .................................................... 3
CIT 15 Computer Concepts ................................................ 3
CIT 40 Computer Operating Systems.................................. 4
**CIT 45 Data Communications........................................... 3
CIT 50 Fundamentals of Networking .................................. 4
EST/CIT 19 Work Experience (Cooperative), Occupational......... 2
EST 55A Digital Concepts ..................................................... 3
EST 60 A+PC Maintenance............................................... 3
EST 61 Networking Fundamentals ..................................... 3
EST 62 Routing Protocols and Concepts.............................. 3
Suggested sequence of courses:
First Semester Units
CIT 15 Computer Concepts ................................................ 3
**CIT 45 Data Communications........................................... 3
EST 55A Digital Concepts ..................................................... 3
EST 60 A+ PC Maintenance............................................... 3
EST 61 Networking Fundamentals ..................................... 5
Total 15
Second Semester Units
*BT 23 Job Search and Workplace Skills .............................. 3
BT 112 Business English .................................................... 3
CIT 40 Computer Operating Systems.................................. 4
CIT 50 Fundamentals of Networking .................................. 4
EST/CIT 19 Work Experience (Cooperative), Occupational......... 2
EST 62 Routing \& Switching Essentials ............................... 3
Total 19
*AT 40 can be substituted for BT 23.
**EST 57A and EST 57B may be substituted for CIT 45.
Note: Requires additional general education units for AS degree.

## PREPARATION IN MICROSOFT OFFICE - MAJOR \#2710

This certificate option is designed to assist students pursuing Microsoft Office Specialist (MOS) certification.

## 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............................. | 2 |
| BT 29 | Microsoft Word II.. | . 2 |
| BT 127 | Microsoft Outlook and E-Mail ..... | ..... 1 |
| CIT 20 | Microsoft Office .......................... | ..... 3 |
|  | Total | 8 |
| Second Semest |  | Units |
| CIT 23 | Spreadsheet Fundamentals.......... | 2 |
| CIT 24 | Advanced Spreadsheets................ | ...... 2 |
| CIT 26 | Database 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 en-try-level systems support personnel.

## CERTIFICATE

## Student Learning Outcome:

1. Given a software or hardware problem, configure, troubleshoot, and repair the computer:

## Suggested sequence of courses:

| Fall Semester |  |
| :--- | :--- |
| CIT 40 | Computer Operating Systems................................... 4 |


Total 7
Spring Semester ..... Units
CIT 48 A+and Server+Systems Fundamentals ..... 3
EST 60 A+PC Maintenance ..... 3
Total ..... 6
WEB DEVELOPER

- FORMERLY WEBMASTER - MAJOR \#2742

This option is designed to prepare students for work in the computer industry as Web Developers. Completing the program with the college graduation requirements leads to an AS degree; without the graduation requirements, student is eligible for a certificate of achievement.

## ASSOCIATE IN SCIENCE DEGREE AND

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcome:

1. Given a business scenario create an interactive client-side and/or serv-er-side, data driven website using appropriate tools to create a solution addressing the scenario.
REQUIRED COURSES ..... Units
CIT 15 Computer Concepts .....  3
CIT 28 Client/Server Databases. ..... 3
CIT 82CIT 85CIT 90
CIT 93
CIT 94 Server Side Scripting ..... 3
Total ..... 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 ..... Units
CIT 82 Web Technologies ..... 3
CIT 85 Creating Websites .....  3
CIT 93 Client Side Scripting. ..... 3
Total ..... 9

## CONSTRUCTION - MAJOR \#8091

The construction curriculum is designed to offer students hands-on training which will prepare them for entry into the construction industry as an advanced apprentice.

## ASSOCIATE IN SCIENCE DEGREE AND

## 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.

| FIRST YEAR |  |  |
| :---: | :---: | :---: |
| First Semester |  | Units |
| ARCH 21 | Materials of Construction... | $\ldots$ |
| AT 10 | Technical Computer Applications.. | . 3 |
| AT 21 | Occupational Safety and Health .......... | ..... 2 |
| AT 130 | Industrial Mathematics.......... | ...... 3 |
| CONS 50A | Basic Residential Construction....... | ...... 3 |
|  | Total | 14 |
| Second Semester |  | Units |
| ARCH 22 | Architectural Practice II. | $\ldots$ |
| AT 40 | Preparing for Employment Opportunities | ......... 3 |
| AT 131 | Technical Report Writing.................... | ....... 3 |
| CONS 50B | Basic Resident Construction ............... | ......... 3 |
|  | Total | 12 |

## SECOND YEAR

First Semester
Units

| CONS 51 | Residential Construction: Foundations and |
| :--- | :--- |
|  | Framing................................................................ 9 |

Second Semester
Units
$\begin{array}{ll}\text { CONS } 53 & \text { Residential Construction: Exterior and Interior } \\ & \text { Finishing .......................................................... } 9\end{array}$
CONS 55 Roof Framing Systems ......................................... 2.5
Total 11.5
Recommended Electives: BT 1; CONS 19, 56; WELD 1.
Note: Students qualify for the certificate of acbievement upon completion of the major requirements listed above. In addition, those completing the associate degree requirements on page 32 of the catalog, upon application, will be awarded the associate in science degree.

## CRIMINOLOGY

- FORMERLY ADMINISTRATION OF JUSTICE


## ADMINISTRATION OF JUSTICE FOR TRANSFER

 - MAJOR \#7750Administration 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 $\mathrm{BA} / \mathrm{BS}$ 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.
3. Define and utilize key terms, concepts, and theories in the criminal justice system.
4. Interpret, assess, and compare competing types of evidence and data.
5. Effectively communicate orally and in writing the results of their analysis and conclusions.
REQUIRED CORE ..... Units
CRIM 1 Introduction to Criminology ..... 3
CRIM 6 Concepts of Criminal Law. .....  3
Select six units from the following: ..... Units
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 six units from the following: ..... Units
CRIM 13 The Constitution and Your Individual Rights ..... 3
MATH/PSY 42 Statistics for the Behavioral Sciences, or
MATH 11 Elementary Statistics .....  .4
PSY 2/2H General Psychology, or
Honors General Psychology ..... 3
SOC 1A Introduction to Sociology, or
Honors Introduction to Sociology. ..... 3

## CORRECTIONAL SCIENCE OPTION - MAJOR \#7731

Designed to provide specialized education for those students desiring a career in the correctional field including employment as a juvenile correctional officer, a state of California corrections officer, a jail correctional officer and a probation and parole officer. This degree is also designed to provide those students who are pursuing careers in the correctional field of criminology, the opportunity to broaden their knowledge and appreciation of the many levels of corrections and the value of correctional roles in the criminal justice system.

This degree will also serve as a primer for those students who wish to pursue a higher level of education in corrections at the university level.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcome:

1. The students will understand state and federal regulations and have knowledge of correctional systems.

## REQUIRED CORE COURSES Units

CRIM 6 Concepts of Criminal Law........................................ 3
+CRIM 13 The Constitution and Your Individual Rights........... 3
CRIM 15 Introduction to Police Ethics ................................... 3
CRIM 20 Introduction to Corrections .................................... 3
CRIM 21 Correctional Report Writing.................................... 3
CRIM 23 Correctional Interviewing and Counseling ............... 3
CRIM 24 Control and Supervision in Corrections .................... 3
CRIM 25 Legal Aspects of Corrections..................................... 3
+*Ethnic Studies Any course listed below ............................................ 3

+ ENGL 1A/1AH $\quad$ Reading and Composition, or
Honors Reading and Composition....................... 4
+HLTH 1 Contemporary Health Issues................................... 3
+Spanish or
Hmong Any Level...........................................................4-5 Total 38-39
Course Options: Select Any 16 Units Units
CRIM 1 Introduction to Criminology .................................. 3
CRIM 5 Community Relations............................................ 3
CRIM 8 Criminal Investigation........................................... 4
CRIM 11 Juvenile Delinquency ............................................. 3
CRIM 18 Criminal Personalities ............................................. 3
CRIM 19 Work Experience (Cooperative), Occupational......1-6
CRIM 36 Gangs and Corrections............................................ 3
+*Ethnic Studies Any course listed below ........................................... 3
+HMONG Any level............................................................... 5
HS 44 Drug Use: Physical and Psychological Effects........... 3
PSY 2/2H General Psychology, or
Honors General Psychology ................................ 3
PSY 16 Abnormal Psychology ............................................ 3
+SPANISH Any level............................................................4-5

WSTS 10 Changing Roles of Women .................................... 3

* Choose from AFRAM 1, 2, or 4; AMIND 31, 32, or 34; ASAMER 1 or 15; or CLS 11, 12, 13, 14, 24, 28, 29, or 30 .
+Also fulfills degree or transfer requirements.
Note: 1. An associate in science degree will be awarded to any candidate who successfully completes a minimum of 60 units.


## 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 Units

CRIM 6 Concept of Criminal Law ......................................... 3
CRIM 20 Introduction to Corrections .................................... 3
CRIM 21 Correctional Report Writing................................... 3
CRIM 23 Correctional Interviewing and Counseling ............... 3
CRIM 24 Control and Supervision in Corrections .................... 3
CRIM 25 Legal Aspects of Corrections ..................................... 3
Total 18
Course Options: Select Any 16 Units Units
CRIM 1 Introduction to Criminology ................................... 3
CRIM 5 Community Relations............................................. 3
CRIM 8 Criminal Investigation.......................................... 4
CRIM 11 Juvenile Delinquency .............................................. 3
CRIM 18 Criminal Personalities ............................................ 3
CRIM 36 Gangs and Corrections............................................ 3
*Ethnic Studies Any Course Listed Below.......................................... 3
Hmong Any Level.............................................................. 5
PSY 2/2H General Psychology, or
Honors General Psychology


#### Abstract

PSY 16 Abnormal Psychology $\qquad$ .. 3 Spanish Any Level4-5

WSTS $10 \quad$ Changing Roles of Women ..................................... 3 *Choose from AFRAM 1, 2, or 4; AMIND 31, 32, or 34; ASAMER 1 or 15; or CLS 11, 12, 13, 14, 24, 28, 29, or 30 .

\section*{STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:}

Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology $1,6,7,12$. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.


## CRIMINOLOGY OPTION - MAJOR \#7700

A Criminology program designed for upper division work in law enforcement, corrections, or victimology.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Recognize, name and define the key terms necessary for further study in criminology including its sub specializations of law enforcement, corrections, and victimology.
2. Explain the significance and importance of criminology to the society in which they live.
3. Identify the principle discoveries and contributions in the study of criminology and appraise critical areas for further inquiry.
4. Be familiar with a base of knowledge to make educated field level decisions in law enforcement, corrections, or victimology.

## REQUIRED CORE COURSES

Units

| AT 10 | Technical Computer Applications, or |
| :--- | :--- |
| CIT 12 | $\quad$ Computer Literacy .................................................................................................................................................................................................................................. 3 |
| CRIM 1 | Introduction to Criminology |
| CRIM 4 | Principles and Procedures of the Justice System........................................................ 3 |
| CRIM 5 | Community Relations................................................................ 3 |

*CLS 11
*CLS/SOC 14
*PSY 2/2H
*SOC 1A/1AH
*SOC 2
*WSTS 10

Introduction to Chicano-Latino Studies, or Sociology of the Mexican American Community. 3 General Psychology, or Honors General Psychology ................................ 3 Introduction to Sociology, or Honors Introduction to Sociology.3
American Minority Groups. ..... 3

* Also fulfills degree or transfer requirements

Note: An associate in science degree will be awarded to any candidate who successfully completes a minimum of 60 units. The 60 -unit minimum must include associate degree requirements and 39 units of course work listed above.

## STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:

Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology $1,6,7,12$. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

## CRIMINOLOGY OPTION - MAJOR \#7700

A transfer program designed for upper division work in law enforcement, corrections, or victimology.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Recognize, name and define the key terms necessary for employment or for further study in criminology including its sub-fields of law enforcement, corrections, and victimology.
2. Explain the significance and importance of criminology [including law enforcement, corrections, and victimology] to the society in which they live.
3. Identify the principle discoveries and contributions of the study of criminology, and appraise critical areas for further academic inquiry.
4. Make educated field level decisions in law enforcement, corrections, and victimology.
REQUIRED CORE COURSES
Units
$\begin{array}{cr}\text { AT } 10 & \text { Technical Computer Applications, or } \\ \text { CIT } 12 & \text { Computer Literacy ......................................... } 3\end{array}$
CRIM 1
CRIM 4
Introduction to Criminology ... 3

CRIM 5 Community Relations............................................. 3
CRIM 6 Concepts of Criminal Law....................................... 3
CRIM 12 Criminal Justice Communications ........................... 3
CRIM 13 The Constitution and Your Individual Rights........... 3
CRIM 15 Introduction to Police Ethics.................................. 3

|  |  |
| :---: | :---: |
| ENGL 1A/1AH | Reading and Composition, or <br> Honors Reading and Composition. .4 $\qquad$ |
|  | Total 31 |
| Course Options: Select 9 Units |  |
| AFRAM 1 AFRAM | Introduction to African American Studies, or Classical and Pre Colonial Africa......................... 3 |
| AMIND 31 <br> AMIND 34 | American Indian Culture, or <br> The American Indian in Contemporary Society... 3 |
| CLS 11 <br> CLS/SOC 14 | Introduction to Chicano-Latino Studies, or Sociology of the Mexican American Community. 3 |
| PSY $2 / 2 \mathrm{H}$ | General Psychology, or <br> Honors General Psychology $\qquad$ |
| SOC 1A/1AH | Introduction to Sociology, or Honors Introduction to Sociology $\qquad$ |
| SOC 2 | American Minority Groups................................... 3 |
| WSTS 10 | Changing Roles of Women ................................. 3 |
| STUDENTS TRANSFERRING FROM THE POLICE ACADEMY: <br> Candidates who have completed the Basic Academy or the Reserve Level |  |
| 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the |  |
| Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records. |  |

## FORENSIC EVIDENCE OPTION - MAJOR \#7732

Designed to provide specialized education for those students desiring a career as crime scene investigators, evidence technicians, or forensic evidence technicians. This degree is also designed to provide those students who are pursuing careers in law enforcement the opportunity to broaden their knowledge and appreciation for the value that forensic evidence plays in the role of solving crime. This degree will also serve as a primer for those students who wish to pursue a higher level of education in forensics at the university level. This Forensic Evidence Degree program has been approved by the International Association for Identification (IAI).

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Make an assessment of a crime scene and organize a systematic search for evidence
2. Collect and process evidence, including analysis and comparison of evidence.
3. Reconstruct a crime scene and prepare evidence for presentation in a judicial proceeding.

REQUIRED CORE COURSES Units
ANTHRO 1 Biological Anthropology ......................................... 3
BIOL 3/3H Introduction to Life Science, or
Honors Introduction to Life Science, or
BIOL 11A/11AH Biology for Science Majors I, or
Honors Biology for Science Majors I..............3.5-5
CADD 14 2D CAD I............................................................... 3
CHEM 3A Introductory General Chemistry............................... 4
CRIM 1 Introduction to Criminology ................................... 3
CRIM 3 Legal Aspects of Evidence........................................ 3
CRIM 8 Criminal Investigation........................................... 4
CRIM 9 Crime Scene Forensic Evidence ............................... 3
CRIM 12 Criminal Justice Communications........................... 3
Total 29.5-31
Course Options: Select 6 Units Units
CRIM 18 Criminal Personalities ............................................ 3
PSY 2/2H General Psychology, or
Honors General Psychology ................................... 3
PSY 16 Abnormal Psychology ............................................ 3
Note: An associate in science degree will be awarded to any candidate who successfully complete a minimum of 60 units. The 60 units must include associate degree requirements and 39 units of course work listed above.
STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:
Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology $1,6,7,12$. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

## FORENSIC EVIDENCE OPTION - MAJOR \#7732

Designed to provide specialized education for those students desiring a career as crime scene investigators, evidence technicians, or forensic evidence technicians. This certificate of achievement is also designed to provide those students who are pursuing careers in law enforcement the opportunity to broaden their knowledge and appreciation for the value that forensic evidence plays in the role of solving crime. This certificate of achievement will also serve as a primer for those students who wish to pursue a higher level of education in forensics at the university level. This Forensic Evidence Certificate of Achievement program is approved by the International Association for Identification (IAI).

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Make an assessment of a crime scene and organize a systematic search for evidence.
2. Collect and process evidence, including analysis and comparison of evidence.
3. Reconstruct a crime scene and prepare evidence for presentation in a judicial proceeding.
REQUIRED CORE COURSES Units
ANTHRO 1 Biological Anthropology ......................................... 3
CADD 14 2D CAD I .............................................................. 3
CIT 12 Computer Literacy..................................................... 3
CRIM 1 Introduction to Criminology ................................... 3
CRIM 3 Legal Aspects of Evidence....................................... 3
CRIM 8 Criminal Investigation........................................... 4
CRIM 9 Crime Scene Forensic Evidence ............................... 3
CRIM 12 Criminal Justice Communications........................... 3
PHOTO 5 Introduction to Photography...................................... 3
Total 28

## STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:

Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology $1,6,7,12$. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

## LAW ENFORCEMENT OPTION - MAJOR \#8872

This degree is designed for students considering careers as police officers, sheriff's deputies, or highway patrol officers.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Describe the development and history of law enforcement in the western world.
2. Compare and contrast legal and constitutional issues.
3. Compare and contrast components of the American criminal justice system.

## REQUIRED CORE COURSES

Units
AT 10
CIT 12
CRIM 1
Technical Computer Applications, or Computer Literacy ... 3

CRIM 3
Introduction to Criminology .. 3

CRIM 5
Legal Aspects of Evidence. ... 3

CRIM 6
CRIM 7
CRIM 8

CRIM 11 Juvenile Delinquency ............................................. 3
CRIM 12 Criminal Justice Communications........................... 3
*CRIM 13 The Constitution and Your Individual Rights........... 3
CRIM 15 Introduction to Police Ethics ................................... 3
Total 34
Course Options: Select 9 Units Units
*AFRAM $1 \quad$ Introduction to African American Studies, or
*AFRAM 4 Classical and Pre Colonial Africa........................ 3
*AMIND 31 American Indian Culture, or
*AMIND 34 The American Indian in Contemporary Society... 3
*CLS 11
*CLS/SOC 14 Sociology of the Mexican American Community. 3
*PSY 2/2H General Psychology, or Honors General Psychology ................................. 3
*SOC 1A/1AH
Introduction to Sociology, or
Honors Introduction to Sociology ........................ 3
*SOC 2 American Minority Groups...................................... 3
*WSTS 10 Changing Roles of Women ...................................... 3
*Also fulfills degree or transfer requirements
Note: An associate in science degree will be awarded to any candidate who successfully completes a minimum of 60 units. The 60 -unit minimum must include associate degree requirements and 42 -43 units of course work listed above.

## STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:

Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology $1,6,7,12$. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

## LAW ENFORCEMENT OPTION - MAJOR \#8872

This certificate of achievement is designed for students considering careers as police officers, sheriff's deputies, or highway patrol officers. Certificate of Achievement

## Student Learning Outcomes:

1. Describe the development and history of law enforcement in the western world.
2. Compare and contrast legal and constitutional issues.
3. Compare and contrast components of the American criminal justice system.
REQUIRED COURSES Units
$\begin{array}{lr}\text { AT } 10 & \text { Technical Computer Applications, or } \\ \text { CIT } 12 & \text { Computer Literacy ............................................ } 3\end{array}$
CRIM 1 Introduction to Criminology ................................... 3
CRIM 3 Legal Aspects of Evidence ....................................... 3
CRIM 5 Community Relations............................................. 3

| CRIM 6 | Concepts of Criminal Law.................................. 3 |
| :---: | :---: |
| CRIM 7 | Concepts of Enforcement Services ........................ 3 |
| CRIM 8 | Criminal Investigation....................................... 4 |
| CRIM 11 | Juvenile Delinquency ........................................ 3 |
| CRIM 12 | Criminal Justice Communications ........................ 3 |
| CR | The Constitution and Your Individual Rights.......... 3 |
| CRIM 15 | Introduction to Police Ethics ................................ 3 |
|  | Total |
| Course | its Units |
| AFRAM 1 AFRAM 4 | Introduction to African American Studies, or Classical and Pre Colonial Africa $\qquad$ 3 |
| AMIND 31 AMIND 34 | American Indian Culture, or <br> The American Indian in Contemporary Society... 3 |
| $\begin{aligned} & \text { CLS } 11 \\ & \text { CLS/SOC } 14 \end{aligned}$ | Introduction to Chicano-Latino Studies, or Sociology of the Mexican American Community. $\qquad$ 3 |
| PSY 2/2H | General Psychology, or Honors General Psychology $\qquad$ |
| SOC 1A/1AH | Introduction to Sociology, or Honors Introduction to Sociology $\qquad$ 3 |
| SOC 2 | American Minority Groups.................................. 3 |
| WSTS 10 | Changing Roles of Women ................................. 3 |
| STUDENTS TRANSFERRING FROM THE POLICE ACADEMY: <br> Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records. |  |
|  |  |
|  |  |

## PRE-ACADEMY TRAINING OPTION

## - MAJOR \#8923

Non-affiliated students who intend to undertake training through the Police Academy can enhance their chances of success by taking the Pre-Academy Certificate of Achievement program listed below.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcome:

1. The student will have the fundamental knowledge of related subjects matters taught at a POST Police Academy.

## REQUIRED COURSES Units

CRIM 3 Legal Aspects of Evidence......................................... 3
CRIM 4 Principles and Procedures of the Justice System....... 3
CRIM 6 Concepts of Criminal Law....................................... 3
CRIM 8 Criminal Investigating............................................ 4
CRIM 12 Criminal Justice Communications........................... 3

CRIM 13 The Constitution and Your Individual Rights........... 3
CRIM 15 Introduction to Police Ethics................................... 3
ENGL 1A/1AH
Reading and Composition, or
Honors Reading and Composition....................... 4
Total 26
Note: This certificate of achievement program is strongly recommended. However, it is not a prerequisite for admission to the Police Academy.

For more information on the Police Academy, call 442-8264.

## CULINARY ARTS

## BASIC CULINARY ARTS - MAJOR \#5684

This certificate is designed to prepare students for entry level employment (prep cook, fry cook, line cook) in the field of food service.

## CERTIFICATE

Student Learning Outcomes:

1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. Demonstrate proper meal service and plate presentation.
3. Identify and compare preparation methods to optimize nutrition content.
REQUIRED COURSES Units
FN 1 Principles of Food Preparation ................................ 3

FSM 35 Food Services, Sanitation, Safety and Equipment..... 2
FSM 144 Presenting Service for Food Service Professionals..... 2
FSM 146 Elementary Food Service Computation I................ 1.5
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 health care 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 Units

FN 35 Nutrition and Health.............................................. 3
FSM 38 Quantity Food Preparation ..................................... 3
FSM 147 Elementary Food Service Computation II..............1.5

## 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

Units
FN 2 Advanced Food Preparation .................................... 3
FSM 11 Food Service Supervision ........................................ 2
FSM 15 Food Production Management............................... 2
FSM 19 Work Experience (Cooperative), Occupational......... 3
FSM 25 Food \& Beverage Purchase \& Control ...................... 2
Total $\quad 12$

## DANCE - MAJOR \#5390

The associate degree in dance provides a base of training in dance technique and practical experience in concert performance and production work as well as theoretical background in dance composition. Possible careers include choreographer + , dance director, dance historian + , dancer, dance teacher+, dance therapist+, fitness/aerobic instructor, movement notator, performer, reconstructor, and recreation leader.

Students considering transferring to a four-year institute as a dance major should contact that target institution for dance audition requirements.

## +Bachelor degree or higher required.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Perform dance in a public setting.
2. Describe characteristic elements and form of various dance and choreographic styles.

## REQUIRED CORE COURSES

 Units| DANCE 10B | Pre-Intermediate Modern Dance, or |  |
| :---: | :---: | :---: |
| DANCE 28 | 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 | .... 3 |
| DANCE 30 | Dance Appreciation |  |
|  | Total | 8-9 |
| Select two o | he following courses: | Units |
| DANCE 21 | Dance Workshop Performance . | ...2-4 |
| DANCE 22 | Dance Theatre Performance....... | ....2-4 |

DANCE 31 Dance Workshop Performance 2 ..... 2-4
DANCE 32 Dance Theatre Performance 2 ..... 2-4
Select at least six units from the following: ..... Units
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
DANCE 17A Beginning Mexican Folk Dance . ..... 3.5
DANCE 18 Intermediate Tap Dance. ..... 0.5
DANCE 20B Intermediate Modern Dance Composition .....  3
DANCE 27B Advanced Mexican Folk Dance. ..... 3.5
DANCE 28 Intermediate Modern Dance Technique ..... 1.5
TA 27B Introduction to Lighting Design. ..... 3Beginning Acting, orBeginning Acting for Theatre Majors.3
Note: Courses used to satisfy the core courses may not be used to satisfy this block.

## DENTAL HYGIENE - MAJOR \#4580

The Registered Dental Hygienist (RDH) provides dental health education, promotes and encourages the preventive aspects of dental care, administers local anesthesia, delivers nitrous oxide/oxygen analgesia, exposes and processes dental x-rays, performs oral cancer screenings, removes deposits and stains from teeth, performs gingival soft tissue management (curettage), and generally assumes responsibilities for dental hygiene patient care in the dental office.

Completion of the Dental Hygiene Program leads to an Associate in Science degree. After completing the program and passing the National Board examination, graduates are eligible to apply for and take the California State Board and/or other clinical examinations for licensing Registered Dental Hygienists.

Dental hygiene students will be required, as part of the total dental hygiene program, to participate in service learning activities. These activities could include community dental health projects, hospital clinical practice, and other field excursions of educational value.
Application Requirements
Enrollment is limited in the dental hygiene program. Minimum qualifications for selection must be met. There are no restrictions as to age, race, gender, or marital status. Minimum prerequisite requirements for application to the program are the following:

1. Have graduated from high school or have an average score of 45 on the General Educational Development (GED) test.
2. Have a minimum cumulative college grade point average (GPA) of 2.70 .
3. Have completed Biology 20, Human Anatomy, and Biology 22, Human Physiology, (or equivalent), or Biology 21A and Biology 21B (or equivalent) each with a grade of " C " or better.
4. Have completed English 1A, Reading and Comprehension; Math 103, Intermediate Algebra, or another more advanced math course; Chemistry 3A, Introduction to General Chemistry; Chemistry 3B, Organic and Biological Chemistry; Biology 31, Microbiology; Food and Nutrition 40, Nutrition; Communication 1 or 2, Introduction to Speaking or Interpersonal Communication; Psychology 2, General Psychology; and Sociology 1A, Introduction to Sociology (or equivalents to these courses) with grades of "C" or better.
5. Have completed an Academic Summary Form for the Dental Hygiene Program.
6. Have no physical impairment that would preclude the performance of all dental hygiene duties.
7. Be in good physical and mental health.

## ACADEMIC REQUIREMENTS

All program entry requirement courses listed above must be completed with a grade of " C " or better. In order to be eligible to take the California State Dental Hygiene Board examination, all other courses leading to the associate degree must also be completed with a grade of " C " or better.

Students in the dental hygiene program must earn a " C " grade or better (or a "Credit" grade when applicable) in all dental hygiene courses. Less than a "C" or a "Credit" grade in any dental hygiene course requires that the course be repeated before continuing with the major. Courses must be repeated in their entirety. Courses may be repeated once only.

Safe professional practice is necessary for retention of students in the program. If a student demonstrates that he/she is unsuited to the profession or is not progressing satisfactorily, based on the professional judgment of the faculty, he/she may be asked to withdraw from the program.

## BACKGROUND CHECK

Upon entry into the program, students may be required to obtain a background check.

## CHANGE OF NAME, ADDRESS, AND/OR TELEPHONE NUMBER

Applicants and dental hygiene students must keep the Dental Hygiene Office informed of any change in name, address, and/or telephone number. Failure of applicants to inform the Dental Hygiene Office of this vital information may result in loss of entry into the program. Dental hygiene students must have working e-mail addresses.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Complete the National Board Dental Hygiene Examination with a score of 75 th percentile or better.
2. Pass clinical licensing examinations.

## FIRST YEAR

First Semester Units
DH 1A Oral Biology.......................................................... 2
DH 3A Pre-Clinical Dental Hygiene Tech............................ 4
DH 4 Oral Radiography................................................. 4
DH 10 Head \& Neck Anatomy ............................................ 2 Total 12
Second SemesterDH 1B General and Oral Pathology .................................... 4
DH 2 Dental Materials .....  2
DH 5A Clinical Dental Hygiene I .....  2.5
DH 6A Medical Emergencies in the Dental Office .....  1
DH 8A Patient Management. .....  2
DH 11 Local Anesthesia. .....  2.5
DH 12 Clinical Seminar Topics I .....  1
Total ..... 15
SECOND YEAR
First Semester ..... Units
DH 1C Periodontology .....  2
DH 5B Clinical Dental Hygiene II .....  .5
DH6B Pharmacology. ..... 3
DH 7A Community Dental Health I .....  2
DH 13 Clinical Seminar Topics II. .....  1
Total ..... 13
Second Semester ..... Units
DH 1D Applied Periodontics. .....  1
DH 3B Dental Specialties .....  1
DH 5C Clinical Dental Hygiene III .....  .5
DH 7B Community Dental Health II. .....  1
DH 8B Practice \& Financial Management. .....  2
DH 9
Nutrition in Dentistry .....  1
DH 14 Clinical Seminar Topics III. .....  1
Total ..... 12

Note: All application requirements, program requirements and selection criteria are subject to change. Students will enter the selection pool based on the current catalog or catalog supplement. Contact a Fresno City College health career counselor every semester for current information.

## DRAFTING - see computer aided drafting and

 design education
## EDUCATION



Associate Degree for Transfer A Degree with a Guarantee.w

## 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 prelimi-
nary Multiple Subject Elementary Teaching Credential. To earn the Associate in Arts in Elementary Education for Transfer degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA , including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. California teaching credential requirements are subject to change; consult with a counselor each semester to ensure compliance with state regulations and transfer requirements.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Demonstrate introductory subject matter competency required for the teaching at the elementary school level.
2. Demonstrate knowledge of social, cultural, environmental, and aesthetic perspectives necessary for teaching at the elementary school level.
3. Discuss historical influence and current trends in education, as well as teaching strategies and approaches appropriate for students of diverse, needs, abilities and backgrounds.

## PROGRAM REQUIREMENTS

## REQUIRED 47 UNITS OF CORE COURSES Units

$\begin{array}{ll}\text { BIOL 3/3H } & \text { Introduction to Life Science, or } \\ & \text { Honors Introduction to Life Science .................. } 3.5\end{array}$
CHDEV 39 Child Growth and Development ............................... 3
COMM 1 Introduction to Public Speaking.............................. 3
EDUC 19 Work Experience (Cooperative), Occupational......... 1
EDUC 30 Introduction to Teaching........................................ 3
ENGL 1A/1AH Reading and Composition, or Honors Reading and Composition .. 4

GEOG 4A World Geography................................................... 3
GEOG 4B World Geography.................................................... 3
GEOL 9 Introduction to Earth Science................................. 4
HIST 11 History of the United States to 1877.......................... 3
HIST $20 \quad$ World History I, to 1600 .......................................... 3
MATH 10A Structure and Concepts in Mathematics I................. 3
NATSCI 1A Integrated Science: Physics and Chemistry .............. 4
POLSCI 2/2H American Government, or Honors American Government............................. 3
LIST A: Select 1 course from the following: Units
$\begin{array}{ll}\text { ENGL 3/3H } \quad \text { Critical Reading \& Writing, or } \\ & \text { Honors Critical Reading \& Writing...................... } 3\end{array}$
PHIL 2 Critical Reasoning and Analytic Writing................... 3
LIST B: Select 1 course from the following: Units
ART 2 Art Appreciation..................................................... 3
ART 5/5H Art History I, or Honors Art History I ............................................ 31

ART 6/6H Art History II, or
Honors Art History II.......................................... 3
MUS 12 Music Appreciation................................................. 3
TA 30 Theatre Appreciation............................................. 3
LIST C: Select 3 course from the following: Units
ART 7 Beginning Drawing................................................ 3
ART 9 Beginning Painting: 0il/Acrylic .............................. 3
ART 10 Beginning Ceramics............................................... 3
ART 11 Beginning Sculpture ............................................... 3
CHDEV 38 Lifespan Development........................................... 3
CIT 12
CIT 15
Computer Literacy, or
Computer Concepts........................................... 3
GEOG 2 Cultural Geography................................................ 3
HIST 1/1H
Western Civilization to 1648, or
Honors Western Civilization to 1648
3
HIST 12/12H History of the United States since 1877, or
Honors History of the United States since 1877 .... 3
LING 11 Introduction to Language for Educators.................. 3
MATH 10B Structure and Concepts in Mathematics II................ 3
SOC 1A/1AH
Introduction to Sociology, or
Honors Introduction to Sociology ....................... 3
Fundamentals of Oral Interpretation ....................... 3
Beginning Acting.................................................... 3
Changing Roles of Women ...................................... 3
WSTS 10
TA 12
TA 41

## EDUCATION - FORMERLY TEACHER AIDE

## EDUCATION PARAPROFESSIONAL - FORMERLY TEACHER AIDE: GENERAL - MAJOR \#5911

The Education Paraprofessional Certificate of Achievement prepares students to work as paraprofessionals in kindergarten through grade 12 (K12) 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

## PROGRAM REQUIREMENTS

| Required | from the following: Units |
| :---: | :---: |
| ART 2 | Art Appreciation, or |
| MUS 12 | Music Appreciation, or |
| TA 30 | Theatre Appreciation ..................................... 3 |
| BIOL 3/3H | Introduction to Life Science, or Honors Introduction to Life Science $\qquad$ 3.5 |
| CHDEV 30 | Child, Family and Community............................ 3 |
| CHDEV 38 | Lifespan Development....................................... 3 |
| CHDEV 39 | Child Growth and Development ........................... 3 |
| CIT 15 | Computer Concepts ........................................... 3 |
| COMM 1 | Introduction to Public Speaking ........................... 3 |
| EDUC 19 | Work Experience (Cooperative), Occupational......... 2 |
| EDUC 30 | Survey of American Education .............................. 3 |
| ENGL 125 <br> ENGL 126 | Writing Skills for College, and Reading Skills for College, or higher English $\qquad$ .4-8 |
| GEOG 4A GOEG 4B | World Geography, or <br> World Geography $\qquad$ |
| HIST 11 | History of the United States to 1877....................... 3 |
| LING 11 | Introduction to Language for Educators................. 3 |
| MATH 201 | Elementary Algebra. or <br> higher Math. $\qquad$ 3-5 |
|  | Total 10 |

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

## ELECTRICAL SYSTEMS TECHNOLOGY - FORMERLY ELECTRONIC TECHNOLOGY - MAJOR \#8171

Electrical Systems Technology provides an opportunity for students to prepare for employment in the electronics/electrical industry. Specific occupational preparation is provided in the following program.

## ASSOCIATE IN SCIENCE DEGREE AND

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Define and apply various numbering systems (i.e. Binary, hexadecimal and Octal).
2. Develop a motor logic control solution using the defined parameters given.
3. Demonstrate a comprehension of the basic operation of communication systems for digital signals.
4. Design and configure a control application using a PLC and PLC software.
5. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.

## FIRST YEAR

First Semester ..... Units
AT 10 Technical Computer Applications. .....  3
EST 51 Direct Current Fund of Electronics .....  3
EST 52 Alternating Current Fundamentals ..... 3
EST 54 Integrated Devices ..... 3
Total ..... 12
Second Semester ..... Units
EST 53 Lab Safety Practices .....  2
EST 55A Digital Concepts ..... 3
EST 55B Facility Automation. ..... 3
EST 57C Voice and Data Cabling ..... 3
EST 96A
EST 96BEST 96C National Electrical Code Part 3 .
3
Total ..... 14
SECOND YEAR
First Semester ..... Units
EST 55C SCADA Systems .....  2
EST 57A Analog Communications .....  3
EST 57B Digital Communications ..... 3
EST 58 Programmable Logic Controllers ..... 3
Total ..... 11
Second Semester ..... Units
AT 40 Preparing for Employment Opportunities ..... 3
EST 56A Wiring Methods .....  3
EST 56B Motor Controls. ..... 3
EST 56C Industrial Electronics .....  3
EST 59 Instrumentation Systems .....  3

## AUTOMATION CONTROL TECHNICIAN - MAJOR \#8179

Training is designed to prepare the student for employment as an industrial and/or building automation technician.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Develop and implement a strategy utilizing HVAC controls.
2. Design and implement a network topology for a solution to a proposed communication problem.
3. Configure the I/O for a PLC project using PLC software.
4. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.
5. Identify the role of a supervisory controller within a DDC network.

## FIRST YEAR

| First Semester |  | Units |
| :---: | :---: | :---: |
| AT 10 | Technical Computer Applications....... | ...... 3 |
| EST 51 | Direct Current Fund of Electronics...... | ....... 3 |
| EST 55B | Facility Automation. |  |
| EST 57C | Voice and Data Cabling. | 3 |
|  | Total | 12 |
| Second Semester |  | Units |
| AC 57 | System Configuration and Control..... | ....... 2 |
| EST 55A | Digital Concepts ........... | . 3 |
| EST 58 | Programmable Logic Controllers ... | ...... 3 |
|  | Total | 8 |
| SECOND YEAR |  |  |
| First Semester |  | Units |
| AC 250 | Digital Unitary Controls.. | ...... 2 |
| EST 55C | SCADA Systems ....... | 2 |
| EST 59 | Instrumentation Systems.... | 3 |
|  | Total | 7 |
| Second Semester |  | Units |
| AC 251 | Digital VAV Controls........................... | ....... 0.5 |
| AC 252 | DDC Network Controllers .................. | ......... 2 |
|  | Total | 2.5 |

## CISCO CCNA PREPARATION

## CISCO CCNA PREPARATION - MAJOR \#8174

This option is to prepare students for the CISCO Certified Network Associate (CCNA) certification test. By completing this option, a student will have basic knowledge of networking hardware, including routers.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for either static and/or dynamic IP routing for a given scenario.
3. Configure a switch for implementing the VLAN protocols.
4. Construct a WAN network utilizing the requested protocol over multiple routers and WAN service providers.

## REQUIRED COURSES Units

EST 61 Networking Fundamentals ...................................... 3
EST 62 Routing \& Switching Essentials ............................... 3
EST 63 Scaling Networks.................................................... 3
EST 64 Advanced Networking and Management.................. 3

## COMMUNICATIONS TECHNOLOGY - MAJOR \#8175

Training is designed to prepare the student for employment as a communication technician.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Describe the basic parameters when working on electronic circuits.
2. Demonstrate a comprehension of the basic operation of communication systems for analog signals.
3. Demonstrate a comprehension of the basic operation of communication systems for digital signals.
4. Design and implement a network topology for a solution to a proposed communication problem.
First Semester
Units
EST 52 Alternating Current Fundamentals .......................... 3
EST 53 Lab Safety Practices................................................ 2
EST 54 Integrated Devices ................................................... 3
Second Semester Units
EST 57A Analog Communications........................................ 3
EST 57B Digital Communications ........................................ 3
EST 57C Voice and Data Cabling........................................... 3
Total 17

## CONTROL SYSTEMS - MAJOR \#8176

Training in this specialized field is designed to prepare the student for employment as a control and instrument technician.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Define and apply formulas (Ohm's and Kirchhoff's Laws) for electrical circuit solutions.
2. Create a digital logic circuit using appropriate logic gates.
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.
First Semester Units
EST 51 Direct Current Fund of Electronics........................... 3
EST 55A Digital Concepts .................................................... 3
EST 57C Voice and Data Cabling.......................................... 3
Second Semester Units
EST 58 Programmable Logic Controllers ............................ 3
EST 59 Instrumentation Systems ........................................ 3
EST 55C SCADA Systems ....................................................... 2
Total

## INDUSTRIAL CONTROLS - MAJOR \#8180

This option is to prepare students for the Industrial Controls Certificate. By completing this option, a student will have 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 COURSES Units

EST 50 Introduction to Electronics, or .............................. 2.5
MMCTC 371 Fund of Hydraulics \& Pneumatics....................... 0
EST 55A Digital Concepts .................................................... 3
EST 58 Programmable Logic Controllers ............................ 3
EST 59 Instrumentation Systems........................................ 3
Total $9-11.5$

## NETWORK SECURITY - MAJOR \#8177

Training is designed to prepare the student for employment as a networking technician emphasizing network security.
CERTIFICATE

## Student Learning Outcomes:

1. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
2. Configure a switch for implementing the VLAN protocols.
3. Construct a WAN network utilizing the requested protocol over multiple routers and WAN providers.
4. Create and implement (through the configuration of network devices) a security policy per a scenario.

Units
EST 61 Networking Fundamentals ..................................... 3
EST 62 Routing \& Switching Essentials .............................. 3
EST 63 Scaling Networks.................................................. 3
EST 64 Advanced Networking and Management.................. 3
Total 12
NETWORKING/COMPUTER TECHNICIAN

## NETWORKING/COMPUTER TECHNICIAN

- MAJOR \#8172

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

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
3. Define and apply digital numbering systems.
4. Explain how networks are interconnected and understand how operating system software affects the hardware.
5. Install and configure the network server operating system software, and manage servers, users, and resources with a server manager utility, and monitor network system performance.

## REQUIRED CORE COURSES Units

*BT 23 Job Search and Workplace Skills ............................. 3
BT 112 Business English .................................................. 3
CIT 15 Computer Concepts ............................................... 3
CIT 40 Computer Operating Systems................................... 4
**CIT 45 Data Communications........................................... 3
CIT 50 Fundamentals of Networking .................................. 4
EST/CIT 19 Work Experience (Cooperative), Occupational......... 2
EST 55A Digital Concepts ..................................................... 3
EST 60 A+ PC Maintenance............................................... 3
EST 61 Networking Fundamentals ..................................... 3
EST 62 Routing \& Switching Essentials ............................... 3
Total 34

## SUGGESTED SEQUENCE OF COURSES:

First Semester Units
CIT 15 Computer Concepts ................................................ 3
**CIT 45 Data Communications............................................ 3
EST 55A Digital Concepts ..................................................... 3
EST 60 A+ PC Maintenance............................................... 3
EST 61 Networking Fundamentals ..................................... 3
Total 15
Second Semester
Units
*BT 23 Job Search and Workplace Skills ............................. 3
BT 112 Business English ................................................... 3
CIT 40 Computer Operating Systems.................................. 4
CIT 50 Fundamentals of Networking .................................. 4
EST/CIT 19 Work Experience (Cooperative), Occupational......... 2
EST 62 Routing \& Switching Essentials ............................... 3
Total 19

* AT 40 can be substituted for BT 23.
** EST 57A and EST 57B may be substituted for CIT 45.
Note: Associate degree requirements are listed on page 32.


## NETWORKING/COMPUTER TECHNICIAN

- MAJOR \#8172

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

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
3. Define and apply digital numbering systems.
4. Explain how networks are interconnected and understand how operating system software affects the hardware.
5. Install and configure the network server operating system software, and manage servers, users, and resources with a server manager utility, and monitor network system performance.

## REQUIRED CORE COURSES Units

*BT 23 Job Search and Workplace Skills ............................. 3
BT 112 Business English .................................................... 3
CIT 15 Computer Concepts ................................................ 3
CIT 40 Computer Operating Systems.................................. 4
**CIT 45 Data Communications........................................... 3
CIT 50 Fundamentals of Networking .................................. 4
EST/CIT 19 Work Experience (Cooperative), Occupational......... 2
EST 55A Digital Concepts .................................................... 3
EST 60 A+ PC Maintenance............................................... 3
EST 61 Networking Fundamentals ..................................... 3
EST 62 Routing \& Switching Essentials ............................... 3
Total $\quad 34$

## SUGGESTED SEQUENCE OF COURSES:

First Semester Units
CIT 15 Computer Concepts .............................................. 3
**CIT 45 Data Communications.......................................... 3
EST 55A Digital Concepts ..................................................... 3
EST 60 A+ PC Maintenance............................................... 3
EST 61 Networking Fundamentals ...................................... 3
Total 15
Second Semester
Units
*BT 23 Job Search and Workplace Skills .............................. 3
BT 112 Business English .................................................... 3
CIT 40 Computer Operating Systems.................................. 4
CIT 50 Fundamentals of Networking ................................. 4
EST/CIT 19 Work Experience (Cooperative), Occupational......... 2
EST 62 Routing \& Switching Essentials ............................... 3
Total

[^4]
## WIRELESS NETWORKS - MAJOR \#8178

Training is designed to prepare the student for employment as a networking technician emphasizing Wireless Local Area Networks.

## CERTIFICATE

## Student Learning Outcomes:

1. Identify network devices, and at which level of the OSI model they are applicable to.
2. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
3. Recognize and apply Wireless LAN topologies for a scenario or set of parameters.
First Semester
Units
EST 61 Networking Fundamentals $\qquad$
Second Semester
Units
EST 62 Routing \& Switching Essentials .
Total

## ENGINEERING - MAJOR \#3010

## RECOMMENDED TRANSFER PROGRAM

The following curriculum satisfies the lower division requirements of most colleges and universities that offer degrees in engineering. Depending upon the engineering field selected, students may be required to complete additional prerequisite classes. The student is strongly advised to consult with an advisor and compare his/her planned program with that listed in the catalog of the senior institution to which he/she expects to transfer.

Fresno City College offers courses that fulfill prerequisites which have not been completed in high school.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes

1. Identify the broad context of engineering problems, including describing the problem conditions, identifying possible contributing factors, and generating alternative solution strategies.
2. Design the fundamental elements of engineering systems, system components and processes, with a good understanding of associated safety, quality, schedule and cost considerations.
3. Undertake laboratory, field and other data collection efforts using commonly used measurement techniques to support the study and solution of engineering problems.
4. Employ mathematics, science, and computing techniques in a systematic, comprehensive, and rigorous manner to support the study and solution of engineering problems.
5. Exhibit good teamwork skills and serve as effective members of multidisciplinary project teams and articulate and justify technical solutions to diverse audiences through oral, written, and graphical communication.
6. Understand the importance of professional and ethical responsibilities of engineers, and be aware of codes of conduct and other sources of guidance for professionally ethical decision-making.
ENGINEERING: Select a minimum of nine units from the
following: ..... Units
ENGR 1A Elementary Plane Surveying 1 ..... 4
ENGR 1B Elementary Plane Surveying 2 ..... 4
ENGR 2 Graphics ..... 4
ENGR 4 Engineering Materials. ..... 3
ENGR 6 Circuits with Lab ..... 4
ENGR 8 Statics ..... 3
ENGR 10 Introduction to Engineering .....  2
ENGR 11 Manufacturing Processes ..... 3
PHYSICS: Select two or three courses from the list depending on your engineering major. Units
PHYS 4A Physics for Scientists and Engineers .....  4
PHYS 4B Physics for Scientists and Engineers .....  4
PHYS 4C Physics for Scientists and Engineers. ..... 4
CHEMISTRY: Select one set of chemistry courses. Units CHEM 1A General Chemistry, and.......................................... 5CHEM 1B General Chemistry and QualitativeAnalysis, or 5
CHEM 3A Introductory General Chemistry, and ..... 4
CHEM 3B Introductory Organic \& Biological Chemistry. ..... 3
MATHEMATICS: 5A, 5B, and 6 are required. MATH 7 may be required depending on your Engineering major. Units MATH 5A Mathematical Analysis I .....  5
MATH 5B Mathematical Analysis II ..... 4
MATH 6 Mathematical Analysis III ..... 4
*MATH 7 Introduction to Differential Equations ..... 4
PROGRAMMING COURSES: Two programming courses
listed below. ..... Units
CSCI $40 \quad$ Programming Concepts \& Methodology I. .....  4
CSCI 41 Programming Concepts \& Methodology II .....  4
Total ..... 45-56
Notes: "MATH 7 not required for Geomatics Engineers.
Associate Degreefor TransferA Degree with a Guarantee.w
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 $1 \mathrm{~A} / 1 \mathrm{AH}$ is a prerequisite to major core courses; it also meets writing/reading competency and general education area D1.

| MAJOR CORE |  |
| :--- | :---: |
| ENGL 1B/1BH | Introduction to the Study of Literature, or |
|  | Honors Intro to the Study of Literature................ 3 |
| ENGL 3/3H | Critical Reading and Writing, or |
|  | Honors Critical Reading and Writing.................. 3 |
|  | Total |

## MAJOR COURSE OPTIONS - SECTION A

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

| ENGL 44A | World Literature to the Renaissance, and |
| :---: | :--- |
| ENGL 44B | World Literature since the Renaissance, or |
| ENGL 46A | English Literature to 1800, and |
| ENGL 46B | English Literature from 1800 to the Present, or |
| ENGL 48A | Introduction to American Literature to |
|  | World War, and |
| ENGL 48B | Introduction to American Literature from |
|  | World War I to the Present.................................. |

MAJOR COURSE OPTIONS - SECTION B Units
Select either six (6) from Section B, or three (3) units from Section B and three (3) units from Section C (Courses taken to meet Section A above cannot be used to fulfill Section B):
ENGL 14 Folklore. 3
ENGL 15A Creative Writing: Poetry .....  3
ENGL 15B Creative Writing: Fiction ..... 3
ENGL/TA15C Creative Writing: Playwriting ..... 3
ENGL/AFRAM 17 African-American Literature ..... 3
ENGL/ASAMER 20 Asian-American Literature ..... 3
ENGL/HUM 42 Classic Myths .....  3
ENGL 44A World Literature to the Renaissance. ..... 3
ENGL 44B World Literature since the Renaissance .....  3
ENGL 45 Contemporary World Literature. .....  3
ENGL 46A English Literature to 1800 .....  3
ENGL 46B English Literature from 1800 to the Present ..... 3
ENGL 48A Introduction to American Literature to World War I .....  3
ENGL 48B Introduction to American Literature from World War I to the Present .....  3
LING 10 Introduction to Language. ..... 3
SECTION C ..... Units
ENGL 12 The Bible as Literature ..... 3
ENGL 15D Creative Writing: Autobiography. ..... 3
ENGL/WSTS 36 Women in Literature ..... 3
ENGL 40 Critical Thinking about Literature .....  3
ENGL 47 Introduction to Shakespeare ..... 3
FASHION MERCHANDISING MARKETING/HOME ECONOMICS

- SEE MARKETING
FIRE TECHNOLOGY
BASIC FIRE ACADEMY - MAJOR \#883B

The Basic Fire Academy program offers curriculum to prepare students with the knowledge and skills necessary to become a State of California Certified Firefighter 1. Employment opportunities are found in various branches of government and the private sector.

The academy is offered in two different formats; an intensive 40 hours per week program or an extended 24 hours per week night program.

## CERTIFICATE OF ACHIEVEMENT

## PROGRAM REQUIREMENTS

To qualify for the program, applicants must:
A. Be 18 years of age or have a high school diploma or G.E.D.
B. Applicant with prior college work must be on good academic and progress standing on all college work attempted.
C. Have successfully completed minimum of Public Safety First Aid and CPR (CA Health and Safety Code 1797.182).
D. Possess a valid California driver's license.
E. Provide proof of a clear physical examination including an electrocardiogram printout (EKG).
F. Contact the Fire Academy Coordinator.

## Student Learning Outcomes:

1. Demonstrate specific skills, knowledge and abilities in routine and emergency firefighting operations.
2. Manipulate, inspect, and maintain firefighting and rescue equipment.
3. Display the personal and professional attitude and discipline necessary for employment in the firefighting profession.

## REQUIRED COURSES Units

FIRET 130A Basic Fire Academy - Part 1 ................................... 13
FIRET 130B Basic Fire Academy - Part 2 ............................... 12.5 Total 25.5

## FIRE TECHNOLOGY - MAJOR \#883A

This program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service careers. The curriculum serves as an in-service program as well as a pre-employment program for students seeking employment or advancement in the profession of fire fighting and fire technology.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Given a typical type of fire department, describe the organizational structure and all of the staff functions within it.
2. Given a specific function of the fire service, describe the purpose of a paid and volunteer firefighter.

## REQUIRED CORE COURSES <br> Units

AT 10 Technical Computer Applications............................ 3
AT 120 Industrial Science ................................................. 3
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
$\begin{array}{ll}\text { FIRET } 14 & \text { Principles of Fire \& Emergency } \\ & \text { Services Safety \& Survival ............................................ } 3\end{array}$
MATH 103 Intermediate Algebra.............................................. 5
Total 29
COURSE OPTIONS: Select 12 Units Units
FIRET 8 Fire Hydraulics ...................................................... 3
FIRET 9 Fire Fighting Practices ............................................ 3
*FIRET 130A Basic Fire Academy - Part 1 ..................................... 6
FIRET 131 Emergency Medical Technician 1.......................... 9.5
**FIRET 135 Emergency Medical Technician-
Paramedic - Field Internship................................. 8.5


## 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 <br> Units

FIRET 131 Emergency Medical Technician I.......................... 9.5
FIRET 133 Emergency Medical Technician - Didactic.............. 22
FIRET 134 Emergency Medical Technician - Clinical ................ 4
FIRET 135 Emergency Medical Technician Field Internship

## FOOD AND NUTRITION - MAJOR \#5682

This degree is designed to prepare students for entry level employment in nutrition programs or food service. This degree prepares students for transfer to four year college in dietetics or culinology.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. Identify and compare preparation methods to optimize nutritional content.
3. Evaluate the nutritional content of foods and menus.

REQUIRED CORE COURSES
Units
CIT 15 Computer Concepts ................................................ 3
FN 1 Principles of Food Preparation ............................... 3
FN 40 Nutrition.............................................................. 3
FN 45 Therapeutic Diets ................................................... 3
FSM 11 Food Service Supervision ........................................ 2
FSM 15 Food Production Management............................... 2
FSM 19 Work Experience (Cooperative), Occupational.......1-4
FSM 35 Food Services, Sanitation, Safety and Equipment..... 2 Total 19-22
ELECTIVES: Select 18 Units
Units

BIOL 22 Human Physiology............................................... 5
BIOL 31 Microbiology...................................................... 4.5

CHEM 3A Introductory General Chemistry .............................. 4
FN 41 Sports Nutrition.................................................... 2
FN 42 Child Nutrition..................................................... 3
FN 43 Women's Nutrition ................................................ 2
FSM 25 Food and Beverage Purchase and Control ................ 2
FSM 38 Quantity Food Preparation ...................................... 3
Note: AS degree: The Food and Nutrition major consists of 37-40 units as indicated above. Students must complete the Food and Nutrition major and associate degree requirements listed on page 32. General Education requirements for transfer certification are on page 40.

## FOOD AND NUTRITION - MAJOR \#5682

This certificate of achievement is designed to prepare students for entry level employment in nutrition programs or food service. This certificate prepares students for transfer to four year college in dietetics or culinology.

## 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. Identify and compare preparation methods to optimize nutritional content.
3. Evaluate the nutritional content of foods and menus.

REQUIRED CORE COURSES
Units
CIT 15 Computer Concepts ............................................... 3
FN 1 Principles of Food Preparation............................... 3
FN 40 Nutrition............................................................. 3
FN 45 Therapeutic Diets .................................................. 3
FSM 11 Food Service Supervision ........................................ 2
FSM 15 Food Production Management............................... 2
FSM 19 Work Experience (Cooperative), Occupational.......1-4
FSM 35 Food Services, Sanitation, Safety and Equipment..... 2
Total 19-22
ELECTIVES: Select 18 Units Units
BIOL 11A/11AH Biology for Science Majors I, or
Honors Biology for Science Majors I.................... 5
BIOL 22 Human Physiology................................................ 5
BIOL 31 Microbiology....................................................... 4.5
CHEM 3A Introductory General Chemistry .............................. 4
FN 41 Sports Nutrition..................................................... 2
FN 42 Child Nutrition..................................................... 3
FN 43 Women's Nutrition ................................................ 2
FSM 25 Food and Beverage Purchase and Control ................ 2
FSM 38 Quantity Food Preparation ..................................... 3

## 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 dietician, ensure that the nutritional needs of the clients of a health care facility will be met.

## REQUIRED COURSES <br> Units

FN 40 Nutrition............................................................. 3
FN 45 Therapeutic Diets ................................................. 3
FSM 19 Work Experience (Cooperative), Occupational......... 1
FSM 35 Food Services, Sanitation, Safety and Equipment..... 2

## Total 9

## DIETARY SERVICE SUPERVISOR - MAJOR \#5681

The certificate of achievement prepares students for employment in a foodservice department within health care facilities such as hospitals, skilled nursing, assisted living or adult day care centers.

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 Units

FN 1 Principles of Food Preparation ................................ 3
FN 40 Nutrition.............................................................. 3
FN 45 Therapeutic Diets .................................................. 3
FSM 11 Food Service Supervision ........................................ 2
FSM 19* Work Experience (Cooperative), Occupational......... 3
FSM 35 Food Services, Sanitation, Safety and Equipment..... 2
FSM 38 Quantity Food Preparation ..................................... 3
Suggested sequence of courses:
First Semester Units
FN 1 Principles of Food Preparation ................................ 3
FN 40 Nutrition.............................................................. 3
FSM 19* Work Experience (Cooperative), Occupational......... 1
FSM 35 Food Services, Sanitation, Safety and Equipment..... 2
Second Semester ..... Units
FN 45 Therapeutic Diets ..... 3
FSM 11 Food Service Supervision ..... 2
FSM 19* Work Experience (Cooperative), Occupational. .....  2
FSM 38 Quantity Food Preparation .....  3
Total ..... 19

* One unit of FSM 19 can either be 75 hours paid or 60 hours volunteer. Two units of FSM19 must be 120 bours volunteer.
Articulation of the Dietetics and Food Administration Major with CSUFFresno City College students planning to transfer to California StateUniversity, Fresno, into a Dietetics or Food Services major approved by theAmerican Dietetics Association should take the following lower divisioncourses before transferring to CSU, Fresno.
COURSES ..... Units
*BIOL 20 ..... 4
BIOL 22 Human Physiology. .....  .5
BIOL 31 Microbiology. ..... 4 .5
CHEM 3A Introductory General Chemistry .....  4
CHEM 8A Elementary Organic Chemistry ..... 3
FN 40 Nutrition. .....  3
FN 1 Principles of Food Preparation .....  3
MATH 11 Elementary Statistics. .....  4
*MATH 201 Elementary Algebra, or
*MATH 103 Intermediate Algebra .....  5
PSY 2/2H General Psychology, or Honors General Psychology ..... 3
* Prerequisite to required course(s).
FOOD SERVICE MANAGEMENT
FOOD SERVICE MANAGEMENT - MAJOR \#5691

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

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. Evaluate the nutritional content of foods and menus.
3. Choose record keeping methods to monitor the fiscal viability of a food service establishment.

| REQUIRED CORE COURSES |  |
| :---: | :---: |
| ACCTG 4A/4AH | Financial Accounting, or |
|  | Honors Financial Accounting, or |
| BT 131 | Applied Accounting....................................3.5-4 |
| BA 18 | Business and the Legal Environment.................... 4 |
| CIT 15 | Computer Concepts ........................................... 3 |
| ECON 40/40H | Introduction to Microeconomics, or Honors Introduction to Microeconomics. $\qquad$ 3 |
| FN 1 | Principles of Food Preparation ............................ 3 |
| FN 35 | Nutrition and Health, or |
| FN 40 | Nutrition .................................................... 3 |
| FSM 11 | Food Service Supervision ................................... 2 |
| FSM 15 | Food Production Management............................ 2 |
| FSM 19 | Work Experience (Cooperative), Occupational......1-4 |
| FSM 25 | Food and Beverage Purchasing and Control............ 2 |
| FSM 35 | Food Services, Sanitation, Safety and Equipment.... 2 |
| FSM 38 | Quantity Food Preparation ................................. 3 |
| MKTG 10 | Principles of Marketing..................................... 3 |
|  | Total 35-38 |
| Note: The Food <br> Students n <br> requireme <br> certificatio | ice Management major consists of 35-38 units as indicated above. complete the Food Service Management major and associate degree are listed on page 32. General Education requirements for transfer are on page 40. |

## 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 Units

ACCTG 4A/4AH Financial Accounting, or Honors Financial Accounting, or BT 131 Applied Accounting......................................3.5-4

BA 18

Business and the Legal Environment
... 4

CIT 15
Computer Concepts ................................................ 3
ECON 40/40H
Introduction to Microeconomics, or Honors Introduction to Microeconomics. 3
FN 1 Principles of Food Preparation .....  3
FN 35

Nutrition and Health, or Nutrition3
FSM 11 Food Service Supervision .....  2
FSM 15 Food Production Management .....  2

CIT 15 Computer Concepts ............................................... 3
$\begin{array}{ll}\text { ECON 40/40H } & \text { Introduction to Microeconomics, or } \\ & \text { Honors Introduction to Microeconomics............. } 3\end{array}$
Arinciples of

FN 40 Nutrition .......................................................... 3
FSM 11 Food Service Supervision ........................................ 2
FSM 15 Food Production Management............................... 2
FSM 19 Work Experience (Cooperative), Occupational......1-4
FSM 25 Food and Beverage Purchasing and Control............ 2
FSM 35 Food Services, Sanitation, Safety and Equipment..... 2
FSM 38 Quantity Food Preparation ..................................... 3
MKTG 10
Total $\quad 35-38$

FSM 25
FSM 35
FSM 38
MKTG 10

## 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 Units

$\begin{array}{ll}\text { CIT } 15 & \text { Computer Concepts ................................................ } 3 \\ \text { FN 1 } & \text { Principles of Food Preparation }\end{array}$
FN 1 Principles of Food Preparation............................... 3
FN 35 Nutrition and Health.............................................. 3
FSM 35 Food Services, Sanitation, Safety and Equipment..... 2
FSM 162 Menu Planning for Child Nutrition.......................... 3 Total 14
ELECTIVES: Select 10 Units Units
BT 6 Records Management........................................... 3
FN 42 Child Nutrition...................................................... 3
FSM 19 Work Experience (Cooperative), Occupational.......1-4
FSM 11 Food Service Supervision ......................................... 2
FSM 15 Food Production Management............................... 2
FSM 25 Food and Beverage Purchasing and Control............. 2
FSM 38 Quantity Food Preparation ..................................... 3
Complete 14 units of required core courses. Select an additional 10 units from the elective courses for the certificate of achievement.

## GEOLOGY FOR TRANSFER - MAJOR \#6070

Geology is a useful major for students with a variety of interests and career goals in the earth sciences including geology, hydrogeology, astrogeology, paleontology, mineralogy, engineering geology, geophysics, geochemistry, petroleum geology, oceanography and environmental science. The Associate in Science in Geology for Transfer program is designed for students who plan to complete a bachelor's degree in a similar major a CSU campus. To earn the Associate in Science in Geology for Transfer program, students must complete a maximum of 60 required semester
units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 27 units within the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. Students must have a minimum grade point average of 2.0. Students must earn a C or better in all courses required for the major.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Identify distinguishing characteristics, properties, and origin of common rocks and minerals.
2. Explain the processes of plate tectonic theory and identify associated geologic features and events.
3. Determine the age relationships of rocks and fossils using various dating techniques.
CORE COURSES Units
CHEM 1A General Chemistry.................................................. 5
CHEM 1B General Chemistry and Qualitative Analysis ............. 5
GEOL 1/1H Physical Geology, or Honors 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 $4 A$ and Physics $4 B$ (8 units)
or (see requirements of 4 year institution)
Physics $2 A$ and Physics $2 B$ (8 units)
Biology 3 (3.5 units)
Geology 3 (1-2 units)
Geology 11 (1-2 units)

## GRAPHIC COMMUNICATIONS

## - FORMERLY PRINTING TECHNOLOGY AND REPROGRAPHICS - MAJOR \#8332

This program is geared for the student considering employment in graphic communications production. Successful completion provides an entry-level skill set and general understanding of production techniques ranging from computerized layout through output in print, digital video, Internet publishing, and digital media products.

## ASSOCIATE IN SCIENCE DEGREE AND

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcome:

1. Demonstrate competency in communication techniques and visual design theory through the use of application specific software and hardware.

## FIRST YEAR



## SECOND YEAR

First Semester

Units
GRC 27 Digital Video Production. .....  .4
GRC 31 Photoshop for Graphics .....  3
Minimum of 3 units from electives listed below. .....  3
Total ..... 10
Second Semester ..... Units
GRC 24 Flash Animation. .....  .3
GRC 30 Adobe InDesign/Professional Publishing .....  3
Total ..... 6Recommended Electives: GRC $14,16,25,32,34,39 \mathrm{~A}, 40 \mathrm{~A}, 51,52,53,57$;PHOTO 6, 12
GRAPHIC DESIGN OPTION - MAJoR \#8501
The Graphic Design Option combines aspects of the graphic communi-cation, fine art, and business curricula to provide a foundation in graphicdesign. The student will receive a background in art, computer graphicsand web design with an understanding of the requirements and limitationsof production.

## ASSOCIATE IN ARTS DEGREE AND

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcome:

1. Demonstrate competency in communication techniques and visual design theory through the use of application specific software and hardware.

## FIRST YEAR

First Semester Units
ART 7 Beginning Drawing. .....  3
AT 40 Preparing for Employment Opportunities. .....  3
GRC 17 Adobe Illustrator. ..... 3
GRC 20 Intro to Applied Graphics .....  3

| Second Semest | er Units | COURSES |  | Units |
| :---: | :---: | :---: | :---: | :---: |
| GRC 15 |  | GRC 14 | Adobe Acrobat Professional....... | .. 3 |
| GRC 30 | Adobe InDesign/Professional Publishing................ 3 | GRC 22 | Digital Media. | . 4 |
| GRC 31 | Photoshop for Graphics ....................................... 3 | GRC 24 | Flash Animation.. | ..... 3 |
| GRC 39A | Introduction to Graphic Design ............................ 3 | GRC 27 | Digital Video Production | .... .4 |
|  | Total 13 | GRC 34 | Introduction to 3-D Animation. |  |
| SECOND YEAR |  | GRC 41 | Visual Communications.. | ...... 3 |
| First Semester Units |  | GRC 51 | Storyboarding |  |
| GRC 14 | Adobe Acrobat Professional ................................... 3 | GRC 53 | Adobe After Effects ... | $\ldots$ |
| GRC 18 | Intro to Production Methods............................. 3 |  | Total | 24 |
| GRC 40A | Intermediate Graphic Design.............................. 3 | VISUAL COMMUNICATIONS - MAJOR \#8510 |  |  |
|  | Total 9 |  |  |  |
| Second Semester Units |  | This certificate provides evidence of skill development for entry level employment in the preparation of media for visual communication. |  |  |
| BA 38 <br> MKTG 11 | Operation of the Small Business, or |  |  |  |
|  | Selling and Sales Management ........................ 3 | CERTIFICATE |  |  |
| GRC Elective |  | Student Learning Outcome: |  |  |
| GRC Elective | ........... 3 | 1. Demonstrate competency in visual communication techniques and visual design theory through the use of application specific software |  |  |
|  | Total 9 |  |  |  |
| Recommended Electives: GRC 16, 22, 23,25, 32, 34, 51, 52, 53; PHOTO 6, 12 |  | and hardware. |  |  |
|  |  | CORE COURSES |  | Units |
| DIGITAL VIDEO OPTION - MAJOR \#8506 |  | GRC 20 | Intro to Applied Graphics .............. | ....... 3 |
| This certificate prepares the student for entry level work in digital video production. |  | GRC 41 | Visual Communications................ | ....... 3 |
|  |  | PHOTO 23 | Photoshop 2: Digital Darkroom......... | ....... 3 |
| CERTIFICATE |  | PHOTO 40 | Professional Photographic Practices ... | ...... 3 |
| Student Learning Outcomes: |  |  | Total | 12 |
| 1. Successfully operate a digital video camera to capture footage in a variety of lighting conditions. |  | WEB DESIGN - MAJOR \#8502 |  |  |
| 2. Capture audio using a digital recorder and compile it with existing audio tracks while maintaining synchronization. |  | This certificate of achievement is evidence of knowledge of the preparation of graphics and web sites for the Internet. Through the creation and capture of images, creation of animation, and layout/design of pages, the student gains insight into graphic industry standards. |  |  |
| COURSES | Units |  |  |  |
| GRC 27 | Digital Video Production...................................... 4 |  |  |  |
| GRC 32 | Video Techniques............................................... 4 | CERTIFICATE OF ACHIEVEMENT |  |  |
| GRC 41 | Visual Communications...................................... 3 | Student Learning Outcome: |  |  |
| GRC 51 | Storyboarding................................................. 1 | 1. Demonstrate competency in communication techniques and visual design theory through the use of application specific software and hardware. |  |  |
| GRC 53 | Adobe After Effects ............................................. 3 |  |  |  |
|  | Total 15 |  |  |  |
| DIGITAL MEDIA OPTION <br> - FORMERLY MULTIMEDIA OPTION - MAJOR \#8504 |  | COURSES |  | Units |
|  |  | GRC 15 | Web Page Construction $1 . . . . . . . . . . . . . . . . . . . ~$ | ....... 4 |
|  |  |  | Web Design Techniques.................... | ....... 4 |
| This certificate | provides evidence of knowledge of the preparation in | GRC 24 | Flash Animation.......................... | ...... 3 |
| images and audio for | for multimedia output. | GRC 25 | CSM Web Design............. | ......... 3 |
| CERTIFICATE |  | GRC 41 | Visual Communications...... | ...... 3 |
| Student Learning | Outcome: |  | Total | 17 |
| 1. Demonstrate co design theory hardware. | mpetency in communication techniques and visual hrough the use of application specific software and |  |  |  |

## HEALTH INFORMATION TECHNOLOGY -

## FORMERLY MEDICAL RECORD TECHNOLOGY - MAJOR \#4621

The Health Information Technology (HIT) Program prepares students for a career working in health information management in a variety of healthcare settings. HIT professionals perform the essential functions of acquiring, analyzing, and protecting digital and medical information. Through the use of technology and expertise in data integrity, confidentiality, and security, their work contributes to quality patient care. Job responsibilities may include coding, data collection, documentation analysis, quality improvement, release of information, or supervision.

The HIT Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Successful completion of the Health Information Technology Program qualifies the graduate for an associate in science degree and eligibility to take the Registered Health Information Technician (RHIT) exam administered by the American Health Information Management Association (AHIMA).

## ASSOCIATE OF SCIENCE DEGREE

## Student Learning Outcomes:

1. Apply the knowledge and skills for health information management according to the entry-level competencies of the American Health Information Management Association HIM Curriculum.
2. Pass the Registered Health Information Technician examination.

## Recommended Sequence of Courses

First Semester - Fall Units
*BIOL 5 Human Biology ................................................... 3.5
CIT 15 Computer Concepts ................................................ 3
HIT 1 Introduction to Health Information Management... 3
HIT 10 Medical Terminology .............................................. 3 Total $\quad 12.5$
Second Semester - Spring Units
HIT 2 Legal Aspects of Health Information ........................ 3
HIT 4 Disease Process ....................................................... 3
HIT 5 Introduction to Coding ........................................... 3
HIT 12 Health Information in Alternative Settings ............... 2
MA 2 Pharmacology ....................................................... 3 Total 14
Third Semester - Fall Units
HIT 3 Quality Improvement.............................................. 2
HIT 6 Coding and Reimbursement................................... 3
HIT 9 Hospital and Health Statistics .................................. 2
HIT 14 HIM Technology and Systems.................................. 3 Total 10
Fourth Semester - Spring Units
HIT 7 Directed Practice .................................................... 4
HIT 8 Health Information Management and Supervision.. 3
HIT 11 CPT Coding .......................................................... 3 Total

Notes:

> 1. The associate degree requires the completion of additional units and requirements listed with a 2.0 or better GPA.
> 2. BIOL 24 or BIOL 20 and 22 may be substituted for BIOL 5 .
> 3. In addition to all major associate degree requirements, students must take a 3-unit elective of their choice. Recommended areas are accounting, business computer application software, finance, management, professional writing, and statistics.
> 4. Academic credit earned in accredited institutions of higher education or AHIMA approved schools of Health Information Technology for comparable courses will be accepted for transfer. Equivalency will be determined on the basis of catalog description, course outline, content comparison, and hour distribution. Credit by examination, when acceptable, may be required when equivalency cannot be determined.

## MEDICAL CODING - MAJOR \#4627

The medical coding certificate program prepares students for a position as a coder in a hospital, physician office, clinic, long-term care facility, and other healthcare settings. Coders review patient health information, analyze and extract data, and ensure appropriate codes are assigned for internal and external data reporting, billing, research, and regulatory compliance.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Evaluate the content of patient health records and assign diagnostic and procedure codes following regulatory guidelines.
2. Use computer technology and applications as a coding professional would in the regular course of business for HIM functions such as the electronic health record, encoding, abstracting, billing, and revenue management.

## Recommended Sequence of Courses

First Semester Units
*BIOL 5 Human Biology ................................................... 3.5
HIT 1 Introduction to Health Information Management... 3
HIT 10 Medical Terminology .............................................. 3 Total 9.5
Second Semester Units
CIT 15 Computer Concepts ................................................ 3
HIT 4 Disease Process ..................................................... 3
HIT 5 Introduction to Coding .......................................... 3
Total 9
Third Semester Units
HIT 6 Coding and Reimbursement................................... 3
HIT 14 HIM Technology and Systems.................................. 3
MA 2 Pharmacology....................................................... 3
Total 9


Note:
*BIOL 24, or 20 and 22 may be substituted for BIOL 5.

## HIGH TECH ADAPTIVE PROGRAM <br> - 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.
2. Demonstrate basic Adaptive Computer Concepts.

REQUIRED COURSES
Units
DEVSER 262 Group Interaction for Students with Disabilities....... 2
DEVSER 277 Adapted Computer Literacy..................................... 2
DEVSER 278 Modified Word Processing....................................... 2
DEVSER 279 Modified Computer Applications .............................. 2
ENGL 277 Reading Skills ..................................................... 2.5
ENGL $281 \quad$ Grammar and Sentence Writing............................ 2.5
MATH 277 Arithmetic for the Learning Disabled ....................... 2
Total 15

Associate Degree
for Transfer
A Degree with a Guarantee.w

## HISTORY FOR TRANSFER - MAJOR \#7380

History is our changing perspective on the past. Historians attempt not only to understand the causes and significance of human actions in the past but also to interpret those past actions to others, through teaching, publications, lectures, exhibits, documentaries, and conversations. Knowledge of history provides insight into human nature, enhances our understanding of the present, and guides choices for the future. The Associate in Arts in History for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the

Associate in Arts in History for Transfer degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 units within the major, with a minimum GPA of 2.0. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Analyze and evaluate the validity and significance of historical information from multiple primary and secondary sources.
2. Demonstrate a familiarity with the main figures, events and concepts in the histories of multiple societies.
3. Assess the relative significance of several factors (e.g. race, class, gender, technological change) in shaping the history of multiple societies.

## REQUIRED UNITED STATES HISTORY COURSES Units

HIST 11 History of the United States to 1877.......................... 3
HIST 12 History of the United States since 1877..................... 3
LIST A - Select one of the following: Units
HIST 1/1H Western Civilization to 1648, or Honors Western Civilization to 1648.................... 3
HIST 20 World History I, to 1600 .......................................... 3
LIST B - Select one of the following: Units
HIST 2/2H Western Civilization since 1648, or Honors Western Civilization since 1648................ 3
HIST 23 World History II, since 1500..................................... 3
LIST C - Select one of the following: Units
HIST 20 World History I, to 1600 .......................................... 3
HIST 22 History of American Women .................................... 3
HIST 23 World History II, since 1500..................................... 3
$\begin{array}{ll}\text { HIST } 29 & \text { History of Mexico, Colonial to Contemporary } \\ & \text { Period ............................................................................... }\end{array}$
HIST 34 History of the American Civil Rights Movement ....... 3
History 20 or 23 may be used for list $C$ only if not used in lists $A$ or $B$.
LIST D - Select one from the following: Units
HIST 3 History of Ancient Rome ......................................... 3
HIST 15 History of the British Isles ....................................... 3
HIST 18 History of Ancient Greece ........................................ 3
HIST 21 United States Civil War........................................... 3
HIST 25 History of Religion in the United States.................... 3
HIST 30 California History.................................................. 3

## HONORS PROGRAM

## LEON S. PETERS HONORS PROGRAM

- MAJOR \#5331


## CERTIFICATE

A Leon S. Peter Certificate in Honors will be awarded to Honors students who successfully complete a minimum of 17 credits of Honors courses including 2 colloquium units with an overall GPA of 3.2 or better.

## Student Learning Outcomes:

1. Demonstrate an understanding and appreciation of social, political, and economic institutions within a historical perspective.
2. Express an understanding of the relationship between science and other human activities.
3. Articulate an understanding of the relationships between the arts, the humanities and themselves.
4. Write clear, logically organized essays using expository and argumentative modes and applying conventions of documentation when appropriate.
5. Apply logical reasoning to make decisions, solve problems, explain conclusions, and evaluate evidence.
REQUIRED COURSE UNITS
*ENGL 1AH Honors Reading and Composition

* An exception can be made if student has successfully completed ENGL 1A prior to entering the Honors program.
ELECTIVE COURSES: Select a minimum of 11 units Course

Units
ACCTG 4AH
ACCTG 4BH
Honors Financial Accounting, or

ANTHRO 2H Honors Managerial Accounting ... 4

ART 5H
ART 6H
BA 10H
BIOL 3H
BIOL 11AH
ECON 40H
ECON 50H
ENGL 1BH
ENGL 3H
HIST 1H
HIST 2H
HIST 12H
HUM 10H
HUM 11H
PHIL 1AH
POLSCI 2H

SOC 1AH

Honors Theories of Knowledge and Reality.............. 3
2in
Honos General Pycholog ........................................
Honors Cultural Anthropology................................. 3
Honors Art History 1, or
Honors Art History, 2 .. 3
Honors Introduction to Business ............................. 3
Honors Introduction to Life Science, or
Honors Biology for Science Majors 1 ..............3.5-5
Honors Introduction to Microeconomics, or
Honors Introduction to Macroeconomics ............ 3
Honors Introduction to the Study of Literature......... 3
Honors Critical Reading \& Writing ......................... 3
Honors Western Civilization to 1648 , or
Honors Western Civilization since 1648, or
Honors History of the United States since 1877 .... 3
Honors Classical Humanities, or
Honors Modern Humanities ... 3

Honors American Government ............................... 3
Honors General Psychology .................................... 3
Honors Introduction to Sociology............................ 3

COLLOQUIA: Select a minimum of 2 units
HONORS 1A Honors Science Colloquium .................................... 1
HONORS 1C Honors Humanities Colloquium ............................. 1
HONORS 1D Honors Business \& Economics Colloquium.............. 1
HONORS 1E Honors Social Science Colloquium ......................... 1
HONORS 1F Honors Phi Theta Kappa Colloquium...................... 1

## HUMAN SERVICES

## ALCOHOLISM AND DRUG ABUSE COUNSELING OPTION - MAJOR \#7951

This degree is designed for students interested in working in the field of chemical dependency. Completion of the total program will broaden a candidate's understanding and assist in preparation needed to enter the field.

These core classes of the degree are accredited by the California Association for Alcohol/Drug Educators (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 IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Demonstrate a fundamental working knowledge of the Alcohol and Other Drug Abuse system.
2. Be prepared for entry-level employment in an Alcohol or Other Drug Program.
3. Demonstrate an understanding of the 12 core competencies and their application to the treatment of substance use disorders.
REQUIRED CORE COURSES Units
HS/SOC 10 Introduction to Aging Studies................................... 3
HS 18 Alcohol and Drug Abuse Counseling:
Professional and Personal Growth 2

HS 19B Work Experience (Cooperative), Occupational ........ 6
HS 20 Introduction to Social Welfare................................. 3
HS 24 Fund of Interviewing and Counseling...................... 3
HS 40 Alcohol and Drug Abuse Counseling: Law and Ethics,
Prevention, Education, Outreach and Referral......... 3
Introduction to Alcohol and Drug Counseling.......... 3
Alcohol and Drug Abuse Counseling:
Case Management.3

Drug Use: Physical and Psychological Effects........... 3 Total29

| COURSE OPTIONS: Select 7 Units |  |
| :---: | :---: |
| AFRAM 1 | Introduction to African American Studies, or |
| AMIND 34 | American Indian in Contemporary Society, or |
| CLS/SOC 14 | Sociology of the Mexican American |
|  | Community................................................. 3 |
| CHDEV 5 | Parent Education .............................................. 3 |
| CHDEV/PSY 12 | Child Abuse..................................................... 3 |
| HS/WSTS 25 | Assertiveness Training....................................... 2 |
| PSY 2/2H | General Psychology, or |
|  | Honors General Psychology ............................. 3 |
| PSY 5 | Social Psychology............................................. 3 |
| PSY 16 | Abnormal 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, or |
| SOC 160 | Basic Sociology ............................................ 3 |
| SOC 1B | Critical Thinking about Social Problems................ 3 |
| SOC 2 | American Minority Groups................................... 3 |
| SOC/WSTS 5 | Sociology of Rape............................................. 3 |
| SOC/WSTS 7 | Domestic Violence: Abuse within the Family............ 3 |
| SOC 32 | Introduction to Marriage and Family ................... 3 |
| WSTS 10 | Changing Roles of Women .................................. 3 |
| Notes: 1. An A Certifica must in major 2. Associ mentsfor | ree will be awarded to any Alcobol and Drug Abuse Counseling ndidate who successfully completes a total of 60 units. The 60 units associate degree requirements and 36 units of course work in the d above. <br> degree requirements are listed on page 32. General Education requirensfer certification are on page 40. |

## ALCOHOLISM AND DRUG ABUSE COUNSELING OPTION - MAJOR \#7951

This certificate is designed for students interested in working in the field of chemical dependency. Completion of the total certificate of achievement will broaden a candidate's understanding and assist in preparation needed to enter the field.

This certificate is accredited by the California Association for Alcohol/ Drug Educators (CAADE) and recognized by the other three certifying organizations in California.

The Alcoholism and Drug Abuse Counseling Certificate program offers course work leading to a certificate of achievement.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Upon completion, the student will be eligible to take the State of California approved test to become an Alcohol and Other Drug Counselor.
2. Students will take and successfully complete the State of California approved written exam from one of the 4 certifying organizations.REQUIRED CORE COURSESUnits
HS/SOC 10 Introduction to Aging Studies ..... 3
HS 18 Alcohol and Drug Abuse Counseling:Professional and Personal Growth 2
Work Experience (Cooperative), Occupational ..... 6
Introduction to Social Welfare ..... 3
Fund of Interviewing and Counseling ..... 3
Alcohol and Drug Abuse Counseling: Law and Ethics,
Prevention, Education, Outreach and Referral. .....  3
Introduction to Alcohol and Drug Counseling. .....  3
Alcohol and Drug Abuse Counseling:
Case Management ..... 3
Drug Use: Physical and Psychological Effects .....  3
HS 44 ..... 29
COURSE OPTIONS: Select 7 Units ..... Units
AFRAM 1 Introduction to African American Studies, or
AMIND 34CLS/SOC 14
CHDEV 5CHDEV/PSY 12Parent Education3Child Abuse,
HS/WSTS 25 Assertiveness Training ..... 2
PSY 2/2H
General Psychology, or
General Psychology, or
Honors General Psychology ..... 3
PSY 5 Social Psychology. ..... 3
PSY 16 Abnormal Psychology ..... 3
PSY 25 Human Sexuality ..... 3
PSY 33 ..... 3SOC 1A/1AHSOC 160
SOC 1B
SOC 2SOC/WSTS 5
SOC/WSTS 7 Domestic Violence: Abuse within the Family. ..... 3
Introduction to Sociology, orHonors Introduction to Sociology, orBasic Sociology. 3
Critical Thinking about Social Problems ..... 3
American Minority Groups. ..... 3 3
SOC 32 Introduction to Marriage and Family ..... 3
WSTS 10 Changing Roles of Women
PRE-SOCIAL WORK OPTION - FORMERLY SOCIAL WORK OPTION - MAJOR \#7633

This degree is designed to prepare students for entry-level employment in a social service setting or to transfer as a junior to a baccalaureate degree program in Social Work. This degree is for the person who has a strong desire to help people who traditionally have been underrepresented within the larger society and require interventions and assistance in increasing control of their personal destinies. These introductory courses will give the student a good fundamental working knowledge of the social services system.

The program offers course work leading to a certificate of achievement and an associate in science degree in Human Services: Pre-Social Work. Students must take the required courses listed in the Core (see below), and select 12 units from the list of options.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Demonstrate a fundamental working knowledge of the social services system.
2. Be prepared for entry-level employment in a social service setting.
3. Understand who are the underrepresented within our society and what might be appropriate interventions to assist them.
4. Apply the multiple perspectives of a broad Liberal Arts foundation to their analysis of social problems.
REQUIRED CORE COURSES Units
CIT 12 Computer Literacy................................................. 3
HS/SOC 10 Introduction to Aging Studies.................................. 3
HS 19A Work Experience (Cooperative), Occupational......... 3
HS 20 Introduction to Social Welfare................................ 3
HS 24 Fundamentals of Interviewing and Counseling........ 3
HS $30 \quad$ Group and Community Social Services.................... 3 Total 18
COURSE OPTIONS: Select 12 Units Units
AFRAM 1 Introduction to African American Studies................ 3
AFRAM 2 Cultural Adaptation of the African-American ........... 3
AMIND 31 American Indian Culture....................................... 3
AMIND 34 The American Indian in Contemporary Society........ 3
AMST $10 \quad \begin{array}{ll}\text { American Pluralism: A Search for Common } \\ & \text { Ground in a Multicultural Society.......................... } 3\end{array}$
$\begin{array}{cc}\text { ANTHRO 2/2H } \quad \text { Cultural Anthropology, or } \\ & \text { Honors Cultural Anthropology ........................... } 3\end{array}$
ASAMER 25 Asian American Social Issues................................... 3
ASL 1 Beginning American Sign Language ....................... 4
CHDEV 5 Parent Education .................................................. 3
$\begin{array}{rr}\text { CHDEV } 30 & \text { Child, Family and Community, or } \\ \text { SOC } 31 & \text { Child in Society: A Social Problems Approach...... } 3\end{array}$
CHDEV/PSY 38 Lifespan Development............................................ 3
CHDEV/PSY39 Child Growth and Development .............................. 3
CLS 11 Introduction to Chicano-Latino Studies.................... 3
CLS 13 Politics and the Chicano-Latino Community ........... 3
COMM 1
COMM 4
COMM 8
COMM 25
PHIL 6
ECON 25
ECON 40/40H Introduction to Microeconomics, or
Honors Introduction to Microeconomics, or

| ECON 50/50H | Introduction to Macroeconomics, or Honors Introduction to Macroeconomics. . 3 $\qquad$ |
| :---: | :---: |
| FN 35 | Nutrition and Health, or |
| FN/WSTS 43 | Won |
| HMONG 1 | Be |
| HS/WSTS 25 | Ass |
| HS 44 | Drug Use: Physical and Psychological Effects.......... 3 |
| PHIL 1A PHIL 1C | Theories of Knowledge and Reality, or <br> Ethics $\qquad$ |
| SOC 1A/1AH | Introduction to Sociology, or Honors Introduction to Sociology $\qquad$ |
| SOC/WSTS 5 | Sociology of Rap |
| SOC/WSTS 7 | Domestic Violence: Abuse Within the Family ........... 3 |
| SOC 32 | Introduction to Marriage and Family ................... 3 |
| SPAN 1 | Beginning Spanish |
| WSTS 10 | Changing Roles of Women .................................. 3 |
| Note: An associate in science degree will be awarded on the successful completion of 60 units. See page 32 for associate degree requirements. General education requirements for transfer certification are on page 40. |  |
| 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 en-try-level employment in a social service setting or with additional general educations courses, to transfer as a junior to a baccalaureate degree program in social work. This program is for the person who has a strong desire to help people who traditionally have been underrepresented within the larger society and require interventions and assistance in increasing control of their personal destinies. These introductory courses will give the student a good fundamental working knowledge of the social services system. <br> 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. |  |
| 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 Units |  | SOC 32 | ion to Marriage and Family ................... 3 |
| :---: | :---: | :---: | :---: |
| CIT 12 | Computer Literacy............................................ 3 | SPAN 1 | Beginning Spanish........................................... 5 |
| HS/SOC 10 | Introduction to Aging Studies.............................. 3 | WSTS 10 | Changing Roles of Women ................................. 3 |
| HS 19A | Work Experience (Cooperative), Occupational........ 3 | For career options, consult with Human Services staff. |  |
| HS 20 | Introduction to Social Welfare............................. 3 |  |  |
| HS 24 | Fundamentals of Interviewing and Counseling....... 3 |  |  |
| HS 30 | Group and Community Social Services................... 3 | HUMANITIES - MAJOR \#5330 |  |
| COURSE OPTIONS: Select 12 Units |  | The Humanities major is ideal for students seeking an integrated liberal arts education, either as a pre-professional major or as a self-enrichmen program. The program is designed to help students develop a diverse understanding and appreciation of world cultures past and present. The Humanities major requirements provide a curriculum that allows for the development of critical thinking, reading, and writing, as well as the development of a creative imagination. A Humanities major is valuable to a student planning to transfer to a four-year institution, whether as a major in humanities or some other field, and will enhance preparation for a wide range of career opportunities. |  |
| AFRAM 1 | Introduction to African American Studies............... 3 |  |  |
| AFRAM 2 | Cultural Adaptation of the African-American .......... 3 |  |  |
| AMIND 31 | American Indian Culture................................... 3 |  |  |
| AMIND 34 | The American Indian in Contemporary Society....... 3 |  |  |
| AMST 10 | American Pluralism: A Search for Common <br> Ground in a Multicultural Society. $\qquad$ .. 3 |  |  |
| ANTHRO 2/2H | Cultural Anthropology, or <br> Honors Cultural Anthropology $\qquad$ 3 |  |  |
| ASAMER 25 | Asian American Social Issues............................... 3 |  |  |
| ASL 1 | Beginning American Sign Language ..................... 4 | ASSOCIATE IN ARTS DEGREE |  |
| CHDEV 5 | Parent Education .............................................. 3 | Student Learning Outcomes: |  |
| CHDEV 30 SOC 31 | Child, Family and Community, or <br> Child in Society. $\qquad$ .. 3 | 1. Recognize the significance of the interrelationships between cultures and their art forms. |  |
| CHDEV/PSY 38 | Lifespan Development........................................ 3 | 2. Discern a sense of continuity in the history of ideas. |  |
| CHDEV/PSY39 | Child Growth and Development ........................... 3 | 3. Critically read literature, philosophy, and drama in translation. |  |
| CLS 11 | Introduction to Chicano-Latino Studies.................. 3 | Requirements within the program (18 units) |  |
| CLS 13 | Politics and the Chicano-Latino Community .......... 3 | COURSES: Select 18 Units: Units |  |
| COMM 1 | Introduction to Public Speaking or | HUMAN 10 | Classical Humanities, or |
| COMM 4 | Persuasion, or | HUMAN 10H | Honors Classical Humanities ............................ 3 |
| COMM 8 | Group Communication................................. 3 | HUMAN 11 | Modern Humanities, or |
| COMM 25 | Argumentation, or | HUMAN 11H | Honors Modern Humanities............................. 3 |
| PHIL 6 | Symbolic Logic ............................................ 3 | ENGL 12 | The Bible as Literature, or |
| ECON 25 | Introduction to Economics, or | ENGL/HUM 4 | Classic Myths, or |
| ECON 40/40H | Introduction to Microeconomics, or | PHIL 1D | World Religions ............................................. 3 |
| ECON 50/50H | Honors Introduction to Microeconomics, or | ENGL 1B <br> ENGL 1BH <br> ENGL 44A | Introduction to the Study of Literature, or Honors Intro to the Study of Literature, or World Literature to the Renaissance, or |
|  | Introduction to Macroeconomics, or |  |  |
|  | Honors Introduction to Macroeconomics............ 3 |  |  |
| FN 35FN/WSTS 43 | Nutrition and Health, 0 | ENGL 44B <br> ENGL 45 | World Literature since the Renaissance, or |
|  | Women's Nutrition .......................................2-3 |  | Contemporary World Literature, or |
| HMONG 1 | Beginning Hmong............................................. 5 | ENGL 45 <br> ENGL 46A | English Literature to 1800, or |
| HS/WSTS 25 | Assertiveness Training....................................... 2 | ENGL 46A <br> ENGL 46B | English Literature from 1800 to the Present, or |
| HS 44 | Drug Use: Physical and Psychological Effects.......... 3 | ENGL 48A | Intro to American Literature to World War I, or |
| SOC 1A/1AH | Introduction to Sociology, or Honors Introduction to Sociology $\qquad$ .. 3 | ENGL 48B | Intro to American Literature World War I <br> to the Present $\qquad$ |
| SOC/WSTS 5 | Sociology of Rape............................................. 3 | PHIL 1A | Theories of Knowledge and Reality, or Honors Theories of Knowledge and Reality, or Social and Political Philosophy, or |
| SOC/WSTS 7 | Domestic Violence: Abuse within the Family........... 3 | PHIL 1AHPHIL 1BPHIL 1C |  |
|  |  |  |  |
|  |  |  | Ethics, or |
|  |  | PHIL 5 | Philosophy of Religion.................................... 3 |


| CLS 21 | Chicano Literature, or |
| :---: | :---: |
| TA 30 | Theatre Appreciation, or |
| TA 31 | Theatre History and Dramatic Literature I, or |
| TA 32 | Theatre History and Dramatic Literature II, or |
| ART 6 | Art History 2, or |
| ART 6H | Honors Art History 2, or |
| ART 55 | Introduction to Asian Art, or |
| ART 60 | Art of the Ancient Americas, or |
| MUS 12 | Music Appreciation, or |
| MUS 13 | History of Music, or |
| MUS 16 | Jazz History and Appreciation .......................... 3 |
|  | Total 18 |
| Note: An associate in <br> fully complete and a minim an associated units and are | arts degree in Humanities will be awarded to students who successa total of 60 units, which include the associate degree requirements um of 18 units of major course work listed above. Students seeking degree may apply for an evaluation after they have completed 30-40 within one year of graduation. |
| INDUSTRIAL ARTS AND TECHNOLOGY <br> - MAJOR \#8991 |  |
| The student interested in a career teaching industrial arts and technology may complete the lower division requirements at Fresno City College and transfer as a junior at the end of two years. The sample program shown parallels lower division at California State University, Fresno, and is acceptable for majors in this area. Students should carefully check the lower division requirements of other colleges to which they plan to transfer for minor variations. This program has been articulated with the California State University, Fresno Industrial Arts Department since spring semester 1974. |  |
| ASSOCIATE IN SCIENCE DEGREE |  |
| FIRST YEAR |  |
| First Semester Units |  |
| AT 11 | Basic Electricity ............................................... 3 |
| DRAFT 12 | Drafting Practices............................................. 3 |
|  | Total 6 |
| Second Semester Units |  |
| AUTOT 9 | Automotive Essentials ......................................... 3 |
|  | Total 3 |
| SECOND YEAR |  |
| First Semester | Units |
| AT 10 | Technical Computer Applications......................... 3 |
| AT 40 | Preparing for Employment Opportunities................ 3 |
| Elective | ..................................................................... 3 |
|  | Total 9 |

First Semester ..... UnitsAT 40 Preparing for Employment Opportunities3

Recommended Electives: ARCH 12; WELD 1.

## INDUSTRIAL TECHNOLOGY

## CONSTRUCTION OPTION - MAJOR \#8240

| ASSOCIATE IN SCIENCE DEGREE |  |
| :---: | :---: |
| FIRST YEAR |  |
| First Semester | Units |
| ARCH 12 | Architectural Practice I ........................................ 3 |
| ENGL 1A/1AH | Reading and Composition, or |
|  | Honors Reading and Composition...................... 4 |

MATH 5A Mathematical Analysis I.......................................... 5
PHYS 2A General Physics ..................................................... 4
Physical Education ........................................................................... 1
Total 17
Second Semester Units

AT 11 Basic Electricity ..................................................... 3

BIOL, CHEM or

GEOL
3.5-4
$\begin{array}{lr}\text { COMM } 1 & \text { Introduction to Public Speaking, or } \\ \text { COMM } 2 & \text { Interpersonal Communication ........................... } 3\end{array}$
ENGR 1A Elementary Plane Surveying I................................. 4
ENGR 2 Graphics ............................................................... 4
Total 17.5-18

## SECOND YEAR

First Semester Units
AT 10 Technical Computer Applications............................. 3
BIOL, CHEM or
PHYS 2B 3.5-4

ECON 50/50H Introduction to Macroeconomics, or Honors Introduction to Macroeconomics............. 3
ENGL 1B/1BH Introduction to the Study of Literature, or Honors Introduction to the Study of Literature, or
PHIL 1A/1AH Theories of Knowledge and Reality, or Honors Theories of Knowledge and Reality .......... 3
Physical Education ............................................................................ 1
POLSCI 2/2H American Government, or
Honors American Government............................ 3
Total 16-17
Second Semester Units
ARCH 21 Materials of Construction....................................... 3
ECON 40/40H Introduction to Microeconomics, or
Honors Introduction to Microeconomics. 3

| Fine Arts Elective |  |
| :---: | :---: |
| HLTH 1 | Contemporary Health Issues ................................ 3 |
| HIST 11 HIST 12 | History of the United States to 1877 , or <br> History of the United States since 1877. $\qquad$ 3 |
| Physical Education |  |
|  | Total 16 |
| Recommended E | ives: AT 21; CONS 19, 51, 53; ARCH 10, 24, 30, 42. |
| Note: Associate degree | virements are listed on page 32. |
| MANUFACTU | RING OPTION - MAJOR \#8260 |
| ASSOCIATE IN | SCIENCE DEGREE |
| FIRST YEAR |  |
| First Semester | Units |
| ENGL 1A/1AH | Reading and Composition, or <br> Honors Reading and Composition $\qquad$ .4 |
| CHEM 3A PHYS 2A | Introductory General Chemistry, or General Physics. ... 4 |
| DRAFT 12 | Drafting Practices............................................. 3 |
| MATH 5A | Mathematical Analysis I..................................... 5 |
| Physical Education | . 1 |
|  | Total 17 |
| Second Semest | er Units |
| AT 11 | Basic Electricity ............................................... 3 |
| BIOL or GEOL | ...3.5-4 |
| COMM 1 <br> COMM 2 | Introduction to Public Speaking, or |
| ENGR 11 | Manufacturing Processes .................................... 3 |
| Physical Education | ................................................................... 1 |
|  | Total 14 |
| SECOND YEAR |  |
| First Semester | Units |
| CHEM 3A PHYS 2B | Introductory General Chemistry, or General Physics 2. ... 4 |
| ECON 50/50H | Introduction to Macroeconomics, or Honors Introduction to Macroeconomic $\qquad$ .. 3 |
| ENGL 1B/1BH | Introduction to the Study of Literature, or Honors Study of Literature, or |
| PHIL 1A/1AH | Theories of Knowledge and Reality, or Honors Theories of Knowledge and Reality $\qquad$ 3 |
| Physical Education | .................................................................. 1 |
| POLSCI 2/2H | American Government, or <br> Honors American Government. $\qquad$ 3 |
| WELD 1 | Exploring Welding/Metals .................................. 3 |
|  | Total 17 |


| Second Semester <br> ECON 40/40H | Introduction to Microeconomics, or <br> Honors Introduction to Microeconomics.............. 3 |
| :--- | :--- |
| Fine Arts Elective | ............................................................................... 3 |

Recommended Electives: AT 21 and WELD 19.
Note: Associate degree requirements are listed on page 32.

## JOURNALISM - MAJOR \#5351

The Journalism Major at Fresno City College is designed to introduce students to the mass media, both as consumers and as potential practitioners. The program focuses on the theory and practice of gathering, processing, and delivering news and that prepares individuals to be professional print journalists, news editors, and news managers. It includes instruction in news writing and editing; reporting; photojournalism; layout and graphic design; journalism law and policy; professional standards and ethics; and journalism history and criticism. All students are encouraged to meet with a counselor.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Demonstrate an understanding of journalistic responsibility.
2. Analyze the impact of mass media on American society and its diverse communities.
3. Describe how the major mass media operate and comprehend their contribution to American society and the world.
4. Write and edit news stories.
5. Meet journalistic deadlines.
6. Demonstrate the uses of photography, graphics and newspaper layout in media productions.
REQUIRED CORE COURSES ..... Units
JOURN 1 Introduction to Mass Communication. ..... 3
JOURN 3 Newswriting ..... 3
JOURN 16 Race, Gender, and the Media ..... 3
Total ..... 9
DEPARTMENT PUBLICATION REQUIREMENTJOURN 4 Writing for the College Newspaper, or
JOURN 5 Newspaper Production ..... 3
JOURN 6 .....  3

Complete a total of twelve (12) units from the courses listed below: Units
ART 5/5H

Art History 1, or Honors Art History 1 .. .3
$\begin{array}{ll}\text { ECON 50/50H } & \text { Introduction to Macroeconomics, or } \\ & \text { Honors Introduction to Macroeconomics............. } 3\end{array}$
GRC 41 Visual Communications......................................... 3
JOURN 2 Interpreting Current Events ..................................... 3
JOURN 9 Feature Writing..................................................... 3
JOURN 15 Basic Editing for Journalists .................................... 2
JOURN 19 Work Experience.................................................1-8
PHIL 1C Ethics................................................................... 3
PHOTO 30 Editorial Photography........................................... 3


Associate Degree
for Transfer
A Degree with a Guarantee.w

## 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): Units
JOURN 1 Introduction to Mass Communication...................... 3
JOURN 3 Newswriting.......................................................... 3
JOURN 11A Beginning Media Writing Practicum, or JOURN 4 Writing for the College Newspaper. ... 3

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

## Units

JOURN 11 C Advanced Media Writing Practicum ......................... 3
JOURN 11D Editorial Leadership ............................................... 3
JOURN 13 Advanced Reporting and Writing.............................. 3
JOURN 14 Multimedia Reporting............................................ 3
PHOTO 30 Editorial Photography............................................. 3
LIST B - Select 6-7 units or 2 courses from the following:

## Units

COMM 1 Introduction to Public Speaking ............................. 3
COMM 25 Argumentation..................................................... 3
ENGL 3/3H Critical Reading \& Writing, or Honors Critical Reading \& Writing...................... 3
ECON 40/40H Introduction to Microeconomics, or Honors Introduction to Microeconomics, or
ECON 50/50H Introduction to Macroeconomics, or Honors Introduction to Macroeconomics............. 3
JOURN 16 Race, Gender and the Media................................... 3
MATH/PSY 42 Statistics for the Behavioral Sciences........................ 4
PHIL 6 Symbolic Logic...................................................... 3
POLSCI 2/2H American Government, or
Honors American Government. .3
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:

## LIBERAL ARTS

## ASSOCIATE OF ARTS LIBERAL ARTS DEGREE WITH AREAS OF EMPHASIS

The associate in arts (A.A.) degree in Liberal Arts Degree is designed for students who wish a broad knowledge of liberal arts and sciences plus additional coursework in an "Area of Emphasis". The associate in arts in Liberal Arts Degree would be an ideal choice for those students planning on transferring to the California State University or University of California as the student can satisfy their general education requirements, plus focus on transferable course work that relates to majors at CSU or UC.

Choose either Option I or II or III for the General Education Pattern related to your educational goal.

Complete the required number of units in one "Area of Emphasis" from those outlined below.

For ALL OPTIONS: complete the necessary Fresno City College graduation requirements.

All classes listed below transfer to CSU. Refer to www.ASSIST.org for transfer details or see a counselor for additional details.

ASSOCIATE IN ARTS DEGREE: Students selecting this option must complete all of the required courses for Fresno City College AA/AS General Education Pattern. This option may not adequately prepare the student for transfer to a 4 -year institution.

CSU/GE: Students intending to transfer to a CSU should complete this option. Students selecting this option must complete all of the required courses for CSU GE Certification.

IGETC: Students who intend to transfer to a UC should complete this option. Students selecting this option must complete all of the required courses for IGETC Certification.

## AREAS OF EMPHASIS:

Choose one of the following "Area of Emphasis":
American Sign Language
Anthropology/Criminology
Anthropology/Economics/Geography
Asian Languages
Cultural Studies
Foreign Languages
History/Political Science
Romance Languages
Social Sciences
Sociology
Spanish
Complete the minimum number of units required in the "Area of Emphasis".

For All Options: complete the necessary Fresno City College Graduation and Competency requirements.

Electives may be necessary to total 60 degree applicable units required for the associate degree.

## LIBERAL ARTS WITH AN EMPHASIS IN AMERICAN SIGN LANGUAGE - MAJOR \#5101

This program is designed to acquaint students with ASL and with an understanding of the culture and history of the people who use the Language.

It will also encourage them to appreciate the complexities of the multicultural society in which they live. Students will acquire the necessary sign language skills to succeed in everyday life experiences, vocational programs, and university transfer courses.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Students will acquire and demonstrate signing, skills at the interme-diate-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 18 units from the following: Units
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 ........................ 3
Total $\quad 18$
*Note: 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 bave completed 30-40 units and are within one year of graduation.

## LIBERAL ARTS DEGREE WITH AN EMPHASIS IN ANTHROPOLOGY/CRIMINOLOGY

- MAJOR \#5106

This program is designed to provide students with a foundation in the social science disciplines related to forensic investigation. The program offers students an introduction to the intersection between the study of humans and their physical remains and the legal contexts of such analyses. This area of emphasis will be an ideal choice for students planning to transfer to the California State University or University of California as students can satisfy their general education requirements, plus focus on transferable course work that relates to majors at the specific college/university of his/ her choice. With this emphasis students could major in either of the two disciplines at their transfer institution. *Students are encouraged to review the lower division requirements at their planned transfer institution as a major in anthropology with a forensics emphasis may require courses in other disciplines such as mathematics, chemistry and biology.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

Upon completion of the Associates in Arts with an Emphasis in Criminology/ Anthropology students will:

1. Be academically prepared to transfer to a four-year college.
2. Have a basic level of knowledge of the process of identification and classification of skeletonized human remains.
3. Have basic skills in criminal investigation and crime scene processing.
4. Have developed skills in critical thinking.

## CORE COURSES: Select 19 Units from the following: Units ANTHRO 1 Biological Anthropology .. 3

Select six units from the following Anthropology courses: ANTHRO 2/2H

Cultural Anthropology, or Honors Cultural Anthropology ........................ 3
ANTHRO 4 Introduction to Archaeology ................................ 3
ANTHRO 15 Laboratory Methods in Archaeology ..................... 4
ANTHRO 16A Field Archaeology I.............................................. 2
ANTHRO 24 Doing Archaeology: Hands-0n!.........................1.5
Total $\quad 13.5$
CRIM 1 Introduction to Criminology............................... 3
CRIM 8 Criminal Investigation ....................................... 4
CRIM 9
Crime Scene Forensic Evidence............................ 3
Total
10

## LIBERAL ARTS DEGREE WITH AN EMPHASIS IN ANTHROPOLOGY/ECONOMICS/GEOGRAPHY <br> - MAJOR \#5107

This program is designed to acquaint students with the diversity of human culture, the environments in which cultures exist, the patterns of resource use that they practice, and the effects of modern economic practices and globalization on the peoples of the world. This area of emphasis will be an ideal choice for students planning to transfer to the California State University or University of California as students can satisfy their general education requirements, plus focus on transferable course work that relates to majors at the specific college/university of his/her choice. With this emphasis students could major in any of the three disciplines or other majors at various transfer institutions that focus on international/ global issues.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

Upon completion of the AA with an Emphasis in Anthropology/Economics/Geography students will:

1. Be academically prepared to transfer to a four-year college.
2. Be prepared to enter the workforce and society with the skills and knowledge needed to effectively interact with people from other cultures.
3. Have an awareness of the rich cultural and geographic diversity of the world.
4. Have the ability to apply economic concepts to understand the effects of globalization on world cultures.
5. Have developed skills in critical thinking.

18 units with 6 Units from Each Discipline: Units
AMIND 20 Native Peoples of California..................................... 3
ANTHRO 1 Biological Anthropology ........................................ 3
ANTHRO 2/2H Cultural Anthropology, or
Honors Cultural Anthropology. .. 3
ANTHRO 3 ANTHRO 4

Archaeology and World Prehistory, or
Introduction to Archaeology .. 3

| ANTHRO 8 | Language and Culture ........................................ 3 |
| :---: | :---: |
| ANTHRO 13 | Anthropology of Magic, Witchcraft, and Religion..... 3 |
| ANTHRO/CLS 28 | Ancient Mexico ................................................. 3 |
| ECON 40/40H | Introduction to Microeconomics, or Honors Introduction to Microeconomics. $\qquad$ |
| ECON 50/50H | Introduction to Macroeconomics, or Honors Introduction to Macroeconomics ... 3 $\qquad$ |
| GEOG 2 | Cultural Geography........................................... 3 |
| GEOG 4A | World Geography.............................................. 3 |
| GEOG 4B | World Geography.............................................. 3 |
| GEOG 20 | Geography in California .................................... 3 |

## LIBERAL ARTS DEGREE WITH AN EMPHASIS IN ASIAN LANGUAGES - MAJOR \#5111

This program is designed to acquaint students with Asian Languages and with an understanding of the culture and history of the people who speak it. The study of foreign languages encourages students to examine assumptions they have uncritically accepted before their college experience. Baccalaureate majors in this area may include degrees in any one of the Asiatic languages offered in this program.

This program will provide students with an understanding of the cultures and history of the people who speak the languages studied. 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. Those preparing to transfer to a California State University or a University of California should refer to the transfer requirements in the FCC catalog and consult a counselor.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Students will demonstrate listening, speaking, reading, and writing skills at the intermediate-advanced level of the target languages consistent with national standards for foreign language education.
2. Students will show evidence of the acquisition and application of grammatical structures when using the languages.
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.
20 units from the following courses
(at least two different languages): Units
ARMEN 2 High-Beginning Armenian ..................................... 5
CHIN 2 High-Beginning Chinese........................................ 5
HMONG 2 High-Beginning Hmong .......................................... 5
JAPAN 2 High-Beginning Japanese ...................................... 5

In addition, 3 units from the following courses: Units
ASAMER 1 Indo-Chinese Americans....................................... 3
ASAMER 10 Hmong Culture ................................................ 3
ASAMER 15 Introduction to Asian-Americans........................... 3
ASAMER 20 Asian-American Literature.................................... 3
Total 23

## LIBERAL ARTS DEGREE WITH AN EMPHASIS IN CULTURAL STUDIES - MAJOR \#5121

This program is designed to acquaint students with the diversity of cultures, particularly within American society. The program offers a broad foundation for the study of cultures as well as classes specific to various ethnic cultures within the United States.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

Upon completion of the Associates in Arts with an Emphasis in Cultural Studies students will:

1. Be academically prepared to transfer to a four-year college.
2. Be prepared to enter the workforce and society with a cultural awareness that facilitates consideration of different cultures and cultural norms.
3. Have an understanding of the rich cultural diversity of the United States.
4. Have developed skills in critical thinking.

18 units from any of the following (but no more than 6 units from each discipline) Units
AFRAM 1 Introduction to African American Studies................. 3
AFRAM 2 Cultural Adaptation of the African-American ........... 3
AFRAM 4 Classical and Pre Colonial Africa............................. 3
AFRAM 5 The Africans of the New World................................. 3
AFRAM 6 African Cultures and Languages............................... 3
AFRAM/WSTS 41 African-American Women's Studies.......................... 3
AMIND 20 Native Peoples of California.................................... 3
AMIND 31 American Indian Culture....................................... 3
AMIND 32 American Indian History......................................... 3
AMIND 34 The American Indian in Contemporary Society........ 3
ANTHRO 2/2H Cultural Anthropology, or Honors Cultural Anthropology ............................. 3
ANTHRO/CLS 28 Ancient Mexico ...................................................... 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
ASAMER/WSTS 30 Asian-American Women........................................... 3
$\begin{array}{ll}\text { AMST } 10 & \text { American Pluralism: A Search for Common } \\ & \text { Ground in a Multicultural Society........................... } 3\end{array}$
CLS 11 Introduction to Chicano-Latino Studies.................... 3
CLS 12 Mexican American History...................................... 3
CLS 13 Politics and the Chicano-Latino Community........... 3
CLS/SOC 14 Sociology of the Mexican American Community ..... 3

CLS/WSTS 24
CLS/HIST 29

CLS 30

CHDEV 15

GEOG 2
GEOG 4A
GEOG 4B
GEOG 20
POLSCI 24
SOC 1B
SOC 2
WSTS 10

La Chicana and Latina ............................................ 3
History of Mexico, Colonial to Contemporary
Period .................................................................... 3
Mexican American Family: Social \& Psychological Perspectives. 3

Diversity and Culture in Early Childhood Education Programs3
Cultural Geography. ..... 3
World Geography ..... 3
World Geography ..... 3
Geography in California ..... 3
International Relations. .....  3
Critical Thinking about Social Problems. ..... 3
American Minority Groups. ..... 3
Changing Roles of Women ..... 3
LIBERAL ARTS DEGREE WITH AN EMPHASIS IN FOREIGN LANGUAGES - MAJOR \#5134

This program is designed to acquaint students with foreign languages and with an understanding of the culture and history of the people who speak them. The study of foreign languages encourages students to examine assumptions they have uncritically accepted before their college experience. Students with substantial foreign language fluency who combine their language skills with a solid foundation in liberal education will find fulfilling occupations.

It will also encourage them to appreciate the complexities of the multicultural society in which they live. Students will acquire the necessary language skills to succeed in everyday life experiences, vocational programs, and university transfer courses.

## ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Students will demonstrate listening, speaking, reading, and writing skills at the intermediate-advanced level of the target language consistent with national standards for foreign language education.
2. Students will show evidence of the acquisition and application of grammatical structures when using language.
3. Students will demonstrate skills necessary to analyze and compare and contrast cultures and practices of the target language with their own culture.
4. Students will demonstrate familiarity with technologies allowing them to access sources in the following areas: current news from the target country, bibliographical and other sources related to coursework, contemporary culture sources, and interactive communication sites.
Minimum of 20 units in at least two foreign languages
Choose from the following: Units
ARMEN 2 High-Beginning Armenian ..................................... 5
CHIN 2 High-Beginning Chinese......................................... 5
FRENCH 2 High-Beginning French......................................... 5

| FRENCH 3 | Intermediate French ......................................... 5 |
| :---: | :---: |
| 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 3 | Intermediate Spanish, or |
| SPAN 3NS | Spanish for Spanish Speakers ........................... 5 |
| SPAN 4 | High-Intermediate Spanish, or |
| 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 |
|  | Total 20 |

## LIBERAL ARTS DEGREE WITH AN EMPHASIS IN HISTORY/POLITICAL SCIENCE

- MAJOR \#5141

This program is designed to acquaint students with the methodologies of history and political science and to increase their awareness of the foundations of social, cultural, and political aspects of modern society.

## ASSOCIATE OF ARTS DEGREE

## Student Learning Outcomes:

Upon completion of the AA with an Emphasis in History/Political Science, students will:

1. Be familiar with and be able to analyze the foundations of modern institutions.
2. Be familiar with and be able to analyze the political process.
3. Be familiar with the cultural diversity of society and be able to gauge its significance in politics and history.
18 Units with 9 units from each discipline: Units
HIST 1/1H Western Civilization to 1648, or Honors Western Civilization to 1648.................... 3
HIST 2/2H Western Civilization since 1648, or Honors Western Civilization since 1648................ 3
HIST 3 History of Ancient Rome ......................................... 3
HIST 11 History of the United States to 1877.......................... 3
HIST 12 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 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/CLS 29 | History of Mexico, Colonial to |
| :--- | :--- |
|  | Contemporary Period........................................... 3 |

HIST 30 California History .................................................. 3
HIST 34 History of the American Civil Rights Movement ...... 3
POLSCI 1 Modern Politics ..................................................... 3
POLSCI 2/2H American Government, or
Honors American Government............................ 3
POLSCI 5 Comparative Government....................................... 3
POLSCI 13 Legal and Judicial Reasoning................................. 3
POLSCI 24 International Relations.......................................... 3
POLSCI 25 Model United Nations............................................. 3

## LIBERAL ARTS DEGREE WITH AN EMPHASIS IN ROMANCE LANGUAGES - MAJOR \#5168

This program is designed to acquaint students with the Romance 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 will have a number of rich opportunities to explore the languages, literatures, and cultures of the Spanish, Portuguese, and French-speaking worlds.

It will also encourage them to appreciate the complexities of the multicultural society in which they live. This emphasis will assure fluency in at least two Romance languages, as well as knowledge of the cultures they represent. Students will acquire the necessary language skills to succeed in everyday life experiences, vocational programs, and university transfer courses.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Students will demonstrate listening, speaking, reading, and writing skills at the intermediate-advanced level of the target language consistent with national standards for foreign language education.
2. Students will show evidence of the acquisition and application of grammatical structures when using language.
3. Students will demonstrate skills necessary to analyze and compare and contrast cultures and practices of the target language with their own culture.
4. Students will demonstrate familiarity with technologies allowing them to access sources in the following areas: current news from the target country, bibliographical and other sources related to coursework, contemporary culture sources, and interactive communication sites.
Choose from the following courses (at least two different languages) for a minimum of 25 units: Units
FRENCH 2 High-Beginning French......................................... 5
FRENCH 3 Intermediate French .............................................. 5
PORT 2 High-Beginning Portuguese .................................... 5
SPAN 2 High-Beginning Spanish ........................................ 5

| SPAN 3 | Intermediate Spanish, or |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| SPAN 3NS | Spanish for Spanish Speakers ............................ 5 |  |  |  |
| SPAN 4 | High-Intermediate Spanish, or |  |  |  |
| SPAN 4NS | Spanish for Spanish Speakers ............................. 5 |  |  |  |
|  | Total |  |  | 25 |

## LIBERAL ARTS DEGREE WITH AN EMPHASIS IN SOCIAL SCIENCES - MAJOR \#5176

A program designed to acquaint the students with the diversity of subjects in the Social Sciences. The Social Sciences offer a broad study in human behavior. This area of emphasis will be an ideal choice for students planning to transfer to the California State University or University of California as students can satisfy their general education requirements, plus focus on transferable course work that relates to majors in liberal arts or liberal studies at CSU or UC. Each student should consult with a counselor for specific information regarding intended majors at the specific college/ university of his/her choice.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

Upon completion of the AA with an Emphasis in Social Sciences students will:

1. Be academically prepared to transfer to a four-year college.
2. Be prepared to analyze the influence of culture, economics, family, and society on individual development.
3. Identify the consequences of bias on social interactions.
4. Have developed skills in critical thinking.

18 units of core courses from any of the following courses (but no more than 6 units in one discipline):

AFRAM 1 Introduction to African American Studies................. 3
AFRAM 3 African-American Art.............................................. 3
AMIND 31 American Indian Culture........................................ 3
AMIND 32 American Indian History........................................ 3
ANTHRO 2/2H Cultural Anthropology, or Honors Cultural Anthropology .. 3
ANTHRO 3 Archaeology and World Prehistory ..... 3
ANTHRO 13 Anthropology of Magic, Witchcraft, and Religion .....  3
ASAMER 1 Indo-Chinese Americans .....  3
ASAMER 15 Introduction to Asian-Americans. ..... 3
AMST 10 American Pluralism: A Search for Common Groundin a Multicultural Society3
CLS 11 Introduction to Chicano-Latino Studies ..... 3
CLS 12 Mexican American History .....  3
CHDEV 39/PSY 39 Child Growth and Development ..... 3ECON 40/40H Introduction to Microeconomics, orHonors Introduction to Microeconomics 3
ECON 50/50HHonors Introduction to Macroeconomics.3

GEOG 2
GEOG 4A
GEOG 4B
HIST 1/1H

HIST 2/2H

HIST 15
HIST 17
HIST 18
HIST 21
HIST 22
HIST 29

HIST 30
HIST 34
HS 20
POLSCI 1
POLSCI 5
POLSCI 24
PSY 2/2H

PSY 5
PSY 15
PSY 25
PSY 33
SOC $1 \mathrm{~A} / 1 \mathrm{AH}$

SOC 1B
SOC 2
SOC/HS 10
SOC/CLS 14
SOC 31
SOC 32
WSTS 10

Cultural Geography................................................ 3
World Geography................................................... 3
World Geography................................................... 3
Western Civilization to 1648, or Honors Western Civilization to 1648
Western Civilization since 1648, or
Honors Western Civilization since 1648................ 3
History of the British Isles ....................................... 3
History of the Muslim World................................... 3
History of Ancient Greece ........................................ 3
United States Civil War........................................... 3
History of American Women .3

History of Mexico, Colonial to Contemporary
Period
California History .................................................. 3
History of the American Civil Rights Movement ....... 3
Introduction to Social Welfare................................. 3
Modern Politics 3

Comparative Government....................................... 3
International Relations. .. 3
General Psychology, or
Honors General Psychology ................................ 3
Social Psychology.................................................. 3
Psychology of Religion........................................... 3
Human Sexuality ................................................... 3
Personal and Social Adjustment.............................. 3
Introduction to Sociology, or
Honors Introduction to Sociology........................ 3
Critical Thinking about Social Problems................. 3
American Minority Groups...................................... 3
Introduction to Aging Studies.................................. 3
Sociology of the Mexican American Community ..... 3
The Child in Society: A Social Problems Approach ... 3
Introduction to Marriage and Family ...................... 3
Changing Roles of Women ..................................... 3

## LIBERAL ARTS DEGREE WITH AN EMPHASIS IN SPANISH - MAJOR \#5183

This program is designed to acquaint students with the Spanish language and with an understanding of the culture and history of the people who speak it. The study of foreign languages encourages students to examine assumptions they have uncritically accepted before their college experience. Students with substantial foreign language fluency who combine their language skills with a solid foundation in liberal education will find fulfilling occupations. It will also encourage them to appreciate the complexities of the multicultural society in which they live. Students will acquire the necessary language skills to succeed in everyday life experiences, vocational programs, and university transfer courses.

## ASSOCIATE IN ARTS DEGREE <br> Student Learning Outcomes:

1. Students will demonstrate listening, speaking, reading, and writing skills at the intermediate-advanced level of the target language consistent with national standards for foreign language education.
2. Students will show evidence of the acquisition and application of grammatical structures when using language.
3. Students will demonstrate skills necessary to analyze and compare and contrast cultures and practices of the target language with their own culture.
4. Students will demonstrate familiarity with technologies allowing them to access sources in the following areas: current news from the target country, bibliographical and other sources related to coursework, contemporary culture sources, and interactive communication sites.

## Select 15 units from the following courses:

## Non-native speakers <br> Units

SPAN 2 High-Beginning Spanish ....................................... 5
SPAN 3 Intermediate Spanish............................................. 5
SPAN 4 High-Intermediate Spanish .................................... 5 OR

## Native speakers <br> Units

SPAN 2 High-Beginning Spanish ......................................... 5
SPAN 3NS Intermediate Spanish for Spanish Speakers.............. 5
SPAN 4NS High-Intermediate Spanish for Spanish Speakers .... 5
Select 8 units from the following: Units
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
Total 23

## LIBRARY TECHNOLOGY

## LIBRARY TECHNOLOGY - MAJOR \#5171

Program prepares students to work as a paraprofessional in a variety of libraries.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Given an aspect of library service, describe the purpose of the library paraprofessional.
2. Given a specific type of library, describe the structure and staff function within it.

## REQUIRED COURSE WORK <br> UNITS

LIBSKL 2 Information and Computer Literacy ........................ 3
LITEC 51 Introduction to Library Services ............................... 3
LITEC 52A Organization of Information.................................. 3

LITEC 52B Collection Management.......................................... 1
LITEC 54 Literature and Services for Youth............................. 3
LITEC 55 Library Public Service ............................................. 3
LITEC 56 Information Technology.......................................... 3
LITEC 57 Reference: Print and Online Sources........................ 3
Total 22
Note: Requires completion of the minimum (22 units). Additionally requires completion of the associate degree requirements found in the Fresno City College Catalog. Students seeking an associate degree may apply for an evaluation atAdmissions and Records after they have completed 30-40 units and are within a year of graduation.

## LIBRARY TECHNOLOGY - MAJOR \#5171

Certificate of Achievement prepares students to work as a paraprofessional in a variety of libraries.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Given an aspect of library service, describe the purpose of the library paraprofessional.
2. Given a specific type of library, describe the structure and staff function within it.
REQUIRED COURSE WORK Units
LIBSKL 2 Information and Computer Literacy ......................... 3
LITEC 51 Introduction to Library Services .............................. 3
LITEC 52A Organization of Information................................... 3
LITEC 52B Collection Management......................................... 1
LITEC 54 Literature and Services for Youth............................. 3
LITEC 55 Library Public Service ............................................. 3
LITEC 56 Information Technology......................................... 3
LITEC 57 Reference: Print and Online Sources........................ 3
Total 22

## MANUFACTURING TECHNICIAN

- MAJOR \#8061

This curriculum provides training in maintenance mechanic, electrical control systems, and principles of industrial refrigeration (ammonia) systems.

## CERTIFICATE

## Student Learning Outcomes:

1. Demonstrate satisfactory knowledge of pneumatic/hydraulic systems.
2. Demonstrate satisfactory knowledge of oxyacetylene and arc welding processes, and use of common hand tools.
3. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.
4. Write programs in ladder logic, load and troubleshoot the programs, and operate the system.

| REQUIRED COURSES |  | Units/Hours |
| :---: | :---: | :---: |
| AC 353 | Principles of Industrial Refrigeratio | .......... 52 Hours |
| EST 50 | Introduction to Electronics .......... | ....... 2.5 Units |
| EST 55A | Digital Concepts ................. | ...... 3 Units |
| EST 58 | Programmable Logic Controllers . | ......... 3 Units |
| EST 59 | Instrumentation Systems ............ | ..... 3 Units |
| MMCTC 370 | Fundamentals of Welding and Machine Shop | .... 300 Hours |
| MMCTC 371 | Fundamentals of Hydraulics and |  |
|  | Pneumatics .............................. | .... 300 Hours |
| MMCTC 372 | Electrical Fundamentals............... | ....... 300 Hours |

## MARKETING

## MARKETING - MAJOR \#2110

This curriculum is designed for students planning to enter the marketing fields of retailing, wholesaling, general selling, and advertising.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Develop and implement a marketing plan in response to market opportunities.
2. Assess and apply technology to appropriate marketing activities.
3. Design, write, and execute a promotional plan including the formulation of selling strategies.
4. Apply effective leadership skills while managing marketing functions within a business enterprise.

## FIRST YEAR

## First Semester Units

MKTG $10 \quad$ Principles of Marketing........................................... 3
MKTG 11 Selling and Sales Management .............................. 3
Associate Degree Requirements.......................................................... 10
Total 16
Second Semester Units
BA 33 Human Relations in the Workplace ......................... 3
CIT 15 Computer Concepts ................................................ 3
MKTG 12 Advertising and Promotion.................................... 3
Associate Degree Requirements............................................................ 7 Total 16

## SECOND YEAR

First Semester Units
MKTG 14 Retailing .............................................................. 3
Associate Degree Requirements.......................................................... 10
Total 13

Second Semester Units
MKTG 21 Digital Marketing.................................................. 3
BT 115 Refresher Math..................................................... 3
Associate Degree Requirements.......................................................... 10
Total 16
Recommended Electives: ACCTG 4A; BA 5, 10; MKTG 17, 19. (MKTG 19, 1st \& 2nd semester, should be equivalent to 500 hours of work experience.)

Note: Associate degree requirements are listed on page 32.

## MARKETING - MAJOR \#2110

This curriculum is designed for students planning to enter the marketing fields of retailing, wholesaling, general selling, and advertising/promotion.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Develop and implement a marketing plan in response to market opportunities.
2. Assess and apply technology to appropriate marketing activities.
3. Design and execute a promotional plan including the formulation of selling strategies.
4. Apply effective leadership skills while managing marketing functions within a business enterprise.

## REQUIRED COURSES <br> Units

BA 33 Human Relations in the Workplace ......................... 3
BT 115* Refresher Math...................................................... 3
CIT 12 Computer Literacy.................................................. 3
MKTG $10 \quad$ Principles of Marketing.......................................... 3
MKTG 11 Selling and Sales Management .............................. 3
MKTG 12 Advertising and Promotion..................................... 3
MKTG 14 Retailing............................................................... 3
MKTG 19 Work Experience (Cooperative), Occupational......... 2
MKTG 21 Digital Marketing................................................... 3
Total 26

* Requirements and units will be waived if knowledge and skill in the subject matter can be demonstrated.


## ADVERTISING - MAJOR \#2113

A step incentive certificate signifying proficiency in advertising and sales promotion.

## CERTIFICATE

## Student Learning Outcomes:

1. Describe each element in the promotion mix.
2. Identify appropriate media for various promotional situations.
3. Develop and implement a marketing media plan in response to market opportunities.
4. Formulate promotion and selling strategies.
5. Display soft skills required for workplace success including teambuilding, conflict management, communication, and professional behavior.
REQUIRED COURSES Units
MKTG $10 \quad$ Principles of Marketing ..... 3
MKTG 12 Advertising and Promotion. ..... 3
MKTG 21 Digital Marketing ..... 3
Total ..... 9

## FASHION MERCHANDISING - MAJOR \#2152

A step incentive signifying proficiency for entry-level fashion merchandising positions.

## CERTIFICATE

## Student Learning Outcomes:

1. Apply knowledge and understanding of key elements of the fashion industry to the areas of entry-level fashion merchandising.
2. Demonstrate an understanding and application of appropriate design and merchandising concepts through the creation of a visual display.
3. Demonstrate a strategic understanding of all elements of the retailing mix through application of retailing case studies/scenarios.
REQUIRED COURSES ..... Units
MKTG 14 Retailing. ..... 3
MKTG 17 Visual Merchandising. ..... 3
MKTG 22 Introduction to Fashion Merchandising ..... 3
Total ..... 9
MARKETING, FASHION MERCHANDISING - MAJOR \#2152

This degree prepares students for employment in the field of Fashion Merchandising.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcome:

1. Integrate the elements of fashion design into the marketing and entrepreneurial concepts of retailing, merchandising, promotion, and personal sales.

## REQUIRED CORE COURSES

| ART 7 | Beginning Drawing, or |
| :---: | :---: |
| INTRDSN 7 | Interior Desig |

BA 51 Business Planning and New Venture Launch ........ 1.5
MKTG 10 Principles of Marketing...................................... 3
MKTG 11 Selling and Sales Management............................. 3
MKTG 12 Advertising and Promotion................................. 3
MKTG 14 Retailing........................................................... 3
MKTG 17 Visual Merchandising, ........................................ 3
MKTG 21 Digital Marketing............................................ 3
MKTG 22 Introduction to Fashion Merchandising................ 3
Total 25.5
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 32.
3. General Education requirements for transfer certification are on page 40.

## MARKETING, FASHION MERCHANDISING - MAJOR \#2152

This certificate prepares students for employment in the field of Fashion Merchandising.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcome:

1. Integrate the elements of fashion design into the marketing and entrepreneurial concepts of retailing, merchandising, promotion, and personal sales.
REQUIRED CORE COURSES Units
$\begin{array}{ll}\text { ART } 7 & \text { Beginning Drawing, or } \\ \text { INTRDSN } 7 & \text { Interior Design ............................................................... }\end{array}$
BA 51 Business Planning and New Venture Launch ........ 1.5
MKTG $10 \quad$ Principles of Marketing........................................... 3
MKTG 11 Selling and Sales Management ............................... 3
MKTG 12 Advertising and Promotion..................................... 3
MKTG 14 Retailing.............................................................. 3
MKTG 17 Visual Merchandising, ............................................ 3
MKTG 21 Digital Marketing................................................... 3
MKTG 22 Introduction to Fashion Merchandising ................... 3
TA 36 Costume Design...................................................... 3
Total 25.5
Students are required to establish eligibility for English 125 and 126 or ESL 67 and 68.

## MARKETING, RETAIL MANAGEMENT - MAJOR \#2055

The program prepares current and future retail employees for the fast paced, ever changing challenges in a competitive retail environment. The program is designed to meet the needs of the retail industry and is endorsed by leading retailers across the nation, including partner companies of the Western Association of Food Chains.

## ASSOCIATE IN SCIENCE DEGREE AND

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Analyze a current marketing situation to identify retail opportunities.
2. Demonstrate effective leadership skills while managing marketing functions within a business enterprise.
3. Describe and identify appropriate application of finance and budgeting activities related to retail management.
4. Identify and describe the types of retailers and appropriate distribution methods for each type of retail situation.
5. Display soft skills required in a retail environment including customer service, teambuilding, time management, conflict management, communication, and professional behavior.

| First Semester |  | Units |
| :---: | :---: | :---: |
| BA/BT 5 | Workplace Communication............ | $\ldots$ |
| BA 33 | Human Relations in the Workplace ..... | $\ldots$ |
| BA 43 | Principles of Management.................. | ....... 3 |
| CIT 15 | Computer Concepts .... | ... 3 |
|  | Total | 12 |
| Second Semester |  | Units |
| BA 31 | Human Resource Management.......... | ........ 4 |
| BT 131 | Applied Accounting, or |  |
| ACCTG 4A | Financial Accounting....................... | ...3.5-4 |
| MKTG 10 | Principles of Marketing..................... | ........ 3 |
| MKTG 14 | Retailing......................................... | ........ 3 |
|  | Total | 13.5-14 |

REQUIRED COURSES

## Units

BA 33 Human Relations in the Workplace .......................... 3
MKTG 10 Principles of Marketing............................................ 3
MKTG 14 Retailing............................................................... 3
Total
9

## MATHEMATICS FOR TRANSFER <br> - FORMERLY MATHEMATICS - MAJOR \#6250

The Associate in Science in Mathematics for Transfer is designed to prepare students for further study in mathematics or in the sciences at the university level. It is also intend to provide students with a solid mathematics background in preparation for graduate level study or research in most majors. The Associate in Science in Mathematics for Transfer is specifically designed for students who plan to complete a bachelor's degree in mathematics at a CSU campus. To earn the Associate in Science in Mathematics for Transfer, students must complete 60 required semester units of CSU-transferable coursework, CSU-GE Breath or IGETC requirements and 20-21 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. The local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admissions and transfer requirements.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Students will solve application problems in the natural sciences, management sciences, and social sciences using sound mathematical principles.
2. Students will demonstrate algebraic proficiency when using the concepts taught in each course to solve multi-step problems.
3. Students will use limits, derivatives, and integrals to calculate rates of change and infinite sums.
REQUIRED CORE COURSES ..... Units
MATH 5A Mathematical Analysis I. .....  .5
MATH 5B Mathematical Analysis II .....  4
MATH 6 Mathematical Analysis III. .....  4
Total ..... 13
GROUP A: Select a minimum of seven units from GroupsA \& B with at least three units from Group A. Units
MATH 7 Introduction to Differential Equations. ..... 4
MATH 26 Elementary Linear Algebra. ..... 3

## GROUP B: Select a minimum of four units from Group B if

 less than seven units in Group A were selected. Units CSCI 40 Programming Concepts \& Methodology I................. 4 MATH 11MATH 42
PHYS 4A
Elementary Statistics, or
Statistics for the Behavioral Sciences ................... 4
Physics for Scientists and Engineers. ... 4

## 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 260 D 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 IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Identify common medical conditions and diseases.
2. Perform clinical skills commonly associated in the physician's office.

REQUIRED CORE COURSES Units
BIOL 5 Human Biology ................................................... 3.5
BT 23 Job Search and Workplace Skills .............................. 3
CIT 15 Computer Concepts ................................................ 3
FN 40 Nutrition............................................................... 3
HIT 10 Medical Terminology ............................................. 3
HLTH 2 First Aid and Safety............................................... 2

HS 24 Interviewing and Counseling.................................. 3
MA 1
MA 2
MA 4
MA 5
MA 6A
MA 6B
MA 19

Note: Requires additional general education units for two-year Associate in Science degree

## MEDICAL ASSISTANT-CLINICIAN - MAJOR \#2121

This curriculum is designed for the student who desires employment and advancement in the medical facility assisting the physician with the diagnosis and treatment of the patient. Medical Assisting is an entry level career in the medical field. ADMISSION POLICY Enrollment is limited in the Medical Assistant-Clinician Program. There are no restrictions as to age, race, sex or marital status. In order to qualify for admission to the program, the applicant must have met all of the following conditions:

1. Graduated from high school or complete the General Educational Development (GED) test with an average score of 45 .
2. Completed Math 260D or test score that would qualify the student to place out of or above Math 260D.
3. Completed an Academic Summary Form for the Medical AssistantClinician 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 Units
MA 1 Legal and Ethical Concepts..................................... 2
MA 2 Pharmacology ..................................................... 3
MA 4 Office Lab Procedures............................................. 4
MA 5 Diagnostic and Therapeutic Procedures................... 4
MA 6A Clinical Training................................................... 3
MA 6B Advanced Training ................................................. 3
MA 19 Work Experience (Cooperative), Occupational......1-8 Total 20

## MUSIC

Associate Degree for Transfer

A Degree with a Guarantee.w

## MUSIC FOR TRANSFER - MAJOR \#5805

The Associate in Arts in Music for Transfer degree is intended for students who plan to complete a Bachelor's degree in music studies at a CSU campus. Students completing the transfer degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts this degree will be required to complete no more than 60 units after transferring to earn a bachelor's degree. The Associate in Arts in Music for Transfer degree may not be the best option for students intending to transfer to a particular CSU campus or a university that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Perform music of at least three different time periods.
2. Hear, analyze, read, and write music.
3. Ability to distinguish historical musical styles while interpreting appropriate conducting patterns.
REQUIRED CORE COURSES Units
MUS 1A Music Theory I ....................................................... 3
MUS 1B Music Theory II..................................................... 3
MUS 2A Music Theory III.................................................... 3
MUS 2B Music Theory IV ..................................................... 3
MUS 7A Ear Training I....................................................... 1
MUS 7B Ear Training: Level II............................................. 1
MUS 7C Ear Training: Level III ............................................ 1
MUS 7D Ear Training: Level IV ............................................. 1
Two Units of Intermediate/Advanced class requirement to be selected from the following: Units
MUS 22 Intermediate/Advanced Piano ................................ 1
MUS 29 Intermediate/Advanced Guitar ................................ 1
MUS 42A Intermediate/Advanced Brass (Brass Choir) ............. 1
MUS 42B Intermediate/Advanced Woodwinds (Woodwind Choir) ................................................. 1
MUS 42C Intermediate/Advanced Strings (String Orchestra) .. 1
MUS 42D Intermediate/Advanced Percussion (Percussion Ensemble) ... .1
MUS 73A Intermediate/Advanced Chamber Ensemble (Brass) 1
MUS 73B Intermediate/Advanced Chamber Ensemble (Woodwinds)1

MUS 73C Intermediate/Advanced Chamber Ensemble (Strings) .. 1
MUS 73D

MUS 74A

MUS 74B
MUS 74C
MUS 74D (Percussion) ... 1
Intermediate/Advanced Brass Performance Practices. .. 1

Practices
$\qquad$
.1

Intermediate/Advanced String Performance Practices $\qquad$ .1 Intermediate/Advanced Percussion Performance Practices
For the Large Ensemble requirement, all music majors select four units from the following: Units
MUS 30 College Choir........................................................ 1
MUS 34 Fresno Chorale ... 1
MUS 40 Concert Band. ... 1
MUS 41 Jazz Ensemble .1
MUS 46 Symphony Orchestra 1

MUS 60 Symphonic Choir
MUS 61 A Cappella Choir.
MUS 68 Symphonic Band.................................................... 1
MUS 69 Wind Band............................................................ 1
MUS 70 Contemporary Jazz Ensemble................................. 1
MUS 71 Lab Jazz Ensemble ................................................. 1
MUS 75 Community Orchestra............................................ 1
MUS 76 College Philharmonic Orchestra............................. 1
This program satisfies the requirements for the Associate in Arts Degree
with a major in music and the lower division course requirements at most
California State Universities.
Music majors must select one of the following areas of specialization:
instrumental (woodwind, brass, percussion, or strings), vocal, guitar, piano, or commercial music.

Instrumental, vocal, guitar, and piano majors must take Music 1A, 1B, $2 \mathrm{~A}, 2 \mathrm{~B}, 7 \mathrm{~A}, 7 \mathrm{~B}, 9,13$, and 18 . These majors must also take the appropriate Intermediate/Advanced class and participate in a Large Ensemble every semester they are enrolled in the Music Major.

## INSTRUMENTAL MAJORS - MAJOR \#5810

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Perform music on the instrument of choice from at least three different time periods.
2. Hear, analyze, read, and write music.
3. Distinguish historical musical styles while using appropriate conducting patterns.


| MUS 13 | History of Music................................................. 3 | MUS 13 | History of Music. | 3 |
| :---: | :---: | :---: | :---: | :---: |
| MUS 18 | Basic Conducting and Score Reading .................... 2 | MUS 18 | Basic Conducting and Score Reading |  |
|  | Total 21 |  | Total | 21 |
| For the INT/ADV class requirement: |  | For the INT/ADV class requirement: |  | Units |
| MUS 29 | Intermediate/Advanced Guitar ...........................1-2 | MUS 22 | Intermediate/Advanced Piano .. | ..1-2 |
| For the Large Ensemble requirement, all guitar majors select eight units from the following: |  | For the Large Ensemble requirement, all piano majors select eight units from the following: |  |  |
| MUS 30 | College Choir................................................... 2 | MUS 30 | College Choir. |  |
| MUS 34 | Fresno Chorale ................................................. 2 | MUS 34 | Fresno Chorale |  |
| MUS 40 | Concert Band.................................................... 2 | MUS 40 | Concert Band |  |
| MUS 41 | Jazz Ensemble ................................................... 2 | MUS 41 | Jazz Ensemble |  |
| MUS 47A | Jazz Combo: New Orleans, Swing and Bop.............. 2 | MUS 47A | Jazz Combo: New Orleans, Swing and B | .... 2 |
| MUS 47B | Jazz Combo: Cool and Mainstream ........................ 2 | MUS 47B | Jazz Combo: Cool and Mainstream . |  |
| MUS 47C | Jazz Combo: Modern and Fusion........................... 2 | MUS 47C | Jazz Combo: Modern and Fusion. |  |
| MUS 47D | Jazz Combo: World Music .................................... 2 | MUS 47D | Jazz Combo: World Music . |  |
| MUS 48 | Latin Jazz Ensemble........................................... 2 | MUS 48 | Latin Jazz Ensemble. |  |
| MUS 53 | Latin Jazz Workshop.......................................... 2 | MUS 53 | Latin Jazz Workshop. |  |
| MUS 54 | Afro-Latin Ensemble .......................................... 2 | MUS 54 | Afro-Latin Ensemble |  |
| MUS 55 | Afro-Caribbean Ensemble ................................... 2 | MUS 55 | Afro-Caribbean Ensemble |  |
| MUS 60 | Symphonic Choir .............................................. 2 | MUS 60 | Symphonic Choir. |  |
| MUS 61 | A Cappella Choir.............................................. 2 | MUS 61 | A Cappella Choir. |  |
| MUS 68 | Symphonic Band.............................................. 2 | MUS 68 | Symphonic Band |  |
| MUS 69 | Wind Band....................................................... 2 | MUS 69 | Wind Band. | 2 |
| MUS 70 | Contemporary Jazz Ensemble .............................. 2 | MUS 70 | Contemporary Jazz Ensemble. |  |
| MUS 71 | Lab Jazz Ensemble ............................................ 2 | MUS 71 | Lab Jazz Ensemble . |  |
| MUS 72 | Jazz Composer's Orchestra .................................. 2 | MUS 72 | Jazz Composer's Orchestra. |  |
| MUS 77 | Studio Jazz Combo ............................................. 2 | MUS 77 | Studio Jazz Combo | 2 |
| MUS 78 | Lab Jazz Combo................................................. 2 | MUS 78 | Lab Jazz Combo.... |  |
| MUS 90 | Jazz Composers Workshop .................................. 2 | MUS 90 | Jazz Composers Workshop |  |
| MUS 91 | Jazz Composers Ensemble.................................. 2 | MUS 91 | Jazz Composers Ensemble. |  |
| MUS 92 | Vocal Jazz Ensemble.............................................. 2 | MUS 92 | Vocal Jazz Ensemble. |  |
| PIANO MAJORS - MAJOR \#5840 |  | BRASS PERFORMANCE - MAJOR \#5811 |  |  |
| 1. Perform piano music of at least three different time periods. <br> 2. Hear, analyze, read, and write music. |  | The Brass Performance Certificate Program insures 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. |  |  |
| 3. Distinguish historical musical styles while using appropriate conducting patterns. |  | Student Learning Outcomes: <br> 1. Perform solo pieces of intermediate level. |  |  |
| REQUIRED CORE COURSES Units |  | 2. Perform in large and small ensembles in performance situations. <br> 3. Compose music, hear music analytically and analyze a musical score |  |  |
| MUS 1A | Music Theory I ...................................................... 3 |  |  |  |
| MUS 1B | Music Theory II............................................... 3 | REQUIRED CORE COURSES |  | Units |
| MUS 2A | Music Theory III............................................... 3 | MUS 3 | Music Fundamentals, or |  |
| MUS 2B | Music Theory IV ............................................... 3 | MUS 1A | Music Theory I....... | ..... 3 |
| MUS 7A | Ear Training: Level I ........................................... 1 | MUS 13 | History of Music... | ..... 3 |
| MUS 7B | Ear Training: Level II......................................... 1 |  | Total | 6 |
| MUS 9 | Composition .................................................... 2 | Select four units of Intermediate/Advanced from the following: |  | Units |
|  |  | MUS 42A | Intermediate/Advanced Brass (Brass Cho | ......1-2 |


| MUS 73A | Intermediate/Advanced Chamber |
| :---: | :---: |
|  | Ensemble (Brass) ............................................1-2 |
| MUS 74A | Intermediate/Advanced Brass Performance |
|  | Practices ........................................................1-2 |
| Select four units of Large Ensemble from |  |
| the following: |  |
| MUS 40 | Concert Band................................................... 2 |
| MUS 46 | Symphony Orchestra......................................... 2 |
| MUS 68 | Symphonic Band............................................... 2 |
| MUS 69 | Wind Band...................................................... 2 |
| MUS 75 | Community Orchestra....................................... 2 |
| MUS 76 | College Philharmonic Orchestra.......................... 2 |

## GUITAR PERFORMANCE - MAJOR \#5831

The Guitar Performance Certificate Program insures 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.

## Student Learning Outcomes:

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES Units
$\begin{array}{cc}\text { MUS } 3 & \text { Music Fundamentals, or } \\ \text { MUS 1A } & \text { Music Theory I................................................. } 3\end{array}$
MUS 13 History of Music.................................................... 3
MUS 29 Intermediate/Advanced Guitar ................................. 4
Total $\quad 10$
Select four units of Large Ensemble from
the following: Units
MUS 30 College Choir.......................................................-. 2
MUS 35 City Singers............................................................ 2
MUS 39 Opera and Musical Theatre Workshop ...................... 2
MUS 39A Baroque/Classical Opera........................................ 2
MUS 39B Romantic and Modern Opera................................. 2
MUS 39C Classic Musical Theatre ................................................ 2
MUS 39D Contemporary Opera and Musical Theatre ............... 2
MUS 40 Concert Band........................................................ 2
MUS 41 Jazz Ensemble .....................................................1-2
MUS 47A Jazz Combo: New Orleans, Swing and Bop............... 2
MUS 47B Jazz Combo: Cool and Mainstream .......................... 2
MUS 47C Jazz Combo: Modern and Fusion.............................. 2
MUS 47D Jazz Combo: World Music ....................................... 2
MUS 48 Latin Jazz Ensemble.............................................. 2
MUS 53 Latin Jazz Workshop................................................ 2
MUS 54 Afro-Latin Ensemble ............................................... 2
MUS 55 Afro-Caribbean Ensemble ....................................... 2
MUS 60 Symphonic Choir ................................................1-2
MUS 61 A Cappella Choir.................................................1-2

MUS 63
MUS 64
MUS 66
MUS 67
MUS 68
MUS 69
MUS 70
MUS 71
MUS 77
MUS 78
MUS 92

Chamber Singers..................................................... 2
Vocal Ensemble ....................................................... 2
Opera Performance Practices.................................. 2
Musical Theater Performance Practices................... 2
Symphonic Band.................................................. $1-2$
Wind Band.............................................................. $1-2$
Contemporary Jazz Ensemble................................-2
Lab Jazz Ensemble ................................................-. $1-2$
Studio Jazz Ensemble............................................. 2
Lab Jazz Combo...................................................... 2
Vocal Jazz Ensemble............................................... 2

## JAZZ PERFORMANCE - MAJOR \#5812

This program satisfies the music course requirements for the certificate of achievement in Jazz Performance which provides the fundamental skills necessary for the jazz performer.

## Student Learning Outcomes:

1. Perform jazz music by reading notated music scores
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES Units
MUS 10A
Beginning Jazz Improvisation, or

Total 5
Select three units from the following: Units
MUS 1A Music Theory I ...................................................... 3
MUS 3 Music Fundamentals
MUS 4 Jazz Theory ............................................................ 3
MUS 6 Jazz Arranging and Composition.............................. 3
Select four units of Large Ensemble from
the following: Units
MUS 41 Jazz Ensemble ....................................................1-2
MUS 47A Jazz Combo: New Orleans, Swing and Bop................ 2
MUS 47B Jazz Combo: Cool and Mainstream .......................... 2
MUS 47C Jazz Combo: Modern and Fusion............................. 2
MUS 47D Jazz Combo: World Music ........................................ 2
MUS 48 Latin Jazz Ensemble............................................... 2
MUS 53 Latin Jazz Workshop............................................... 2
MUS 54 Afro-Latin Ensemble ............................................... 2
MUS 55 Afro-Caribbean Ensemble ........................................ 2
MUS 70 Contemporary Jazz Ensemble...............................1-2
MUS 71 Lab Jazz Ensemble ..............................................1-2
MUS 77 Studio Jazz Ensemble............................................. 2
MUS 78 Lab Jazz Combo...................................................... 2
MUS 92 Vocal Jazz Ensemble............................................... 2

## MUSIC THEORY - MAJOR \#5860

The Music Theory Certificate Program insures completion of the undergraduate music theory requirements necessary for the AA degree in Music and/or transfer to CSU, UC and some other public and private universities.

## Student Learning Outcomes:

1. Compose and analyze chord progressions of the common practice period
2. Analyze music scores for harmonic and formal structures of different historical, geographical, and cultural areas.
3. Write critically, synthesizing ideas and concepts about music while using correct terminology following attendance of a live music concert.
REQUIRED CORE COURSES Units
MUS 1A Music Theory I ...................................................... 3
MUS 1B Music Theory II..................................................... 3
MUS 2A Music Theory III.................................................... 3
MUS 2B
Music Theory IV $\qquad$
Total 12

## PERCUSSION PERFORMANCE - MAJOR \#5813

The Percussion Performance Certificate Program insures 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.

## 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.

Units


Select four units of Intermediate/Advanced from the following:
MUS 42D Intermediate/Advanced Brass
(Percussion Ensemble) .1-2
MUS 73D Intermediate/Advanced Chamber Ensemble (Percussion) .1-2
MUS 74D Intermediate/Advanced Percussion Performance ......
Practices 1-2
Select four units of Large Ensemble from the following:

Units

MUS 40 Concert Band........................................................ 2
MUS 46 Symphony Orchestra............................................... 2
MUS 68 Symphonic Band................................................... 2
MUS 69 Wind Band........................................................... 2
MUS 75 Community Orchestra............................................ 2
MUS 76 College Philharmonic Orchestra............................. 2

## PIANO PERFORMANCE - MAJOR \#5841

The Piano Performance Certificate Program insures 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.

## Student Learning Outcomes:

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES
Units
MUS 3
MUS 1A
MUS 13
MUS 22
Music Fundamentals, or
Music Theory I.
. 3
History of Music..................................................... 3
Intermediate/Advanced Piano ................................. 4

Select four units of Large Ensemble from the following:

Units
MUS 30 College Choir.....................................................1-2
MUS 35 City Singers........................................................... 2
MUS 39 Opera and Musical Theatre Workshop ..................... 2
MUS 39A Baroque/Classical Opera......................................... 2
MUS 39B Romantic and Modern Opera................................. 2
MUS 39C Classic Musical Theatre ........................................ 2
MUS 39D Contemporary Opera and Musical Theatre ............... 2
MUS 40 Concert Band........................................................ 2
MUS 41 Jazz Ensemble .....................................................1-2
MUS 47A Jazz Combo: New Orleans, Swing and Bop................ 2
MUS 47B Jazz Combo: Cool and Mainstream .......................... 2
MUS 47C Jazz Combo: Modern and Fusion............................. 2
MUS 47D Jazz Combo: World Music ....................................... 2
MUS 48 Latin Jazz Ensemble............................................... 2
MUS 53 Latin Jazz Workshop................................................ 2
MUS 54 Afro-Latin Ensemble ............................................. 2
MUS 55 Afro-Caribbean Ensemble ...................................... 2
MUS 60 Symphonic Choir ................................................. $1-2$
MUS 61 A Cappella Choir.................................................1-2
MUS 63 Chamber Singers................................................... 2
MUS 64 Vocal Ensemble ...................................................... 2
MUS 66 Opera Performance Practices.................................. 2
MUS 67 Musical Theater Performance Practices................... 2
MUS 68 Symphonic Band................................................... $1-2$
MUS 69 Wind Band............................................................2
MUS 70 Contemporary Jazz Ensemble...............................1-2
MUS 71 Lab Jazz Ensemble ...............................................1-2
MUS 77 Studio Jazz Ensemble............................................. 2
MUS 78 Lab Jazz Combo..................................................... 2
MUS 92 Vocal Jazz Ensemble.............................................. 2

## STRING PERFORMANCE - MAJOR \#5814

The String Performance Certificate Program insures 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.

## Student Learning Outcomes:

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES Units
$\begin{array}{cr}\text { MUS } 3 & \text { Music Fundamentals, or } \\ \text { MUS 1A } & \text { Music Theory I.................................................. } 3\end{array}$
MUS 13 History of Music.................................................... 3
Total 6
Select four units of Intermediate/Advanced from the following: Units

| MUS 42C | Intermediate/Advanced Brass |
| :--- | :--- |
|  | (String Orchestra).............................................1-2 |

$\begin{array}{ll}\text { MUS 73C } & \text { Intermediate/Advanced Chamber Ensemble } \\ & \text { (Strings) .............................................................2-... }\end{array}$
$\begin{array}{ll}\text { MUS 74C } & \text { Intermediate/Advanced String Performance } \\ & \text { Practices ................................................................... }\end{array}$
Select four units of Large Ensemble from Units
the following:
MUS 46 Symphony Orchestra...........................................1-2
MUS 75 Community Orchestra..........................................1-2
MUS 76 College Philharmonic Orchestra...........................1-2

## VOCAL PERFORMANCE - MAJOR \#5821

The Vocal Performance Certificate Program insures that the vocal music major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

## Student Learning Outcomes:

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES Units
$\begin{array}{ll}\text { MUS 3 } & \text { Music Fundamentals, or } \\ \text { MUS 1A } & \text { Music Theory I.................................................. } 3\end{array}$
MUS 13 History of Music.................................................... 3
MUS 26 Intermediate/Advanced Guitar ................................ 4
Total $\quad 10$


## WOODWIND PERFORMANCE - MAJOR \#5815

The Woodwind Performance Certificate Program insures 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.

## Student Learning Outcomes:

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES Units
$\begin{array}{cr}\text { MUS } 3 & \text { Music Fundamentals, or } \\ \text { MUS 1A } & \text { Music Theory I.................................................. } 3\end{array}$
MUS 13 History of Music..................................................... 3
Total 6
Select four units of Intermediate/Advanced from the following:

Units
MUS 42B
Intermediate/Advanced Brass (Woodwind Choir)$.1-2$

MUS 73B Intermediate/Advanced Chamber Ensemble
(Woodwinds) ..... $.1-2$

MUS 74B Intermediate/Advanced Woodwind Performance ......
Practices
Select four units of Large Ensemble from the following: Units
MUS 40 Concert Band ..... 2
MUS 46 Symphony Orchestra .....  2
MUS 68 Symphonic Band ..... 2
MUS 69 Wind Band ..... 2
MUS 75 Community Orchestra .....  2
MUS 76 College Philharmonic Orchestra ..... 2
COMMERCIAL MUSIC
COMMERCIAL MUSIC - MAJOR \#5850This program satisfies the music course requirements for the associateof science degree in commercial music and satisfies the requirements forthe associate of science degree with a major in commercial music or musicindustry and the lower division course requirements at California stateuniversities. The commercial music major must take MUS 3 or MUS 1A,7 A, MUS 24 , MUS 20, MUS 21, MUS 17, MUS 8, MUS 111, MUS 112, MUS5. Commercial Music majors must also take at least four units of LargeEnsemble and 3 units of Music Electives.
ASSOCIATE IN SCIENCE DEGREE
Student Learning Outcomes:

1. Utilize current music technology to create, notate, and record music
2. Distinguish the fundamentals of form, theory, history, and performanceas it relates to commercial music.3. Correctly describe the development and current structure of the musicindustry as it applies to a career in commercial music.
REQUIRED CORE COURSES ..... Units
MUS 3 or Music Fundamentals, or
Music Theory I ..... 3
MUS 5 Computer Music Production ..... 3
MUS 7A Ear Training: Level I ..... 1
MUS 8 Audio Engineering .....  3
MUS 17 History of Rock ..... 3
**MUS 20 Beginning Piano: Level I .....  2
***MUS 21 Beginning Piano: Level II ..... 2
*MUS 24 Elementary Voice: Level I ..... 1.5
MUS 111 The Music Business .....  3
MUS 112 Introduction to Finale. ..... 2
Total ..... 23.5
For the Large Ensemble requirement select four units from the following: ..... Units
MUS 30 College Choir ..... 2
MUS 34 Fresno Chorale ..... 2
MUS 40 Concert Band .....  2
MUS 41 Jazz Ensemble ..... 2
MUS 47A Jazz Combo: New Orleans, Swing and Bop. ..... 2

| MUS 42A | Intermediate/Advanced Brass (Brass Choir) ..........1-2 |
| :---: | :---: |
| MUS 42B | Intermediate/Advanced Woodwinds <br> (Woodwind Choir) $\qquad$ 1-2 |
| MUS 42C | Intermediate/Advanced Strings <br> (String Orchestra) |
| MUS 42D | Intermediate/Advanced Percussion <br> (Percussion Ensemble) $\qquad$ 1-2 |
| MUS 46 | Symphony Orchestra.......................................... 2 |
| MUS 48 | Latin Jazz Ensemble.......................................... 2 |
| MUS 49 | Advanced Large Ensembles ................................. 1 |
| MUS 57 | Solo Repertoire Studies I..................................... 1 |
| MUS 59 | Advanced Chamber Ensembles ............................. 1 |
| MUS 60 | Symphonic Choir .............................................. 2 |
| MUS 63 | Chamber Singers .............................................. 2 |
| MUS 64 | Vocal Ensemble ............................................... 2 |
| MUS 68 | Symphonic Band............................................... 2 |
| MUS 69 | Wind Band...................................................... 2 |
| MUS 70 | Contemporary Jazz Ensemble.............................. 2 |
| MUS 71 | Lab Jazz Ensemble ........................................... 2 |
| MUS 72 | Jazz Composer's Orchestra.................................. 2 |
| MUS 73A | Intermediate/Advanced |
|  | Chamber Ensemble (Brass)..............................1-2 |
| MUS 73B | Intermediate/Advanced |
|  | Chamber Ensemble (Woodwinds)......................1-2 |
| MUS 73C | Intermediate/Advanced |
|  | Chamber Ensemble (Strings) .............................1-2 |
| MUS 73D | Intermediate/Advanced |
|  | Chamber Ensemble (Percussion).......................1-2 |
| MUS 74A | Intermediate/Advanced |
|  | Brass Performance Practices..............................1-2 |
| MUS 74B | Intermediate/Advanced |
|  | Woodwind Performance Practices ......................1-2 |
| MUS 74C | Intermediate/Advanced |
|  | String Performance Practices ............................1-2 |
| MUS 74D | Intermediate/Advanced |
|  | Percussion Performance Practices......................1-2 |
| MUS 75 | Community Orchestra....................................... 2 |
| MUS 76 | College Philharmonic Orchestra .......................... 2 |
| MUS 77 | Studio Jazz Combo ................................................. 2 |
| MUS 78 | Lab Jazz Combo............................................... 2 |
| MUS 90 | Jazz Composers Workshop .................................. 2 |
| MUS 91 | Jazz Composers Ensemble................................... 2 |
| MUS 92 | Vocal Jazz Ensemble.......................................... 2 |
| Notes: *MUS 25 or 26 may be substituted. <br> **MUS 21 or 22 may be substituted. <br> ***MUS 22 may be substituted. |  |

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 3 A or equivalent with a grade of " C " or better.
3. Completed Biology 20, Human Anatomy, and Biology 22, Human Physiology, (or equivalents) with a grade of "C" or better in each course.
4. Completed Biology 31, Microbiology, with a grade of " C " or better.
5. Completed Sociology 1A, Introduction to Sociology, or Anthropology 2, Cultural Anthropology, and Psychology 2, General Psychology, with grades of "C" or better in each course.
6. Completed English 1A, Reading and Composition, with a grade of "C" or better.
7. Completed Mathematics 103, Intermediate Algebra, or a more advanced math course with a grade of "C" or better.
8. Attained a cumulative grade point average (GPA) of " $\mathrm{C}+$ " (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 version 5 (TEAS 5) exam as delineated in the Registered Nursing Student Handbook with an overall score of $62 \%$ or better.

Notes:

> 1. The college GPA and college courses of an applicant will bave precedence over an applicant's high school GPA and courses.
> 2. Prior to registration for the semester in which the applicant is scheduled to take courses in the Registered Nursing Program, the student must submit evidence of physical examination, current immunizations, and freedom of TB by a licensed physician. The student is also required to attend a mandatory orientation meeting before the start of the semester:
> 3. Students are required to complete a background check.

## Change of Name, Address, and/or Telephone Number

Applicants and nursing students must keep the Nursing Education Office informed of any change in name, address, and/or telephone number. Failure of applicants to inform the Nursing Education Office of changes may result in loss of entry into the program.
Vocational Nursing Articulation
Procedures and application requirements specific to vocational nurse articulation into the Registered Nursing Program are available upon request.

## Previous Education in Nursing

Any person desiring to enter the Fresno City College Registered Nursing Program by transfer or challenge will be evaluated on an individual basis after all college general requirements for transfer or challenge have been met. The college has written policies and procedures for academic training in registered nursing programs. Individuals who have completed vocational
nursing programs and persons having other education in the field of nursing should contact the Director of Nursing for specific information.

## Prenursing Preparation

Prenursing students planning to transfer to four-year programs in other schools should consult the catalog of the transfer school.

## Academic Requirements

All program entry requirement courses listed above must be completed with a grade of "C" or better. In order to be eligible to apply for licensure as a Registered Nurse and to take the National Council Licensure Examination - RN, all other courses leading to the associate degree must also be completed with a grade of " C " or better. Students in the nursing program must earn a " $C$ " grade or better (or a "Pass" grade when applicable) in all required nursing courses. Less than a "C" or a "Pass" grade in any required nursing course necessitates repeating the course before continuing with the major. Registered Nursing courses must be repeated in their entirety. Course repeatability and failure policy will be followed as outlined in the Registered Nursing Student Handbook.

If, based on the professional judgment of the faculty, a student demonstrates that he/she is unsuited to nursing, is not progressing satisfactorily or is engaged in unethical, unprofessional, or illegal practices, he/she may be asked to withdraw from the program.

## State License

The successful completion of the prescribed registered nursing course sequence in addition to the other licensure and/or degree requirements qualifies the graduate for an associate in science degree and eligibility to apply for licensure as a Registered Nurse.

## ASSOCIATE IN SCIENCE DEGREE

Registered Nursing Course Sequence (All courses must be completed with a grade of " C " or better.)

## Student Learning Outcomes:

1. Students completing the Registered Nursing Program, who have their names forwarded by the college to the California Board of Registered Nursing, will pass the NCLEX-RN at $85 \%$ for first-time takers.
2. At the completion of the Registered Nursing Program students will be able to coordinate nursing care for groups of clients by applying the nursing process to successfully modify care for critical and acute care clients.

## FIRST YEAR

First Semester
Units
RN $31 \quad$ Foundations and Introduction to MedicalSurgical Nursing ................................................... 4
RN 32 Foundations and Introduction to MedicalSurgical Nursing Clinical. .. 2
RN 32A Foundations and Introduction to MedicalSurgical Nursing Skills .. 2
RN 33
RN 35A


Third Semester Units
$\begin{array}{ll}\text { RN } 51 & \text { Nursing Care of the Adult with Complex } \\ & \text { Health Problems......................................................... } 3\end{array}$
RN 52 Nursing Care of the Adult and Older Adult with Complex Health Problems Clinical................... 2 Nursing Care of the Adult and Older Adult
with Complex Health Problems Skills ................... 0.5 with Complex He the Older Adult... 0.5
Nursing Care of the ..... Nursing Care of the Oder Adul............................. 1

Fourth Semester Units
RN 61 Nursing Care of the Critically Ill Adult and Coordinator of Care ........................................ 2.5
Nursing Care of the Critically Ill Adult
and Coordinator of Care Clinical................................ and Coordinator of Care Clinical.......................... 3.5
Nursing Care of the Critically Ill Adult Skills ........ 0.5
RN 62A Nursing Care of the Critically Ill Adult Skills ......... 0.5
RN 65 Nursing Care of the Client with Behavioral and Emotional Disorders
RN 66
Nursing Care of the Client with Behavioral
and Emotional Disorders Clinical .......................... 2
Total $\quad 10.5$
Required Courses on Entry for Transfer Students from other Accredited Nursing Programs: Units
$\begin{array}{ll}\text { RN } 101 & \text { Transition to Fresno City College Registered } \\ & \text { Nursing Program ............................................. } 1.5\end{array}$
RN 102 Transition to Fresno City College Registered Nursing Program Skills .1-2

## ELECTIVE COURSES

RN 19 Work Experience (Cooperative), Occupational
RN 105 Medication Math
RN 107 Introduction to Nursing Process
Degree/Licensure Requirements
In addition to the program application requirements and the program course requirements, the following courses are required to apply for licensure.

Communication 1 or 2 . All course work must be completed with a "C" or better.

Electives to complete the AS degree requirements. All course work must be competed with a "C" or better.

Note: All application requirements, program requirements, and selection criteria are subject to change. Students will enter the selection pool based on the current catalog or catalog supplement. Contact a Fresno City College Health Career Counselor every semester for current information.

## PARALEGAL - MAJOR \#2550

This curriculum is designed for the student who desires employment and advancement in the field of paralegal work.

## ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Describe the nature and historical development of the field of paralegalism, the ethical rules applicable to paralegals and the role of the paralegal in today's law office.
2. Demonstrate basic legal research, analysis and writing skills in preparing basic legal documents.
3. Define basic legal terminology and explain the basic substantive and procedural concepts applicable to American civil and criminal law.
4. Demonstrate basic proficiency in certain selected computer software programs used in the law office for: legal forms preparation, time and billing, calendaring, litigation support and case management.

## Completion of 32 units of common-core courses.

REQUIRED CORE COURSES
Units
BA 20 Law and the Legal System....................................... 3
BT 28 Microsoft Word I.................................................... 2
BT 29 Microsoft Word II................................................... 2
PLEGAL 1 Introduction to Paralegalism ................................. 3
PLEGAL 2A Legal Research \& Writing I..................................... 3
PLEGAL 2B Legal Research \& Writing II .................................... 3
PLEGAL 6A Litigation I........................................................... 3
PLEGAL 6B Litigation II ........................................................... 3
PLEGAL 7 Law Office Practices ................................................ 3
PLEGAL 14 Law Office Computing ............................................ 3
PLEGAL 19 Work Experience (Cooperative) Occupational (300 hours) 4

Total Core Curriculum 32

## ELECTIVES Units

Choose any 2 of the following courses for a total of 6
units: Units
PLEGAL 3 Family Law............................................................ 3
PLEGAL 4 Probate ................................................................ 3
PLEGAL 5 Business Organizations.......................................... 3
PLEGAL 8 Torts/Contracts ....................................................... 3
PLEGAL 10 Criminal Law \& Procedure..................................... 3
PLEGAL 11 Evidence ............................................................... 3
PLEGAL 12 Bankruptcy........................................................... 3
PLEGAL 13 Discovery/Trial Preparation.................................... 3
PLEGAL 15 Debt Collection \& Enforcement of Judgments .......... 3
PLEGAL 17 Administrative Law/Workers' Compensation ............ 3
PLEGAL 18 Employment Law ................................................... 3
PLEGAL 20 Civil Rights and Liberties ........................................ 3
PLEGAL 156/BT 140 Legal Document Processing...................................... 3 Total 38

## 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 <br> Units

PHIL 1A/1AH Theories of Knowledge and Reality, or

Honors Theories of Knowledge and Reality.......... 3
PHIL 1C Ethics................................................................... 3
PHIL 6 Symbolic Logic ....................................................... 3
Select three of the following courses Units (min. two PHIL):
HIST 1/1H Western Civilization to 1648, or Honors Western Civilization to 1648.................... 3
HIST 2/2H Western Civilization since 1648, or Honors Western Civilization since 1648................ 3
PHIL 1B Social and Political Philosophy............................... 3
PHIL 1D World Religions..................................................... 3
PHIL 2 Critical Reasoning and Analytic Writing.................. 3
PHIL 5 Philosophy of Religion........................................... 3

## PHOTOGRAPHY

## PROFESSIONAL PHOTOGRAPHY

## PROFESSIONAL PHOTOGRAPHY <br> - 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 those in the portrait, commercial, editorial, digital, laboratory, and retail fields. Some equipment and supplies provided.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Demonstrate abilities in both digital and film disciplines of photography in creating professional quality images
2. Utilize various marketing and visual techniques to not only produce their images but distribute and promote their work to a wide range of markets.

## FIRST YEAR

First Semester Units
PHOTO 5 Introduction to Photography....................................... 3
PHOTO 12 Photoshop 1: Photoshop for Photographers.............. 3
PHOTO 15 Photography and Visual Literacy............................. 3
Total 9
Second Semester
Units
PHOTO 18 Digital Black and White Photography....................... 3
PHOTO 23 Photoshop 2: Digital Darkroom.............................. 3
PHOTO 26 Lighting Principles................................................ 3
Total 9
SECOND YEAR
First Semester Units
PHOTO 30 Editorial Photography............................................ 3
PHOTO 32 Commercial Portraiture......................................... 3
Elective ........................................................................... 3
Total $\quad 9$

## Second Semester

Units

## PHOTO 40 Professional Photographic Practices .3

PHOTO 45 Advanced Projects ..... 3
Elective .....  3
Total ..... 9
Photography Electives:
PHOTO 6 Digital Imaging Fundamentals ..... 3
PHOTO 17 Classic Black and White Photography .....  3
PHOTO 27 Alternative Photographic Processes ..... 3

| PHOTO 37 | Editorial Portraiture.......................................... 3 |
| :---: | :---: |
| PHOTO 47 | Book/Video Publishing....................................... 3 |
| PHOTO 57 | Applied Color and Alternative Photographic |
|  | Media .............................................................. 3 |

Note: Associated degree requirements are listed on page 32.

## 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 those in the portrait, commercial, editorial, digital, laboratory, and retail fields. Some equipment and supplies provided.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcome:

1. Utilize and demonstrate competency in photography in both digital and film based formats.

## FIRST YEAR

| First Semester | Units |
| :---: | :---: |
| PHOTO 5 | Introduction to Photography............................... 3 |
| PHOTO 12 | Photoshop 1: Photoshop for Photographers............. 3 |
| PHOTO 15 | Photography and Visual Literacy........................... 3 |
|  | Total 9 |
| Second Semest | er Units |
| PHOTO 18 | Digital Black and White Photography.................... 3 |
| PHOTO 23 | Photoshop 2: Digital Darkroom............................. 3 |
| PHOTO 26 | Lighting Principles............................................ 3 |

## SECOND YEAR

First Semester ..... Units
PHOTO 30 Editorial Photography ..... 3
PHOTO 32 Commercial Portraiture ..... 3
Recommended Elective from Below ..... 3
Second Semester ..... Units
PHOTO 40 Professional Photographic Practices .....  3
PHOTO 45 Advanced Projects. ..... 3
Recommended Elective from Below ..... 3Recommended Photography Electives:
PHOTO 6 Digital Imagining Fundamentals ..... 3
PHOTO 17 Classic Black and White Photography ..... 3
PHOTO 27 Alternative Photographic Processes .....  3
PHOTO 37 Editorial Portraiture. ..... 3
PHOTO 47 Book/Video Publishing. ..... 3
PHOT 57 Applied Color and AlternativePhotographic Media3

## 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. Demonstrate skills necessary to set up and use an electronic still photograph studio work stations.
2. Utilize skills in picture selection, placement and cropping with emphasis on impact and marketability.

## REQUIRED COURSES <br> Units

PHOTO 23 Photoshop 2: Digital Darkroom............................... 3
PHOTO 26 Lighting Principles................................................. 3
PHOTO 32 Commercial Portraiture.......................................... 3
PHOTO 40 Professional Photography Practices ......................... 3
PHOT 57 Applied Color and Alternative Photographic Media.

Total

## 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. Use Photoshop to selectively adjust, tone, color and manage color throughout a workflow process.
2. Organize and manage effective color management of images from input to output on high end digital printing devices.
REQUIRED COURSES ..... Units
PHOTO 23 Photoshop 2: Digital Darkroom. .....  3
PHOTO 40 Professional Photography Practices .....  3
PHOTO 47 Book/Video Publishing. .....  3
PHOTO 57 Applied Color and AlternativePhotographic Media. 3
Total ..... 12

## FINE ART PHOTOGRAPHY - MAJOR \#5224

Students taking these courses will concentrate on the fine art of photography exploring 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. Produce quality black and white and color photographs using various cameras and film and digital formats.
2. Utilize photography as a visual communication tool.

REQUIRED COURSES
Units
PHOTO 15 Photography and Visual Literacy............................. 3
PHOTO 18 Digital Black and White Photography...................... 3
PHOTO 23 Photoshop 2: Digital Darkroom.............................. 3
PHOTO 27 Alternative Photographic Processes .......................... 3
Total 12

## PHOTOJOURNALISM - MAJOR \#5225

Students in these classes will learn the art of storytelling through images and the power in conveying another person's story through their own eyes. Digital compositional and editing of storytelling images and their publication will be explored and utilized.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Describe and demonstrate the effective use of various applications of camera and lens techniques for visual story telling.
2. Produce photographs, design and layout for traditional, video and Internet visual publications.

## REQUIRED COURSES <br> Units

PHOTO 30 Editorial Photography........................................... 3
PHOTO 37 Editorial Portraiture................................................ 3
PHOTO 40 Professional Photography Practices ......................... 3
PHOTO 47 Book/Video Publishing............................................ 3
Total 12
Associate Degree
for Transfer
A Degree with a Guarantee.w

## 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 Units

PHYS $4 A$ Physics for Scientists and Engineers...................... 4
PHYS 4B Physics for Scientists and Engineers....................... 4
PHYS $4 C$ Physics for Scientists and Engineers...................... 4
MATH 5A Mathematical Analysis I.......................................... 5
MATH 5B Mathematical Analysis II ........................................ 4
MATH
Mathematical Analysis III....................................... 4

## 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:
Units
POLSCI 2/2H
American Government, or
Honors American Government. .3
LIST A: Select three of the following: ..... Units
MATH/PSY 42 Statistics for the Behavioral Sciences. .....  4
POLSCI 1 Modern Politics .....  3
POLSCI 3 Introduction to Political Theory and Thought. ..... 3
POLSCI 5 Comparative Government ..... 3
POLSC 24 International Relations. ..... 3
LIST B: Select two of the following: ..... Units
BA 20 Law and the Legal System. .....  3
ECON 25 Introduction to Economics. ..... 3
POLSIC 13 Legal and Judicial Reasoning. ..... 3
SOC 1B Critical Thinking about Social Problems ..... 3
Notes: Required Major Courses ..... 18-19 units.
CSU General Education or IGETC.
39 units. Transferable Elective as needed to reach 60 transferable units. Degree Total.......................................................... 60 units.

## 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 Associates in Arts degree in Psychology may be beneficial for individuals whose vocational plans include working in human or social services (e.g., law enforcement, education, sales, social welfare, and nursing). Students are encouraged to follow the CSU General Education-Breadth or IGETC pattern with the assistance of a counselor.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Students will apply their knowledge of psychology's major theoretical perspectives (psychodynamic, behavioral, biological, humanistic, cognitive, evolutionary, and sociocultural) and its scientific research process when studying topics of interest, including methodologies and ethical concerns within the field's subdisciplines.
2. Students will recognize and analyze the application of psychological concepts and theories to human experiences across the lifespan and within the context of various social and cultural constructs.
3. When presented with information and claims about human behavior and mental processes, students critically evaluate them within a framework that views humans as continually developing physiological, social, and psychological organisms.

## REQUIRED CORE COURSES <br> Units

## PSY 2

General Psychology, or
PSY 2H Honors General Psychology ................................ 3
PSY 36 Biological Psychology ............................................. 3
PSY 42 Statistics for the Behavior Sciences........................... 4
Total 10

## ELECTIVES

DEPTH: Choose two (2) of the following: Units
PSY 5 Social Psychology................................................. 3
PSY 12 Child Abuse........................................................... 3
PSY 16 Abnormal Psychology ............................................. 3
PSY 18 Criminal Personalities ............................................ 3
Total 6
LIFESPAN: Choose one (1) of the following: Units
PSY 25 Human Sexuality ................................................... 3
PSY 33 Personal \& Social Adjustment................................ 3
PSY 38 Lifespan Development............................................ 3
PSY 39 Child Growth and Development .............................. 3
Total 3
DIVERSITY: Choose one (1) of the following: Units
AFRAM 1 Introduction to African American Studies................. 3
AMIND 31 American Indian Culture........................................ 3
AMST $10 \quad$ American Pluralism: A Search for Common Ground in a Multicultural Society............................ 3
$\begin{array}{ll}\text { ANTHRO 2/2H } \quad \text { Cultural Anthropology, or } \\ & \text { Honors Cultural Anthropology........................... } 3\end{array}$
ASAMER 15 Introduction to Asian-Americans............................. 3
CLS 11 Introduction to Chicano-Latino Studies.................... 3
SOC 2 American Minority Groups..................................... 3
WSTS 10 Changing Roles of Women ..................................... 3 Total 3

## 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
Units

| PSY 2/PSY 2H $\quad$ General Psychology, or |  |
| :--- | :--- |
|  | Honors General Psychology ............................... 3 |

PSY 36 Biological Psychology ............................................ 3
PSY/MATH 42 Statistics for the Behavioral Sciences........................ 4
PSY 45 Introduction to Research Methods in Psychology..... 3
Select one of the following course: Units
BIOL 5 Human Biology .................................................. 3.5
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

Units
PSY 5
Social Psychology.................................................. 3
PSY 16 Abnormal Psychology ............................................ 3
PSY 25 Human Sexuality .................................................. 3
PSY 33
Personal and Social Adjustment. $\qquad$
Notes: Required Major Courses. $\qquad$ 19-20 units.
CSU General Education or IGETC. $\qquad$ 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.
6. Recognize emergency patient conditions and initiate lifesaving first aid and basic life support procedures.
7. Evaluate the performance of radiologic systems, know the safe limits of equipment operation, and report malfunctions to the proper authority.
8. Exercise independent judgment and discretion in the technical performance of medical imaging procedures.
9. Participate in radiologic quality assurance programs.
10. Assist in fluoroscopic procedures.

Classes are conducted on the Fresno City College campus. Students also attend classes at local hospitals affiliated with the program for clinical experience.

An associate in science degree will be granted upon successful completion of requirements for graduation, which includes formal hospital training. The student will be eligible to take the State licensing examination and the examination given by the American Registry of Radiologic Technologists upon successful completion of requirements for graduation.

## Admission Policy

Enrollment is limited in the Radiologic Technology Program. There are no restrictions as to age, race, or marital status. In order to qualify for admission to the program, the applicant must have met all of the following conditions:

## Application Requirements

Minimum prerequisite requirements for application to the Radiological Technology Program follow.

1. Have completed and submitted an Academic Summary Form for the Radiologic Technology Program.
2. Have graduated from high school or have an average score of 45 on the General Educational Development (GED) test.
3. Have completed Biology 24, Anatomy and Physiology (or equivalent), with a grade of "C" or better. Biology 24 may be replaced by Biology 20, Human Anatomy, and Biology 22, Human Physiology, with a grade of "C" or better in each course. Biology 24 may also be replaced by Biology 21A, Human Anatomy and Physiology I, and Biology 21B, Human Anatomy and Physiology II, with a grade of "C" or better in each course.
4. Have completed Applied Technology 11, Basic Electricity (or equivalent), with a grade of " C " or better.
5. Have attained a minimum cumulative grade point average (GPA) of "C+" (2.5) in completed college work.
6. Have no physical impairment that would preclude the performance of all radiologic technology duties.
7. 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 Tecbnology, 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 Health Science office informed of any change in name, address, and/or telephone number. Failure of applicants to inform the Health Science 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 "Pass" grade when applicable) in all program courses. Less than a "C" or a "Pass" grade in any radiologic technology course requires that the course be repeated before continuing with the major. Courses must be repeated in their entirety. Courses may be repeated once only.

Safe professional practice is necessary for retention of students in the program. If a student demonstrates that he/she is unsuited to the profession or is not progressing satisfactorily based on the professional judgment of the faculty, he/she may be asked to withdraw from the program.

| ASSOCIATE IN SCIENCE DEGREE |  |
| :---: | :---: |
| with grade of "C" or better) |  |
| Student Learning Outcome: |  |
| 1. Students will pass the ARRT National Registry Examination on the first attempt. |  |
| FIRST YEAR |  |
| First Semester | Units |
| 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 |
|  | Total 13 |
| Second Semester Units |  |
| 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 |
|  | Total 10 |
| Summer Semester Units |  |
| RAD 3 | Basic Clinical Radiologic Technology ..................... 9 |
|  | Total 9 |
| SECOND YEAR |  |
| First Semester Units |  |
| RAD 4A | Pathology in Radiologic Technology .................... 2 |
| RAD 4B | Advanced Clinical Radiologic Technology ............. 12 |
| RAD 4C | Advanced Radiologic Positioning |
|  | Laboratory-Cranium......................................... 1 |
|  | Total 15 |
| Second Semester Units |  |
| RAD 5A | Special Procedures in Radiologic Technology ......... 2 |
| RAD 5B | Specialized Clinical Radiologic Technology .......... 12 |
| RAD 5C | Fluoroscopy ...................................................... 2 |
|  | Total 16 |

RECREATION LEADERSHIP - MAJOR \#4300

This degree is designed to prepare students for employment opportunities in recreation and leisure as well as preparation for transfer to a four year university.

## Student Learning Outcomes:

1. List and define the programs and services of the recreation programs in the community.
2. Identify and apply the skills needed to be a recreational leader in a community setting.
3
RAD 1D Nursing Procedures in Radiologic Technology.3
Units
RAD 2A Radiation Biology ..... 6RAD 2C Clinical Observation Laboratory3
RAD 2D Quality Assurance in Radiologic Technology. ..... 1
Summer Semester ..... nitsTotal9
SECOND YEAR
RAD 4A Pathology in Radiologic Technology ..... 2RAD 4C Advanced Radiologic PositioningLaboratory-Cranium 1
Second Semester ..... Units
SAD 5B Secializd Clinical Ratiogic Tel
12
RAD 5C Fluoroscopy .....  2
Total ..... 16This degree is designed to prepare students for employment opportunities
ecreation and leisure as well as preparation for transfer to a four yearniversity.1. List and define the programs and services of the recreation programsIdentify and apply the skills needed to be a recreational leader in acommunity setting.
ASSOCIATE IN ARTS DEGREE
CORE COURSES ..... Units
HLTH 1 Contemporary Health Issues .....  3
HLTH 2PE 62REC 19
REC 20REC 21REC 23
PE Courses

## RESPIRATORY CARE PRACTITIONER

\author{

- 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.

## ASSOCIATE IN SCIENCE DEGREE

Respiratory Care course sequence (all must be completed with a "C" grade or better):

## Student Learning Outcome:

1. Successful completion of the Registered Respiratory Therapist (RRT) through the NBRC within six months of graduation.

## FIRST YEAR

First Semester
Units
RCARE 16 Patient Assessment................................................ 3
RCARE 17 Fundamentals of Patient Management.................... 4
RCARE 18 Physiology of the Respiratory System....................... 4
RCARE 20 Introduction to Respiratory Care............................. 5 Total 16
Second Semester Units
RCARE $21 \quad$ Applications and Procedures in Respiratory Care ................................................ 10.5

Total 10.5
SECOND YEAR
First Semester Units

RCARE 22

RCARE 24

Clinical Applications and Ventilator Management in
Respiratory Care .. 9
Neonatal and Pediatric Diseases............................... 2
Total
11


## SCHOOL TO WORK

## SCHOOL TO WORK, CLERICAL - MAJOR \#7004

The School to Work Clerical Certificate Program is designed to provide students with the opportunity to enhance their education while focusing on an environment which will encourage awareness in the clerical workforce as well as prepare students for mainstream computer classes. This certificate will validate the students' participation in the School to Work objectives at Fresno City College and enhances computer/clerical awareness of each student.

## CERTIFICATE

## Student Learning Outcomes:

1. Describe potential employment opportunities based on their educational and vocational experiences.
2. Demonstrate basic computer literacy skills.

Select a minimum of 16 units from the following list:
Units
DEVSER 262 Group Interaction for Students with Disabilities....... 2
DEVSER 272 Consumer Skills .................................................... 2
DEVSER 273 Independent Living Skills for DSPS students ............ 2
DEVSER 277 Adapted Computer Literacy ...................................... 2
DEVSER 278 Modified Word Processing....................................... 2
DEVSER 279 Modified Computer Applications .............................. 2
DEVSER 291 Strategies for Academic Success................................ 2
DEVSER 292 College Awareness Survival Skills ............................. 2

ENGL 277 Reading Skills .................................................... 2.5
ENGL 278 Reading Comprehension ..................................... 2.5
ENGL $281 \quad$ Grammar and Sentence Writing........................... 2.5
ENGL 282 Paragraph Writing ............................................... 2.5
MATH 277 Arithmetic for the Learning Disabled ....................... 2
The Certificate requires completion of 16 units within major with a 2.0/Pass or better GPA. Certificates do not appear on the transcript.

## SCHOOL TO WORK, WORKABILITY - MAJOR \#7005

The School to Work Workability Certificate Program is designed to provide students with the opportunity to enhance their education while focusing on an environment which will encourage job awareness. This certificate will validate the students' participation in the School to Work objectives of Fresno City College and enhance employment of each student.

## CERTIFICATE

## Student Learning Outcomes:

1. Describe potential employment opportunities based on their educational and vocational experiences.
2. Demonstrate time management and organizational skills.

Select a minimum of 16 units from the following list:

## Units

DEVSER 250 Workability Assess and Career Awareness................... 3
DEVSER 251 Workability Portfolio and Interview Development.... 3
DEVSER 252 Workability Strategies and Communication Skills ... 3
DEVSER 260 Workability Job Search........................................... 3
DEVSER 262 Group Interaction for Students with Disabilities....... 2
DEVSER 264 Transition to College for Student w/Disabilities........ 1
DEVSER 272 Consumer Skills ..................................................... 2
DEVSER 273 Independent Living Skills ....................................... 2
DEVSER 275 Horticultural Skills I .............................................. 2
DEVSER 276 Horticulture Skills II ................................................ 2
DEVSER 277 Adapted Computer Literacy...................................... 2
DEVSER 278 Modified Word Processing....................................... 2
DEVSER 279 Modified Computer Applications .............................. 2
DEVSER 282 Greenhouse Workforce Prep.................................... 4
DEVSER 291 Strategies for Academic Success............................... 2
DEVSER 292 College Awareness Survival Skills ............................. 2
The Certificate requires completion of 16 units within major with a 2.0/Pass or better GPA. Certificates do not appear on the transcript.

## 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 Units
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
ASL 20 Introduction to Interpreting .................................... 3
ASL 21 American Sign Language to English Translation..... 3
ASL 22 English to American Sign Language Translation..... Total 25


Associate Degree HS 20
for Transfer
A Degree with a Guarantee.w

## SOCIOLOGY FOR TRANSFER - MAJOR \#7600

The Associate in Arts in Sociology for Transfer degree is designed to acquaint students with tools to understand the functioning of the society in which they live. The degree offers students a broad and multicultural perspective of the world around them and also provides them with a solid foundation for further study in sociology. Sociology can assist in occupations such as teaching, social work, drug and alcohol counseling, police work, probation aides, juvenile hall counseling, medical work, international business, and any other occupation that places you in contact with people of diverse backgrounds. The Associate in Arts in Sociology for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Local graduation requirements
are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. To earn the associate in arts in Sociology for Transfer degree, students must complete the following requirements: Completion of 60 semester units that are eligible for transfer to the California State University, including all of the following: Students must earn a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements (CSU-GE). Completion of a minimum of 18 semester units in the associate in arts degree in Sociology for Transfer as identified by the Fresno City College catalog. Students must earn a "C" or better in all of the courses required for this degree.

## 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 <br> Units

PSY 5
Social Psychology .. 3
PSY/MATH 42
Statistics for the Behavioral Sciences, or
MATH 11
SOC 1A/1AH
Elementary Statistics .4
Introduction to Sociology, or Honors Introduction to Sociology.3
SOC 1B Critical Thinking about Social Problems ..... 3
SOC 32 Introduction to Marriage and Family .....  3
Choose one of the following 3-unit courses: ..... Units
AMST 10 American Pluralism: A Search for Common Ground in a Multicultural Society. ..... 3
Cultural Anthropology, orHonors Cultural Anthropology3
HS 20 Introduction to Social Welfare. ..... 3
American Minority Groups. ..... 3
SOC/WSTS 5 Sociology of Rape ..... 3
SOC/WSTS 7 Domestic Violence: Abuse within the Family. .....  3
SOC/HS 10 Introduction to Aging Studies. .....  3
SOC/CLS 14 Sociology of the Mexican American Community . .....  3
SOC 31 The Child in Society: A Social Problems Approach ... 3WSTS $10 \quad$ Changing Roles of Women3
Notes: Required Major Courses ..... 19 unis.
CSU General Education or IGETC. ..... 39 units.
Transferable Elective as needed to reach 60 transferable units.Degree Total.60 units.

## SPANISH - MAJOR \#5510

The Spanish Program is designed to prepare students for entry into a variety of career options requiring intermediate or better levels of fluency. The Spanish major also acquaints students with the cultures of Spanish speaking countries.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Engage in conversation using the Spanish in daily life situations.
2. Read with a certain depth of understanding magazine or newspaper articles, short stories, and literary excerpts written in Spanish.
3. Write at the advance level in a variety of modalities including personal and professional letters, short narratives, and descriptive essays.
4. Recognize and understand cultural similarities and differences between U. S. culture and that of the Spanish speaking world. Distinguish simple behavioral patterns that represent these cultures and behave in culturally appropriate ways in specific situations.

## REQUIRED CORE COURSES <br> Units

| SPAN 3 | Intermediate Spanish, or |
| :---: | :---: |
| SPAN 3NS | Spanish for Spanish Speakers ............................. 5 |
| SPAN 4 | High-Intermediate Spanish, or |
| SPAN 4NS | Spanish for Spanish Speakers ............................. 5 |

## Select a minimum of twelve (12) additional units from the following list: Units

SPAN 5 The Short Story: Mexico, Spain \& the U.S................. 4
SPAN 6 The Short Story: Latin America................................ 4
SPAN 7 Advanced Spanish: Composition \& Grammar .......... 4
SPAN 8 Advanced Spanish: Conversation............................. 4
SPAN 9 Spanish Business and Culture ................................. 4
Total 22
Notes: 1. An associate in arts degree in Spanish will be awarded to any candidate who successfully completes a total of 60 units which include associate degree requirements and a minimum of 22 units of course work as listed above. Associate degree requirements are listed on page 32. General Education requirements for transfer certification are listed on page 40.
2. Two Spanish courses can be used to fulfill the area "C" General Education requirement (in Humanities) for graduation or transfer:
3. Two of the following courses may be challenged according to Foreign Language Department policy: Spanish 1, 2.

Associate Degree
for Transfer
A Degree with a Guarantee.w

## 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 24 semester units within the major. Students must maintain a minimum 2.0 GPA , including grades of C or higher in each course taken to fulfill the major. The local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admissions and transfer requirements.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Engage in conversation using the Spanish in the daily life situation.
2. Read with a certain depth of understanding magazine or newspaper articles, short stories, and literacy excerpts written in Spanish.
3. Write at the advanced level in a variety of modalities including personal and professional letters, short narratives, and descriptive essays.
4. Recognize and understand cultural similarities and differences between U.S. culture and that of the Spanish speaking world. Distinguish simple behavioral patterns that represent these cultures and behave in culturally appropriate ways in specific situations.
REQUIRED CORE COURSES Units
SPAN 1 Beginning Spanish................................................ 5
SPAN 2 High-Beginning Spanish ........................................ 5
SPAN $3 \quad$ Intermediate Spanish, or
SPAN 3NS Intermediate Spanish for Spanish Speakers ......... 5
SPAN $4 \quad$ 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 Units
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 17 Hispanic American Culture.................................... 4
Notes:
5. Students entering the Spanish program at Spanish 2 or bigher are required to complete the specified unit requirements of the degree. Students must consult with the Foreign Language Department Cbair for approval of course substitutions.
6. Some of the above courses may bave prerequisite. See the catalog or schedule of classes.
7. The Associate Degree requires completion of the major (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.

## THEATRE ARTS - MAJOR \#5440

The Theatre Arts major is a performance oriented major. It emphasizes a "hands on" approach and places special focus on the "well rounded" theatre artist. Students who complete the program can successfully transfer to a competitive four-year university or conservatory.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Demonstrate the acting process from script and character analysis, through a performance before an audience.
2. Demonstrate basic proficiency in technical theatre production.
3. Analyze a play in context of its historical period, structure, theme, character, style and other components of drama.

## REQUIRED COURSES Units

TA 23 Technical Theatre Practicum .................................. 3
TA 25 Stagecraft, or
TA 35 Costume Craft, or
TA 36 Costume Design................................................ 3
TA $30 \quad$ Theatre Appreciation, or
TA 15C Creative Writing: Playwriting, or
TA 38 Script Analysis ..... 3
$\begin{array}{cc}\text { TA } 31 & \text { Theatre History and Literature I, or } \\ \text { TA } 32 & \text { Theatre History and Literature II ....................... } 3\end{array}$
$\begin{array}{cc}\text { TA } 41 & \text { Beginning Acting, or } \\ \text { TA } 42 & \text { Beginning Acting for Theatre Majors.................. } 3\end{array}$
TA 43 Intermediate Acting................................................ 3
TA 46 Voice for the Actor................................................... 3
Three Units from the Following Courses: Units
TA 40 Performance Practicum......................................... 3
TA 44A Actors Workshop .................................................... 3
TA 45 Kennedy Center American College Theater Festival Topics ........................................................ 2
TA 48A Teasers I............................................................. 0.5
TA 48B Teasers II ........................................................... 0.5
Recommended Electives: DANCE 9, 10, 11, 12A, 14, 16; TA 28

## 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
Units

| TA 30 | Theatre Appreciation, or |
| :---: | :---: |
| TA 31 | Theatre History and Dramatic Literature I........... 3 |
| TA 40 | Performance Practicum, or |
| TA 23 | Technical Theatre Practicum.............................. 3 |
| TA 41 | Beginning Acting, or |
| TA 42 | Beginning Acting for Theatre Majors................... 3 |

Elective Courses: Select 9 Units from the following courses:

Units
Note: TA 23 or TA 40 can be taken in this section only if they were not taken as tart of the core.
TA 23 Technical Theatre Practicum ................................. 3
TA 25 Stagecraft............................................................. 3
TA 27B Introduction to Lighting Design.............................. 3
TA 28 Introduction to Stage Makeup................................. 3
TA 36 Costume Design.................................................... 3
TA 38 Script Analysis ....................................................... 3
TA 40 Performance Practicum......................................... 3
TA 43 Intermediate Acting................................................ 3
Notes:
Required Major Courses............................................... 18 units.
CSU General Education or IGETC........................ 39 units.
Transerable Elective as needed to reach 60 transerable unis.
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 IN 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 <br> Units

TA 23 Technical Theatre Practicum .................................. 3
TA 25 Stagecraft.............................................................. 3
TA $30 \quad$ Theatre Appreciation, or
$\begin{array}{ll}\text { TA } 31 & \text { Theatre History and Literature I, or } \\ \text { TA } 38 & \text { Script Analysis.................................................. } 3\end{array}$
TA 35 Costume Crafts ...................................................... 3
TA 41 Beginning Acting, or
TA 42 Beginning Acting for Theatre Majors.................... 3
Select one of the following courses: Units
TA 27A Introduction to Scenic Design ................................. 3
TA 27B Introduction to Lighting Design.............................. 3
TA 28 Introduction to Stage Makeup................................. 3
TA 36 Costume Design..................................................... 3
Select six units from the following list Units
(Note: Courses used in the above list may not be repeated for this list.):
TA 15C Creative Writing: Playwriting................................... 3
TA 27A Introduction to Scenic Design ................................. 3
TA 27B Introduction to Lighting Design.............................. 3
TA 28 Introduction to State Makeup................................. 3
TA 29A Advanced Technical Theatre Practicum I ................. 1
TA 29B Advanced Technical Theatre Practicum II................ 1
TA 31 Theatre History and Dramatic Literature I................ 3
TA 32 Theatre History and Dramatic Literature II .............. 3
TA 36 Costume Design.................................................... 3
TA 38 Script Analysis ....................................................... 3
TA 39A Intermediate Crew Practicum I.............................. 1
TA 39B Intermediate Crew Practicum II.............................. 1
TA 40 Performance Practicum......................................... 3
TA 45 Kennedy Center American College Theater Festival Topics .2

Notes: 1. An associate in arts degree requirements will be awarded to any candidate who successfully completes a total of 60 units, which include associates degree requirements and a minimum of 24 units of course work listed above.
2. Associate degree requirements listed on page 32. General Education requirements for transfer certification are listed on page 40.
3. Recommended electives for Physical Education: DANCE 10, 11, 12A, 14, 16.

## WELDING TECHNOLOGY

## METAL FABRICATION OPTION

## METAL FABRICATION OPTION - MAJOR \#8371

Instruction in the design and fabrication of metal projects by welding and related practices. Skills will be taught in design, manufacturing processes, production techniques, and material cost estimation.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Given an idea or description, students will be able to design and plan the construction of one or more advanced metal fabricated projects.
2. From design and specifications, students will be able to determine estimated steel weights and cost calculations.
3. Students will be able to demonstrate the proper safety precautions, setup and use of tools and equipment common to metal fabrication.
4. In the construction of their project, students will apply various types of welds and other joining processes with quality workmanship to assemble the metal components of advanced projects.
5. During the construction of their project, students will demonstrate the efficient use of time and materials to produce their advanced projects.

## FIRST YEAR

First Semester Units
AT 10 Technical Computer Applications............................. 3
AT 130 Industrial Mathematics........................................... 3
WELD 2A Introduction to Welding Technology........................ 6
Second Semester Units
AT 21 Occupational Safety and Health .............................. 2
AT 40 Preparing for Employment Opportunities................ 3
WELD 2B Advanced Multi-Process Welding.............................. 5
CADD 16 3D Solid Modeling I .............................................. 3

## SECOND YEAR

First Semester Units
DRAFT 12 Drafting Practices.................................................. 3
WELD 3A Welding Design and Fabrication ............................ 5
Second Semester Units
WELD 3B Advanced Welding Design and Fabrication.............. 5
Electives .........................................................................2-3
Recommended Electives: CAM 10; CADD 24, 34; ENGR 10, 11; WELD 56.
Note: Associate degree requirements are listed on page 32.

## METAL FABRICATION OPTION - MAJOR \#8371

Instruction in the design and fabrication of metal projects by welding. Skills will be taught in design, manufacturing processes, production techniques, and material cost estimation.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Given an idea or description, students will be able to design and plan the construction of one or more advanced metal fabricated projects.
2. From design and specifications, students will be able to determine estimated steel weights and cost calculations.
3. Students will be able to demonstrate the proper safety precautions, setup and use of tools and equipment common to metal fabrication.
4. In the construction of their project, students will apply various types of welds and other joining processes with quality workmanship to assemble the metal components of their advanced projects.

## REQUIRED CORE COURSES

FIRST YEAR
First Semester Units
AT 10 Technical Computer Applications............................ 3
$\begin{array}{lr}\text { AT 130 } & \text { Industrial Mathematics, or } \\ \text { MATH 201 } & \text { Elementary Algebra.........................................-5 } \\ \text { WELD 2A } & \text { Introduction to Welding Technology }\end{array}$
WELD 2A Introduction to Welding Technology........................ 6
Second Semester Units
AT 21 Occupational Safety and Health .............................. 2
AT 40 Preparing for Employment Opportunities................. 3
WELD 2B Advanced Multi-Process Welding............................. 5
CADD 16 3D Solid Modeling I ............................................... 3
SECOND YEAR
First Semester Units
DRAFT 12 Drafting Practices.................................................. 3
WELD 3A Welding Design and Fabrication ............................. 5
Second Semester Units
WELD 3B Advanced Welding Design and Fabrication............... 5
Electives .........................................................................2-3
Recommended Electives: CAM 10; CADD 24, 34; ENGR 10, 11; WELD 56.

## PIPE AND STRUCTURAL STEEL

## PIPE AND STRUCTURAL STEEL CERTIFICATION OPTION - MAJOR \#8372

Welding technology provides an opportunity for students to prepare for employment in welding and metal occupations. Specific preparation is provided in welding and metal fabrication or pipe and steel certification procedures.

Pre-employment training for structural steel and pipe welding technicians. An emphasis is placed on developing certification code-level proficiency in the use of shielded metal arc and flux cored arc welding procedures used in the construction of components on bridges, building, and pressure vessel systems.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Students will demonstrate correct usage of all weld symbols on the American Welding Society welding symbols chart.
2. Students will weld in all welding positions.
3. Students will correctly use ASME, AWS and API codes.
4. Students will perform and weld different pipe configurations according to specification.
FIRST YEAR
First Semester Units
AT 10 Technical Computer Applications............................ 3
AT 130 Industrial Mathematics.......................................... 3
DRAFT 12 Drafting Practices................................................... 3
WELD 2A Introduction to Welding Technology........................ 6
Total
15
Second Semester Units
AT 21 Occupational Safety and Health .............................. 2
AT 40 Preparing for Employment Opportunities................. 3
WELD 2B Advanced Multi-Process Welding............................. 5
Total $\quad 10$

## SECOND YEAR

First Semester Units
$\begin{array}{ll}\text { WELD 4A } & \text { Heavy Plate, Structural Steel and Welding } \\ & \text { Certification....................................................... } 5\end{array}$
Recommended Elective ....................................................................... 3
Total 8
Second Semester Units
WELD 4 B Pipe, Tube Welding and Certification....................... 5
Recommended Elective .................................................................................
Total 8
Recommended Electives: CAM 10; CADD 14, 24; ENGR 10, 11; WELD 56.

## PIPE AND STRUCTURAL STEEL CERTIFICATION OPTION - MAJOR \#8372

Welding technology provides an opportunity for students to prepare for employment in welding and metal occupations.
Pre-employment training for structural steel and pipe welding technicians. An emphasis is placed on developing certification code-level proficiency in the use of shielded metal arc and flux cored arc welding procedures used in the construction of components on bridges, 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.

## FIRST YEAR

| First Semester | Units |
| :---: | :---: |
| AT 10 | Technical Computer Applications......................... 3 |
| AT 130 | Industrial Mathematics, or |
| MATH 201 | Elementary Algebra ......................................3-5 |
| DRAFT 12 | Drafting Practices............................................. 3 |
| WELD 2A | Introduction to Welding Technology...................... 6 |
|  | Total 15-17 |
| Second Semest | er Units |
| AT 21 | Occupational Safety and Health ............................ 2 |
| AT 40 | Preparing for Employment Opportunities............... 3 |
| WELD 2B | Advanced Multi-Process Welding........................... 5 |
|  | Total 10 |

## SECOND YEAR

First Semester Units

| WELD 4A | Heavy Plate, Structural Steel and Welding |
| :--- | :--- |
|  | Certification................................................................. 5 |

Recommended Elective ..... 3
Total ..... 8
Second Semester ..... Units
WELD $4 \mathrm{~B} \quad$ Pipe, Tube Welding and Certification ..... 5
Recommended Elective ..... 3
Total ..... 8

## 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 Units
AT 10 Technical Computer Applications............................. 3
CADD 16 3D Solid Modeling I ................................................ 3
Second Semester Units
WELD 3A Welding Design and Fabrication ............................ 5
SECOND YEAR
First Semester Units
WELD 3B Advanced Welding Design and Fabrication............... 5
Total $\quad 16$
WELDING MULTI-PROCESS - MAJOR \#8373
This certificate provides pre-employment training for an entry level job in the welding industry. Instruction in the areas of shielded metal, gas metal, gas tungsten and flux cored arc welding along with oxyacetylene cutting and plasma cutting will be presented. Skills will include welding in the flat, horizontal, vertical and overhead positions with the various processes as well as welding with aluminum and stainless steel with the Gas Metal and Gas Tungsten arc welding processes. Students will also use common power and hand tools to compliment related to the welding industry.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Students will be able to identify defects and discontinuities in their horizontal, vertical, and overhead welds according to AWS (American Welding Society) standards.
2. Given a power source, students will be able to properly set up and adjust the SMAW, GMAW, GTAW, FCAW and air carbon arc gouging machines to complete their lab assignments to AWS standards.
3. Given a drawing with weld symbols and specifications, students will be able to prepare their metal and perform the correct weld.
First Semester Units
AT 130 Industrial Mathematics........................................... 3
WELD 2A Introduction to Welding Technology........................ 6
Total 9
Second Semester Units
DRAFT 12 Drafting Practices................................................... 3
WELD 2B Advanced Multi-Process Welding............................. 5
Total 8

## WOMEN'S STUDIES - MAJor \#7610

This is a transfer program designed to inform students of the historical and contemporary issues affecting women's lives. Women's Studies offers a broad interdisciplinary approach to the study of women in society including their contrasting roles circumscribed by their culture and social institutions, their opportunities for self expression, achievement and self actualization, their relationships with parents, peers, intimates and children, and their concern for survival in a violent-prone society. Because Women's Studies is interdisciplinary, it also provides an academic background helpful to those planning careers in law, business, education and medicine.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Evaluate the role of women and gender relationships in various crossand inter-cultural contexts.
2. Analyze the study of the intersections and complications of class, race, age, ethnicity, nationality, health/disability, and sexual identity as fundamental categories of social and cultural analysis.
3. Engage in in-depth examination of one aspect of women's experience learned through (for example) a literary genre, a time period, a geographic region, or focus on a very narrow topic.
4. Connect ideas and concepts from various fields about oppression and patriarchy as these affect women to common themes or topics.
5. Evaluate the roles of women in society from a historical and sociological perspectives.
Program Requirements 20
REQUIRED CORE COURSES Units
WSTS $10 \quad$ Changing Roles of Women ..................................... 3
WSTS/HS 25 Assertiveness Training ............................................. 2
Total 5

Course Options: Select 15 units Units
WSTS/SOC 5 Sociology of Rape................................................... 3
WSTS/SOC 7 Domestic Violence: Abuse within the Family............. 3
WSTS/CLS 24 La Chicana and Latina ........................................... 3
WSTS/ENGL 36 Women in Literature ............................................... 3
WSTS/AFRAM 41 African-American Women's Studies.......................... 3
WSTS/FN 43 Women's Nutrition ................................................ 2
WSTS/BA 44 Women in Management ......................................... 3
Note: Associate degree requirements are listed on page 32.

# COURSE DESCRIPTIONS 

## Descriptions of courses offered at Fresno City College follow in alphabetical order:

## Repeating a Course

It is the policy of this District that, unless specifically exempted by statute or regulation, every course, section or class, reported for state aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets such prerequisites as may be established pursuant to Subchapter 1, Chapter 6, Division 6, Title 5 of the California Code of Regulations, commencing with Section 55000 .

Courses generally offered in only one of the two regular semesters are identified with a Fall (fall semester) or Spring (spring semester). Courses generally offered in only the evening program or during the summer session are so designated.

The State has mandated the maximum number of times a course may be repeated is three (3).

## Key to Graduation or Transfer Status Designations

The identification of the transfer acceptance of Fresno City College courses by the California State University and University of California systems was one of the outcomes of the Fresno City College Student Success Project. Listed at the end of each course description, if applicable, are abbreviations identifying the transfer or graduation status of the course. The key to the abbreviations follows:
A Associate degree applicable
CSU Transferable to the California State University system
CSU-GE Meets the general education requirements for California State University transfer certification. Completion of all courses in the California State University General Education transfer certification pattern will permit a student to transfer to a campus in the California State University system without having to complete additional lower division general education courses after transfer.
I Meets the requirements of the Intersegmental General Education Transfer Curriculum (IGETC). Completion of all IGETC requirements will permit a student to transfer to a campus in either the California State University or University of California system without having to complete additional lower division general education courses after transfer.
UC Transferable to the University of California system

## Schedule of Classes

The schedule of classes contains information necessary for registration and is available at the Admissions Office. Where no prerequisite is indicated, none is required except as explained in the section on "Prerequisites" which follows. Students should study the Schedule of Classes very carefully before completing registration.

## Course Credit Limitation

A student shall not be granted credit for the completion of a course that is a prerequisite for another course previously completed by the student.

## Prerequisites/Corequisites/ Advisories

Students are urged to study the description of courses in this catalog to ensure that prerequisites are satisfied before registering for a course. Correct registration at an early date is important.

It is the student's responsibility to be certain that he/she has 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 <br> 1-99 <br> 100-199 <br> 200-299 <br> 300-399 <br> Associate degree applicable courses that are also transferable to baccalaureate institutions Associate degree applicable courses that are NOT transferable to baccalaureate institutions Nondegree applicable credit courses 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
Admin of Justice 211
Admin of Justice 217
Admin of Justice 219
Admin of Justice 220
Admin of Justice 222
Admin of Justice 223
Admin of Justice 224
Admin of Justice 233A
Admin of Justice 233B
Admin of Justice 233C
Admin of Justice 233D
Admin of Justice 233E
Admin of Justice 233I
Admin of Justice 233 K
Admin of Justice 245
Admin of Justice 245A
Admin of Justice 245D
Admin of Justice 245E
Admin of Justice 245F
Admin of Justice 245G
Admin of Justice 245M
Admin of Justice 246A

Instructor Training
Expandable Straight Baton Instructor
Background Investigation
Requalification-Basic Course
Radar Operator
Internal Affairs Investigator
Basic Tactical Communication
Interview and Interrogation
Tactical Firearms
Firearms - Tactical Rifle
Civil Procedures for Law Enf Officers
CalGang End User Training
Police Training 0fficer (PT0)
Court \& Temporary Holding Facility
Arrest \& Control Update
Academy Instructor Certification Course Update
Arrest \& Control Techniques Update
Detective School
Driver Awareness Instructor
Driver Awareness Update
Driver Training Instructor
Electronic Weapons
Search/Arrest Warrant

Admin of Justice 268
Admin of Justice 269A
Admin of Justice 270A
Admin of Justice 270B
Admin of Justice 271A
Admin of Justice 271B
Admin of Justice 272
Admin of Justice 273
Admin of Justice 274
Admin of Justice 276
Admin of Justice 278
Admin of Justice 279
Admin of Justice 280
Admin of Justice 284
Admin of Justice 285
Admin of Justice 286
Admin of Justice 290
Admin of Justice 291
Admin of Justice 291A
Admin of Justice 293
Admin of Justice 295
Air Conditioning 250
Air Conditioning 251
Air Conditioning 252
Air Conditioning 260B
Air Conditioning 260C
Air Conditioning 260D
Auto Tech 261
Auto Tech 262A (A6)
Auto Tech 262 B (A8)
Auto Tech 262 C (Ll)
Auto Tech 281A
Auto Tech 281B
Auto Tech 282A
Auto Tech 282B
Auto Tech 283A
Auto Tech 283B
Auto Tech 284
Auto Tech 285
Auto Tech 286
Auto Tech 287
Auto Tech 292
Auto Tech 294
Biology 222
Business \& Technology 271
Computer Info Tech 202
Computer Info Tech 205
Dental Hygiene 200

Pre-Police Academy Conditioning
Advanced Officer Topics \#2
Basic Police Academy-Part 1
Basic Police Academy-Part 2
PC 832 Laws of ArrestArrest \& Control
PC 832 Firearms
Reg Basic Course-Mod Format-Mod III
Reg Basic Course-Mod Format-Mod II
Reg Basic Course-Mod Format-Mod I
Basic Supervisors
Public Safety Dispatcher
Citizens' Police Academy
Basic Correctional Academy
Communications Training Officer
Probation Core Course
Juvenile Counselor CORE Course
Firearms Instructor Course
Field Training Officer
FT0 Update
Drug Influence-H \& S 11550
Traffic Collision Investigation
Digital Unitary Controls
Digital VAV Controls
DDC Network Controllers
Electricity for Air Conditioning
Residential Heating
Advanced Troubleshooting
Clean Air Car-Diag \& Rep
Electrical/Electronic Training
Engine Performance Training
AOW Engine Performance Training
Automatic Power Trains I
Automatic Power Trains II
Suspen/Wheel Align
Auto Braking Systems
Tune-up \& Diag
Electrical Systems
Auto Air Conditioning
Auto Engines
Automotive Information Systems
Street Rod Technology
Cert Preparatory
Lamp/Brk Adj Prep
Biology Skills
Grammar Fundamentals
Introduction to Online Learning
Computer Basics
Clinical Dental Hygiene IV

Developmental Services 250
Developmental Services 251
Developmental Services 252
Developmental Services 260
Developmental Services 262
Developmental Services 264
Developmental Services 272
Developmental Services 273
Developmental Services 275
Developmental Services 276
Developmental Services 277
Developmental Services 278
Developmental Services 279
Developmental Services 282
Developmental Services 291
Developmental Services 292
EMLS 263R
EMLS 263W
EMLS 264R
EMLS 264W
EMLS 265R
EMLS 265W
English 252
English 260
English 262
English 277
English 278
English 281
English 282
Fire Technology 261
Fire Technology 265
Fire Technology 269
Math 201
Math 250
Math 255
Math 260A
Math 260B
Math 260C
Math 260D
Math 277
Nursing, Registered 201
Nursing, Registered 202
Nursing, Registered 203
Nursing, Registered 204
Nursing, Registered 205

Workability Assessment and Career Awareness
Workability Portfolio and Interview Development
Workability Strategies and Communication Skills
Workability Job Search
Group Inter for Stud w/Disabilities
Trans to College Stud w/Disabilities
Consumer Skills
Independent Living Skills
Horticulture Skills I
Horticulture Skills II
Adapted Computer Literacy
Modified Word Processor
Modified Computer Applications
Greenhouse Workforce Prep
Strategies for Academic Success
College Awareness Survival Skills
Low Intermediate Academic Reading and Vocabulary
Low Intermediate Academic Writing and Grammar
Intermediate Academic Reading and Vocabulary
Intermediate Academic Writing and Grammar
High Intermediate Academic Reading and Vocabulary
High Intermediate Academic Writing and Grammar
Reading Improvement
Basic Reading
Writing Improvement
Reading Skills
Reading Comprehension
Grammar and Sentence Writing
Paragraph Writing
EMT 1 Refresher
I-300, Intermediate ICS
Advanced Firefighter Topics
Elementary Algebra
College Arithmetic
Pre-Algebra
Arithmetic Review: Whole Numbers
Arithmetic Review: Fractions
Arithmetic Review: Decimals
Arithmetic Review: Percents
Arithmetic for Learn Disabled
NCLEX-RN Review
Successful Strategies for RN Students
RN Refresher Course
Intro to the Nursing Profession
Care of the Childbearing and Parenting Family Theory

Nursing, Registered 206 Care of the Childbearing and Parenting
Family Simulation
Radiologic Technology 205 Radiography Review
Special Studies $277 \quad$ Credit, Nondegree SP ST
Vocational ESL 266R Applied Inter Reading for College and Careers
Vocational ESL 266W Applied Inter Writing for College and Careers
Vocational ESL 269R Applied Adv Reading for College and Careers
Vocational ESL 269W Applied Adv Writing for College and Careers

## B. Noncredit

Admin of Justice 369A Advanced Office Topics
Air Conditioning $353 \quad$ Principles of Industrial Refrigeration
Apprenticeship 361/7J Roofing
Business \& Technology 370A Office Asst Applications
Business \& Technology 370B Office Asst Applications
Developmental Services 359 Differential Learn Diag
ST $300 \quad$ Tutoring
Special Studies $377 \quad$ Zero Unit, No Grade Sp St
Theatre Arts 346 Senior Musical Performance Skills
Theatre Arts $347 \quad$ Senior Musical Theatre Skills
Theatre Arts $348 \quad$ Senior Play Production
Career \& Technology Center Courses
Auto Mechanics 371 Engine Repair
Auto Mechanics $372 \quad$ Engine Performance
Auto Collision Repair 371 Fund of Weld Tech \& Working Sheet Metal
Auto Collision Repair $372 \quad$ Body Work Technology
Auto Collision Repair 373 Automotive Refinishing Technology
Indust Training $371 \quad$ Warehouse and Distribution Careers
Indust Training $372 \quad$ Warehouse and Distribution Careers
Maint Mechanic $370 \quad$ Fund-Weld/Machine Shop
Maint Mechanic $371 \quad$ Fund Hydraul/Pneumatics
Maint Mechanic $372 \quad$ Electrical Fundamentals
Manuf Mechanic $351 \quad$ 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 3530 Hydraulic Fundamentals
Manuf Mechanic 354A Power Transmission
Manuf Mechanic 354B Welding Fundamentals
Manuf Mechanic 354C Electrical Fundamentals

## COURSE DESCRIPTIONS

## ACCOUNTING (ACCTG)

## 4A FINANCIAL ACCOUNTING

4 units, 4 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended. Enrolled or previously completed Computer Information Technology 12 or 15.

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)

## 4AH HONORS FINANCIAL ACCOUNTING

## 4 units, 4 lecture hours, 1 lab hour

ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

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)

## 4BH HONORS MANAGERIAL ACCOUNTING

4 units, 4 lecture hours, 1 lab hour
PREREQUISITE: Accounting 4A or equivalent. ADVISORY: Meet the requirements for consideration for acceptance into the Honors Program. See Honors Program listing in the college catalog.

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 unitsCOREQUISITE: 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)

## 32A COMPUTERIZED ACCOUNTING

1 unit, 1 lecture hour, 0.5 lab hour, (Formerly
Accounting 31 and 32)
PREREQUISITE: Accounting 4A equivalent.
Introduction to accounting procedures and applications on microcomputer based software for accountants and business managers in the areas of general ledger, accounts receivable, accounts payable, inventory, and payroll. Course utilizes publisher developed integrated accounting software. (A, CSU)

## 34 ACCOUNTING SPREADSHEETS

2 units, 2 lecture hours, 1 lab hour
PREREQUISITE: Accounting 4A or equivalent.
Microsoft Excel spreadsheets applied to accounting scenarios. Course covers creating a worksheet, formatting the worksheet, using formulas and functions, creating reports and graphs, and applying advanced Excel applications to accounting problems. (A, CSU)

## 51 INTERMEDIATE ACCOUNTING

3 units, 3 lecture hours, 1 lab hour, (Formerly Accounting 51 and 151)
PREREQUISITE: Accounting 4A or equivalent.
Preparation and analysis of the Balance Sheet, Income Statement, and Statement of Cash Flows. Examination of accounting theory, conceptual framework underlying financial accounting, time value of money, accounting for current and fixed assets, current and long-term liabilities, and stockholders' equity. (A, CSU)

## 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 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)

## 55 ACCOUNTING METHODS

1.5 units, 1.5 lecture hours

PREREQUISITE: Accounting 4A or equivalent.
Covers accepted accounting methods for accounts receivable, notes receivable, inventory, and fixed assets. Explores the impact of these methods on profitability and in financial position. (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

2 units, 2 lecture hours, 1 lab hour
PREREQUISITE: Accounting 4A or equivalent.
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/MAS90 FUNDAMENTALS

2 units, 2 lecture hours, 1 lab hour
PREREQUISITE: Accounting 4A or equivalent.
Introduction to accounting procedures and applications using Sage 100 (formerly MAS 90) 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 (ADMIN OF JUSTICE) <br> POLICE ACADEMY

## 204 INSTRUCTOR TRAINING/ACADEMY INSTRUCTOR CERTIFICATION COURSE

1.5 units, 1.55 lecture hours, 0.32 lab hours, (Pass/

No Pass), (Formerly Administration of Justice 104)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Presentation skills and techniques that can be applied in any presentation environment. An overview of learning activities, facilitation of group activities, public speaking, and resources available to enhance presentations. Also, designed to increase the skills of Basic Academy Instructors in delivering POST Learning Domain curricula. Materials fee will be charged.

## 211 EXPANDABLE STRAIGHT BATON INSTRUCTOR

0.4 unit, 8.5 lecture hours, 8.5 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of, and familiarity regarding officer safety related to police baton use; knowledge of proper and safe tactical movement related to police baton use; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under physical situations; knowledge of proper and safe arrest and control techniques related to police baton; knowledge of, and familiarity with, California Penal codes used in law enforcement use of force pertaining to the police baton; knowledge of effective verbal and non-verbal communication used in law enforcement during arrest procedure related to the police baton; knowledge of, and familiarity with, case law pertinent to law enforcement related to the use of the police baton; ability to perform CPR and First Aid techniques; knowledge of proper documentation in police reports pertaining to the use of the police baton.

Train officers to instruct department personnel in the use of the expandable and straight baton. Materials fee will be charged.

## 217 BACKGROUND INVESTIGATION

1.5 units, 33.6 lecture hours, (1 week), (Pass/No

Pass), (Formerly Administration of Justice 117)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Basic techniques and procedures for background investigators. Materials fee will be charged.

## 219 REQUALIFICATION—BASIC COURSE

6 units, 11.4 lecture hours, 5.4 lab hours, ( 9 weeks), (Pass/No Pass), (Formerly Administration of Justice 119)

PREREQUISITE: A POST Regular Basic Academy Certificate or equivalent or, for out-of-state, a letter of recommendation from POST. No criminal record that 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.

## 220 RADAR OPERATOR

1 unit, 25.2 lecture hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Possession of a valid California Driver's License; knowledge of, and familiarity with, California Vehicle codes related to speed laws; Knowledge of, and familiarity with, case law pertinent to the use of electronic speed tracking devices used in policing; knowledge with the safe positioning of patrol vehicles during surveillance of traffic on state highways.

Proper operation of police radar devices including history of radar operation, principles of operation and laws relevant to radar operation. Materials fee will be charged.

## 222 INTERNAL AFFAIRS INVESTIGATOR

1.5 units, 33.6 lecture hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

This course requires extensive knowledge of all types of police operations, because an internal investigator will be asked to investigate a wide variety of complaints. The investigator will need to possess deep operational knowledge because in part, he or she will be called upon to make judgments regarding the truthfulness and accuracy of individuals who are interviewed or investigated. Students will also be required to have detailed knowledge of California law, case law, evidence collection, and criminal justice procedures. Knowledge of, and familiarity with, proper use of force during law enforcement operations; knowledge of proper use of verbal and non-verbal communication used in law enforcement contacts with the public; knowledge of, and familiarity with, current case law related to proper law enforcement procedures in daily policing; knowledge of the proper use of police weaponry as it pertains to its use in daily policing; knowledge of local, state and federal law violations pertaining to law enforcement officers working under color of authority.

Ethical issues, legal considerations, investigative tools and procedures concerning public safety internal investigations. Procedures under California Government Code sections 3300 to 3311 and case law. Materials fee will be charged.

## 223 BASIC TACTICAL COMMUNICATION

10.4 unit, 8.4 lecture hours, (1 week), (Pass/No Pass)<br>PREREQUISITE: None

Development, practice and delivery of effective conflict management of communication skills required for public safety personnel. Materials fee will be charged.

## 224 INTERVIEW AND INTERROGATION

1.5 units, 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.

## 233 TACTICAL FIREARMS (PSP)

0.1 unit, 0.58 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; due to transition drills satisfy PC 33220 (b); ability to achieve a qualifying score during handgun shooting; ability to achieve a qualifying score during shotgun training; knowledge of, and familiarity with, sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of, and familiarity with, the use of force continuum related to policing; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling while transitioning weapons; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Knowledge of tactical handgun, shotgun and rifle proficiency with techniques, exercise, and course-of-fire focusing on, weapons safety, drawing techniques, shooting fundamentals, target identification, speed, accuracy and effectiveness under stress, movement conditions, transitioning and clearing malfunctions.

## 233B FIREARMS - TACTICAL RIFLE

## 0.4 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. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during AR- 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of, and familiarity with, California Penal codes used in law enforcement pertaining to use of force; knowledge of case law pertaining to use of force in policing; knowledge of, and familiarity with, use of force continuum and weapon selection used in policing; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Designed to satisfy Penal Code 33220(b) requirements by the State of California for law enforcement officers to carry and use a patrol rifle.

## 233C CIVIL PROCEDURES FOR LAW ENFORCEMENT OFFICERS

0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of, and familiarity with, California Penal codes used in law enforcement pertaining to enforcement of court orders, property levy and till taps; knowledge of, and familiarity with, community policing and problem-solving pertaining to civil disputes; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement in the civil process; ability to read court orders pertaining to policing; knowledge of, and familiarity with, officer safety techniques used in disturbance calls; knowledge of the NCIC system related to pre-investigation of action plans prepared by law enforcement.

Enforcement of civil procedures common to Law Enforcement, such as, landlord tenant disputes, till taps, property levees, evictions, restraining orders, and repossessions.

## 233D CALGANG END USER TRAINING

## 0.3 unit, 0.93 lab hours, (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Students will need to possess deep operational knowledge of gang investigation in policing. Students will also be required to have detailed knowledge of California law, case law, evidence collection, and criminal justice procedures in policing. Knowledge of, and familiarity with, current case law related to gangs; knowledge of report writing pertaining to policing; knowledge of chain of custody and evidence processing pertaining to policing; knowledge of basic computer skills; possession of a NCIC clearance pertaining to police investigations.

Introduces students to the Cal Gangs computer system, data entry, data queries, link analysis, mapping and related issues.

233E POLICE TRAINING OFFICER (PTO)
1 unit, 10 lecture hours, 32 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, 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 judgements regarding the in-field training of police officers. Students will also be required to have detailed knowledge of California law, case law, evidence collection, and criminal justice procedures. Knowledge of, and familiarity with, proper use of force during law enforcement operations; knowledge, and familiarity with, Penal and Vehicle codes; knowledge, and familiarity with, Health \& Safety codes; knowledge of proper use of verbal and non-verbal communication used in law enforcement contacts with the public; knowledge of, and familiarity with, current case law related to proper law enforcement procedures in daily policing; knowledge of the proper use of police weaponry as it pertains to its use in daily policing; knowledge of the rank structure in policing; knowledge, and familiarity of, local, state, and federal laws, and policies, pertaining to law enforcement.

Meets POST requirements for the training of Patrol Training Officers. Topics include PTO program goals, objectives, role of PTO, expectations of the PTO, adult learning, coaching and training methods.

## 233 I COURT \& TEMPORARY HOLDING FACILITY

## 0.1 unit, 0.46 lab hours, (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate, or California Standards of Training for Corrections Basic Course, completion of a POST PC 832 course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of the Penal code, Vehicle code, Health \& Safety codes related to the degrees of crime related to an inmate in a detention facilities; knowledge of officer safety techniques related to the movement of arrestees in confined areas; knowledge of case laws related to the housing of juvenile vs. adults in detention facilities; knowledge of courtroom procedures related to inmate movements within a courthouse; knowledge of First Aid procedures related to non-handgun suicides.

Meets requirements of Section 1024, Title 5, California Code of Regulations for training personnel responsible for supervision of inmates in, and supervisors of, a court holding or temporary holding facility regarding jail standards, jail operations, liability, inmate segregation, suicide prevention, emergency procedures and planning.

## 233K ARREST \& CONTROL UPDATE

0.1 unit, 0.06 lecture hours, 0.24 lab hours, (Pass/ No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of, and familiarity regarding officer safety related to resistive subjects; knowledge of, and familiarity with, control holds and takedowns used in policing; knowledge of, and familiarity with, the principals of Awareness, Balance and Control pertaining to policing; knowledge of, and familiarity with, cursory search and full arrest searches in policing; knowledge of body parts as personal weapons acceptable to policing; knowledge of, and familiarity with common concealed weapons on subjects pertinent to policing; knowledge of Penal code sections related to use of force in policing; knowledge of emotional response during an arrest process; knowledge of proper and safe firearms retentions; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and disaster situations; knowledge of proper and safe arrest and control techniques; knowledge of, and familiarity with, the use of force continuum pertaining to policing; knowledge and ability to use handcuffing commonly used in policing; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement; knowledge of report writing related to police use of force reports; ability to perform CPR and First Aid techniques.
5.2 hour course meets POST PSP requirements for arrest and control technique update for California law enforcement officers.

## 245 ACADEMY INSTRUCTOR CERTIFICATION COURSE UPDATE

0.1 unit, 8.4 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Dispatcher Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Updated teaching techniques related to teaching in the Basic Regular Course (Police Academy) that satisfies the POST PAM Section 1070 requirements.

## 245A ARREST \& CONTROL TECHNIQUES UPDATE

0.1 unit, 0.06 lecture hours, 0.23 lab hours, (Pass/ No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of, and familiarity regarding officer safety related to resistive subjects; knowledge of, and familiarity with, control holds and takedowns used in policing; knowledge of, and familiarity with, the principals of Awareness, Balance and Control pertaining to policing; knowledge of, and familiarity with, cursory search and full arrest searches in policing; knowledge of body parts as personal weapons acceptable to policing; knowledge of, and familiarity with common concealed weapons on subjects pertinent to policing; knowledge of Penal code sections related to use of force in policing; knowledge of emotional response during an arrest process; knowledge of proper and safe firearms retentions; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and disaster situations; knowledge of proper and safe arrest and control techniques; knowledge of, and familiarity with, the use of force continuum pertaining to policing; knowledge and ability to use handcuffing commonly used in policing; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement; knowledge of report writing related to police use of force reports; ability to perform CPR and First Aid techniques.

Arrest \& Control updated techniques to satisfy POST PAM 2-year cycle requirements for sworn law enforcement officers.

## 245D DETECTIVE SCH00L

## 0.4 unit, 25.2 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Dispatcher Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police crime scenes, because as a generalist detective you have a wide variety of investigative responsibilities. A detective relies on their past academy and patrol experience with knowledge and familiarity with the Penal code, Vehicle code, Health \& Safety code, knowledge and familiarity with case law pertaining to policing; knowledge and familiarity with collection of evidence; knowledge and familiarity with criminal suspect's rights; knowledge and familiarity with the chain of evidence in policing; knowledge and familiarity with fingerprint identification, impressions, collection procedures pertaining to policing; knowledge and familiarity with legal authority; knowledge and familiarity with generating crime scene notes that document observations, scene conditions and investigative actions pertaining to policing; knowledge and familiarity with systematic methods to search crime scenes pertaining to policing; knowledge and familiarity with crime scene diagraming; knowledge and familiarity with interviewing and interrogation of subjects pertaining to policing; certificate to use NCIC as part of criminal investigations.

Training for new detectives covering, case management, interrogation, interviewing, crime scene, media relations, warrants, evidence and other related subjects.

## 245E DRIVER AWARENESS INSTRUCTOR

0.4 unit, 25.2 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Possession of a valid California Driver's License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving, knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; Knowledge and familiarity with, case law pertinent to law enforcement emergency driving; ability to
perform CPR and First Aid techniques
Satisfies POST PAM 1070 regulation to train law enforcement driving courses, EVOC, high and low speed driving.

## 245F DRIVER AWARENESS UPDATE

0.1 unit, 0.06 lecture hours, 0.18 lab hours, (Pass/ No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Possession of a valid California Driver's License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving, knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; Knowledge and familiarity with, case law pertinent to law enforcement emergency driving; ability to perform CPR and First Aid techniques.

Satisfies POST PAM Perishable Skills 2-year update requirements, slow speed turning, steering, parking, backing and turn around.

## 245G DRIVER TRAINING INSTRUCTOR

## 0.5 unit, 42 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Possession of a valid California Driver's License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving, knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; Knowledge and familiarity with, case law pertinent to law enforcement emergency driving; ability to perform CPR and First Aid techniques.

Satisfies POST PAM 1070 requirement for Driver Awareness Instructor, driving simulators, skid pan, code-3, and driving courses.

## 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.

## 246A SEARCH/ARREST WARRANT

## 0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of Vehicle codes pertaining to policing; knowledge of persons under the influence of drugs or alcohol related to vehicle collision investigations; knowledge of, and familiarity with, officer safety during Field Sobriety Testing in the field during policing; knowledge of, and familiarity with, courtroom testimony related to policing; knowledge of, and familiarity with, evidence collection pertaining to policing; Knowledge of, and familiarity with, police report writing; knowledge of, and familiarity
with, crime scene photography; knowledge of, and familiarity with, vehicle identification numbers located on several location of vehicles; certified for NCIC use.

Warrant deployment, search warrant process, warrant planning, interior tactics, application, and scenarios.

## 268 PRE-POLICE ACADEMY COURSE

1 unit, 4.2 lecture hour, (6 weeks), (Pass/No Pass)
ADVISORY: In good physical condition to perform physical training.
Expose future FCC Police Academy students to a POST Basic Police Academy structure and environment. Discipline, structure, physical demands, studying, safety, uniform maintenance, Learning Domain books will be introduced.

## 269A ADVANCED OFFICER TOPICS \#2

0.1-2 units, 2.33 lecture hours, 2.33 lab hours, (118 weeks), (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B or equivalent, or currently employed by a Public Safety Agency.

Satisfies mandatory yearly requirements of the California Commission on Peace Officer Standards and Training (POST) or Standards for Training in Corrections (STC) for advanced officer training. May be offered in seminar, lecture, and/or laboratory format. Examination of topics, current trends, and/or issues as mandated by POST or STC and not covered by regular catalog offerings. Course content to be determined by POST or STC. The format of delivery will vary. No class will be presented in less than four hours of subject matter, or more than 84 hours of subject matter. These courses may be presented within one week or 18 weeks with variables between those two time limits. The variable format is provided due to public safety officers' demanding schedules and the officer's limited flexing times available to train.

## 270A BASIC POLICE ACADEMY - PART 1

24 units, 20.3 lecture hours, 8.8 lab hours, (19 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

27.5 units, 18 lecture hours, 11.1 lab hours

PREREQUISITE: Successful completion of Administration of Justice 270A when taken in tandem without a time separation between courses (Administration of Justice 270A and Administration of Justice 270B).
(1) POST Standardized Reading Comprehension and Writing Skills Test; (2) POST Physical Agility Test; and (3) Physical Exam. Possess a valid Class C California Driver's License. Proof of a Department of Justice criminal history clearance to possess a firearm (PC13511.5), or be sponsored by a law enforcement agency.

Satisfies the requirement of the California Commission of Peace Officer Standards and Training (POST) for Basic Police Academy training mandatory for every full-time peace officer under Penal Code, Section 830.1. Health, parking and range fees will be charged.

## 271A PC 832 LAWS OF ARREST/ARREST \& CONTROL

1.5 units, 31.5 lecture hours, 10.5 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: Demonstration of physical ability to perform arrest and control techniques in a safe manner.

Basics in arrest and control techniques and knowledge of California laws related to the requirements of Section 832 (Level III) of the California Penal Code.

## 271B PC 832 FIREARMS

0.5 unit, 4.2 lecture hours, 21 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course.

Basic use of firearms to fulfill the requirements of Section 832 of the California Penal Code. Materials and range fee will be charged.

## 272 REGULAR BASIC COURSE - MODULAR FORMAT MODULE III

10 units, 9 lecture hours, 3.4 lab hours
PREREQUISITE: Valid Class C California Driver's License. Proof of a Department of Justice criminal history clearance to possess a firearm (PC 13511.5) or be sponsored by a law enforcement agency.

Satisfies mandatory training requirements for Level III Reserve Peace Officer and is the mandatory prerequisite for the Administration of Justice 273 (Level II module). Must provide a handgun, ammo, and safety equipment associated with a firearms course.

## 273 REGULAR BASIC COURSE - MODULAR FORMAT -

 MODULE II13 units, 11.1 lecture hours, 6.1 lab hours
PREREQUISITE: Successful completion of Administration of Justice 272 (Module III). Current (within the last 3 years) in PC 832, Arrest and Firearms, training requirements. Proof of a Department of Justice criminal history clearance to possess a firearm (PC 13511.5). Passage of the POST - Constructed Comprehensive Module 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

25.5 units, 18 lecture hours, 8.7 lab hours, ( 22 weeks)
PREREQUISITE: Successful completion of Administration of Justice 272 and 273. Current (within last 3 years) in PC 832, Arrest and Firearms, training requirements. Passage of the POST Constructed Comprehensive Module II End-of-Course Proficiency Test within the preceding 12 months. Successful completion of the POST Standardized Reading 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 BASIC SUPERVISORS

4.5 units, 42 lecture hours, (2 weeks), (Pass/No Pass), (Formerly Administration of Justice 73 and 76)

PREREQUISITE: POST training curriculum for the newly promoted law enforcement supervisor. Role identification, leadership styles, values, ethics, and principles, assertive leadership, etc. Materials fee will be charged. POST training curriculum for the newly promoted law enforcement supervisor. Role identification, leadership styles, values, ethics and principles, assertive leadership, etc. Materials fee will be charged.

## 278 PUBLIC SAFETY DISPATCHER

7 units, 8.4 lecture hours, ( 15 weeks), (Pass/No
Pass), (Formerly Administration of Justice 89 and 78)

PREREQUISITE: None.
Knowledge, skills, and abilities to perform the tasks and duties required by a police dispatcher to provide quality service to the public as defined in the California Commission on Peace Officer Standards and Training (POST) procedure D-1-7.

## 279 CITIZENS' POLICE ACADEMY

0.5 unit, 3.15 lecture hours, ( 17 weeks), (Pass/No

Pass), (Formerly Administration of Justice 79) PREREQUISITE: None.
To educate and inform citizens regarding the function and duties of law enforcement personnel. Materials fee will be charged.

## 280 ADULT CORRECTIONAL OFFICER CORE

10 units, 33.6 lecture hours, 8.4 lab hours, (5
weeks), (Pass/No Pass), (Formerly Administration of Justice 74 and 80)
PREREQUISITE: None.
Satisfies the requirements for Standards and Training for Corrections (STC), basic correctional academy training.

## 284 COMMUNICATIONS TRAINING OFFICER

2 units, 42 lecture hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Dispatcher Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police dispatch center operations, because as first line training officer you must have a wide variety communication center operations. Due to giving citizen callers preliminary instructions via telephone, prior to police officer arrival, the students will also be required to have detailed knowledge of California law, case law, evidence collection, and 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

10 units, 35.6 lecture hours, 6.4 lab hours, (5 weeks), (Pass/No Pass), (Formerly Administration of Justice 85)
PREREQUISITE: None.
Knowledge and skills essential for newly hired Probation Officers. Materials fee will be charged.

## 286 JUVENILE CORRECTIONAL OFFICER CORE

7 units, 27.3 lecture hours, 14.7 lab hours, (4 weeks), (Pass/No Pass), (Formerly Administration of Justice 86)
PREREQUISITE: Employment as a correctional officer.
Knowledge and skills essential for newly hired Juvenile Counselors to meet maximum performance standards and to obtain maximum benefits from subsequent on-the-job training. Meets certification requirements for California Standards and Training for Corrections. Materials fee will be charged.

## 290 FIREARMS INSTRUCTORS COURSE

1.5 units, 22 lecture hours, 20 lab hours, (1week), (Pass/No Pass), (Formerly Administration of Justice 90)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during hand gun shooting; ability to achieve a qualifying score during shotgun training; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge of, and familiarity with, California Penal codes used in law enforcement related to firearms carry laws; knowledge of effective verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Designed to prepare the student with the fundamentals of teaching law enforcement firearms techniques to others and to create and administer a safe and quality Firearms Training Program. Various shooting styles and updated instruction on the most effective contemporary techniques used in law enforcement today. How to diagnose shooting problems through target analysis, and how to properly correct the problems. Materials fee will be charged.

## 291 FIELD TRAINING OFFICER

2 units, 42 lecture hours, (1 week), (Pass/No Pass), (Formerly Administration of Justice 91)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police operations, because as first line police training officer you must have a wide variety of law enforcement daily operations. The first line training officer will need to possess deep operational knowledge because in part, he or she will be called upon to make judgments regarding the in-field training of police officers. Students will also be required to have detailed knowledge of California law, case law, evidence collection, and criminal justice procedures. Knowledge of, and familiarity with, proper use of force during law enforcement operations; knowledge, and familiarity with, Penal and Vehicle codes; knowledge, and familiarity with, Health \& Safety codes; knowledge of proper use of verbal and non-verbal communication used in law enforcement contacts with the public; knowledge of, and familiarity with, current case law related to proper law enforcement procedures in daily policing; knowledge of the proper use of police weaponry as it pertains to its use in daily policing; Knowledge of the rank structure in policing; knowledge, and familiarity of, local, state, and federal laws, and policies, pertaining to law enforcement.

Training of experienced officers so they can provide field training to new recruits. Evaluation, motivation, and discipline; issues of supervision, value and ethics, adult learning processes, counseling, and role of the training officer. Materials fee will be charged.

## 291A FTO UPDATE

1 unit, 25.2 lecture hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police 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 FT0 program, Ethics, Coaching, Teaching/ Training demonstrations, Evaluations, Driver Safety Issues, Intervention Techniques, Remediation, Documentations and other issues related to the FT0 environment.

## 293 DRUG INFLUENCE - H\&S 11550

1.5 units, 33.6 lecture hours, (1 week), (Pass/No

Pass), (Formerly Administration of Justice 84 and
93)

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 Penal and Vehicle codes pertaining to persons under the influence of drugs or alcohol; Knowledge of Health \& Safety codes pertaining to policing; 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 local, state and federal laws pertaining to illegal drugs; knowledge of case law pertaining to policing; knowledge of, and familiarity with, evidence collection pertaining to policing; knowledge of search \& seizure laws pertaining to illegal drugs on a person and at a location, pertaining to policing; Knowledge of, and familiarity with, police report writing.

An elementary introduction to controlled substances and how they affect the human body both psychologically and physiologically. Completion of this course will enable student to recognize, photograph, and document H\&S 11550 suspects and prepare the officer for court. Materials fee will be charged.

## 295 TRAFFIC COLLISION INVESTIGATION

2 units, 37.8 lecture hours, 4.2 lab 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.

## 369A ADVANCED OFFICER TOPICS

0-1.17 lecture hours, 0-1.17 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B or equivalent, and currently employed by a Public Safety Agency.

Satisfies mandatory yearly requirements of the California Commission on Peace Officer Standards and Training (POST) or Standards for Training in Corrections (STC) for advanced officer training. May be offered in seminar, lecture, and/or laboratory format. Examination of topics, current trends, and/or issues as mandated by POST or STC and not covered by regular catalog offerings. Course content to be determined by POST or STC. The format of delivery will vary. No class will be presented in less than four hours of subject matter, or more than 42 hours of subject matter. These courses may be presented within one week or 18 weeks with variables between those two-time limits. The variable format is provided due to public safety officers' demanding schedules and the officer's limited and flexing times available to train.

## AEROSPACE STUDIES (AEROST)

## 1A USAF FOUNDATIONS

1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended. COREQUISITE: Aerospace Studies 3.

The Air Force in the contemporary world. Focuses on basic organizational structure and missions of Air Force organizations and an introduction to leadership and followership. Includes a basic study of Air Force communications and briefing skills. (A, CSU, UC)

## 1B USAF FOUNDATIONS

1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended. COREQUISITE: Aerospace Studies 3.

The Air Force in the contemporary world. Focuses more on leadership and followership then on the organizational structure and missions of Air Force organizations. Officership and professionalism are stressed; and includes a more in-depth study of Air Force communication skills. (A, CSU, UC)

## 2A EVOLUTION OF AIR AND SPACE POWER

1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended. COREQUISITE: Aerospace Studies 3.

Detailed look at strategy, doctrine, and evolution of the art and science of air, space and cyberspace power until 1960; history, political science, and leadership studies; basic communication skills training and evaluation in terms of improving professional writing and speaking. (A, CSU, UC)

## 2B EVOLUTION OF AIR AND SPACE POWER

1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended. COREQUISITE: Aerospace Studies 3.

Detailed look at strategy, doctrine, and evolution of the art and science of air, space and cyberspace power after 1960; history, political science, and leadership studies; basic communication skills training and evaluation in terms of improving professional writing and speaking. (A, CSU, UC)

## 3 LEADERSHIP LABORATORY

1 unit, 4 lab hours, (Pass/No Pass)
ADVISORY: Eligibility for English 1A recommended. COREQUISITE: Aerospace Studies 1A, or 1B, or 2A, or 2B. (Note: if a cadet has taken all 4 of the possible corequisite courses, they do no need to enroll in a corequisite course again. They can then take Aerospace 3 as a stand-alone course.)

A practicum of Air Force customs and courtesies, issuing military commands, instructing, directing and evaluating the preceding skills, studying the environment of an Air Force officer and learning about areas of opportunity available to commissioned officers. (A, CSU, UC)

## 5 DRILL AND CEREMONY FUNDAMENTALS

1 unit, 0.5 lecture hour, 0.5 lab hour
ADVISORY: Eligibility for English 1A recommended. COREQUISITE: Aerospace Studies 1A, or 1 B , or 2 A , or 2 B . (Note: if a cadet has taken all 4 of the possible corequisite courses, they do no need to enroll in a corequisite course again. They can then take Aerospace 3 as a stand-alone course.)

The elements of military drill, individual and group precision movements, development of command voice; technical, stylistic and aesthetic aspects of creative drill maneuvers; encompasses both rehearsal and public performance. (A, CSU)

## AFRICAN-AMERICAN STUDIES (AFRAM) FORMERLY CULTURAL STUDIES/BLACK STUDIES

1 INTRODUCTION TO AFRICAN-AMERICAN STUDIES 3 units, 3 lecture hours, (Formerly Cultural Studies 1)

ADVISORY: Eligibility for English 1A recommended.
Introduction to African-American Studies: an interdisciplinary study of African-American history and heritage from Pre Colonial West Africa through the 21st Century. (A, CSU-GE, UC, I)

## 2 CULTURAL ADAPTATION OF THE AFRICAN-AMERICAN

 3 units, 3 lecture hours, (Formerly Cultural Studies 20)ADVISORY: Eligibility for English 1A recommended.
Examination and evaluation of the dynamic development of Afri-can-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.
The creative products of Black people in Africa and America: painting, architecture, sculpture, drawing and printing. (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 Colonialinization 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 AFRICANS OF THE NEW WORLD

3 units, 3 lecture hours, (Formerly Cultural Studies 5)

ADVISORY: Eligibility for English 1A recommended.
History and contributions of African people in North America, 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.
African language structures: ethnological and historical implications.
(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)

## 13 AFRICAN-AMERICAN MUSIC FROM PRE-SLAVERY TIMES

 TO 19403 units, 3 lecture hours, (Formerly African-American Studies 7)
ADVISORY: Eligibility for English 1A recommended.
The evolution of African-American music from African rhythms to spirituals, gospel music, blues, ragtime, jazz, and the big bands of the 1940s. (A, CSU-GE, UC, I)

## 15 AFRICAN-AMERICAN MUSIC FROM 1940 TO THE PRESENT

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
African-American music from 1940 to the present. (A, CSU-GE, UC, I)

## 17 AFRICAN-AMERICAN LITERATURE

3 units, 3 lecture hours, (See also English 17)
PREREQUISITE: English 1A or equivalent. English 1B is not a prerequisite for this course.

Reading critical works of African and African-American writers and understanding cultural values and themes as expressed in essays, short stories, novels, poetry, and plays. (A, CSU-GE, UC, I)

## 34 HISTORY OF THE AMERICAN CIVIL RIGHTS MOVEMENT

3 units, 3 lecture hours, (See also History 34)
ADVISORY: English 1A recommended.
History of the struggle for civil and human rights in American history, focusing on the African American movement. Legal, moral, ethical, religious and humanistic foundations of the Movement. Forms of discrimination, segregation and oppression and various forms of resistance to them. Efforts to protect human and civil rights in the United States. (A, CSU-GE, UC, I)

## 36 CONTEMPORARY AFRICA

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An analysis of Africa's struggle for political independence, economic development, cultural identity, and the democratic process. (A, CSU, UC)

## 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 US society 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 (AC)

## 50 PRINCIPLES OF MECHANICAL REFRIGERATION

3 units, 3 lecture hours
ADVISORY: Applied Technology 10, eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

Refrigerant system components and principles of operation. Refrigerants, temperature pressure relationships, sensible and latent heat transfer in the refrigeration process. Analysis of system operation as a diagnostic tool. (A, CSU)

## 51 ELECTRICAL SYSTEMS

6.5 units, 5 lecture hours, 5 lab hours

ADVISORY: Applied Technology 10, eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

Theory and application of electrical principles. Single and three phase power, transformers, wiring diagrams, control logic, test instruments, single-phase motors and controls. Brazing, evacuation, charging, recovery, wiring and testing of refrigerant systems. (A, CSU)

## 52 HEATING SYSTEMS

6.5 units, 5 lecture hours, 5 lab hours

ADVISORY: Air Conditioning 50, 51, 53, Applied Technology 10 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

Theory of operation, diagnosis, service and repair of natural and induced draft heaters, condensing furnaces, resistance heaters and heat pumps. Electromechanical and solid state controls, ignition systems, flame sensing, gas controls and venting. (A, CSU)

## 53 MEASUREMENTS AND DIAGNOSIS

6.5 units, 5 lecture hours, 5 lab hours

ADVISORY: Air Conditioning 50 or concurrent enrollment, Applied Technology 10 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

Diagnosis of the refrigerant systems through the analysis of pressures, temperatures, and current draw. Airflow measurement, analysis of heat content, and test procedures. Use of the volt, ohm and amp meters, manifold gauge, incline manometer, magnehelic gage, pitot tubes, anemometers digital/sling psychorometer and the psychrometric chart as diagnostic tools. (A, CSU)

## 54 COMMERCIAL SYSTEMS

6.5 units, 5 lecture hours, 5 lab hours

ADVISORY: Air Conditioning 50, 51, Applied Technology 10 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

Operation and diagnosis of three-phase motors, solid state and electromechanical controls and refrigerant flow controls. Sizing of related electrical and gas distribution systems. (A, CSU)

## 55 TECHNICIAN TESTING AND CERTIFICATION

1 unit, 2 lecture hours, ( 9 weeks)
ADVISORY: Air Conditioning 50, 51, 52, 53, 54, 56, and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended. Air Conditioning 53, 54 and 56 may be taken concurrently.

Prepares students/technicians for specific HVAC industry competency, licensing, and certification examinations. Those exams may include, but are not necessarily limited to, EPA Section 608 (proper refrigerant handling techniques), R-410A safety certification, Air-Conditioning and Refrigeration Institute's (ARI) Industry Competency Exam(s) (ICE) and North American Technician Excellence (NATE) Installation/Service Technician Certification(s). Substantial out-of-class study will be required to prepare for each exam. The exams are an integral part of the course and will be conducted by an approved proctor for each organization. In addition to normal registration fees, all test fees imposed by competency, licensing and certifying organizations are the responsibility of the student. (A, CSU)

## 56 DUCT SYSTEMS

3 units, 2 lecture hours, 3 lab hours, (Formerly Air Conditioning 53)
ADVISORY: Air Conditioning 50 or concurrent enrollment, and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

Layout, design, installation and testing of duct systems. Basic sheet metal fabrication, soldering and spot welding. Estimating and bidding projects. (A, CSU)

## 57 SYSTEM CONFIGURATION AND CONTROL

2 units, 2 lecture hours
ADVISORY: Applied Technology 10, eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

Uses energy management software to identify air conditioning system configurations and control strategies. (A, CSU)

## 60A FUNDAMENTALS OF REFRIGERATION

3 units, 3 lecture hours
ADVISORY: Applied Technology 10, eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

The physics of mechanical refrigeration, temperature pressure relationships, system components and principles of operation. (A, CSU)

## 250 DIGITAL UNITARY CONTROLS

2 units, 2 lecture hours, 1 lab hour
ADVISORY: Applied Technology 10, Air Conditioning 57, eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68, and Mathematics 201 or Applied Technology 130 recommended.

Principles and application of unitary digital controls.

## 251 DIGITAL VAV CONTROLS

0.5 unit, .75 lecture hour, .75 lab hour

ADVISORY: Applied Technology 10, Air Conditioning 57, eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68, and Mathematics 201 or Applied Technology 130 recommended.

Principles and application of digital variable air volume controls.

## 252 DDC NETWORK CONTROLLERS

2 units, 2 lecture hours, 1 lab hour
ADVISORY: Applied Technology 10, Air Conditioning 57, eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68, and Mathematics 201 or Applied Technology 130 recommended.

Principles and application of network controllers.

## 260B ELECTRICITY FOR AIR CONDITIONING

3 units, 3 lecture hours, (Formerly Air Conditioning 60B)
ADVISORY: Applied Technology 10, eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 and Mathematics 201 or Applied Technology 130 recommended.

Theory and application of electrical principles. Induction motors, wiring diagrams, control logic and test instruments.

## 260C RESIDENTIAL HEATING

3 units, 3 lecture hours, (Formerly Air Conditioning 60C)
ADVISORY: Air Conditioning 260B, Applied Technology 10, eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 and Mathematics 201 or Applied Technology 130 recommended.

Principles of combustion, furnace controls and system diagnosis. Properties of air, measurements and analysis.

## 260D TROUBLESHOOTING PROCEDURES

3 units, 2 lecture hours, 1 lab hour, (Formerly Air
Conditioning 60D)
ADVISORY: Air Conditioning 60A, 260B, Applied Technology 10, Air Conditioning 57, and eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 and Mathematics 201 or Applied Technology 130 or equivalent recommended.

Troubleshooting and analysis of air, electrical and refrigeration systems using computer simulations. Introduction to residential duct system design and airflow measurement.

## 353 PRINCIPLES OF INDUSTRIAL REFRIGERATION

3 lecture hours, (Open Entry/Open Exit)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 and Mathematics 201 or Applied Technology 130 recommended.

Principles of Ammonia based Industrial Refrigeration Systems with emphasis on standards for Refrigeration Engineers \& Technicians Association (RETA) "Certified Assistant Refrigeration Operator" (CARO) and EPA-section 608 certification.

## AMERICAN INDIAN STUDIES (AMIND)

## 20 NATIVE PEOPLES OF CALIFORNIA

3 units, 3 lecture hours, (Formerly Anthropology 20) ADVISORY: Eligibility for English 1A recommended.
The ethnohistory, linguistics, spiritual beliefs, political organization, subsistence patterns, gender, arts, oral history, social issues, images and cultures of the indigenous peoples of California. Conflict with various colonial forces and contemporary issues. (A, CSU-GE, UC)

## 31 AMERICAN INDIAN CULTURE

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The Native Nations of North America (American Indians) from antiquity to the present; regional survival strategies and expressive arts; effects of invasion and colonization with an emphasis on self-preservation and continuing sovereignty. (A, CSU-GE, UC, I)

## 32 AMERICAN INDIAN HISTORY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The history of the American Indian nations from antiquity to the mid-20th century, with an emphasis on pre-Columbian life, the European invading nations, and federal-Indian relations in the United States. (A, CSU, UC)

## 34 THE AMERICAN INDIAN IN CONTEMPORARY SOCIETY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
American Indian in North America after the Second World War to the present; emphasis on current events and legislation; issues involving the inherent sovereignty of American Indian nations and their place in modern global society. (A, CSU-GE, UC, I)

## 35 AMERICAN INDIAN ART

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Major American Indian art traditions of North America. Pre-contact and early-contact-era traditions and the evolution of Indian art forms in contemporary times. Design and techniques in Indian art. Emphasis on North, Central and South America. (A, CSU-GE, UC, I)

## AMERICAN SIGN LANGUAGE

SEE FOREIGN LANGUAGES

## AMERICAN STUDIES (AMST)

## 10 AMERICAN PLURALISM: A SEARCH FOR COMMON

 GROUND IN A MULTICULTURAL SOCIETY3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Multidisciplinary examination of racial and ethnic identity in a multicultural society, the roots of prejudice and of religious and ethnic animosities, with special emphasis on what forces unite as well as divide this country. (A, CSU-GE, UC, I)

## 11 LAW AND DEMOCRACY

3 units, 3 lecture hours
PREREQUISITE: English 1A.
Evaluation, debate, and critical analysis of law and legal issues that affect individuals, their families, and communities. Practical and historical aspects of civil, criminal, constitutional, immigration, and consumer law in a diverse society, with an orientation toward civic involvement in the local community. Includes an interdisciplinary exploration of themes such as equality, citizenship, access, and social justice. (A, CSU-GE, UC, I)

## ANTHROPOLOGY (ANTHRO)

## 1 BIOLOGICAL ANTHROPOLOGY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A.
Concepts, methods of inquiry, and scientific explanations for biological evolution and application to the human species. Topics include: genetics, evolutionary theory, human variation and biocultural adaptations, comparative primate anatomy and behavior, and the fossil evidence for human evolution. Scientific method serves as foundation of the course. (C-ID ANTH 110) (A, CSU-GE, UC, I)

## 1L BIOLOGICAL ANTHROPOLOGY LABORATORY

1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

A hands-on laboratory experience to supplement Biological Anthropology. May be taken either concurrently with Anthropology 1 or in a subsequent term. Exercises will provide additional experience and hands-on activities to expand student learning in the following major subject areas: the scientific method, evolution and natural selection with a specific focus on human evolution, evolutionary genetics, modern human variation, forensic anthropology, primate anatomy and behavior, and the hominid fossil record. (A, CSU-GE, UC, I)

## 2 CULTURAL ANTHROPOLOGY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A.
Explores how anthropologists study human culture. The broad arc of human experiences: subsistence, social, political, and economic organization, communication and creative expression, family and kinship, belief systems. Includes discussion of gender, racial and ethnic identity labels, and the effects of colonialism and globalization. Ethnographic case studies; professional anthropological research ethics; the application of anthropology to understanding humans around the globe. (C-ID ANTH 120) (A, CSU-GE, UC, I)

## 2H HONORS CULTURAL ANTHROPOLOGY

3 units, 3 lecture hours, (Formerly Honors 2A)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Explores how anthropologists study human culture. The broad arc of human experiences: subsistence, social, political, and economic organization, communication and creative expression, family and kinship, belief systems. Includes discussion of gender, racial and ethnic identity labels, and the effects of colonialism and globalization. Ethnographic case studies; professional anthropological research ethics; the application of anthropology to understanding humans around the globe. Honors takes a greater cross-disciplinary perspective, places greater emphasis on the use of anthropology on the understanding of the modern world, and more critically evaluates the methods and theory of anthropology. (C-ID ANTH 120) (A, CSU-GE, UC, I)

## 3 ARCHAEOLOGY AND WORLD PREHISTORY

 3 units, 3 lecture hoursADVISORY: Eligibility for English 1A.
A broad survey of physical and cultural evolution of the human species from the earliest signs of "humanness" through the rise of civilization as understood through the archaeological record. Includes a brief introduction to the methods of archaeology and the interdisciplinary nature of archaeological research. (A, CSU-GE, UC, I)

## 4 INTRODUCTION TO ARCHAEOLOGY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A.
Introduction to the study of concepts, theories, data and models of anthropological archaeology that contribute to knowledge of the human past. Includes discussion of the nature of scientific inquiry, the history and interdisciplinary nature of archaeological research; dating techniques, methods of survey, excavation, analysis, and interpretation incorporating selected cultural sequences; cultural resource management; professional ethics. (C-ID ANTH 150) (A, CSU-GE, UC, I)

## 8 LANGUAGE AND CULTURE

3 units, 3 lecture hours
ADVISORY: Eligibility for 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)

## 13 ANTHROPOLOGY OF MAGIC, WITCHCRAFT, AND RELIGION

3 units, 3 lecture hours
ADVISORY: Eligibility for 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 1,2,2H,3, or 4. ADVISORY: Eligibility for English 1A recommended. Mathematics 102 and 250 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)

## 16A FIELD ARCHAEOLOGY I

2 units, 1 lecture hours, 3 lab hours, (Formerly Anthropology 6)
COREQUISITE: Anthropology 4. ADVISORY: Eligibility for English 1A recommended. Mathematics 102 and 250 recommended.

Field experience in archaeology. Development of practical skills including archaeological survey, excavation, mapping, and site recordation; artifact, feature, site, and cultural landscape identification in field situations; and logistics of archaeological projects. Required orientation meeting prior to field experience. (A, CSU, UC)

## 16B FIELD ARCHAEOLOGY II

2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Anthropology 4 and 16A. ADVISORY: Eligibility for English 1A recommended. Mathematics 102 and 250 recommended.

A second experience in archaeological field work. Continues development of practical skills in archaeological field work with the addition of higher level responsibilities. (A, CSU, UC)

## 24 DOING ARCHAEOLOGY: HANDS-ON!

1.5 units, 1 lecture hour, 2 lab hours

COREQUISITE: Anthropology 4. ADVISORY: Eligibility for English 1A recommended. Mathematics 102 and 250 recommended.

Hands-on experience in archaeology: artifact identification; compass use; survey methods; unit, site, and feature mapping; setting up archaeological excavation units; introduction to topographic maps and their use in archaeology especially the use of the Universal Transverse Mercator and Public Lands Survey grid systems. Introduction to site record forms. (A, CSU, UC)

## 28 ANCIENT MEXICO

3 units, 3 lecture hours, (See also Chicano-Latino Studies 28)
ADVISORY: Eligibility for English 1A.
A survey of history, geography, socio-political, religious systems, and cultural achievements of Mesoamerican civilizations such as the Olmec, Zapotec, Teotihuacano, Mayan, Toltec, and Aztec/Mexican. (A, CSU, UC)

## 30 TOPICS IN ANTHROPOLOGY

1-4 units, 1-3 lecture hours, 0-9 lab hours ADVISORY: Eligibility for English 1A.
Examination of topics, current trends, and/or issues in the subdisciplines of anthropology not covered by regular catalog offerings. Course content and unit credit to be determined by faculty. May be offered in seminar, lecture, and/or laboratory format. Recommended preparation varies with topic. (A, CSU, UC approved as variable topics; evaluation completed by individual campuses after admission.)

## APPLIED TECHNOLOGY (AT)

## 10 TECHNICAL COMPUTER APPLICATIONS

3 units, 2.5 lecture hour, 1.5 lab hours, (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. Fulfills the computer literacy graduation requirement. (A, CSU)

## 11 BASIC ELECTRICITY

3 units, 3 lecture hours, (Formerly Industrial Education 11)
PREREQUISITE: None.
Fundamental concepts of electricity and its applications. Lecture/ demonstration. (A, CSU)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

 1-8 unitsCOREQUISITE: 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, (Formerly Industrial Education 36)
ADVISORY: Eligibility for English 1A recommended. Applied Technology 10 recommended.

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)
ADVISORY: Eligibility for English 1A recommended. Applied Technology 10 recommended.

Development of human relations competencies and professional workplace communications including written, oral and presentation skills in the work world. Development of job-seeking skills including preparing resumes, preparing portfolios and honing job search and interview skills. (A, CSU)

## 120 INDUSTRIAL SCIENCE

3 units, 3 lecture hours, 1 lab hour, (Formerly Industrial Education 51)
ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 or Applied Technology 130 recommended.

A study of Force, Work, Rate, Resistance, Energy, and Power in the physical systems of Mechanical, Fluid, Electrical, and Thermal. Applications to the trades emphasized. (A)

## 130 INDUSTRIAL MATHEMATICS

3 units, 3 lecture hours, (Formerly Industrial Education 60)
PREREQUISITE: Mathematics 260C or 250 or designated math score. ADVISORY: Eligibility for English 125 and 126 recommended.

Trade-related math problems including the use of signed 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)
ADVISORY: Eligibility for English 125 recommended. Applied Technology 10 recommended.

Learn about the different types of written job-related reports. An emphasis is placed on job-related records, forms, and letters. (A)

## 140 INTRODUCTION TO MACHINE SHOP

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 125 and 126 recommended. Applied Technology 130 recommended.

Introduction to machine shop equipment in regards to safety, operation and application. (A)

## 150 PNEUMATIC \& HYDRAULIC SYSTEMS

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended. Applied Technology 10 recommended.

Principles and practices of hydraulics/pneumatics as used in the industry. Study of the different applications and management of hydraulics for the most efficient use. Basic pneumatic principles and application systems. (A)

## 160 MECHANICAL POWER DRIVE SYSTEMS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 125 and 126 recommended. Applied Technology 130 recommended.

The theory behind and practical principles of using mechanical power to do work and includes power sources, drive trains, gearboxes, conveyor systems, and specialized transmission devices. Emphasis will be placed on troubleshooting and repair techniques, safety and reliability. (A)

## APPRENTICESHIP TRAINING (APP)

Apprenticeship training courses are designed for those currently employed and indentured in the specific trade.
For specific apprenticeship training program requirements refer to the Associate Degree and Certificate Programs section of this catalog.

## 361/7J R00FING

3 lecture hours, 1 lab hour, (Open Entry/Open Exit), (Formerly Apprenticeship Training 61/66J and 361/6J)
PREREQUISITE: Apprenticeship status.
History, materials, tools, and roof preparation. Built-up roofing, dampproofing, waterproofing, composition shingling, and rigid roofing. Blueprint reading and estimating. Characteristics of built-up roofing, insulation, and temperature control. Steep roofing and metal roofing. Reroofing, repairing, plastics, drainage, and estimating.

## ARCHITECTURE (ARCH)

## 10 ARCHITECTURAL DESIGN AND VISUALIZATION I

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Architecture 14 concurrently strongly recommended for architecture majors. Eligibility for English 1A recommended.

Basic principles and concepts of design while concurrently addressing the skills of freehand drawing, manual drafting and visualization. History and development of perspective during the Renaissance. (A, CSU, UC)

## 11 INTRODUCTION TO ARCHITECTURE AND ENVIRONMENTAL DESIGN

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Familiarization with the professional fields of architecture, landscape architecture, structural engineering, city planning and construction. Roles of the architect and the project team. Introduction to design principles and elements. Phases of the construction project. Licensing requirements. Visiting Lecturers. (A, CSU, UC)

## 12 ARCHITECTURAL PRACTICE I

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Methods of construction and drafting practices as applied to architectural contract documents concerning plans and details for light wood frame structures. Use and application of building codes and reference material. Site contours and grading. Field trips may be required. (A, CSU)

## 14 DIGITAL TOOLS FOR ARCHITECTS

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Digital tools in the context of architectural practice. Basic 3D modeling and image manipulation. Presentation layout and output. (A, CSU)

## 15A HISTORY OF ARCHITECTURE I

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
History of architecture from prehistory to the Middle Ages including Europe, Asia, Africa, and Pre-Columbian America. Relationship between social, cultural, religious, and physical conditions that influenced the built environment.(A, CSU-GE, UC, I)

## 15B HISTORY OF ARCHITECTURE II

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
History of architecture from the Renaissance to the 21 st 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, 3 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 drafting practices and contract documents. Emphasis on lightcommercial materials and construction. Computer-aided drafting in commercial architectural applications. (A, CSU)

24 BUILDING INFORMATION MODELING
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: None.
Building Information Modeling (BIM) in the context of architectural practice. Generation of architectural plans within a BIM environment to include dimensions, details, basic materials and rendering. (A, CSU)

## 30 ARCHITECTURAL DESIGN AND VISUALIZATION III

3 units, 2 lecture hours, 3 lab hours
PREREQUISTEE: Architecture 20.
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)
PREREQUISITE: None.
International building codes and local building zoning ordinances. (A, CSU)

## 32 STATICS AND STRENGTH OF MATERIALS

3 units, 3 lecture hours, (Formerly Architecture 31)
ADVISORY: Completion of Mathematics 201 or equivalent 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
PREREQUISITE: None.
Generation of architectural renderings to include lighting, reflection, environment and beginning animation. (A, CSU)

## 40 ARCHITECTURAL DESIGN AND VISUALIZATION IV

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Architecture 30.
Continuation of Architecture 30 . Extended development of the content of Architecture 30 with emphasis on the design process. Projects of an architectonic nature will be completed. Development of an educational portfolio. (A, CSU)

## 41A OFFICE PRACTICES

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A and Mathematics 201 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: Eligibility for English 1A recommended.
Introduction to the visual arts through lectures/discussions covering: a) the way artists communicate through their choices of visual language, art media and subject matter; b) how the Visual Elements and Principles of Design contribute to the content and meaning of artwork; and c) how historical context affects the creation of art in diverse cultures around the world from the pre-historic age to the present. (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 1

3 units, 3 lecture hours, (Formerly Art 25)
ADVISORY: Eligibility for English 1A recommended.
A survey of the Western Art from prehistory to the Gothic period that may include one or more areas of non-Western art during the same eras. (C-ID ARTH 110) (A, CSU-GE, UC, I)

## 5H HONORS ART HISTORY 1

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 Gothic period that may include one or more areas of non-Western art during the same eras. Honors sections will include additional readings of primary and secondary source material. (C-ID ARTH 110) (A, CSU-GE, UC, I)

## 6 ART HISTORY 2

3 units, 3 lecture hours, (Formerly Art 26)
ADVISORY: Eligibility for English 1A recommended.
A survey of Western Art from the Renaissance to the present that may include one or more areas of non-Western Art from the same time periods. (C-ID ARTH 120) (A, CSU-GE, UC, I)

## 6H HONORS ART HISTORY 2

3 units, 3 lecture hours, (Formerly Honors 6A)
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 Western Art from the Renaissance to the present that may include one or more areas of non-Western Art from the same time periods. Honors sections will include additional readings of primary and secondary source material. (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. Emphasis on observational drawing, drawing media (traditional and nontraditional), the formal elements of visual language (line, value, texture, shape, volume, color), composition, and meaning in visual image making. (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 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 the creative act of painting through exploration of representational, abstract, and non-objective forms. Emphasis on oil/acrylic media. (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. Eligibility for English 1A and Mathematics 201 recommended.

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, wood, glass or clay). 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: Art 3 and 7 and eligibility for English 1A recommended.
Introduction to the basic methods and materials of watercolor painting through creative, visual problem-solving exercises. (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 traditional and contemporary fine art printmaking practices. Topics may include relief, intaglio, silk screen and planographic printing. Students will produce editions of prints that demonstrate a basic understanding of the technical and aesthetic dimensions of this art form. (A, CSU-GE, UC)

## 15 CERAMIC SCULPTURE

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 12)

ADVISORY: Eligibility for English 1A recommended.
Creative self-expression in sculpture using clay and related materials as the media. (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.

The creative act of figurative painting, using the live model as subject matter. (A, CSU, UC)

## 17 INTERMEDIATE DRAWING

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 7B)
PREREQUISITE: Art 7 or Art 8 or demonstration of comparable skill level to be determined by testing and/or portfolio of past drawing work.

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.

A further exploration of the creative act of painting using representational, abstract, and non-objective forms. Emphasis on oil/acrylic media. (A, CSU, UC)

## 20 INTERMEDIATE CERAMICS

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 11B)
PREREQUISITE: Art 10 or demonstration of comparable skill level to be determined by testing and/or portfolio of past ceramic work.

Construction and decorative processes used in ceramics. Throwing on the potters wheel, hand building, and exploration of clay and glaze chemistry. Historic and contemporary study of ceramics as a major medium of expression. (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.

Further methods and materials of watercolor painting through creative, visual problem-solving assignments. (A, CSU, UC)

## 24A INTAGLIO 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 intaglio printmaking. Topics may include etching, engraving, drypoint, aquatinting and photo-etching in creating editions of fine art prints. Emphasis is placed upon mastery and the creative use of these techniques. (A, CSU, UC)

## 24B LITHOGRAPH PRINTMAKING

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 14 or demonstration of comparable skill level to be determined by testing and/or portfolio of past printmaking work. An examination of applied lithographic techniques, concentrating on process and aesthetic development. (A, CSU, UC)

## 24C RELIEF PRINTMAKING

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 14 or demonstration of comparable skill level to be determined by testing and/or portfolio of past printmaking work. Intermediate-level relief printmaking processes, including experimentation with techniques in monotype, woodblock, linoleum block, and collage print techniques. (A, CSU, UC)

## 24D SCREENPRINTING

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 14 or demonstration of comparable skill level to be determined by testing and/or portfolio of past printmaking work.

Intermediate-level screenprinting processes, including experimentation with techniques in photo, drawing, reductive screenprinting, multicolor on textiles, and cut film. (A, CSU, UC)

## 25 MURAL PAINTING

3 units, 2 lecture hours, 4 lab hours. Offered 1 semester each academic year.
PREREQUISITE: Art 7 and 9. ADVISORY: Eligibility for English 1A recommended.

An exploration of the aesthetic and practical applications of mural painting, including historical background, planning, techniques and execution. (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 creative act of painting. Emphasis on oil/ acrylic media. (A, CSU, UC)

## 31 ADVANCED SCULPTURE

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 21 or demonstration of comparable skill level to be determined by testing and/or portfolio of past sculpture work.

Development of a portfolio of sculptural work through concentrated advanced self-expression in a variety of sculptural media which may include but is not limited to clay, steel fabrication, bronze casting, stone, wood, plaster, and new media such as installation and 3D printing/scanning. (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.
Throwing on the potter's wheel and exploration of clay and glaze chemistry. Historic study of the potters wheel as a major tool of self expression. (A, CSU, UC)

38A INTERMEDIATE HAND-BUILDING
3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 20.
Intermediate ceramic hand-building and exploration of clay and glaze chemistry. Historic study of ceramics as a major tool of self expression. (A, CSU)

## 52 INTRODUCTION TO DIGITAL ART/NEW MEDIA

3 units, 2 lecture hours, 4 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 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
ADVISORY; Eligibility for English 1A recommended.
Introduction to the arts of Asia, including China, Japan, Korea, India, and Southeast Asia. (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)
ADVISORY: Eligibility for English 1A recommended.
A historical survey of 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 \& Inca. (A, CSU-GE, UC, I)

## 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 In-do-China. The Vietnamese, Cambodian, Lao, and Hmong experience. (A, CSU-GE, UC, I)

## 8 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)

## 10 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, UC)

## 15 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, interracial relationships, family influences, discrimination and generational conflict. (A, CSU-GE, UC, I)

## 20 ASIAN-AMERICAN LITERATURE

3 units, 3 lecture hours, (See also English 20)
PREREQUISITE: English 1A or the equivalent. English 1B is not a prerequisite for this course.

Survey of Asian-American classic and contemporary literature. Reading and writing critical analysis of novels, short stories, poems and plays. (A, CSU, UC)

## 25 ASIAN-AMERICAN SOCIAL ISSUES

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Issues of contemporary relevance related to Asian Americans: gender inequality, media representation, workplace concerns, crime, anti-Asian violence, race relations, the changing Asian American family and community, homosexuality, issues in education, teen suicide, and political involvement. (A, CSU, UC)

## 30 ASIAN-AMERICAN WOMEN

3 units, 3 lecture hours, (See also Women's Studies 30)

ADVISORY: Eligibility for English 1A recommended.
Historical experiences of early and later Asian immigrant women. Emphasis is on Asian American women today. Topics include growing up Asian American, relationship with parents, marriage, identity, raising children, doll image, voice, and American feminism. (A, CSU, UC)

## ASTRONOMY (ASTRO)

## 10 BASIC ASTRONOMY

3 units, 2 lecture hours, 2 lab hours, (generally
evening only)
ADVISORY: Eligibility for English 1A and 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) <br> FORMERLY BODY AND FENDER

## 151 BASIC ACR

9 units, 4 lecture hours, 16 lab hours, (Day
Program), (Formerly Body-Fender 51/52)
ADVISORY: Welding Technology 2A and eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 and Mathematics 201 or Applied Technology 130 recommended.

Theory and practice in minor auto body repair. Principles of auto construction and design. Correct use and application of body shop hand tools, power tools and equipment. Diagnosis and repair of minor/major collision damage and body alignment. Emphasis on automotive safety procedures and shop safety. Not open to students that have completed Automated Collision Repair Technology 151B. (A)

## 151A BASIC ACR

4.5 units, 2 lecture hours, 8 lab hours

ADVISORY: Welding Technology 2A and eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 and Mathematics 201 recommended.

Theory and practice in minor auto body repair. Principles of auto construction and design. Correct use and application of body shop hand tools, power tools and equipment. Diagnosis and repair of minor/major collision damage and body alignment. Emphasis on automotive safety procedures and shop safety. (A)

## 151B BASIC ACR

4.5 units, 2 lecture hours, 8 lab hours

PREREQUISITE: Automotive Collision Repair 151A.
Theory and practice in minor auto body repair. Principles of auto construction and design. Correct use and application of body shop hand tools, power tools and equipment. Diagnosis and repair of minor/major collision damage and body alignment. Emphasis on automotive safety procedures and shop safety. (A)

## 153 ADVANCED ACR

9 units, 4 lecture hours, 16 lab hours, (Day
Program), (Formerly Body-Fender 53/54)
PREREQUISITE: Automotive Technology Collision Repair 151. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 and Mathematics 201 or Applied Technology 130 recommended.

Estimation of body repair and refinishing, analysis of mechanical components, repair of auto plastics, auto body panel replacement and adjustment, restoration of corrosion protection, application of materials for spot repair and complete repaints, surface preparation on all types of substrates, paint materials used in refinishing, refinishing equipment, and other body shop repairs such as glass and trim removal and replacement. Emphasis on automotive safety procedures and shop safety. Not open to students that have completed Automotive Collision Repair Technology 153B. (A)

## 153A ADVANCED ACR

## 4.5 units, 2 lecture hours, 8 lab hours

ADVISORY: Welding Technology 2A and eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 and Mathematics 201 recommended.

Estimation of body repair and refinishing, analysis of mechanical components, repair of auto plastics, auto body panel replacement and adjustment, restoration of corrosion protection, application of materials for spot repair and complete repairs, surface preparation on all types of substrates, paint materials used in refinishing, refinishing equipment, and other body shop repairs such as glass and trim removal and replacement. Emphasis on automotive safety procedures and shop safety. (A)

## 153B ADVANCED ACR

4.5 units, 2 lecture hours, 8 lab hours

PREREQUISITE: Automotive Collision Repair 153A. ADVISORY: Welding Technology 2A and eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 and Mathematics 201 or Applied Technology 130 recommended.

Estimation of body repair and refinishing, analysis of mechanical components, repair of auto plastics, auto body panel replacement and adjustment, restoration of corrosion protection, application of materials for spot repair and complete repaints, surface preparation on all types of substrates, paint materials use 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 BodyFender 55)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 and Mathematics 201 or Applied Technology 130 recommended.

Methods of prepping vehicles for spot repair and complete painting. Application of waterborne basecoat, solvent base coats and 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), (Open Entry/Open Exit) PREREQUISITE: None.
Theory and practice in MIG welding, oxyacetylene welding, steel rod, brazing rod, plasma cutter, metal shrinking, working sheet metal, welded panel replacement, restoring corrosion protection, hand tool technology, shop safety and efficiency, job success and ASE certification.

## 372 BODY WORK TECHNOLOGY

2.78 lecture hours, 13.89 lab hours, ( 300 total hours), (Repeats = 3), (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), (Open Entry/Open Exit) PREREQUISITE: None.
Compressed air technology, refinishing materials and fasteners, repairing plastics, refinishing equipment technology, vehicle surface preparation and masking, refinishing procedures, color matching and custom painting, and paint problems and final detailing.

## AUTOMOTIVE TECHNOLOGY (AUTOT)

## 9 AUTOMOTIVE ESSENTIALS

3 units, 3 lecture hours, (Formerly Industrial Education 9)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Automotive components, service tools, and equipment. Designed for the prospective industrial arts teacher and students needing an exploratory course in the automotive field. (A, CSU)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

 1-8 unitsCOREQUISITE: 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

3 units, 3 lecture hours, (See also Automotive
Technology GM 51), (Formerly Automotive Mechanics 51)

COREQUISITE: Automotive Technology 9 and 51L. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Engine design and operation including diagnosis, failure analysis, and service practices. Designed to accompany work experience in the trade. (A, CSU)

## 51L AUTOMOTIVE ENGINE LABORATORY

2 units, 7 lab hours, (See also Automotive
Technology GM 51L), (Formerly Automotive
Mechanics 51L)
COREQUISITE: Automotive Technology 9 and 51. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Engine laboratory for the Automotive Technology major. Use of engine related equipment. Emphasis on engine rebuilding and machining practices. Designed to accompany work experience in the trade. (A, CSU)

## 52 AUTOMOTIVE ELECTRICAL SYSTEMS

5 units, 5 lecture hours, 16 lab hours, ( 9 weeks), (See also Automotive Technology GM 52), (Formerly Automotive Mechanics 52)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Basic electrical theory and operation of the automotive electrical components and systems. Testing, diagnosing, and repairing electrical components and systems including automotive computer controls using necessary equipment. Designed to accompany work experience in the trade. (A, CSU)

## 53 ENGINE PERFORMANCE

5 units, 5 lecture hours, 16 lab hours, ( 9 weeks), (See also Automotive Technology GM 53)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Engine theory and construction related to engine performance. History and theory of operation for the different types of automotive systems. Latest technologies in automotive fuel delivery, emission control, and ignition systems. Testing, diagnosing, and repairing fuel, emission, and ignition systems. Use of necessary test equipment. Designed to accompany work experience in the trade. (A, CSU)

## 54 SUSPENSION, STEERING, AND WHEEL ALIGNMENT

5 units, 5 lecture hours, 16 lab hours, ( 9 weeks), (See also Automotive Technology GM 54), (Formerly Automotive Mechanics 53)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Theory and practical application of basic 4 -wheel alignment, steering, and suspension systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. ( $\mathrm{A}, \mathrm{CSU}$ )

## 55 POWER TRAINS: TRANSMISSIONS/TRANSAXLES,

 DIFFERENTIALS, AND DRIVEAXLES6 units, 6 lecture hours, 20 lab hours, ( 9 weeks),
(See also Automotive Technology GM 55), (Formerly Automotive Mechanics 54)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

The principles of automotive power train systems: automatic and manual transmissions/transaxles, transfer cases, clutch assemblies, driveaxles, drivelines, and differentials. Diagnosis, service, and repair. Designed to accompany work experience in the trade. (A, CSU)

## 56 AUTOMOTIVE BRAKING SYSTEMS

5 units, 5 lecture hours, 16 lab hours, ( 9 weeks), (See also Automotive Technology GM 56)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Complete disassembly and reassembly of various automotive braking systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. (A, CSU)

## 57 AUTOMOTIVE HEATING, VENTILATION, AIR CONDITIONING, AND ADVANCED ELECTRONICS

5 units, 2.5 lecture hours, 8 lab hours, (See also Automotive Technology GM 57), (Formerly Automotive Technology 60)
PREREQUISITE: Automotive Technology 52 and 53 or equivalent. COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1 A and Mathematics 201 recommended.

Theory and practice in automotive heating, ventilation, and air conditioning systems/components. $\mathrm{R}-12$ and $\mathrm{R}-134 \mathrm{~A}$ refrigeration systems, recovery, recycling, charging, leak, and performance testing. Diagnosis, service, and repair of the advance automotive electronics, automatic temperature/ climate control, and other computer controlled systems found on today's late model vehicles. (A, CSU)

## 58 INDIVIDUALIZED SKILLS TRAINING (IST) CHASSIS SYSTEMS I LABORATORY

1 unit, 4 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Designed for students to complete assigned automobile manufacturers' training modules: Hands-On (HO), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Automotive Technology. Designed to accompany work experience in the trade. (A, CSU)

## 58A INDIVIDUALIZED SKILLS TRAINING (IST) CHASSIS

 SYSTEMS II LABORATORY1 unit, 4 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Designed for students to complete assigned automobile manufacturers' training modules in Advanced Chassis Systems: Hands-On (HO), Computer-Based Training (CBT), Web-Based Training (WBT), and/ or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Automotive Technology. Designed to accompany work experience in the trade. (A, CSU)

## 58B INDIVIDUALIZED SKILLS TRAINING (IST) ENGINE/ PROPULSION SYSTEMS LABORATORY

1 unit, 8 lab hours, ( 9 weeks)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Designed for students to complete assigned automobile manufacturers' training modules in Advanced Chassis Systems: Hands-On (H0), Computer-Based Training (CBT), Web-Based Training (WBT), and/ or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Automotive Technology. Designed to accompany work experience in the trade. (A, CSU)

## 58C INDIVIDUALIZED SKILLS TRAINING (IST) POWER TRAIN SYSTEMS LABORATORY

1 unit, 8 lab hours, ( 9 weeks)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Designed for students to complete assigned automobile manufacturers' training modules in Power Train Systems: Hand-On (HO), Comput-er-Based Training (CBT), Web-Based Training (WBT), and/or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Automotive Technology. Designed to accompany work experience in the trade. (A, CSU)

## 109L AUTOMOTIVE ESSENTIALS LABORATORY

## 1 unit, 3 lab hours

COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Automotive essential laboratory to include: automotive components, service tools, procedures, and equipment. Designed for the prospective industrial arts teacher and students needing an exploratory course in the automotive field. (A)

## 110A AUTOMOTIVE EXPRESS SERVICE TECHNICIAN

2 units, 1 lecture hour, 3 lab hours
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

Apply the principles and applications required to perform the duties of an Express Service Technician at an automotive service facility. Skills and tools required to perform the various tasks of the Express Service Technician will be discussed and practiced in laboratory exercises. Customer satisfaction will be the foremost topic of all work developed by the student. Designed to accompany work experience in the trade. (A)

## 110B AUTOMOTIVE SERVICE CONSULTANT

2 units, 1 lecture hour, 3 lab hours
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

Apply the basic principles and applications required to perform the duties of an Automobile Service Consultant. Customer relations and customer satisfaction will be the foremost topic of all work developed by the student. Designed to accompany work experience in the trade. (A)

## 110C AUTOMOTIVE PARTS SPECIALIST

2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

Apply the basic principles and applications required to perform the duties of an Automobile Parts Specialist. Customer relations will be the foremost topic of all work developed by the student. Designed to accompany work experience in the trade. (A)

## 161A LEVEL 1 - ENGINE AND EMISSION CONTROL FUNDAMENTALS

3 units, 2 lecture hours, 3 lab hours, (Formerly
Automotive Technology 61, 61A and 261A)
PREREQUISITE: Automotive Technology 52, and 53, or 261, or 10 semester units, 13 quarter units, or 180 hours of instruction at a NATEF certified and/or bureau-recognized college or trade school in the areas of electrical and engine performance. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

Designed to prepare students for the Bureau of Automotive Repair Smog Check Licensing Exam. Level 1 Training provides students with basic knowledge of engine and emission controls needed to move forward with Level 2 Smog Procedures Training. Smog check rules and regulations covered in detail. Introduction to Smog Check Program inspection procedures and policies mandated by the Bureau of Automotive Repair. Those who do not meet prerequisites/automotive experience are allowed to take this course but will not be certified as eligible to take the licensing examination. (A)

161B LEVEL 2 - SMOG CHECK PROCEDURES TRAINING
1.5 units, 1.5 lecture hours, 1 lab hours, (Formerly

Automotive Technology 61B and 261B)
PREREQUISITE: Automotive Technology 161A. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

Prepares students/technicians for the Bureau of Automotive Repair (BAR) Enhanced Area emission testing procedures and guidelines. This training provides students the procedural knowledge, skills, and abilities needed to perform Smog Check inspections. Students who complete and pass this training will have met the Bureau's training requirements to qualify to take the Smog Check Inspector state licensing examination. Introduction to on-vehicle diagnosing and repair mandated by the Bureau of Automotive Repair. Those who do not meet the prerequisite are allowed to take this course but will not be certified as eligible to take the (BAR) licensing examination. (A)

## 161C BAR UPDATE TRAINING

1 unit, 4 lecture hours, 4 lab hours, (2 weeks),
(Formerly Automotive Technology 261C)
PREREQUISITE: Automotive Technology 161B. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

Prepares students/technicians for new Bureau of Automotive Repair (BAR) procedures and guidelines Smog Check technicians must follow when performing emission inspections and certifying vehicles in the Basic and Enhanced Smog Check Program areas. Those who do not meet the prerequisite are allowed to take this course but will not be certified as eligible to take the (BAR) licensing examination and/or granted renewal of applicable license. (Note: Enhanced Area Technician training program certified). (A)

## 162A BEGINNING PERFORMANCE TUNING

3 units, 2.5 lecture hours, 2 lab hours
PREREQUISITE: Automotive Technology 161B. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

This beginning tuning course is designed for tuning with Stage 1 custom designed Tuning Checklists and Tuning Software. Emphasis will be focusing on three types of car combinations: bolt-on's, heads/cam combos, and forced induction (turbocharges/superchargers/nitrous). (A)

## 162B ADVANCED PERFORMANCE TUNING

3 units, 2.5 lecture hours, 2 lab hours
PREREQUISITE: Automotive Technology 162A. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

This advanced tuning course is designed for tuning with Stage 2 and/ or 3 custom designed Tuning Checklists and Tuning Software. Emphasis will be focusing on three types of advanced modifications: heads/cam combos, internal engine components, and forced induction (turbocharges/ supercharges/nitrous). Advanced power tuning with MAF, Speed Density, and BAR systems will also be covered. (A)

## 170A INTRODUCTION TO HYBRID ELECTRICAL VEHICLES (HEVS)

2 units, 2 lecture hours, 1 lab hour
PREREQUISITE: Automotive Technology/Automotive Technology GM 57. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

This course is designed to familiarize the construction, theory, and operation of the Hybrid Electric Vehicle (HEV). Includes high voltage safety, engines, electric motors, power inverters, DC to DC converters, battery construction and technologies, regenerative braking, and HVAC systems. (A)

## 170B SERVICE AND MAINTENANCE TO HYBRID ELECTICAL

 VEHICLES (HEVS)2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Automotive Technology 170A. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

This course is designed to familiarize with the hybrid safety, hybrid transmissions, parallel/series, electric motors, batteries, control module units, hybrid internal combustion engines (ICE), power inverter systems, $A C$ 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 <br> VEHICLES (HEVS)

2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Automotive Technology 170B. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

This course is designed to familiarize with hybrid safety, hybrid transmissions, parallel/series, electric motor failure diagnosis, battery failure diagnosis, control module failure diagnosis, battery reconditioning and rebuilding review, hybrid internal combustion engines (ICE), power inverter system, AC induction electric motors, and permanent magnet electric motors. This course will emphasize diagnosis and repairs to Hybrid Electric Vehicles (HEVs). (A)

## 171A INTRODUCTION TO ALTERNATIVE FUELED VEHICLES (AFVS)

2 units, 2 lecture hours, 1 lab hour
PREREQUISITE: Automotive Technology 170C. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

This is an introductory course on Alternative Fueled Vehicles (AFVs). Various alternative fuels will be compared, such as Ethanol, Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG), Liquefied Petroleum Gas (LPG) and Clean Diesel. The theory of operation, system components, and safe handling of these fuels are included. (A)

## 171B SERVICE AND MAINTENANCE TO ALTERNATIVE FUELDED VEHICLES (AFVS)

2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Automotive Technology 171A. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

This course is designed to familiarize with the hybrid safety, hybrid transmissions, parallel/series, electric motors, batteries, control module units, hybrid internal combustion engines (ICE), power inverter systems, $A C$ induction electric motors, and permanent magnet electric motors theory and construction. Inspection, maintenance, and service procedures on Hybrid Electric Vehicle (HEVs) systems will be emphasized. (A)

## 171C DIAGNOSIS AND REPAIR TO ALTERNATIVE FUELED VEHICLES (AFVS)

2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Automotive Technology 171B. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

This course is designed to familiarize with diagnosis and repair on Alternative Fueled Vehicles (AFVs). Emphasis will be placed on Ethanol, Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG), Liquefied Petroleum Gas (LPG) and Clean Diesel type fuel systems. (A)

## 261 BAR SPECIFIED DIAGNOSIS AND REPAIR TRAINING

3 units, 2 lecture hours, 3 lab hours, (Formerly Automotive Technology 61)
PREREQUISITE: Automotive Technology 52 or 53 or 9 semester units, 13 quarter units, or 180 hours of instruction at a NATEF certified and/or bureau recognized college or trade school in the areas of electrical and engine performance. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

Introduction to Smog Check Program diagnosis and repair procedures; engine theory, engine performance, and electrical systems; automotive computer control system operations; on-vehicle diagnosing and repair mandated by the Bureau of Automotive Repair. The training provides students with comprehensive knowledge related to the diagnosis and repair of Smog Check failures.

## 281A AUTOMOTIVE POWER TRAINS I

3 units, 3 lecture hours, (Formerly Automotive
Technology 81A)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68, and Mathematics 201 recommended.

The principles of automotive power train systems: automotive transmissions, drivelines, and differentials. Diagnosis and service methods.

## 281B AUTOMOTIVE POWER TRAINS II

3 units, 3 lecture hours, (Formerly Automotive Technology 81B)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68, and Mathematics 201 recommended.

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 equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68, and Mathematics 201 recommended.

Theory of basic 4 -wheel alignment and suspension systems. Operating principles, component description, diagnosis, and service adjustment spec.

## 282B AUTOMOTIVE BRAKING SYSTEMS

3 units, 3 lecture hours, (Formerly Automotive
Technology 82B)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68, and Mathematics 201 recommended.

Discuss complete disassembly and reassembly of various automotive braking systems. Operating principles, component description, diagnosis, repair, and service adjustments.

## 283A ENGINE PERFORMANCE AND DIAGNOSIS

3 units, 3 lecture hours, (Formerly Automotive Technology 83A)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68, and Mathematics 201 recommended.

Latest technologies in automotive fuel delivery, emission control, and ignition systems. Diagnosis fuel, emission ignition systems. Introduction of diesel theory, application, and operation. Use of necessary test equipment.

## 283B ELECTRICAL SYSTEMS

3 units, 3 lecture hours, (Formerly Automotive Technology 83B)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68, and Mathematics 201 recommended.

Basic electrical theory of the automotive electrical components and systems. Diagnosing electrical components and systems including automotive computer controls using necessary equipment.

284 AUTOMOTIVE AIR CONDITIONING
3 units, 3 lecture hours, (Formerly Automotive Technology 84)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68, and Mathematics 201 recommended.

Theory in automotive heating, ventilation, and air conditioning systems/components. R-12 and R-134A refrigeration systems, recovery, recycling, charging, leak, and performance testing. Discuss the diagnosis, service, and repair of automatic temperature/climate control.

## 285 AUTOMOTIVE ENGINES

3 units, 3 lecture hours, (Formerly Automotive Technology 85)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68, and Mathematics 201 recommended.

Engine design and operation including diagnosis, failure analysis, and service practices.

## 286 AUTOMOTIVE INFORMATION SYSTEMS

3 units, 3 lecture hours, (Formerly Automotive Technology 86)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68, and Mathematics 201 recommended.

Automotive service information for components, specifications, procedures, tools, and equipment. Designed for the automotive technology student or automotive technician in the field.

## 287 STREET ROD TECHNOLOGY

4 units, 2 lecture hours, 7 lab hours
PREREQUISITE: None.
Modification of older vehicles to incorporate new technology from newer vehicles.

## 292 ASE CERTIFICATION PREPARATION

2 units, 2 lecture hours, (Formerly Automotive Technology 92)
PREREQUISITE: Automotive Technology 9 or equivalent.
Preparation for the National Institute for Automotive Service Excellence (ASE) Certifications in the following areas: Engine Repair (A1), Automatic Transmission/Transaxle (A2), Manual Drive Train and Axles (A3), Suspension and Steering (A4), Brakes (A5), Electrical/Electronic Systems (A6), Heating and Air Conditioning (A7), and Engine Performance (A8).

## 294 BRAKE AND LAMP ADJUSTMENT/CERTIFICATION PREPARATION

2 units, 2 lecture hours, 0.5 lab hours, (Formerly Automotive Technology 94)
PREREQUISITE: Automotive Technology 9 or equivalent.
Preparation for the State of California Automotive Technician Brake and Lamp Adjustment/Certification examination.

AUTOMOTIVE MECHANICS (AMCTC)

## 371 ENGINE REPAIR

11 lecture hours, 22.33 lab hours, ( 600 total hours), (Pass/No Pass), (Repeats = 3), (Open Entry/Open Exit), (Formerly AMVTC 71)
Preparation for ASE certification in engine repair. Practical and theoretical training in general engine diagnosis, cylinder heads, valve train, engine block, lubrication, and cooling systems.

## 372 ENGINE PERFORMANCE

16.5 lecture hours, 33.5 lab hours, ( 900 total hours), (Pass/No Pass), (Repeats = 3), (Open Entry/ Open Exit), (Formerly AMVTC 72)
Basic skills necessary for an entry level job. Competency-based similar to those operations performed by automotive shop professionals. Prepares students to take the ASE certification tests.

## AUTOMOTIVE TECHNOLOGY: GENERAL MOTORS ASEP PROGRAM (ATGM)

## 51 PRINCIPLES OF ENGINE THEORY AND SERVICE

3 units, 3 lecture hours, (See also Automotive Technology 51)
COREQUISITE: Automotive Technology 9 and Automotive Technology GM 51L. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Engine design and operation including diagnosis, failure analysis, and service practices. Designed to accompany work experience in the trade. (A, CSU)

## 51L AUTOMOTIVE ENGINE LABORATORY

2 units, 7 lab hours, (See also Automotive Technology 51L)
COREQUISITE: Automotive Technology 9 and Automotive Technology GM 51. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Engine laboratory for the Automotive Technology major. Use of engine related equipment. Emphasis on engine rebuilding and machining practices. Designed to accompany work experience in the trade. (A, CSU)

## 52 AUTOMOTIVE ELECTRICAL SYSTEMS

5 units, 5 lecture hours, 16 lab hours, ( 9 weeks),
(See also Automotive Technology 52), (Formerly
Automotive Technology General Motors 32)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Basic electrical theory and operation of the automotive electrical components and systems. Testing, diagnosing, and repairing electrical components and systems including automotive computer controls using necessary equipment. Designed to accompany work experience in the trade. (A, CSU)

## 53 ENGINE PERFORMANCE

5 units, 5 lecture hours, 16 lab hours, ( 9 weeks),
(See also Automotive Technology 53), (Formerly
Automotive Technology General Motors 32)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Engine theory and construction related to engine performance. History and theory of operation for the different types of automotive systems. Latest technologies in automotive fuel delivery, emission control, and ignition systems. Testing, diagnosing, and repairing fuel, emission, and ignition systems. Use of necessary test equipment. Designed to accompany work experience in the trade. (A, CSU)

## 54 SUSPENSION, STEERING, AND WHEEL ALIGNMENT

5 units, 5 lecture hours, 16 lab hours, ( 9 weeks),
(See also Automotive Technology 54), (Formerly
Automotive Technology General Motors 31)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Theory and practical application of basic 4 -wheel alignment, steering, and suspension systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. (A, CSU)

## 55 POWER TRAINS: TRANSMISSIONS/TRANSAXLES, DIFFERENTIALS, AND DRIVEAXLES

6 units, 6 lecture hours, 20 lab hours, ( 9 weeks), (See also Automotive Technology 55), (Formerly Automotive Technology General Motors 36)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

The principles of automotive power train systems: automatic and manual transmissions/transaxles, transfer cases, clutch assemblies, driveaxles, drivelines, and differentials. Diagnosis, service, and repair. Designed to accompany work experience in the trade. (A, CSU)

## 56 AUTOMOTIVE BRAKING SYSTEMS

5 units, 5 lecture hours, 16 lab hours, ( 9 weeks),
(See also Automotive Technology 56)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Complete disassembly and reassembly of various automotive braking systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. (A, CSU)

## 57 AUTOMOTIVE HEATING, VENTILATION, AIR CONDITIONING, AND ADVANCED ELECTRONICS

 5 units, 2.5 lecture hours, 8 lab hours, (See also Automotive Technology 57), (Formerly Automotive Technology General Motors 34)PREREQUISITE: Automotive Technology/Automotive Technology GM 52 and 53 or equivalent. COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Theory and practice in automotive heating, ventilation, and air conditioning systems/components. R-12 and R-134A refrigeration systems, recovery, recycling, charging, leak, and performance testing. Diagnosis, service, and repair of the advance automotive electronics, automatic temperature/ climate control, and other computer controlled systems found on today's late model vehicles. (A, CSU)

## BIOLOGY (BIOL)

## 3 INTRODUCTION TO LIFE SCIENCE

3.5 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)

## 3H HONORS INTRODUCTION TO LIFE SCIENCE

## 3.5 units, 3 lecture hours, 2 lab hours

ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

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, literature and scientific research, use of technology and student presentations are included in this honors level course. (A, CSU-GE, UC, I)

## 4 PRINCIPLES OF ZOOLOGY

5 units, 3 lecture hours, 6 lab hours, (Formerly
Zoology 1)
PREREQUISITE: Mathematics 103 or equivalent with a grade of "C" or better. Completion within the last five years recommended. ADVISORY: Eligibility for English 1A recommended.

Animal forms using the evolutionary approach including morphology, physiology, and ecology relative to the major phyla. Field trips required. $(\mathrm{C}-\mathrm{ID}$ BIOL 130S $=$ BIOL $4+$ BIOL 6$)(\mathrm{A}, \mathrm{CSU}-\mathrm{GE}, \mathrm{UC}, \mathrm{I})$

## 5 HUMAN BIOLOGY

3.5 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, 24, and 31. (A, CSU-GE, UC, I)

## 6 PRINCIPLES OF BOTANY

5 units, 3 lecture hours, 6 lab hours, (Formerly Botany 1)
PREREQUISITE: Mathematics 103 or equivalent with a grade of "C" or better. Completion within the last five years recommended. ADVISORY: Eligibility for English 1A recommended.

Morphological, physiological, ecological, genetic, and taxonomic relationships with emphasis on seed plants. Field trips required. (C-ID BIOL $130 \mathrm{~S}=$ BIOL $6+$ BIOL 4) (A, CSU-GE, UC, I)

## 7 FIELD BIOLOGY

5 units, 3 lecture hours, 6 lab hours, (Spring)
PREREQUISITE: Biology 3 or 11A with a grade of "C" or better. Completion within the last five years recommended. ADVISORY: Eligibility for English 1A recommended.

Investigation of plants, animals, and fungi emphasizing natural history, taxonomy, and ecology of local species and methods of field based ecological investigation. Weekly required field trips with easy to moderate hiking and a multi-day field trip to the Pacific coast are included in this course. (A, CSU-GE, UC)

## 11A BIOLOGY FOR SCIENCE MAJORS I

5 units, 4 lecture hours, 3 lab hours
PREREQUISITE: Mathematics 103 and Chemistry 1A within the last five years recommended. ADVISORY: Eligibility for English 1A recommended.

One of two general biology courses for majors: the chemistry of life, cellular structure, cellular metabolism including photosynthesis, aerobic and anaerobic respiration, cellular communication, cellular division and its regulation, Mendelian genetics, molecular genetics, biotechnology, and evolution. Intended for science majors and pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors. (C-ID BIOL 190) (A, CSU-GE, UC, I)

## 11AH HONORS BIOLOGY FOR SCIENCE MAJORS I

5 units, 4 lecture hours, 3 lab hours
PREREQUISITE: Chemistry 1A and Mathematics 103 with a grade of "C" or better. Completion within the last five years recommended. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program. See Honors Program listing in the college catalog.

One of two general biology courses for majors: the chemistry of life, cellular structure, cellular metabolism including photosynthesis, aerobic and anaerobic respiration, cellular communication, cellular division and its regulation, Mendelian genetics, molecular genetics, biotechnology, and evolution. Intended for science majors and pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors. Field trips, guest speakers, literature and scientific research, use of technology, and student presentations are included in this honors level course. (C-ID BIOL 190) (A, CSU-GE, UC, I)

## 11B BIOLOGY FOR SCIENCE MAJORS II

5 units, 3 lecture hours, 6 lab hours
PREREQUISITE: Mathematics 103 within the last five years recommended. ADVISORY: Eligibility for English 1A recommended. Biology 11A.

One of two general biology courses for majors: evolution, speciation, the evolutionary history of biodiversity, plant structure and function, animal structure and function, and ecology. Intended for science majors and for pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors. Field trips required. (C-ID BIOL 140) (A, CSU-GE, UC, I)

## 20 HUMAN ANATOMY

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Biology 5 or 11A or equivalent, with a grade " C " or better. 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 and Chemistry 3 A with a grade "C" or better.

The first class in a two semester human anatomy and physiology sequence. Biology 21A and 21B are designed to prepare students planning careers in healthcare including nursing. (C-ID BIOL 115S $=$ BIOL 21A + 21B) (A, CSU-GE, UC, I)

## 21B HUMAN ANATOMY \& PHYSIOLOGY II

5 units, 4 lecture hours, 3 lab hours
PREREQUISITE: Biology 21A with a grade " C " or better. 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 $+21 \mathrm{~B})(\mathrm{A}$, CSU-GE, UC, I)

## 22 HUMAN PHYSIOLOGY

5 units, 4 lecture hours, 3 lab hours
PREREQUISITE: Biology 20 or equivalent and Chemistry 3 A or equivalent, each with a grade "C" or better. Completion within the last year recommended. ADVISORY: Eligibility for English 1A recommended.

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. Three units of credit for student with credit in Biology 24. (C-ID BIOL 120B) (A, CSU-GE, UC, I)

## 24 HUMAN ANATOMY AND PHYSIOLOGY

5 units, 4 lecture hours, 3 lab hours
PREREQUISITE: Biology 5 or 11A or equivalent, with a grade " $C$ " or better. Completion within the last year recommended. ADVISORY: Eligibility for English 1A recommended.

Systematic relationship of the gross and microscopic structures of the human body and their functional relationships. Fulfills the prerequisite for a limited number of health-related programs. Not open to students with credit in both Biology 20 and Biology 22. (A, CSU-GE)

## 31 MICROBIOLOGY

4.5 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. Presented by biology faculty. (A, CSU)

## 222 BIOLOGY SKILLS

1 unit, 2 lecture hours, ( 9 weeks), (Pass/No Pass)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 and Mathematics 201 recommended.

An introductory class for students seeking to develop foundation skills in biological science.

## BODY AND FENDER

SEE AUTOMOTIVE COLLISION REPAIR TECHNOLOGY

## BOTANY

SEE BIOLOGY

## BUILDING TECHNOLOGY

SEE ARCHITECTURE OR CONSTRUCTION

## BUSINESS ADMINISTRATION (BA)

## 5 WORKPLACE COMMUNICATION

3 units, 3 lecture hours, (See also Business \& Technology 5)
ADVISORY: Eligibility for English 1A recommended. Business \& Technology 1 and 112 recommended.

Professional workplace communication including written, oral, and presentation fundamentals with emphasis on organization, correctness, completeness, conciseness, and tone. (A, CSU)

## 10 INTRODUCTION TO BUSINESS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
A multidisciplinary survey of the U.S. business environment including the examination, analysis, reasoning, advocacy, and critique of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization's policy, practices, and ability to achieve its goals. Demonstrates how these influences impact key areas of business including: organizational structure and design; management; marketing; organizational communication; technology; and financial practices. (C-ID BUS 110) (A, CSU, UC)

## 10H HONORS INTRODUCTION TO BUSINESS

3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

A multidisciplinary survey of the U.S. business environment including the examination, analysis, reasoning, advocacy, and critique of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization's policy, practices, and ability to achieve its goals. Demonstrates how these influences impact key areas of business including: organizational structure and design; management; marketing; organizational communication; technology; and financial practices. (C-ID BUS 110) (A, CSU, UC)

## 18 BUSINESS AND THE LEGAL ENVIRONMENT

4 units, 4 lecture hours, (Formerly Business
Administration 18A)
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Law and the legal system: administrative, tort, criminal, contracts, agency, labor and employment, and international business law. Case studies utilized. (C-ID BUS 120) (A, CSU, UC)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

 1-8 unitsCOREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to business administration. Collaborative learning objectives established specific to business administration. Seventy-five hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 20 LAW AND THE LEGAL SYSTEM

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
What every educated citizen should know about law as a social process and about American law and legal institutions. The historical origins of law as well as the role law plays in modern western and non-western societies. Institutional sources of law; legal reasoning; judicial decision making and remedies; an overview of the civil and criminal litigation process; administrative law and procedure; alternative dispute resolution mechanisms; ethics and the legal system. (A, CSU-GE, UC)

## 25 INTERNATIONAL BUSINESS - AN INTRODUCTION

3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1 A recommended.

A study of the theory and practice of global business. Within the context of a multinational business a study of the functional areas of production, marketing, finance, human resource management, accounting, technology, legal issues and the impact of culture on the business practices. (A, CSU)

## 27 COLLEGIATE ENTREPRENEURS ORGANIZATION (CEO)/ STUDENTS IN FREE ENTERPRISE (SIFE)

1-3 units: 1 unit, 1 lecture hour, 1 lab hour; 2 units, 1 lecture hour, 3 lab hours; 3 units, 1 lecture hour, 6 lab hours
ADVISORY: Eligibility for English 1A recommended.
Business leadership training, experience, knowledge and practical experience in entrepreneurship and business using the student organizations Students in Free Enterprise and/or Collegiate Entrepreneurs Organization which are affli iated with the international organizations of the same name. Students in Free Enterprise, Inc. and Collegiate Entrepreneurs Organization participate in intercollegiate competitions, events and conferences to acquire knowledge and skills regarding teaching, mentoring, service, leadership, organization, networking, communication, presentation skills, business management skills and entrepreneurial skills as they relate to community economic development. Students manage and participate in student organized fund raising events and student run business ventures. CEO students attend the national CEO annual conference to advance the knowledge and skills required to become successful student entrepreneurs. (A, CSU)

## 28 E-LAW AND ETHICS

3 units, 3 lecture hours
ADVISORY: Computer Information Technology 15. Eligibility for English1A recommended.

An introduction to the legal and ethical issues involving technology and the use of the Internet. (A, CSU)

## 30 PERSONAL FINANCE

4 units, 4 lecture hours
ADVISORY: Business Administration 10. Eligibility for English 1A recommended. Eligibility for Mathematics 201 recommended.

Examines personal financial management from an economic and behavioral perspective. Emphasis on the life-long impact financial decisions have on individuals, families and society. Topics include time value of money, opportunity cost and marginal analysis; tax strategies; financial planning strategies; financial monitoring and reporting; money \& credit management; purchasing strategies and large asset acquisition; risk management through home, health, auto and disability insurance; saving and investing; and retirement and estate planning. (A, CSU-GE)

## 31 HUMAN RESOURCE MANAGEMENT

4 units, 4 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1 A recommended.

Examines major functions of human resource management including planning, recruitment, selection, training and development, evaluation, compensation, labor relations, and motivation. (A, CSU)

## 33 HUMAN RELATIONS IN THE WORKPLACE

3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1 A recommended.

Multidisciplinary examination of how society, economics, and human behavior are inextricably interwoven into the American work environment. An emphasis on employee interaction with coworkers, clients, supervisors/ managers, and their effect on the total organization. Emphasis on communication, societal and cultural differences, conflict resolution, ethics and politics, career selection and entry, inter-personal relations, motivation, leadership, attitude, and group dynamics. (A, CSU)

## 34 FUNDAMENTALS OF INVESTING

3 units, 3 lecture hours
ADVISORY: Business Administration 10 and 30 recommended. Eligibility for English 1A recommended. Eligibility Mathematics 201 recommended.

Study of basic investment theory and practice including security valuation. Includes strategies for investments in government securities, corporate bonds, stocks, mutual funds and basic derivatives. (A, CSU)

## 35 FINANCIAL MANAGEMENT FOR ENTREPRENEURS AND SMALL BUSINESS

3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A and Mathematics 201 recommended.

Basic financial decision-making for business owners, entrepreneurs and financial managers. Financial statement analysis, working capital management, capital budgeting, time value of money, sources of funding, and financial markets and institutions. (A, CSU)

## 38 OPERATION OF THE SMALL BUSINESS

3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A and Mathematics 201 recommended.

A systematic approach to developing and managing a small business including the development of a formal, comprehensive business plan. Emphasis on discussions and practical exercises to develop expertise in the operations, marketing, human resource utilization, and financing of the small business venture. (A, CSU)

## 40 SUPERVISION AND LEADERSHIP

3 units, 3 lecture hours, (Formerly Business
Administration 39)
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Focus on first-level (operational) supervision. Emphasis on planning, organizing, staffing, leading, and controlling. (A, CSU)

## 43 PRINCIPLES OF MANAGEMENT

3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

In-depth study of the primary management functions including: strategic and tactical planning; decision-making; organizational design and systems; leadership, motivation and communication; and control systems. (A, CSU)

## 44 WOMEN IN MANAGEMENT

3 units, 3 lecture hours, (See also Women's Studies 44)

ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Management and entrepreneurial behaviors for women seeking leadership skills, particularly for managers and those aspiring to executive levels. (A, CSU)

## 48 E-BUSINESS

3 units, 3 lecture hours, (Formerly eCommerce 1)
ADVISORY: Computer Information Technology 12 or 15; eligibility for English 1A and Mathematics 201 recommended.

A study of the nature and environment of electronic commerce and its strategic implications including: information technology infrastructure; marketing and business models; ethical, financial, legal and global strategic implications; the value chain and enterprise resource planning. (A, CSU)

## 49 BUSINESS PROTOCOL FOR ENTREPRENEURS

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Provides skill building application of business protocol required for entrepreneurs and those involved in business start-ups. (A, CSU)

## 50 BUSINESS CONCEPTS

2 units, 2 lecture hours, (Formerly Business
Administration 9)
ADVISORY: Eligibility for English 1A recommended.
A study of business basics for entrepreneurs. Topics include marketing, finance, strategic planning, personnel management, basic macroeconomic principles and an assessment of entrepreneurial readiness. Primarily for nonbusiness majors or those just beginning the study of business but interested in entrepreneurship. (A, CSU)

## 51 BUSINESS PLANNING AND NEW VENTURE LAUNCH

1.5 units, 1.5 lecture hours

ADVISORY: Business Administration 50 and eligibility for English 1A recommended.

Review of resources available to assist entrepreneurs in developing and launching a business including sources of funding. Business plan development. (A, CSU)

## 52 INTRODUCTION TO ENTREPRENEURSHIP

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Develops an understanding of the complex tasks faced by individuals engaged in entrepreneurial activities. Identifies the methods for developing a business idea, the process of starting a business, how to acquire resources, and the key parts of a business plan. (A, CSU)

## 58 BUSINESS MORALITY AND ETHICS

1.5 units, 1.5 lecture hours

ADVISORY: Business Administration 10, and eligibility for English 1 A recommended.

Applied business ethics and its relationship to free markets, marketing, finance, and the law. Topics cover key issues including management's responsibility for accountability, corporate governance, accounting practices, stakeholder relations, and ethical decision. (A, CSU)

## BUSINESS \& TECHNOLOGY (BT)

## 1 COMPUTER DOCUMENT PROCESSING I

3 units, 2 lecture hours, 3 lab hours, (Formerly BSS
1A and Business Information Processing 1)
ADVISORY: Eligibility for English 1A recommended. Business \& Technology 106 or keyboarding at 20 wpm at $96 \%$ accuracy on a 3 -minute timed writing recommended.

Producing basic correspondence, letters, memos, tables, and reports, using current word processing program. Developing keyboarding speed and accuracy. Fulfills the computer literacy graduation requirement. (A, CSU)

## 2 COMPUTER DOCUMENT PROCESSING II

3 units, 2 lecture hours, 3 lab hours, (Formerly
Business Information Processing 2)
PREREQUISITE: Business \& Technology 1 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Producing and formatting specialized correspondence, letters, memos, reports, tables, and business forms using a current word processing program. Building typing speed and accuracy. Fulfills the computer literacy graduation requirement. (A, CSU)

## 5 WORKPLACE COMMUNICATION

3 units, 3 lecture hours, (See also Business
Administration 5), (Formerly BSS 5 and Business
General Office 5)
ADVISORY: Eligibility for English 1A recommended. Business \& Technology 1 and 112 recommended.

Professional workplace communication including written, oral, and presentation fundamentals with emphasis on organization, correctness, completeness, conciseness, and tone. (A, CSU)

## 6 RECORDS MANAGEMENT

3 units, 3 lecture hours, 1 lab hour, (Formerly
Business Information Processing 10 and Business \&
Technology 10)
ADVISORY: Business \& Technology 106 or equivalent. Eligibility for English 1A recommended.

An introduction to filing methods and principles for all Business \& Technology majors and employees in the business community. Internationally applied rules of records management for manual and computerized systems used to create and maintain filing systems. Mastery of alphabetic, geographic, numeric and subject filing. (A, CSU)

## 9 COMPUTER APPLICATIONS I

4 units, 3 lecture hours, 3 lab hours, (Formerly
Business Information Processing 9)
ADVISORY: Business \& Technology 1 or equivalent. Eligibility for English 1A and Mathematics 201 recommended.

Hands-on learning which covers: an introduction to computers, their use, and the development of general computer skills with integrated software for office applications. Content includes word processing, spreadsheets, graphics, database, and electronic communication, using Microsoft Office. Fulfills the computer literacy graduation requirement. (A, CSU)

## 10 COMPUTER APPLICATIONS II

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Business \& Technology 9 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Advanced computer application skills for preparing and enhancing documents, spreadsheets, databases, and presentations for professional use. Typically the most current version of Microsoft 0ffice is taught. Fulfills the computer literacy graduation requirement. (A, CSU)

## 11 TODAY'S OFFICE

3 units, 3 lecture hours, 1 lab hour, (Formerly
Business General Office 18)
ADVISORY: Eligibility for English 1A recommended. Business \& Technology 106 or 1 or equivalent recommended.

General duties of a receptionist including telephone techniques, telecommunications, handling mail, scheduling appointments, and making travel arrangements both manually and via the internet. Perform internet research on related topics. (A, CSU)

## 13 APPLIED BUSINESS CORRESPONDENCE

2 units, 2 lecture hours, (Formerly Business
Information Processing 62)
PREREQUISITE: Business \& Technology 112. ADVISORY: Eligibility for English 1A recommended.

Constructing effective business letters, memos, and reports that are accurate, complete, and well organized. Identifying and correcting problems in business correspondence and then rewriting to improve meaning, tone, and completeness. (A, CSU)

## 18 SPREADSHEET FUNDAMENTALS

2 units, 4 lecture hours, 1 lab hour, ( 9 weeks),
(See also Computer Information Technology 23),
(Formerly Business Information Processing 18)
ADVISORY: Eligibility for English 1A and Mathematics 201 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)

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 anther college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to business \& technology. Collaborative learning objectives established specific to business \& technology. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 23 JOB SEARCH AND WORKPLACE SKILLS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Development of job-seeking and working relations tools and skills for students preparing to enter the workforce. Create marketable resumes and job search/interview strategies. Develop working relations competencies for greater on-the-job productivity and career success. Examination of human behavior, stress management, financial literacy, social and business relationships, goal setting, customer service, business communications, etiquette, leadership, teamwork, and conflict management. (A, CSU)

## 24 BEGINNING EXCEL

1 unit, 1 lecture hour, 1 lab hour, (See also
Computer Information Technology 31), (Formerly Business Information Processing 24)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Creating a worksheet, formatting the worksheet, using formulas and functions, enhancing the display of workbooks, and creating graphs. (A, CSU)

## 25 MICROSOFT OFFICE

3 units, 3 lecture hours, 1 lab hour, (See also Computer Information Technology 20), (Formerly Business Information Processing 25)
PREREQUISITE: Computer Information Technology 15.
The major software components of the Microsoft Office suite: Word, Excel, Access, and PowerPoint. Working within the Windows graphical user interface, creating applications and sharing data files to develop solutions that use more than one component of the suite. (A, CSU)

## 26 DATABASE FUNDAMENTALS

2 units, 4 lecture hours, 1 lab hour, ( 9 weeks), (See also Computer Information Technology 26), (Formerly Business Information Processing 26)
PREREQUISITE: Computer Information Technology 15. ADVISORY: Eligibility for English 1A recommended.

Creating database files, entering data, modifying database file structure, designing queries, reports and forms. (A, CSU)

## 28 MICROSOFT WORD I

2 units, 1.5 lecture hours, 1.5 lab hours, (Formerly
Business Information Processing 28)
ADVISORY: Business \& Technology 106 or equivalent. Eligibility for English 1A recommended.

Basic features of Microsoft Word. Designed to equip students with the skills to prepare personal correspondence and reports. Fulfills the computer literacy graduation requirement. (A, CSU)

## 29 MICROSOFT WORD II

2 units, 1.5 lecture hours, 1.5 lab hours, (Formerly
Business Information Processing 29)
PREREQUISITE: Business \& Technology 28 or Business \& Technology 9 or equivalent recommended. ADVISORY: Eligibility for English 1A recommended.

Advanced features of Microsoft Word. Designed for office personnel using Microsoft Word on the job. Fulfills the computer literacy graduation requirement. (A, CSU)

## 33 SOCIAL MEDIA AND EMERGING TECHNOLOGIES IN THE WORKPLACE

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Business \& Technology 106. Eligibility for English 1A recommended.

Project-based course providing dynamic coverage of current information available on social networking and emerging technologies for today's workplace environments. Includes researching and applying the latest tools toward office and administrative problem solving. (A, CSU)

## 104 TEN-KEY CALCULATIONS

2 units, 2 lecture hours, 1 lab hour, (Formerly Business General Office 8 and Business \& Technology 4)

PREQUISITE: None.
The operation of electronic desktop calculators and the application of these calculators to business oriented problems. The development of employable ten-key touch skills. (A)

## 106 COMPUTER KEYBOARDING

1.5 units, 1 lecture hour, 1.5 lab hours, (Formerly

Business Information Processing 6 and Business \& Technology 6)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Development of skills using the touch method to key letters, numbers, and figures on a computer keyboard. (A)

## 112 BUSINESS ENGLISH

3 units, 3 lecture hours, (Formerly Business
Information Processing 59 and Business \&
Technology 12)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Gain the skills needed to create grammatically correct work while improving speaking and writing skills. Review rules of English grammar and apply new concepts for communicating effectively in business settings. (A)

## 115 REFRESHER MATH

3 units, 3 lecture hours, (Formerly Business General Office 53 and Business \& Technology 15)
ADVISORY: Eligibility for English 125 and 126 recommended. Mathematics 260A.

Review of math fundamentals involving fractions, decimals, percents, and measurements with application problems related to business and technology Designed for students preparing for business occupations. (A)

## 116 SPELLING AND VOCABULARY BUILDING

2 units, 2 lecture hours, (Formerly BSS 61 and Business General Office 61 and Business \&
Technology 16)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Fundamentals of effective communication in a business setting with an emphasis on spelling, proofreading, and improving vocabulary. (A)

## 120 RESUME/INTERVIEW

1 unit, 1 lecture hour, (Formerly Business General Office 59 and 59A and Business \& Technology 20)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Development of job-seeking skills for students preparing to enter the workforce. Creating marketable resumes and practicing steps for winning interviews. (A)

## 121 WORKING RELATIONSHIPS

1.5 units, 1.5 lecture hours, (Formerly Business

General Office 59B and Business \& Technology 21)
ADVISORY: Eligibility for English 1A recommended.
Development of human relations competencies in the world of work for greater on-the-job happiness, productivity, and career success. (A)

## 122 TYPING SKILLBUILDING

0.5 unit, 1.5 lab hours, (Pass/No Pass), (Formerly

Business Information Processing 51A and Business \&
Technology 22)
PREREQUISITE: Business \& Technology 1 or equivalent.
Techniques and practice for improving keyboard speed and accuracy in order to meet certificate requirements. (A)

## 123 TEN-KEY SKILLBUILDING

0.5 unit, 1.5 lab hours, (Pass/No Pass)

PREREQUISITE: None.
Techniques and practice for improving ten-key speed and accuracy in order to meet degree and certificate requirements. (A)

## 126 AUTOMATED BUSINESS RECORDS

1 unit, 1 lecture hour, 1 lab hour, (Formerly Business \& Technology 206)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Develop knowledge of record keeping by transferring data from paper accounting forms into a database, entering accounting information (customers, vendors, suppliers, etc.), modifying file structures, designing queries to produce accounting reports, and printing reports, all using the database software. (A)

## 127 MICROSOFT OUTLOOK AND E-MAIL

1 unit, 1 lecture hour, 1 lab hour
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Using the Microsoft Outlook computer program to manage e-mail, appointments, contacts, and tasks; and to make notes and journal entries. Create effective e-mail messages for professional settings. (A)

## 130 BEGINNING POWERPOINT

1 unit, 1 lecture hour, 1 lab hour
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Using basic features of Microsoft PowerPoint computer program to create presentations including editing, adding effects and presenting a finished presentation. (A)

## 131 APPLIED ACCOUNTING

3.5 units, 3 lecture hours, 2 lab hours, (Formerly Business General Office 51 and Business \& Technology 31)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Practical accounting for service and merchandising businesses involving classification of accounts, relationship of assets, liabilities, and owner's equity; posting, accounts receivable, accounts payable, financial reports, the accounting cycle, and payroll. (A)

## 134 EXPLORATION OF CAREERS IN BUSINESS

1 unit, 1 lecture hour, 1 lab hour
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Students will use career exploration tools and engage with local employers as they assess their interest in, and explore the many options for, a career in business. Emphasis will be on the planning and communication skills needed to analyze career options and prepare for today's job market. (A)

## 140 LEGAL DOCUMENT PROCESSING

3 units, 2 lecture hours, 3 lab hours, (See also
Paralegal 156), (Formerly BSS 57A and Business
General Office 56 and Business \& Technology 40)
ADVISORY: Business \& Technology 1, or Business \& Technology 28, or basic knowledge of a word processing program. Ability to type at least 25 gross words per minute is recommended. Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Producing and formatting business and legal correspondence and documents using a current word processing program. (A)

## 143 MEDICAL OFFICE VOCABULARY

1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended.
Develop the ability to pronounce, spell, define, and use medical terms in a medical office. (A, CSU)

## 144 MEDICAL ADMINISTRATIVE ASSISTANT

2.5 units, 2 lecture hours, 2 lab hours, (Fall only), (Formerly BSS 58 and Business General Office 58 and Business \& Technology 44)
ADVISORY: Ability to touch type 25 words per minute. Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended. Business \& Technology 1 or equivalent.

Administrative procedures in a medical office/healthcare setting. Prepare documents, file charts, conduct basic office operations; consider legal, ethical and cultural issues when interacting with patients. (A)

## 147 MEDICAL MANAGEMENT SOFTWARE

2 units, 1 lecture hour, 3 lab hours, (Formerly
Business Information Processing 63 and Business \& Technology 47)
ADVISORY: Business \& Technology 1.
Introduction to medical office management software. Students will learn to enter patient information, insurance information, schedule appointments, and generate reports. (A)

## 148 MEDICAL INSURANCE \& BILLING CONCEPTS

2.5 units, 2 lecture hours, 2 lab hours, (Formerly

BSS 64 and Business General Office 64 and Business
\& Technology 48)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended. Business \& Technology 1 or equivalent.

Interpret health insurance plans, complete insurance claims forms used in a medical office, complete with coding. (A)

## 271 BUSINESS GRAMMAR FUNDAMENTALS

2 units, 2 lecture hours, (Formerly Business
Information Processing 71 and Business \&
Technology 71)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Introduction to or review of basic areas of business English: basic sentence structure, punctuation, capitalization, expression of numbers, spelling; also vocabulary developing, proofreading, and editing.

## 370A OFFICE ASSISTANT APPLICATIONS

5 lecture hours, 10 lab hours, (20 weeks), (300
total hours), (Repeats = 3), (Open Entry/Open
Exit), (Formerly CTVTC 70, CTCTC 370 and Business \& Technology 370)
COREQUISITE: Business \& Technology 370B.
Develop and improve skills for those desiring office employment. Emphasis on records management, keyboarding, grammar, 10-key, MS Word, MS Excel, telephone techniques, and computer literacy. Must be taken concurrently with BT 370B.

## 370B OFFICE ASSISTANT APPLICATIONS

5 lecture hours, 10 lab hours, ( 20 weeks), ( 300 total hours), (Repeats = 3), (0pen 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.

## CARPENTRY

SEE CONSTRUCTION

## CHEMISTRY (CHEM)

## 1A GENERAL CHEMISTRY

5 units, 3 lecture hours, 6 lab hours
PREREQUISITE: High school chemistry with laboratory component, Chemistry 101P, or Chemistry 3A or equivalent, and Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Development of atomic theory; atoms, isotopes, molecules, and ions; compounds; classification of matter; formulas and equations; stoichiometry; introduction to aqueous reactions: precipitation, acids and bases, and gas forming and redox reactions; gas laws; kinetic molecular theory of gases; thermochemistry; modern atomic theory; 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 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Chemistry for applied science and non-science majors. The scientific method; chemical computations; composition of matter, energy, and physical and chemical changes; fundamental laws and principles; atomic and molecular theory, structure; bonding; inorganic nomenclature, 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. ADVISORY: Eligibility for English 1A recommended.

Introduction to the basic concepts of organic and biochemistry. Structure and behavior of organic and biological compounds, metabolism, and regulation. Primarily for students in the health-oriented professions. Not a substitute for Chemistry 3A. (C-ID CHEM 102) (A, CSU-GE, UC)

## 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, CSUGE, UC, I)

## 18L ELEMENTARY ORGANIC CHEMISTRY LAB

2 units, 6 lab hours
PREREQUISITE: Chemistry 1B. COREQUISITE: 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.

Structures, properties, reactions, and nomenclature of alkanes, alkenes, alkynes, alkyl halides, alcohols, amines, ethers, epoxides, and organometallic compounds. Radical, substitution, and elimination reactions. Synthesis, separation, and identification of representative compounds. Reactions and nomenclature of stereoisomers. Introduction to Infrared, nuclear magnetic, and mass spectroscopies. Resonance and conjugation. Kinetic versus thermodynamic control of reactions. Multistep synthesis. (C-ID CHEM $150=$ CHEM 28A +29 A and C-ID CHEM 160S $=$ CHEM 28A $+29 \mathrm{~A}+28 \mathrm{~B}+29 \mathrm{~B})(\mathrm{A}, \mathrm{CSU}-\mathrm{GE}, \mathrm{UC}, \mathrm{I})$

## 28B ORGANIC CHEMISTRY II

3 units, 3 lecture hours
PREREQUISITE: Chemistry 28A. COREQUISITE: Chemistry 29B. ADVISORY: Eligibility for English 1A recommended.

Structures, properties, reactions, and nomenclature of aromatic compounds, benzene derivatives, amines, carbonyl compounds and their derivatives, carbohydrates, amino acids, lipids, and nucleic acids. Structural analysis of aromatic, carbonyl, and amine containing compounds. Oxida-tion-reduction chemistry of organic functional groups. Multi-step synthesis, separation, identification, and reaction mechanisms of representative compounds. Protecting groups in multi-step synthesis. (C-ID CHEM 160 S $=$ CHEM $28 \mathrm{~A}+29 \mathrm{~A}+28 \mathrm{~B}+29 \mathrm{~B})(\mathrm{A}, \mathrm{CSU}-\mathrm{GE}, \mathrm{UC}, \mathrm{I})$

## 29A ORGANIC CHEMISTRY LABORATORY I

## 2 units, 6 lab hours

PREREQUISITE: Chemistry 1B. COREQUISITE: Chemistry 28A. ADVISORY: Eligibility for 1A recommended.

Laboratory for Chemistry 28A; isolation, purification, and identification of organic compounds. Product characterization; melting point and boiling point; index of refraction; chromatography. Principles and hands on application of FT-NMR, FTIR, and gas and solid phase chromatography. Principles and interpretation of GC-MS data. Application of theories and mechanisms of organic reactions. Methods of synthesis. (C-ID CHEM 150 $=$ CHEM 28A +29 A and C-ID CHEM 160S $=$ CHEM $28 \mathrm{~A}+29 \mathrm{~A}+28 \mathrm{~B}+$ 29B) (A, CSU-GE, UC, I)

## 29B ORGANIC CHEMISTRY LABORATORY II

2 units, 6 lab hours
PREREQUISITE: Chemistry 29A. COREQUISITE: Chemistry 28B. ADVISORY: Eligibility for English 1A recommended.

Continuation of Chemistry 29A and the laboratory for Chemistry 28B. Application of theories and mechanisms of organic reactions. Methods of synthesis, isolation, purification, and identification of organic compounds. Principles and hands on application of FT-NMR, FTIR, and gas and solid phase chromatography. Principles and interpretation of GG-MS data. (C-ID CHEM 160S $=$ CHEM 28A $+29 \mathrm{~A}+28 \mathrm{~B}+29 \mathrm{~B})(\mathrm{A}, \mathrm{CSU}-\mathrm{GE}, \mathrm{UC}, \mathrm{I})$

## 42 TOPICS IN CHEMICAL EDUCATION

1-4 units, 1-4 lecture hours, (Pass/No Pass)
ADVISORY: Eligibility for English 1A recommended.
Chemistry field studies of such topics as the history of chemistry, applications of chemistry, etc. as they relate to an international location such as England, Scotland, Sweden, Denmark, etc. Required field trips. Additional costs for travel abroad. (A, CSU)

## 100I CHEMICAL LABORATORY INTERNSHIP

## 2-6 units, 6-18 lab hours

COREQUISITE: Chemistry 18L. ADVISORY: Eligibility for English 1A recommended.

Supervised experience or employment in an approved chemical laboratory. (A)

## 101P GENERAL CHEMISTRY PREPARATION

3 units, 2 lecture hours, 2 lab hours
PREREQUISITE: Mathematics 201. ADVISORY: Eligibility for English 1A recommended.

Introductory chemistry for students who plan to major in a scientific field. Appropriate for students desiring to prepare themselves for CHEM 1A. Emphasizes chemical nomenclature and techniques of chemical problem solving. Topics covered include: dimensional analysis; conversions between measuring units; mass, mole and volume calculations; chemical equations; density; heat and temperature; solutions. Students must demonstrate a minimum of $80 \%$ competency in dimensional analysis, nomenclature, and mole calculations, as demonstrated on department approved proficiency quizzes, in order to pass. (A)

## CHICANO-LATINO STUDIES (CLS)

FORMERLY CULTURAL STUDIES, LARAZA STUDIES

## 11 INTRODUCTION TO CHICANO-LATINO STUDIES

3 units, 3 lecture hours, (Formerly Cultural Studies
11)

ADVISORY: Eligibility for English 1A recommended.
The Chicano-Mexican American community, culture, and heritage in American society. An interdisciplinary approach to the study of society and culture, social and cultural change, and social and cultural conflict. Examines the roots of Chicano-Mexicano culture and heritage from the pre-Columbian indigenous civilizations to the present. (A, CSU-GE, UC, I)

## 12 MEXICAN AMERICAN HISTORY

3 units, 3 lecture hours, (Formerly Cultural Studies 12)

ADVISORY: Eligibility for English 1A recommended.
A survey of Mexican American and Latino history from the indigenous civilizations of Mesoamerica to the present, with a focus on the history of Mexicans in the United States. History and heritage of the Chicano-Latino community. (A, CSU-GE, UC, I)

## 13 POLITICS AND THE CHICANO-LATINO COMMUNITY

 3 units, 3 lecture hours, (Formerly Cultural Studies 13)ADVISORY: Eligibility for English 1A recommended.
Chicano-Latino political issues, interaction with governmental and political structures, legislation, political parties, pressure groups, political socialization, and political change. The Chicano Movement. Chicano-Latino political organizations. (A, CSU, UC)

## 14 SOCIOLOGY OF THE MEXICAN AMERICAN COMMUNITY

3 units, 3 lecture hours, (See also Sociology 14), (Formerly Cultural Studies 14)
ADVISORY: Eligibility for English 1A recommended.
Sociological examination of the Chicano and Latino in American society: family, religion, education, social class, gender, and political and social institutions. Emphasis on social problems, social issues, and social change. (A, CSU, UC)

## 17A BEGINNING MEXICAN FOLK DANCE

3.5 units, 3 lecture hours, 2 lab hours, (See also Dance 17), (Formerly Cultural Studies and ChicanoLatino 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.

## 18 LATIN JAZZ ENSEMBLE

2 units, 1 lecture hour, 3 lab hours, (See also Music
48), (Formerly Cultural Studies 18)

ADVISORY: Advanced high school band, orchestra, or jazz ensemble experience or the equivalent performance skills as determined by audition recommended.

Study and performance of Latin-jazz and Afro-Cuban music. Participation in concerts and jazz festivals required. (A, CSU, UC)

## 20 CHICANO ART

3 units, 3 lecture hours, (Formerly Cultural Studies 20)

ADVISORY: Eligibility for English 1A recommended.
Mexican, Chicano, and Latino art from the historical to the contemporary. Contemporary art forms and their ancestral cultural base. Survey of Mexican, Chicano and Latino artistic expressions. (A, CSU-GE, UC, I)

## 21 CHICANO LITERATURE

3 units, 3 lecture hours, (Spring), (Formerly Cultural Studies 21)
ADVISORY: Eligibility for English 1A recommended.
Survey of Chicano-Latino classic and popular literature. Reading and critical analysis of novels, short stories, poetry, and plays. (C-ID ARTH 145) (A, CSU-GE, UC, I)

## 22 ART OF THE ANCIENT AMERICAS

3 units, 3 lecture hours, (See also Art 60)
ADVISORY; Eligibility for English 1A recommended.
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.
Asociological analysis of the Mexican American female in contemporary society. Special emphasis on her role in the family, church, education, economics, and politics. (A, CSU, UC)

## 27A INTERMEDIATE MEXICAN FOLK DANCE

3.5 units, 3 lecture hours, 2 lab hours, (See also

Dance 27A)
PREREQUISITE: Chicano-Latino Studies 17B. Demonstrated experience and skills at the beginning level as assessed by instructor. ADVISORY: Eligibility for English 1A recommended.

History of the origin of Mexican dance, from the arrival of the Spaniards to the present time. Analysis of the form, function, and symbolism of the music, musical instruments, movements and choreographies. Dances practiced and performed at the intermediate level. (A, CSU)

## 27B ADVANCED MEXICAN FOLK DANCE

3.5 units, 3 lecture hours, 2 lab hours, (See also

Dance 27B), (Formerly Chicano-Latino Studies 27)
PREREQUISITE: Chicano-Latino Studies/Dance 27A. ADVISORY: Eligibility for English 1A recommended.

History of the origin of Mexican dance, from the arrival of the Spaniards to the present. Analysis of the form, function, and symbolism of the music, musical instruments, movements and choreographies. Dances practiced and performed at the advanced level. (A, CSU-GE, UC)

## 28 ANCIENT MEXICO

3 units, 3 lecture hours, (Formerly Cultural Studies
28), (See also Anthropology 28)

ADVISORY: Eligibility for English 1A.
A survey of history, geography, socio-political, religious systems, and cultural achievements of Mesoamerican civilizations such as the Olmec, Zapotec, Teotihuacano, Mayan, Toltec, and Aztec/Mexican. (A, CSU, UC)

29 HISTORY OF MEXICO, COLONIAL TO CONTEMPORARY PERIOD
3 units, 3 lecture hours, (Formerly Cultural Studies 29), (See also History 29)

ADVISORY: Eligibility for English 1A recommended.
A social, economic, and political survey of Mexican history from the colonial (1521) to the contemporary period. (A, CSU-GE, UC, I)

## 30 THE MEXICAN AMERICAN FAMILY: SOCIAL AND PSYCHOLOGICAL PERSPECTIVES

3 units, 3 lecture hours, (Formerly Cultural Studies 30)

ADVISORY: Eligibility for English 1A recommended.
Chicano social and psychological perspectives. Analysis of the dynamics of personality development and its relationship with the Chicano and Mexican family. Emphasis on culture, socialization, personality, and mental health. (A, CSU, UC)

## 33 COMMUNITY LEADERSHIP

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Personal development, community and civic development, public policy development and analysis, and leadership theory. A working understanding of international, national, state and local issues impacting the political, economic, and social fabric of the Latino community. (A, CSU)

## CHILD DEVELOPMENT (CHDEV)

## 1 PRINCIPLES AND PRACTICES OF TEACHING YOUNG CHILDREN

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An examination of the underlying historical context and theoretical perspectives of developmentally appropriate practice in early care and education. This course explores current best practices, professionalism and career pathways. (C-ID ECE 120) (A, CSU)

## 3 INTRODUCTION TO CURRICULLUM

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Verification of freedom from tuberculosis. Verification of immunization against influenza, pertussis and measles. ADVISORY: Eligibility for English 1A recommended.

Developmentally appropriate curriculum and environments for young children. Includes strategies for observation-based curriculum development and assessment for academic content areas, play, art and creativity. Includes a focus on children's development of social-emotional, communication, self-help skills, and integration of content across the curriculum. The "To Be Arranged" hours may include observation of and participation in planning learning environments and curriculum. (C-ID ECE 130) (A, CSU)

## 5 PARENT EDUCATION

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An introduction to the skills needed for effective parenting; the developmental needs of children; effective communication skills; appropriate and effective use of discipline; family structure and function. (A, CSU)

## 6 HEALTH, SAFETY AND NUTRITION IN EARLY CHILDHOOD EDUCATION

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to laws, regulations, standards, policies and procedures and early childhood curriculum related to child health safety and nutrition. Prevention, detection, and management of communicable disease; medical issues associated with disabilities and chronic illness; physical health; mental health and safety for both children and adults; collaboration with families and health professionals. Integration of concepts into planning and program development for children ages 0 to 5 . (C-ID ECE 220) (A, CSU)

## 9 MUSIC, MOVEMENT, AND DRAMA FOR YOUNG CHILDREN

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Basic skills, methods and theory in music, movement and drama for the young child. Emphasis on integrating music, movement and drama into the early childhood curriculum and developing a repertoire of music, movement and drama materials. (A, CSU)

## 10 SCIENCE AND MATH FOR YOUNG CHILDREN

3 units, 3 lecture hours, (Formerly Child Development 27)
ADVISORY: Eligibility for English 1A recommended.
Basic skills, methods and theory in science and math for the young child. Emphasis on integrating science and math into the early childhood curriculum and developing resource materials for these curriculum areas. (A, CSU)

## 11 THE YOUNG CHILD WITH SPECIAL NEEDS

3 units, 3 lecture hours
PREREQUISITE: Child Development 39. ADVISORY: Eligibility for English 1A recommended.

An introduction to the variations in development of children with special needs ages birth through eight and the resulting impact on families. Includes an overview of historical and societal influences, laws relating to children with special needs, and the identification and referral process. (A, CSU)

## 12 CHILD ABUSE

3 units, 3 lecture hours, (See also Psychology 12)
ADVISORY: Eligibility for English 1A recommended.
Issues related to abused, battered, and neglected children including issues related to child sexual molestation and pornography. Characteristics of different types of abusers, pedophiles, and adolescent molesters. Reporting laws and the legal process. Identification, prevention, and treatment of abused children and abusers. (A, CSU)

## 15 DIVERSITY AND CULTURE IN EARLY CHILDHOOD EDUCATION PROGRAMS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Examines the development of children's social identities in diverse societies and the influences of stereotypes and bias, social and educational access, media and schooling. Includes personal reflection for teachers on issues related to providing culturally and linguistically appropriate anti-bias environments, strategies and interactions. (C-ID ECE 230) (A, CSU)

## 16 INTRODUCTION TO EARLY INTERVENTION

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Child Development 20 , verification of freedom from tuberculosis. Verification of immunization against influenza, pertussis and measles. ADVISORY: Eligibility for English 1A recommended. Child Development 11 and 17A.

The study of infants and toddlers with disabilities, atypical development or other special needs, both in the Early Intervention setting and in the Child Care setting. Explores strategies and interventions used in the field of Early Intervention. Current theories in Early Intervention, early relationships, family systems, grief processing and stressors. The "To Be Arranged" hours may include observation of practitioners and participation in assessments and early intervention strategies. (A, CSU)

## 17A INFANT AND TODDLER PRACTICUM

3 units, 2 lecture hours, 3 lab hours, (Formerly Child Development 7 and 38)
PREREQUISITE: Child Development 1, 6, and 39. Verification of freedom from tuberculosis. Verification of immunization against influenza, pertussis and measles. ADVISORY: Eligibility for English 1A recommended.

Applies current theory and research to the care and education of infants and toddlers in group settings. Examines essential policies, principles and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months. The "To Be Arranged" hours may include observation of and participation in planning environments and facilitating infant toddler growth and development. (A, CSU)

## 17B ADVANCED INFANT AND TODDLER DEVELOPMENT

3 units, 3 lecture hours, (Formerly Child
Development 7A)
PREREQUISITE: Child Development 17A. ADVISORY: Eligibility for English 1A recommended.

A study of infants and toddlers focusing on birth to age three including physical, cognitive, language, social, and emotional growth and development. Includes an overview of pre-conception, conception, prenatal development and birth. Applies theoretical frameworks to interpret behavior and interactions between heredity and environment. Emphasizes the role of family and relationships in development. (A, CSU)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

## 1-8 units

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to child development. Collaborative learning objectives established specific to child development. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 20 OBSERVATION AND ASSESSMENT

3 units, 3 lecture hours
PREREQUISITE: Child Development 1, 3 , and 39. ADVISORY: Eligibility for English 1A recommended.

Appropriate use of assessment, observation, and recording strategies; documentation of development and learning; partnerships with families and professionals; use of rating systems, portfolios, and multiple assessment tools. (C-ID ECE 200) (A, CSU)

## 30 CHILD, FAMILY, AND COMMUNITY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An examination of the developing child in a societal context focusing on the interrelationship of family, school and community and emphasizes historical and socio-cultural factors. The process of socialization and identity development will be highlighted.(C-ID CDEV 110) (A, CSU-GE, UC, I)

## 37A EARLY CHILDHOOD PRACTICUM

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Child Development 1 and Child Development 3 and Child Development 39/Psychology 39. Verification of freedom from tuberculosis. Verification of immunization against influenza, pertussis and measles. ADVISORY: Eligibility for English 1A recommended.

Curriculum design, implementation and evaluation of developmentally appropriate experiences that promote positive development and learning for all young children, in a supervised lab school setting or in early childhood programs with mentor teachers. Emphasis on child centered play-oriented approaches to teaching, learning and assessment. Classroom experiences will support connections between theory and practice, develop professional behaviors and build comprehensive understanding of children and families. The "To Be Arranged" hours may include observation of and participation in planning environments and activities to facilitate preschool children's growth and development. (C-ID ECE 210) (A, CSU)

## 37B ADVANCED PRACTICUM IN EARLY CHILDHOOD EDUCATION

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Child Development 37 A . Verification of freedom from tuberculosis. Verification of immunization against influenza, pertussis and measles. ADVISORY: Eligibility for English 1A recommended.

Supervised experience as a teacher in an early childhood education program: developing environments for learning, child observation and assessment, documentation of children's work, behavior guidance, group management, collaborative teaching, building relationships with families, and effective preparation and implementation of curriculum. The "To Be Arranged" hours may include observation of and participation in planning environments and activities to facilitate the growth and development of preschool children in early care and education settings. (A, CSU)

## 38 LIFESPAN DEVELOPMENT

3 units, 3 lecture hours (See also Psychology 38)
ADVISORY: Eligibility for English 1A recommended.
Basic theories, research concepts, and principles of typical and atypical physical, cognitive and psychosocial development at each major stage of life from conception to death. All major topics of human development (e.g. human behavior, sexuality, nutrition, health, stress, key relationships of humankind to the social and physical environment, and implications of death and dying) presented in an integrated manner. (C-ID PSY 180) (A, CSU-GE, UC, I)

## 39 CHILD GROWTH AND DEVELOPMENT

3 units, 3 lecture hours, 1 lab hour, (See also Psychology 39)
ADVISORY: Eligibility for English 1A recommended. Verification of freedom from tuberculosis. Verification of immunization against influenza, pertussis and measles.

Basic theories, research, concepts, and principles of physical, cognitive/language, and psychosocial development at each major stage in life from conception through adolescence. Emphasis on environmental and genetic influences on typical and atypical development. The "To Be Arranged" hours may include observation and documentation of children at various stages of development. (C-ID CDEV 100) (A, CSU-GE, UC, I)

## 40A ADMINISTRATION I: PROGRAMS IN EARLY CHILDHOOD EdUCATION

3 units, 3 lecture hours, (Formerly Child
Development 36A)
PREREQUISITE: Child Development 30 and 37A or Child Development 30 and 17A. ADVISORY: Eligibility for English 1A recommended.

Introduction to the administration of early childhood programs. Covers program types, budget, management, regulations, laws, development and implementation of policies and procedures. Examines administrative tools, philosophies, and techniques needed to organize, open, and operate an early care and education program. (A, CSU)

## 40B ADMINISTRATION II: PERSONNEL AND LEADERSHIP in EARLY CHILDHOOD EDUCATION

3 units, 3 lecture hours, (Formerly Child Development 36B)
PREREQUISITE: Child Development 30 and 37A or Child Development 30 and 17A. ADVISORY: Eligibility for English 1A recommended.

Effective strategies for personnel management and leadership in early care and education settings. Includes legal and ethical responsibilities, supervision techniques, professional development, and reflective practices for a diverse and inclusive early care and education program. (A, CSU)

## 42 CHILD NUTRITION

3 units, 3 lecture hours, (See also Food and Nutrition 42)
ADVISORY: Food and Nutrition 40 and eligibility for English 1A recommended.

Nutritional requirements of infants and children from conception through adolescence. Nutritional needs of pregnant and lactating women. Feeding infants and children for optimum physical and mental development. Child and maternal nutrition programs. Social and cultural influences affecting child and maternal nutrition. (A, CSU)

## 43 CHILDREN'S LITERATURE

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Selection and presentation of literature for the child from infancy to eight years. Storytelling, emergent literacy and awareness regarding diverse perspectives. Emphasis on supporting the child's emotional, social and cognitive growth through experience with books. (A, CSU)

## 45 ADULT SUPERVISION AND MENTORING IN EARLY CARE AND EDUCATION

3 units, 3 lecture hours
PREREQUISITE: Child Development 17A or 37A. Currentemployment in a supervisory capacity in an early care and education setting. ADVISORY: Eligibility for English 1A recommended.

Methods and principles of mentoring and supervising student teachers, volunteers, staff, and other adults in early care and education settings. Emphasis is on the roles and development of early childhood professionals as mentors and leaders. This course satisfies the adult supervision requirement for the Master Teacher Permit issued by the California Commission on Teacher Credentialing. (A, CSU)

## 47 EMERGENT LITERACY

3 units, 3 lecture hours, (Formerly Child Development 47A)
ADVISORY: Eligibility for English 1A recommended.
Research-based principles and practices for providing children birth through age eight with a strong foundation in emergent language and literacy skills within a developmentally-appropriate approach. Topics include the teacher's role, preparation of the classroom environment curriculum development and teaching strategies, including ways to support the child learning English as a second language. (A, CSU)

## 48 CHILDREN WITH CHALLENGING BEHAVIORS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Effective strategies for working with children with challenging behaviors in early childhood environments; guidelines for discussion, identification and intervention of impeding behaviors; emphasis on teacher's role in supporting children through emotional difficulties and sensory challenges; needs of children at risk, in trauma and/or deprivation. Specific disabilities or special needs which affect behavior will be studied. (A, CSU)

## 53 FAMILY CHILD CARE PROGRAMS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An introduction to managing a quality family child care home; meeting licensing requirements, developing policies for parents, business practices, recruiting children, and strategies to promote professionalism. Program planning including developmentally appropriate practices for children of mixed ages, guidance techniques, and designing an environment for children's learning. (A, CSU)

## 60 INTRODUCTION TO CHILD WELFARE

3 units, 3 lecture hours, (See also Human Services 60)

ADVISORY: Eligibility for English 1A recommended.
Introduction to the child welfare system. Exploration of the goals of child welfare including safety, a permanent family and well-being of every child. Emphasis on the practice of preventing, remedying, or ameliorating child maltreatment. (A, CSU)

## CHINESE

SEE FOREIGN LANGUAGES

## CISCO

SEE ELECTRICAL SYSTEMS TECHNOLOGY (EST)

## COMMUNICATION (COMM)

FORMERLY SPEECH

## 1 INTRODUCTION TO PUBLIC SPEAKING

3 units, 3 lecture hours, (Formerly Speech 1)
ADVISORY: Eligibility for English 1A recommended.
Theories and techniques of public speaking from the perspective of the speaker and the audience. Emphasis on research, logical organization, composition and effective delivery of informative and persuasive speeches. Practice in clearly stating and developing ideas. (C-ID COMM 110) (A, CSU-GE, UC, I)

## 2 INTERPERSONAL COMMUNICATION

3 units, 3 lecture hours, (Formerly Speech 2)
ADVISORY: Eligibility for English 1A recommended.
Introduction to interaction processes in interpersonal communication settings. Emphasis on effective and appropriate uses of verbal and nonverbal messages in the initiation, development, maintenance, and termination of personal and professional relationships. (C-ID COMM 130) (A, CSU-GE)

## 4 PERSUASION

3 units, 3 lecture hours, (Formerly Speech 4)
ADVISORY: Eligibility for English 1A recommended.
Theories and practice of influence, advocacy, and reasoning from the perspective of both persuader and audience. Practice preparing effective, ethical persuasive appeals. (C-ID COMM 190) (A, CSU-GE, UC, I)

## 8 GROUP COMMUNICATION

3 units, 3 lecture hours, (Formerly Speech 8)
ADVISORY: Eligibility for English 1A recommended.
An introduction to group communication as a vehicle for solving problems, reaching decisions, and making recommendations on policy. Students will study and practice the theories, behaviors, and processes of group communication. (C-ID COMM 140) (A, CSU-GE, UC, I)

## 12 FUNDAMENTALS OF ORAL INTERPRETATION

3 units, 3 lecture hours, (See also Theatre Arts 12), (Formerly Speech 12)
ADVISORY: Eligibility for English 1A recommended.
An introduction to performance studies; analysis, appreciation, and application of theories of interpretive performance of various forms of literature including poetry, prose, and drama. (A, CSU-GE, UC)

## 20 COMMUNITY INVOLVEMENT

2-3 units, 1 lecture hour, 3-6 lab hours, (Formerly
Speech 20)
ADVISORY: Eligibility for English 1A recommended.
Theory and practice of community service in nonprofit agencies. Emphasis on the analysis, practice and application of communication theory, leadership, and citizenship through a community service experience. (A, CSU)

## 25 ARGUMENTATION

3 units, 3 lecture hours, (Formerly Speech 25)
ADVISORY: Eligibility for English 1A recommended.
Analysis, reasoning, advocacy, and criticism of ideas. Emphasis on derived conclusions based on valid evidence and sound inferences without using fallacies of thought and language. Demonstration of basic principles through a variety of oral presentations and written assignments. (C-ID COMM 120) (A, CSU-GE, UC, I)

## 26 INTERCOLLEGIATE FORENSICS LABORATORY

1-3 units: 1 unit, 1 lecture hour, 1 lab hour; 2 units,
1 lecture hour, 3 lab hours; 3 units, 1 lecture hour, 6
lab hours, (Repeats = 3), (Formerly Speech 26)
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 either attend intercollegiate tournaments for a specified number of weekends or participate in on-campus intramural contests. (C-ID COMM 160B) (A, CSU)

## COMPUTER AIDED DRAFTING AND DESIGN (CADD) SEE ALSO DRAFTING

## 6A INTRODUCTORY 3D SOLID MODELING IA

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. Mathematics 255 recommended.

Introductory course surveying the fundamentals of freehand sketching for technical drawings and 2D sketching tools along with basic 3D solid modeling features to create parts and assemblies using CAD. The design process will also be introduced. (A, CSU)

6B INTRODUCTORY 3D SOLID MODELING IB
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. Mathematics 255 recommended.

Introductory course surveying 3D solid modeling features to create parts, assemblies and 2D detailed drawings using CAD. Reverse engineering concepts and product fabrication will also be introduced. (A, CSU)

## 14 2D CAD I

3 units, 2 lecture hours, 3 lab hours, (Formerly
Drafting 42 and 32)
ADVISORY: Eligibility for English 1A and Mathematics 255 recommended.

Creating and modifying digital drawings for the architectural, engineering, mechanical and other related industries. (A, CSU)

## 16 3D SOLID MODELING I

3 units, 2 lecture hours, 3 lab hours, (Formerly
Drafting 20 and Computer Aided Drafting and Design 26 and 34)
ADVISORY: Eligibility for English 1A and Mathematics 255 recommended.

CAD generated 2D sketches, 3D solid models, assemblies and detailed drawings for the mechanical industry. (A, CSU)

## 22 MECHANICAL DRAWING I

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 16.
Solid modeling practices for sheet metal, fasteners and welding drawings. Use of precision measuring tools and tolerances will also be covered. (A, CSU)

24 2D CAD II
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 14.
Advanced 2D CAD topics for the computer aided draftsperson in the disciplines of architecture, engineering, mechanical and other related industries. (A, CSU)

## 26A 3D SOLID MODELING II

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 16.
3D sketching, advanced drawings, legacy data import, design table configurations and subassemblies using 3D solid modeling techniques for the mechanical industry. (A, CSU)

## 28 PRODUCT DEVELOPMENT I

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 16.
Create realistic rapid prototypes/models from digital solid models using processes such as 3D printing, silicone molds, casting resins, vacuum forming, laser cutting and engraving and the application of finishes. (A, CSU)

## 32 REVERSE ENGINEERING I

3 units, 2 lecture hours, 3 lab hours, (Formerly Drafting 22 and Computer Aided Drafting and Design 24)

PREREQUISITE: Computer Aided Drafting and Design 16.
Reverse engineering practices using specialized software and various scanners including laser. Traditional methods will also be covered. (A, CSU)

## 36A 3D SOLID MODELING III

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 16.
Create renderings and animations of solid models and assemblies. The application of advanced modeling features to existing solid models. Create solid models using various surface modeling techniques. Run simulations on solid models to determine the factor of safety. (A, CSU)

## 42 MECHANICAL DRAWING III

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 28 and 36A.
Project design using various CAD systems. Digital and hard bound portfolio creation including presentation models. (A, CSU)

## COMPUTER AIDED MANUFACTURING (CAM)

## 10 CNC MILL PROGRAMMING \& OPERATION I

6.5 units, 5 lecture hours, 5 lab hours, (Formerly Drafting and Computer Aided Drafting and Design 44)

ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

An entry-level class that gives the students access to industrial tools and technologies found in industry. (A, CSU)

## 15 COMPUTER AIDED MACHINING FOR CAD USERS

3 units, 2 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. Introduction to MasterCAM's programming software package for Numerical Control (NC) part programming. Topics include: CNC concepts, machine axis, tooling, programming formats, manufacturing process, Computer Aided Manufacturing (CAM), NC mill programming, NC lathe programming, program editing, speeds, feeds, and machine shop safety. (A, CSU)

## 20 CNC MILL PROGRAMMING \& OPERATION II

6.5 units, 5 lecture hours, 5 lab hours

PREREQUISITE: Computer Aided Manufacturing 10.
Continuation of CAM 10. Design parts in 3D solid and 3D surfacing for mill and lathe machine tool programming. Instruction on operation and set-up of CNC HAAS mill/lathe, Akira Seiki mill/lathe machines and shop safety. (A, CSU)

## 25 CNC OPERATION AND SETUP FOR CAD USERS

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Manufacturing 10 or Computer Aided Drafting and Design 14 or Computer Aided Drafting and Design 16. .

Instruction in operation and set-up of CNC HAAS mill/lathe, Akira Seiki mill/lathe machines and shop safety. (A, CSU)

## 26 LATHE PROGRAMMING AND OPERATION II

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Manufacturing 10.
An intermediate level to the operation and set up of a CNC HAAS lathe and Akira Seiki OT FANUC lathe. Lathe geometry programming with the latest MasterCAM software. (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. Basic principles of hardware and software; shopping for a personal computer; social issues associated with the role of computers in the world today; and an introduction to word processing, spreadsheets, and Internet principles and usage. Fulfills the computer literacy graduation requirement. (A, CSU, UC)

## 15 COMPUTER CONCEPTS

3 units, 3 lecture hours, 1 lab hour, (Formerly Computer Information Systems 15 and Information Systems 15)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Introduction to computers and their use. Topics include basic principles of hardware and software, application programs, systems software, telecommunications, networks, program design, the Internet, and the World Wide Web. Students will work with Windows and the Internet; word processing, spreadsheet, and database programs; and a programming language. Fulfills the computer literacy graduation requirement. (C-ID ITIS 120) (A, CSU, UC)

## 17 WINDOWS 7

2 units, 3 lecture hours, 1 lab hour, ( 9 weeks), (Formerly Computer Information Systems 14 and Information Systems 14)
ADVISORY: Eligibility for English 1A recommended.
Basic introduction to Microsoft Windows 7. Introductory hands-on operations for students who want to learn how to manage files, run applications, customize desktops, browse the internet, use email, and work with pictures and music. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units, (Formerly Information Systems 19)
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to computer information technology. Collaborative learning objectives established specific to computer information technology. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 20 MICROSOFT OFFICE

3 units, 3 lecture hours, 1 lab hour, (See also
Business \& Technology 25), (Formerly Information
Systems 25)
PREREQUISITE: Computer Information Technology 15.
The major software components of the Microsoft Office suite: Word, Excel, Access, and PowerPoint. Working within the Windows graphical user interface, creating applications and sharing data files to develop solutions that use more than one component of the suite. (A, CSU)

## 23 SPREADSHEET FUNDAMENTALS

2 units, 4 lecture hours, 1 lab hour, ( 9 weeks),
(See also Business \& Technology 18), (Formerly
Information Systems 5 and 18)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Creating and formatting a worksheet, using formulas and functions, and creating graphs; integrating spreadsheets with other programs and the World Wide Web; and creating macros. (A, CSU)

## 24 ADVANCED SPREADSHEETS

2 units, 4 lecture hours, 1 lab hour, ( 9 weeks),
(Formerly Information Systems 20)
PREREQUISITE: Computer Information Technology 23 or Business \& Technology 18.

Advanced capabilities of spreadsheets. Solving complex problems using spreadsheets, creating and using macros, creating data tables, working with multiple worksheets and workbooks, and using Visual BASIC to enhance a spreadsheet. (A, CSU)

## 26 DATABASE FUNDAMENTALS

2 units, 4 lecture hours, 1 lab hour, ( 9 weeks), (See also Business \& Technology 26), (Formerly Information Systems 6 and 26)
PREREQUISITE: Computer Information Technology 15. ADVISORY: Eligibility for English 1A recommended.

Creating database files, entering data, modifying database file structure, designing queries, reports and forms. (A, CSU)

## 28 CLIENT/SERVER DATABASES

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15.
Fundamentals of relational database systems. How to design, program and administer a client / server database. (A, CSU)

## 31 BEGINNING EXCEL

1 unit, 1 lecture hour, 1 lab hour, (See also Business \& Technology 24), (Formerly Information Systems 24 and 74)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Creating a worksheet, formatting the worksheet, using formulas and functions, enhancing the display of workbooks, and creating graphs. (A, CSU)

## 40 COMPUTER OPERATING SYSTEMS

4 units, 3.5 lecture hours, 2 lab hours, (Formerly
Information Systems 22)
PREREQUISITE: Computer Information Technology 12 or 15.
Principles of computer operating systems. A survey and comparison of the graphical user interface along with the command line interface using various operating systems such as Microsoft Windows and Linux, etc. (A, CSU)

## 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.

Essential elements that make up data communications including transmission media, local area networks, wide area networks, network interconnections, network management, security, network applications, and related technologies. (A, CSU)

## 48 A+ AND SERVER+ SYSTEMS FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour, (Formerly Information Systems 238 and Computer Information Technology 238)
PREREQUISITE: 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 customer satisfaction. (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 UNIX/Linux. (A, CSU)

## 51 MCTS NETWORK INFRASTRUCTURE

4 units, 4 lecture hours, 1 lab hour, (Formerly
Information Systems 30B)
PREREQUISITE: Computer Information Technology 45. ADVISORY: Computer Information Technology 50 recommended.

Implementing and supporting a Microsoft Windows network infrastructure. For product support professionals who will be responsible for installing, configuring and supporting a Microsoft Windows network infrastructure. Prepare students for the MCTS exam. (A, CSU)

## 52 MCTS DIRECTORY SERVICES

4 units, 4 lecture hours, 1 lab hour, (Formerly Information Systems 30C)
PREREQUISITE: Computer Information Technology 45. ADVISORY: Computer Information Technology 50 recommended.

Install, configure, and administer "Active Directory" directory services, which is the directory service for Microsoft Windows. Implementing and configuring "Group Policy" to centrally manage large numbers of users and computers. Prepare students for the MCTS exam. (A, CSU)

## 55 MCTS NETWORK SECURITY

4 units, 4 lecture hours, 1 lab hour, (Formerly Information Systems 30F)
PREREQUISITE: Computer Information Technology 45 and 50. ADVISORY: Computer Information Technology 50 recommended.

Design a security framework for small, medium, and enterprise networks by using Microsoft Windows technologies. Prepare students for the MCTS exam. (A, CSU)

## 57 WIRELESS NETWORKING FOR HOME AND OFFICE

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

Basic understanding of wireless networking. Plan, design, and configure wireless networks and equipment. Basic security for wireless networks. Prepare for the Certified Wireless Network Administrator (CWNA) exam. (A, CSU)

## 58A PRINCIPLES OF INFORMATION SECURITY

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

Basic understanding information security in a business environment. Prepares students to become CISSP (certified information systems security professional) certified. Introduces the SecSDLC (Security Systems development life cycle) and uses the cycle to build a security system. Examines both managerial and technical components of security. Lay a foundation from which managerial strategies can be formulated and technical solutions selected. (A, CSU)

## 58B OPERATING SYSTEM SECURITY

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

A full range of security concepts and techniques used in the business environment. Prepares students to become Security+ certified. Covers desktop and network server security concepts using windows, Linux and the Mac OS X. Examines all aspects of operating system security from how attackers operate to how viruses strike. Introduces operating system hardening to repel attacks on both business networks and workstations. (A, CSU)

## 58C NETWORK SECURITY FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

Provides a comprehensive overview of network security. Covers a full range of security concepts and techniques used in the business environment. Prepares students to become CompTIA Security+ 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. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

Examines the practice and techniques of intrusion detection to deter network attacks against business information technologies. Provides a comprehensive overview of intrusion detection design, and implementation, virtual private networks, packet filters, and network traffic signatures. Prepares students to take the network defense and countermeasures exam for the security certified professional (SCP) which is an industry standard security certification. (A, CSU)

## 58E FIREWALLS AND NETWORK SECURITY

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

Comprehensive overview of firewalls and their use with other network security components Perimeter devices and concepts are covered to provide a secure business environment. Prepares students for industry standard security certifications. Covers authentication methods, packet filtering, proxy servers, and encryption strategies to protect business information systems. (A, CSU)

## 58F ETHICAL HACKING

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

Basic understanding of the ethics involved in testing systems and networks using hacking tools to judge the level of vulnerability. Penetration testing methodologies, security certification programs, laws governing hacking, tools such as port scanners and network sniffers as well as spyware, adware, worms, and viruses. (A, CSU)

## 60 BEGINNING VISUAL BASIC

4 units, 4 lecture hours, 1 lab hour, (Formerly
Information Systems 35 and 47)
PREREQUISITE: Computer Information Technology 15.
Introduction to programming in Visual Basic. Development of applications using standard Windows elements such as command buttons, and check, option and list boxes. Emphasis on structured program design, including debugging, testing, and documentation. (A, CSU, UC)

## 62 BEGINNING OBJECTIVE C PROGRAMMING

4 units, 4 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15.
Programming using the Objective C language. Emphasis on fundamentals including control, computation, functions, classes, object-oriented design and algorithm performance. Preparation for software development on the Mac and iOS platforms. (A, CSU, UC)

## 63 BEGINNING JAVA PROGRAMMING

4 units, 4 lecture hours, 1 lab hour, (Formerly
Information Systems 33 and 39)
PREREQUISITE: Computer Information Technology 15.
Developing Java Applets and applications using the Java programming language. Emphasis on object-orientated programming, control structures, methods, arrays, strings, inheritance, and graphics. (A, CSU, UC)

## 65 ANDROID PROGRAMMING APPLICATIONS

4 units, 4 lecture hours, 1 lab hour
PREREQUISITE: 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)
PREREQUISITE: Computer Information Technology 15.
Software development using the C++ programming language. Emphasis on object-oriented design, computations, strings, pointers, functions, classes, and objects. (A, CSU, UC)

## 68 ADVANCED PROGRAMMING APPLICATIONS

4 units, 4 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 60, 62, 63, or 66.
Developing programming applications using a variety of programming languages such as Java, C++.NET, Visual Basic.NET. Application development will emphasize the use of object-orientated programming, control structures, methods, arrays, inheritance, and graphical-user interface, etc. (A, CSU, UC)

## 69 IOS PROGRAMMING APPLICATIONS

## 4 units, 4 lecture hours, 1 lab hour

PREREQUISTE: Computer Information Technology 62, 63 or 66.
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)

## 80 INTERNET BASICS

2 units, 4 lecture hours, 1 lab hour, ( 9 weeks), (Formerly Information Systems 7 and 40)
PREREQUISITE: None.
Introduction to the Internet and the World Wide Web, including the use of e-mail, discussion boards, browser basics, FTP, searching the Web, History of the Internet, Internet ethics, e-commerce, and Netiquette. (A, CSU)

## 81 WORLD WIDE WEB RESEARCH

2 units, 4 lecture hours, 1 lab hour, ( 9 weeks),
(Formerly Information Systems 8 and 41)
ADVISORY: Computer Information Technology 15.
Using the World Wide Web for research. Topics include browsers, search engines, Boolean logic, and URLs. Requires preparing and presenting reports from the research. (A, CSU)

## 82 WEB TECHNOLOGIES

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)

## 85 CREATING WEBSITES

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 DATA DRIVEN WEBSITES

4 units, 4 lecture hours, 1 lab hour, (Formerly Information Systems 28)
PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 85.

Developing dynamic websites using server-side scripting and a database. (A, CSU)

## 93 CLIENT SIDE SCRIPTING

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15.
Fundamentals of JavaScript to add interactivity to HTML/XML web pages and web sites on the Internet. Topics include writing functions, using data from forms, buttons, menus, and text boxes, and using if conditional statements and program loops to make web pages "smarter". (A, CSU)

## 94 SERVER SIDE SCRIPTING

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: None.
Creating dynamic web pages from a server side perspective. Creating server side scripting applications in languages such as PHP, ASP, or JSP. Scripting fundamentals and database connectivity. Exception handling, debugging, testing, and maintenance. Document Object Model. (A, CSU)

## 95 INTRODUCTION TO PYTHON PROGRAMMING

4 units, 4 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISORY: Eligibility for English 1A recommended.

Using Python programming language, involves activities such as analysis, understanding, solving problems using algorithms, correctness and resource requirements, coding of algorithm in proper syntax, testing, debugging, maintaining source code, documenting and implementation of the built system and its management. (A, CSU)

## 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 take classes online.

## 205 COMPUTER BASICS

2 units, 3 lecture hours, 1 lab hour, (12 weeks)
PREREQUISITE: None.
Introduction to basic computer terminology and skills. Includes introduction to word processing and spreadsheet programs.

## COMPUTER SCIENCE (CSCI)

## 26 DISCRETE MATHEMATICS FOR COMPUTER SCIENCE

4 units, 3.5 lecture hours, 2 lab hours
PREREQUISITE: Computer Science 40 or 40J, and Mathematics 5A.
Elements of discrete mathematics which have applications to computer science. Topics include sets, propositional and predicate logic, relations and functions, mathematical induction, graphs, and trees. (C-ID COMP 152) (A, CSU-GE, UC, I)

## 40 PROGRAMMING CONCEPTS AND METHODOLOGY I

4 units, 3.5 lecture hours, 2 lab hours, (Formerly Mathematics 30A and Computer Science 30A)
PREREQUISITE: Mathematics 103 or equivalent. COREQUISITE: Mathematics 4A or equivalent. ADVISORY: Eligibility for English 1A recommended.

Introduction to problem solving, algorithm development, procedural and data abstraction using the $\mathrm{C}++$ language; program design, coding, debugging, testing, and documentation. (A, CSU, UC)

## 41 PROGRAMMING CONCEPTS \& METHODOLOGY II

4 units, 3.5 lecture hours, 2 lab hours, (Formerly Mathematics 30B and Computer Science 30B)
PREREQUISITE: Computer Science 40 and Mathematics 4A, or equivalent. ADVISORY: Eligibility for English 1A recommended.

Programming methodology, program correctness, and review of data types; data structures; linear and nonlinear structures, lists, stacks, queues, trees, and files; implementation of data structures; recursion, searching, and sorting. C++ language is used. (TCSU CSCI 120) (A, CSU, UC)

## CONSTRUCTION - CARPENTRY (CONS)

## 14 BUILDING INSPECTION

3 units, 3 lecture hours, (Formerly Building Code and Safety Administration 14)
PREREQUISITE: None.
Familiarization with inspections of residential one and two-family dwellings and type $V$ construction, in preparation for I.C.C. Building Inspector certification. (A, CSU)

## 18 CALIFORNIA DISABLE ACCESS REGULATIONS

3 units, 3 lecture hours, (Formerly Building Code and Safety Administration 18)
PREREQUISITE: None.
Familiarization with disabled access codes in California Code of Regulations, Title 24, Part 2, Federal Americans with Disabilities Act of 1990 and Federal Fair Housing Act Amendments of 1988. (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 construction. Collaborative learning objectives established specific to construction. 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)

## 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.

General introductory and basic skills in residential construction. Emphasis on hand and power tools, foundations, framing, and materials. (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, roofing, and plumbing. (A, CSU)

## 51 RESIDENTIAL CONSTRUCTION: FOUNDATIONS AND FRAMING

9 units, 4 lecture hours, 16 lab hours, (Formerly Construction 51/52)
ADVISORY: Construction 50A and 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. Not open to students with credit in CONS 51A and 51B. (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.

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. (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. (A, CSU)

## 53 RESIDENTIAL CONSTRUCTION: EXTERIOR AND INTERIOR FINISH

9 units, 4 lecture hours, 16 lab hours, (Formerly Construction 53/54)
ADVISORY: Construction 50B and 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. Not open to students with credit in CONS 53A and 53B. (A, CSU)

## 55 ROOF FRAMING SYSTEMS

## 2.5 units, 1 lecture hour, 5 lab hours

ADVISORY: Construction 50A and eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Introduction to conventional roof framing with common rafters, hip and valley rafters, jack rafters, lay out of rafter locations, roof trusses, roof sheathing, and stairs. (A, CSU)

## 56 RESIDENTIAL PLUMBING

3 units, 2 lecture hours, 4 lab hours
ADVISORY: Construction 50A and eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Introduction to residential plumbing; lay out and installation of a residential plumbing system. Familiarization with uniform plumbing code, construction and inspection, to prepare for I.A.P.M.O. and/or I.C.C. certification. (A, CSU)

## 56A RESIDENTIAL PLUMBING 1

3 units, 2 lecture hours, 4 lab hours
COREQUISITE: Construction 56AL. ADVISORY: Construction 50A and eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Introduction to Residential Plumbing; lay out and installation of a residential plumbing system. Familiarization with the uniform plumbing code, construction and inspection, to prepare for I.A.P.M.O. and /or I.C.C. certification. (A, CSU)

## 56AL RESIDENTIAL PLUMBING LAB 1

## 0.5 unit, 1.5 lab hours

COREQUISITE: Construction 56A. ADVISORY: Construction 50A and eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Off campus lab activity installing plumbing systems in the Fresno City College Project House. To be taken concurrently with Construction 56A/ Building Safety and Code Administration 15A. (A, CSU)

## 56B RESIDENTIAL PLUMBING 2

3 units, 2 lecture hours, 4 lab hours
COREQUISITE: Construction 56BL. ADVISORY: Construction 50A and eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Residential Plumbing; Installation of finish fixtures. Plumbing codes and inspection, to prepare for I.A.P.M.O. and/or I.C.C. certification. (A, CSU)

## 56BL RESIDENTIAL PLUMBING LAB 2

0.5 unit, 1.5 lab hours

COREQUISITE: Construction 56B. ADVISORY: Construction 50A and eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Off campus lab activity installing plumbing systems in the Fresno City College project house. To be taken concurrently with Construction 56B/Building Safety and Code Administration 15B. (A, CSU)

## 60 ENERGY EFFICIENT REMODING

8 units, 4 lecture hours, 13 lab hours
ADVISORY: Construction 50A and 50B or Construction 53 or Construction 65.

Cosmetic and structural residential improvements with an emphasis on improving energy efficiency. To be hands on in an existing home. (A, CSU)

## 65 FUNDAMENTAL CONSTRUCTION ELEMENTS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introductory skills in residential construction including OSHA 10 certification, basic drafting, computer applications, construction calculations and construction equipment. (A, CSU)

## 149 INTRODUCTION TO CONSTRUCTION

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: None.
Overview of trades and careers related to the construction industry. Hands on lab activities related to selected areas of construction. (A)

## 175 RESIDENTIAL WIRING

4 units, 3 lecture hours, 4 lab hours, (See also Electrical Systems Technology 175), (Formerly Construction 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 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
PREQUISITE: None.
Introduction to electrical code, installation methods. Electrical circuits hands on practice. Installation of the rough electrical system in the Fresno City College construction program's project house at an off campus location. Construction 175AL must be taken concurrently with Construction 175A. (A)

## 175AL RESIDENTIAL WIRING LAB 1

. 5 unit, 1.5 lab hours
PREREQUISITE: None.
Hands on Rough Wiring of a residential building. Course must be taken concurrently with Construction 175A. (A)

## 175B RESIDENTIAL WIRING 2

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: None.
Electrical code. Emphasis 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)

## 175BL RESIDENTIAL WIRING LAB 2

. 5 unit, 1.5 lab hours
PREREQUISITE: None.
Students will apply classroom knowledge and gain hands on experience during installation of finish apparatus in the FCC project house. Course must be taken concurrently with Construction 175B. (A)

## COUNSELING (COUN)

## 43 GROUP DYNAMICS AND SELF UNDERSTANDING

2 units, 2 lecture hours, (Formerly Guidance Studies
43)

ADVISORY: Eligibility for English 1A recommended.
An in-depth look at concepts key to self-understanding and developing a support system. This includes addressing psycho-social topics such as: personal responsibility, stress-management, interpersonal skills and communication. (A, CSU)

## 48 CAREER PLANNING AND DEVELOPMENT

2 units, 2 lecture hours, (Formerly Guidance Studies
48)

ADVISORY: Eligibility for English 1A recommended.
Designed to guide students in choosing their career fields and correlated majors, includes self assessment, career exploration, occupational outlook, computerized resources and career information systems. (A, CSU)

## 53 COLLEGE AND LIFE MANAGEMENT

3 units, 3 lecture hours, (Formerly Guidance Studies
53)

ADVISORY: Eligibility for English 1A recommended.
Psycho-social exploration of higher education and development of student's personal strengths, personality types, learning styles, personal values, levels of attribution, success skills, and defining academic, personal, and professional goals to increase lifelong learning. (A, CSU)

## 54 CIVIC RESPONSIBILITY AND LEADERSHIP

1 unit, 1 lecture hour, (Formerly Guidance Studies 54)

ADVISORY: Eligibility for English 1A recommended.
Designed to assist students with the transition process from college to other life roles. Understanding role responsibilities to self and the community. Soft skills, leadership development, and life planning. (A, CSU)

## 150 COLLEGE TRANSITION AND SUCCESS

1 unit, 2 lecture hours, ( 9 weeks), (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 coping strategies and interpersonal relationships in the workplace. Includes practicing interview techniques and positive workplace behaviors, exploring career implications and the job market.

## 267 FINANCIAL AID MONEY MANAGEMENT

1 unit, 1 lecture hour, (Formerly Guidance Studies 167 and Counseling 167)
ADVISORY: Eligibility for English 125 and 126 recommended. Eligibility for Mathematics 201 recommended.

Recommended for financial aid eligible college students. Designed to help develop a basic awareness of financial aid money management skills including personal student budgeting, and the nature and purpose of financial aid assistance.

## CRIMINOLOGY (CRIM)

FORMERLY ADMINISTRATION OF JUSTICE

## 1 INTRODUCTION TO CRIMINOLOGY

3 units, 3 lecture hours, (Formerly Administration of Justice 1)
ADVISORY: English 1A recommended.
Characteristics of the criminal justice system in the U.S. with cross cultural content; evolution of prevailing principles; crime measurement; theoretical explanations for criminality and responses to it; future challenges; functions of the police, courts and correctional system; legal process, sentencing, and incarceration policies. (C-ID AJ 110) (A, CSU, UC)

## 3 LEGAL ASPECTS OF EVIDENCE

3 units, 3 lecture hours, (Formerly Administration of Justice 3)
ADVISORY: Eligibility for English 1A recommended.
Categories of evidence, and the legal rules relating to admission or exclusion with attention to history and development. (C-ID AJ 124) (A, CSU)

## 4 PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM

3 units, 3 lecture hours, (Formerly Administration of Justice 4)
ADVISORY: Eligibility for English 1A recommended.
Examination and analysis of due process in the criminal justice system from pre-arrest through trial and appeal using statutory, case law, and constitutional precedents. (C-ID AJ 122) (A, CSU)

## 5 COMMUNITY RELATIONS

3 units, 3 lecture hours, (Formerly Administration of Justice 5)
ADVISORY: Eligibility for English 1A recommended.
Relationship between our communities and the justice system in addressing crime and conflict; challenges and potential for administering criminal justice within a multicultural society with conflicting values in culture, religion, and law. (C-ID AJ 160) (A, CSU, UC)

## 6 CONCEPTS OF CRIMINAL LAW

3 units, 3 lecture hours, (Formerly Administration of Justice 6)
ADVISORY: Eligibility for English 1A recommended.
Analysis of criminal liability in the U.S.; classification of crimes (persons, property, morals, and public welfare), elements of offenses; common and statutory law; acceptable evidence; defenses; prosecution and defense decision making. (C-ID AJ 120) (A, CSU)

## 7 CONCEPTS OF ENFORCEMENT SERVICES

3 units, 3 lecture hours, (Formerly Administration of Justice 7)
ADVISORY: Eligibility for English 1A recommended.
Role expectations for line enforcement officers; patrol, traffic and public service responsibilities; physical and psychological officer survival. (A, CSU)

## 8 CRIMINAL INVESTIGATION

4 units, 3 lecture hours, 3 lab hours, (Formerly Administration of Justice 8)
ADVISORY: Eligibility for English 1A recommended.
Techniques, procedures, and ethical considerations involved in crime investigation; organization of the process; crime scene logistics; searches; recovery and preservation of evidence; documentation; scientific examination; and trial presentation. (C-ID AJ 140) (A, CSU)

## 9 CRIME SCENE FORENSIC EVIDENCE

3 units, 3 lecture hours
PREREQUISITE: Criminology 8 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Introduction to forensics in criminal investigations; methods to properly locate, identify, handle, and analyze physical evidence; analysis of crime scenes; pattern evidence; instruments firearms; questioned documents; and controlled substances. (C-ID AJ 150) (A, CSU)

## 11 JUVENILE DELINQUENCY

3 units, 3 lecture hours, (Formerly Administration of Justice 11)
ADVISORY: Eligibility for English 1A recommended.
Origin, development and organization of the juvenile justice system in the U.S.; theories relating to the causes and prevention of juvenile delinquency, and the treatment of youthful offenders; legal processes and constitutional standards. (C-ID AJ 220) (A, CSU)

## 12 CRIMINAL JUSTICE COMMUNICATIONS

3 units, 3 lecture hours, (Formerly Administration of Justice 12)
ADVISORY: Eligibility for English 1A recommended.
Fundamentals of information gathering; preparation of public safety reports, testifying; formal and informal communication with public and official agencies. (A, CSU)

## 13 THE CONSTITUTION AND YOUR INDIVIDUAL RIGHTS

3 units, 3 lecture hours, (Formerly Administration of Justice 13)
ADVISORY: Eligibility for English 1A recommended.
History and development of the Constitution; analysis of notable cases; historic protection of individual rights; ability of government to limit those prerogatives. (A, CSU-GE, UC)

## 15 INTRODUCTION TO POLICE ETHICS

3 units, 3 lecture hours, (Formerly Administration of Justice 15)
ADVISORY: Eligibility for English 1A recommended.
Examination of issues relating to ethical standards and violations in the criminal justice system; practical and theoretical solutions; morality and ethics in human behavior. (A, CSU)

## 16 INTRODUCTION TO VICTIMOLOGY

3 units, 3 lecture hours, (Formerly Administration of Justice 16)
ADVISORY: Eligibility for English 1A recommended.
Philosophical, theoretical issues and analysis of the most recent research findings and their implications in relationship to victims of street crimes. Controversies surrounding victims and their relations with offenders, media, agencies, etc. (A, CSU)

## 18 CRIMINAL PERSONALITIES

3 units, 3 lecture hours, (See also Psychology 18)
ADVISORY: Eligibility for English 1A recommended.
Focus on the physiological, cognitive, and social factors involved in crime and the development of criminal personalities. An examination of an offender's expectations, rationalizations, and justifications for his/her criminal behavior: Emphasis on modern concepts of criminal personalities including sociopaths, psychopaths, and criminal psychopaths. The role of corrections at the federal, state, and local levels. Treatment classifications and management of the criminal personality, including sociopaths and psychopaths, within institutional settings. (A, CSU)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

 1-8 unitsCOREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors. Selection for program participation. ADVISORY: Eligibility for English 1A recommended.

Supervised employment extending the classroom based on occupational learning related to criminology. Collaborative learning objectives established specific to criminology. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 20 INTRODUCTION TO CORRECTIONS

3 units, 3 lecture hours, (Formerly Administration of Justice 20)
ADVISORY: Eligibility for English 1A recommended.
History and analysis of the methods of punishment; alternatives to them, and their impact upon the justice system and its correctional component; adult and juvenile corrections (probation and parole); examination of penal institutions, their populations, and contemporary issues; alternative programs designed for specific Correctional Institutions, and their impact upon the Corrections client and the society at large. (C-ID AJ 200) (A, CSU)

## 21 CORRECTIONAL REPORT WRITING

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
The practical aspects of gathering, organizing, and preparing written reports for correctional activities on local, state, and federal levels. Techniques of communicating facts, information, and ideas effectively in a simple, clear, and logical manner for various types of criminal justice systems reports, letters, memoranda, directives, and administrative reports. Students will gain practical experience in note taking, report writing, and presenting testimony in court. (A, CSU)

## 23 CORRECTIONAL INTERVIEWING AND COUNSELING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An overview of the techniques in counseling and interviewing available to practitioners in corrections. The use of appropriate techniques and theories in confidence building which may be used by the correctional employee in client interviews and counseling. For students planning to enter or already employed within the correctional science field. (A, CSU)

## 24 CONTROL AND SUPERVISION IN CORRECTIONS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An overview of supervision of inmates in local, state, and federal correctional institutions. Issues of institutional control in a continuum from daily living through crisis situations. Emphasis on the role played by the offender and the correctional worker. Inmate subculture, violence, and the officers in a hostile prison environment. The causes and effects of abusive tactics. (A, CSU)

## 25 LEGAL ASPECTS OF CORRECTIONS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The historical framework, concepts and precedents that guide correctional practice. The corrections environment, the civil rights of prisoners, and the responsibilities and liabilities of corrections officials. (A, CSU)

## 36 GANGS AND CORRECTIONS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Specialized knowledge relating to the correctional impact of gangs. The history of gangs and the issues associated with the development of gangs. Focus on the emergence of prison gangs following a series of changes within correctional systems. Review of the types of gangs and the criminal activities associated with the gang. Special emphasis on the prison gang and correctional issues including identification, intake, classification, communication, and trends. Psychological and sociological dynamics. Institutional management and future trends. (A, CSU)

## CULTURAL STUDIES (CULTS)

## 10 ISLAMIC CULTURE

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The foundation of Islam, Islamic beliefs, values, the expansion of Islamic culture and civilization throughout the world, the relationships within Muslim family and society. Twentieth century issues and contemporary conflicts. (A, CSU)

## DANCE (DANCE)

## 8 HIP HOP TECHNIQUE

1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Basic technique and style of Hip Hop dance both historical and current emphasizing musicality, rhythms, and the basic movement required to develop Beginning Hip Hop skills. (A, CSU)

## 9 DANCE CONDITIONING

1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Conditioning techniques which promote body awareness, improve body alignment, enhance and expedite body ability for dance skills, and aid in preventing injuries common to various dance styles. (A, CSU, UC)

## 10A BEGINNING MODERN DANCE TECHNIQUE

1 unit, 3 lab hours, (Formerly Physical Education 4 and Dance 10)
ADVISORY: Eligibility for English 1A recommended.
Modern dance exercises and improvisations involving body movement, rhythm, design, dynamics, technique, and expression. Body conditioning exercises for posture, strength, and flexibility. (A, CSU, UC)

## 10B PRE-INTERMEDIATE MODERN DANCE TECHNIQUE

## 1 unit, 3 lab hours

PREREQUISITE: Dance 10A or appropriate dance experience as determined by the instructor. ADVISORY: Eligibility for English 1A recommended.

Pre-intermediate modern dance exercises and improvisations involving body movement, rhythm, design, dynamics, technique, and expression. Body conditioning exercises for posture, strength, and flexibility. (A, CSU, UC)

## 12A BEGINNING BALLET PART 1

1 unit, 3 lab hours, (Formerly Dance 12 and Physical Education 26)
ADVISORY: Eligibility for English 1A recommended.
Fundamental technique of classical Ballet using barre exercises and center work, basic concepts of Ballet dance vocabulary, and Ballet terminology for the beginning student. (A, CSU, UC)

## 12B BEGINNING BALLET PART 2

1 unit, 3 lab hours
PREREQUISITE: Dance 12A or equivalent as demonstrated through testing and recommended by instructors. ADVISORY: Eligibility for English 1 A recommended.

Pre-intermediate-level technique of classical Ballet using barre exercises and center work, learning more Ballet terminology for the pre-intermediate student. (A, CSU, UC)

## 13A INTERMEDIATE BALLET TECHNIQUE

1.5 units, 1 lecture hour, 2 lab hours

PREREQUISITE: Dance 12B or relevant experience as determined by instructor. ADVISORY: Eligibility for English 1A recommended.

Intermediate level Ballet technique using barre exercises and center works, may include a demonstration of creating and teaching a ballet phrase in the class. (A, CSU, UC)

## 13B PRE-ADVANCED BALLET TECHNIQUE

1.5 units, 1 lecture hour, 2 lab hours

PREREQUISITE: Dance 13A or relevant experience as determined by instructor. ADVISORY: Eligibility for English 1A recommended.

Pre-advanced Ballet technique using barre exercises and center works, may include a demonstration of creating and teaching a ballet phrase and a short combination in the class. (A, CSU, UC)

## 14 BEGINNING JAZZ DANCE TECHNIQUE

1 unit, 3 lab hours, (Formerly Physical Education 27)
ADVISORY: Eligibility for English 1A recommended.
Fundamental technique of Jazz dance, utilizing basic steps and isolated body parts; conditioning exercises for strength, flexibility, balance, and alignment done in a rhythmic form of jazz and other contemporary music. (A, CSU, UC)

## 15 INTERMEDIATE JAZZ DANCE TECHNIQUE

1 unit, 3 lab hours
PREREQUISITE: Dance 14 or demonstration of comparable skill level to be determined by testing or video portfolio of past jazz dance performance work. ADVISORY: Eligibility for English 1A recommended.

A progressive refinement of jazz dance technique, building upon skills and techniques covered in Dance 14. Presentation of different jazz styles. (A, CSU, UC)

## 16 BEGINNING TAP DANCE

0.5 unit, 2 lab hours

ADVISORY: Eligibility for English 1A recommended.
An introduction of various tap styles, sequences, and dance patterns to develop rhythm, coordination, and balance. (A, CSU, UC)

## 17A BEGINNING MEXICAN FOLK DANCE

3.5 units, 3 lecture hours, 2 lab hours, (See also

Chicano-Latino Studies 17A), (Formerly Dance 17)
ADVISORY: Eligibility for English 1A recommended.
History and origin of Mexican dance, from the pre-Columbian era through the arrival of the Spaniards. Analysis of the form, function, and symbolism of the music, musical instruments, movements, and choreography. Examination of the role of gender in this art form. Dances practiced and performed at the beginning level. (A, CSU-GE, UC)

## 17B BEGINNING INERMEDIATE 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)

## 18 INTERMEDIATE TAP DANCE

0.5 unit, 2 lab hours

PREREQUISITE: Dance 16 or appropriate previous tap dance experience as determined by the instructor. ADVISORY: Eligibility for English 1A recommended.

Progressive refinement of tap dance technique, building upon skills and techniques covered in Dance 16. Presentation of more advanced tap steps and styles. (A, CSU, UC)

## 20A BEGINNING MODERN DANCE COMPOSITION

3 units, 2 lecture hours, 3 lab hours, (Formerly
Physical Education 20A)
ADVISORY: Eligibility for English 1A recommended. Dance 10A recommended.

Modern dance technique warm up and exercises for development of movement vocabulary, strength, flexibility, alignment, range of motion, and rhythmic coordination. Guided group improvisations will be used for development of personal movement vocabulary, creative outlet, and to hone in on basic improvisational skills. Study of modern dance as an art form including brief discussions on history and theory. Study of dance composition theories and conceptual approaches. Creation of solo and group work. (A, CSU-GE, UC)

## 20B INTERMEDIATE MODERN DANCE COMPOSITION

3 units, 2 lecture hours, 3 lab hours, (Formerly
Physical Education 20B)
PREREQUISITE: Dance 10A. ADVISORY: Eligibility for English 1Arecommended.

Modern dance technique warm up and exercises for development of movement vocabulary, strength, flexibility, alignment, range of motion, and rhythmic coordination. Guided group improvisations will be used for development of personal movement vocabulary, creative outlet, and to hone in on intermediate improvisational skills. Dance composition theories and conceptual approaches. Creation of solo and group work on a complex and multi-dimensional level. Hone in on one's own artistic voice and to be able to articulate their reasons for creation in an intelligent, comprehensive manner. (A, CSU, UC)

## 21 DANCE WORKSHOP PERFORMANCE

2-4 units, 1 lecture hour, 3-9 lab hours per unit, (Formerly Physical Education 21)
PREREQUISITE: Previous Modern dance, Jazz, or Ballet experience or concurrent enrollment in Ballet, Jazz, or Modern dance recommended. For choreographers: Dance 20A or demonstration of comparable skill level to be determined by Artistic Director through testing and/or video portfolio of past Modern Dance, Jazz, or Ballet dance performance work. ADVISORY: Eligibility for English 1A recommended.

Beginning dance technique and conditioning, improvisation, choreography, rehearsal, and performance on main stage in an informal setting. Diagnostic test in dance technique will be given during the first three weeks of the semester. Includes opportunities for support activities for the production. (A, CSU, UC)

## 22 DANCE THEATRE PERFORMANCE

2-4 units: 2 units, 1 lecture hour, 3 lab hours; 3 units, 1 lecture hour, 6 lab hours; 4 units, 1 lecture hour, 9 lab hours, (Formerly Physical Education 22) PREREQUISITE: Current intermediate competency in Ballet, Jazz, or Modern Dance and concurrent enrollment in Ballet, Jazz, or Modern Dance recommended. For choreographers: Dance 20A or demonstration of comparable skill level to be determined by Artistic Director through testing and/or video porffolio of past Modern Dance, Ballet, Jazz performance work. ADVISORY: Eligibility for English 1A recommended.

Intermediate level dance technique, conditioning, improvisation, choreography, rehearsal, and performance on main stage in a formal theatrical presentation. Participants need to demonstrate their technical level during the first three weeks of classes. (A, CSU, UC)

## 26 AMERICAN COLLEGE DANCE FESTIVAL

1.5 units, 2 lecture hours, 5 lab hours, ( 9 weeks), (Repeats = 3)
COREQUISITE: Dance 21 or 22. ADVISORY: Eligibility for English 1 A recommended.

Preparation of dance participants for attendance at the American College Dance Festival. Participation in master classes and participation/ attendance at adjudication concerts. (A, CSU)

## 27A INTERMEDIATE MEXICAN FOLK DANCE

3.5 units, 3 lecture hours, 2 lab hours, (See also Chicano-Latino Studies 27A)
PREREQUISITE: Chicano-Latino Studies/Dance 17B. Demonstrated experience and skills at the beginning level as assessed by instructor. ADVISORY: Eligibility for English 1A recommended.

History of the origin of Mexican dance, from the arrival of the Spaniards to the present time. Analysis of the form, function, and symbolism of the music, musical instruments, movements and choreographies. Dances practiced and performed at the intermediate level. (A, CSU)

## 27B ADVANCED MEXICAN FOLK DANCE

3.5 units, 3 lecture hours, 2 lab hours, (See also

Chicano-Latino Studies 27B), (Formerly Dance 27)
PREREQUISITE: Chicano-Latino Studies/Dance 27A. ADVISORY: Eligibility for English 1A recommended.

History of the origin of Mexican dance, from the arrival of the Spaniards to the present time. Analysis of the form, function, and symbolism of the music, musical instruments, movements and choreographies. Dances practiced and performed at the advanced level. (A, CSU-GE, UC)

## 28 INTERMEDIATE MODERN DANCE TECHNIQUE

1.5 units, 1 lecture hours, 2 lab hours

ADVISORY: Dance 10B. Eligibility for English 1A recommended.
Intermediate-level modern dance, emphasis on inverted movement, fast-pace locomotor patterns, and weight sharing. (A, CSU, UC)

## 30 DANCE APPRECIATION

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Survey of dance as a historical form of cultural and theatrical expression. Emphasis on the growth of ballet and modern dance from their origins to the current trends in the United States. Dance 30 does not meet the Physical Education requirement. (A, CSU-GE, UC, I)

## 31 DANCE WORKSHOP PERFORMANCE 2

2-4 units, 1 lecture hour, 3-9 lab hours
PREREQUISITE: Dance 21. ADVISORY: Eligibility for English 1A recommended.

Intermediate-advanced dance technique and conditioning, improvisation, choreography, rehearsal, and performance in an informal setting. Includes opportunities for support activities for the production. (A, CSU, UC)

## 32 DANCE THEATRE PERFORMANCE 2

2-4 units, 1 lecture hour, 3-9 lab hours
PREREQUISITE: Dance 22. ADVISORY: Eligibility for English 1A recommended.

Intermediate/advanced-level dance technique and conditioning, improvisation, choreography, rehearsal, and performance for formal theatrical presentation. (A, CSU, UC)

## DECISION SCIENCE (DS)

## 21 FINITE MATHEMATICS

3 units, 3 lecture hours, (Formerly Decision Science
22)

PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Applications of linear, exponential, and logarithmic functions, matrix operations, and inverse matrices. Linear programming techniques, mathematics of finance, probability, and counting theory. Limits, rates of change, and derivatives. (A, CSU-GE, UC, I)

## 23 BUSINESS STATISTICS

4 units, 4 lecture hours, (Formerly Business
Administration 23)
PREREQUISITE: Mathematics 103 or equivalent.
The use of probability and predictive techniques to facilitate deci-sion-making using data from disciplines including business, social sciences, psychology, life sciences, health sciences, and education. The analysis will incorporate the use of EXCEL 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)

## DENTAL HYGIENE (DH)

## 1A ORAL BIOLOGY

2 units, 2 lecture hours, 1 lab hour, (Fall, first year)
PREREQUISITE: Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Dental Hygiene 3A, 4, and 10.

Anatomy of orofacial structures; study of the physiological and structural functions of the teeth and supporting tissues; embryology and histology of oral structural formation; oral anatomy relative to administration of local anesthetic agents. (A, CSU)

## 1B GENERAL AND ORAL PATHOLOGY

4 units, 4 lecture hours, (Spring, first year)
PREREQUISITE: Dental Hygiene 1A, 3A, 4, and 10. COREQUISITE: Dental Hygiene 2, 5A, 6A, 8A, 11 and 12.

Pathologic processes; disease, inflammation, immunologic defense, degeneration, neoplasia, developmental disorders, healing and repair, recognition of normal and abnormal conditions in the oral cavity; recognition of abnormalities in the human body. (A, CSU)

## 1C PERIODONTOLOGY

2 units, 2 lecture hours, (Fall, second year)
PREREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 8A, 11 and 12. COREQUISITE: Dental Hygiene 5B, 6B, 7A and 13.

Periodontal anatomy and histology; recognition of the normal and pathological periodontium, etiology and treatment of periodontal disorders; pathogenesis of inflammatory periodontal disease; periodontal examination, prognosis, and treatment planning; periodontal instrumentation; gingival curettage and other periodontal surgical procedures. (A, CSU)

## 1D APPLIED PERIODONTICS

1 unit, 1 lecture hour, (Spring, second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. COREQUISITE: Dental Hygiene 3B, 5C, 7B, 8B, 9 and 14.

The dental hygienist's ethical and clinical responsibility in the treatment of periodontal disorders. Relationship of the specialty practice of periodontics within the broad scope of dentistry. Current concepts and future possibilities relevant to the practice of periodontics. (A, CSU)

## 2 DENTAL MATERIALS

2 units, 1 lecture hour, 3 lab hours, (Spring, first year)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 5A, 6A, 8A, 11 and 12.

The properties, characteristics and use of numerous categories of materials used in dental procedures. Concepts of the dental health team with emphasis on dental hygiene care. (A, CSU)

## 3A PRE-CLINICAL DENTAL HYGIENE TECHNIQUES

4 units, 2 lecture hours, 6 lab hours, (Fall, first year)
PREREQUISITE: Biology 31 and Communication 1 or 2. COREQUISITE: Dental Hygiene 1A, 4 and 10.

Medical and dental histories; extra and intraoral examination; patient education; patient and operator positioning; clinical operations and appointment procedures; use and care of instruments; patients records; equipment maintenance and sterilization; asepsis and infection control procedures. (A, CSU)

## 3B DENTAL SPECIALTIES

1 unit, 2 lecture hours, ( 9 weeks), (Spring, second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. COREQUISITE: Dental Hygiene 1D, 5C, 7B, 8B, 9 and 14.

The history of dental specialties including pediatric dentistry, orthodontics, periodontics, oral surgery, endodontics, prosthodontics, forensic odontology, and the role of the registered dental hygienist in each dental specialty. Specialties practice research and presentation. (A, CSU)

## 4 ORAL RADIOGRAPHY

4 units, 2 lecture hours, 6 lab hours, (Fall, first year) PREREQUISITE: Biology 31. COREQUISITE: Dental Hygiene 1A, $3 A$ and 10.

History and physics of radiation; radiation protection; use of standard, panoramic, and computerized digital radiographic equipment; use of the intraoral camera; duplication of radiographic images; exposure, processing, mounting, and identification of standard, panoramic, and computerized radiographs and intraoral images; critiquing of oral radiographic images of normal and abnormal anatomy and artifacts; interpretation of radiographic and pictorial pathology of the hard and soft structures of the oral cavity. (A, CSU)

## 5A CLINICAL DENTAL HYGIENE I

2.5 units, 8 lab hours, (Spring, first year), (Pass/No Pass)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 2, 6A, 8A, 11 and 12.

Beginning experience in the treatment of adult and child patients; various clinical procedures including scaling and polishing techniques, oral inspection, dental and periodontal charting, principles of ultrasonic scaling, radiographic techniques, plaque control instruction, and fluoride application; principles of dental hygiene practice. (A, CSU)

## 5B CLINICAL DENTAL HYGIENE II

5 units, 16 lab hours, (Fall, second year), (Pass/No Pass)
PREREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 8A, 11 and 12. COREQUISITE: Dental Hygiene 1C, 6B, 7A, and 13.

Intermediate experiences in the treatment of dental hygiene patients; includes principles and procedures of Dental Hygiene 5A plus techniques for administering local anesthetics; various field experiences. (A, CSU)

## 5C CLINICAL DENTAL HYGIENE III

5 units, 16 lab hours, (Spring, second year), (Pass/ No Pass)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. COREQUISITE: Dental Hygiene 1D, 3B, 7B, 8B, 9 and 14.

Advanced experience in patient treatment procedures; includes principles and procedures of Dental Hygiene 5A and Dental Hygiene 5B plus the techniques of soft tissue curettage, nitrous oxide-oxygen analgesia, and nutritional counseling. (A, CSU)

6A MEDICAL EMERGENCIES IN THE DENTAL OFFICE
1 unit, 2 lecture hours, ( 9 weeks), (Spring, first year)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 2, 5A, 8A, 11 and 12.

Prevention of emergency situations; management of dental and medical emergencies. CPR certification reviewed. (A, CSU)

## 6B PHARMACOLOGY

3 units, 3 lecture hours, (Fall, second year)
PREREQUISITE: Dental Hygiene 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, pharmacokinetics, and physiology of local anesthetic agents and nitrous oxide gas. Fulfills the computer literacy graduation requirement for Dental Hygiene majors only. (A, CSU)

## 7A COMMUNITY DENTAL HEALTH I

2 units, 2 lecture hours, (Fall, second year)
PREREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 8A, 11 and 12. COREQUISITE: Dental Hygiene 1C, 5B, 6B and 13.

Procedures for improving public health, community dental health, and target group selection. Introduction to biostatistics and dental research techniques. Principles of education. (A, CSU)

## 7B COMMUNITY DENTAL HEALTH II

1 unit, 1 lecture hour, (Spring, second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. COREQUISITE: Dental Hygiene 1D, 3B, 5C, 8B and 14.

Community dental health; implementation of target group dental health project; tobacco cessation program; health care delivery systems; available methods for purchase of dental care; community fluoridation and biostatistics. (A, CSU)

## 8A PATIENT MANAGEMENT

2 units, 2 lecture hours, (Spring, first year)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 11, and 12.

Patient characteristics, motivation, and management; interpersonal communication and treatment planning. Treatment of the compromised patient. (A, CSU)

## 8B PRACTICE AND FINANCIAL MANAGEMENT

2 units, 2 lecture hours, (Spring, second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A, 8A and 13. COREQ-
UISITE: Dental Hygiene 1D, 3B, 5C, 7B, 9 and 14.
Office practice management and the dental hygienist's role in the office team; ethical and legal aspects of dentistry and dental hygiene; personal business matters relating to dental hygiene practice. (A, CSU)

## 9 NUTRITION IN DENTISTRY

1 unit, 1 lecture hour, (Spring, second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. COREQUI-
SITE: Dental Hygiene 1D, 3B, 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 LOCAL ANESTHESIA

2.5 units, 4 lecture hours, 3 lab hours, ( 9 weeks), (Spring, first year)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 8A and 12.

Pharmacology and physiology of local and topical anesthetic agents; the concept of pain and pain control; anatomy of the trigeminal nerve, physiology of nerve conduction, and the blockage of nerve impulses. Preparation of the armamentarium for local anesthetic injections and techniques of regional anesthesia in dentistry. (A, CSU)

## 12 CLINICAL SEMINAR TOPICS I

1 unit, 2 lecture hours, ( 9 weeks), (Spring, first year)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 8A and 11.

Seminar format with discussion of various topics dealing with beginning clinical practice of dental hygiene. Beginning level decision making, dental hygiene diagnosis, treatment planning, implementation of dental hygiene therapy and problem solving of clinical issues encountered in DH 5A, Clinical Dental Hygiene I. Instrument sharpening, beginning instrument sequencing, periodontal assessment charting, and dental computer technology. (A, CSU)

## 13 CLINICAL SEMINAR TOPICS II

1 unit, 2 lecture hours, ( 9 weeks), (Fall, second year)
PREREQUISITE: Dental Hygiene 12. COREQUISITE: Dental Hygiene 5B.

Seminar format with discussion of various topics related to intermediate clinical practice of dental hygiene. Intermediate level decision making, clinical judgment, dental hygiene diagnosis, implementation of dental hygiene therapies and problem solving of clinical issues encountered in DH 5B, Clinical Dental Hygiene II. The intent of DH 13, Clinical Seminar Topics II, is to strengthen the student's ability to perform clinical skills at the intermediate level in the corresponding clinical course, DH 5B, and ultimately enhance student success in the clinical lab. (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. COREQUISITE: Dental Hygiene 1D, 3B, 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 solving of clinical issues encountered in DH 5C, Clinical Dental Hygiene III. Preparation for the Dental Hygiene National Board Examination, Mock Board Clinical examination, and state licensure examinations. (A, CSU)

## 200 CLINICAL DENTAL HYGIENE IV

.2-1 unit, 1.33-8 lab hours, (6 weeks), (Pass/No Pass)
PREREQUISITE: Graduation from an accredited Dental Hygiene Program.

Advanced experience in patient treatment procedures. Principles and procedures of Dental Hygiene 5A, 5B, and 5C. Provides treatment opportunities that allow students to maintain and perfect their dental hygiene skill level between program graduation and successful completion of clinical licensing examinations. Students must have current CPR certification and malpractice insurance.

## DEVELOPMENTAL SERVICES (DEVSER)

## 250 WORKABILITY ASSESSMENT AND CAREER AWARENESS

3 units, 2 lecture hours, 3 lab hours, (Pass/No Pass)
PREREQUISITE: Student must have a diagnosed, verifiable disability.
Designed for students with documented disabilities. 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.

## 251 WORKABILITY PORTFOLIO AND INTERVIEW DEVELOPMENT

3 units, 2 lecture hours, 3 lab hours, (Pass/No Pass)
PREREQUISITE: Student must have a diagnosed, verifiable disability.
Designed for students with documented disabilities. Students will complete portfolios which will include the following: Resumes, cover letters, letters of recommendation, and references. Students will develop and demonstrate interview skills. Students will become familiar with the Americans with Disabilities Act.

## 252 WORKABILITY STRATEGIES AND COMMUNICATION SKILLS

3 units, 2 lecture hours, 3 lab hours, (Pass/No Pass)
PREREQUISITE: Student must have a diagnosed, verifiable disability.
Designed for students with documented disabilities. Emphasizes developing strategies in the workplace related to personal disability, work ethics, and socialization. Expanding communication skills as a vehicle for solving problems.

## 260 WORKABILITY JOB SEARCH

3 units, 3 lecture hours, (Pass/No Pass), (Formerly Developmental Services 60)
PREREQUISITE: Students must have a diagnosed, verifiable disability. Designed for students with documented disabilities. Emphasizes the development of job search strategies including online applications, social networking sites, internet job search sites, creating and utilizing a professional network. Demonstrates how a targeted job search leads the student through the process of identifying open positions for which students are qualified. Students will develop and maintain a job search $\log$ during their job search process.

## 262 GROUP INTERACTION FOR STUDENTS WITH DISABILITIES

2 units, 2 lecture hours, (Pass/No Pass), (Formerly Developmental Services 62)
PREREQUISITE: Students must have a diagnosed, verifiable disability.
Development and improvement of self-understanding through group interactions. Designed for students with documented disabilities.

## 264 TRANSITION TO COLLEGE FOR STUDENTS WITH DISABILITIES

1 unit, 1 lecture hour, (Pass/No Pass)
PREREQUISITE: Student must have a diagnosed, verifiable disability.
Designed for students with documented disabilities. Assist 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.

## 272 CONSUMER SKILLS

2 units, 6 lab hours, (Pass/No Pass), (Formerly Developmental Services 72)
PREREQUISITE: Student must have a diagnosed, verifiable disability. Designed for students with documented disabilities. Emphasis on home and money management, health, hygiene and safety, and food and nutrition.

## 273 INDEPENDENT LIVING SKILLS FOR DSP\&S STUDENTS

2 units, 6 lab hours, (Pass/No Pass), (Formerly Developmental Services 73)
PREREQUISITE: Student must have a diagnosed, verifiable disability.
Designed for students with documented disabilities. Basic independent living skills. Including appropriate social interaction, self-advocacy, selfcare, community involvement, personal choice and managing life events.

## 275 HORTICULTURE SKILLS I

2 units, 6 lab hours, (Pass/No Pass), (Formerly
Developmental Services 75)
PREREQUISITE: Student must have a diagnosed, verifiable disability.
Designed for students with documented disabilities. Basic techniques of foliage plant care and growing vegetables and ornamentals, with emphasis on transferable employment skills.

## 276 HORTICULTURE SKILLS II

2 units, 6 lab hours, (Pass/No Pass), (Formerly
Developmental Services 76)
PREREQUISITE: Student must have a diagnosed, verifiable disability. ADVISORY: Developmental Services 275.

Designed for students with documented disabilities. Intermediate techniques of foliage plant care and growing vegetables and ornamentals, with emphasis on transferable employment skills.

## 277 ADAPTED COMPUTER LITERACY

2 units, 1 lecture hour, 3 lab hours (Pass/No Pass), (Formerly Developmental Services 77)
PREREQUISITE: Student must have a diagnosed, verifiable disability.
Designed for students with documented disabilities. Introduction to computers and commonly used microcomputer applications. Emphasis on computer use and adaptation. In depth coverage of computers and their impact in society.

## 278 MODIFIED WORD PROCESSING

2 units, 1 lecture hour, 3 lab hours, (Pass/No Pass), (Formerly Developmental Services 78)
PREREQUISITE: Student must have a diagnosed, verifiable disability. ADVISORY: Developmental Services 277.

Designed for students with documented disabilities. Basic word processing terminology and understanding of Microsoft Word.

## 279 MODIFIED COMPUTER APPLICATIONS

2 units, 1 lecture hour, 3 lab hours, (Pass/No Pass), (Formerly Developmental Services 79)
PREREQUISITE: Student must have a diagnosed, verifiable disability. ADVISORY: Development Services 278. Expansion and enhancement of word processing, data management, spreadsheet, and other highly marketable microcomputer applications.

## 282 GREENHOUSE WORKFORCE PREP

3 units, 9 lab hours, (Pass/No Pass), (Formerly
Developmental Services 82)
PREREQUISITE: Student must have a diagnosed, verifiable disability. ADVISORY: Developmental Services 275 and 276.

Designed for students with documented disabilities. Introduction to vocational training in an actual working greenhouse. Assists students in preparing for success in future employment. Topics include ornamental and vegetable plant growing and care, occupational behavior and interpersonal skill development. Designed for students with documented disabilities.

## 291 STRATEGIES FOR ACADEMIC SUCCESS

2 units, 2 lecture hours, (Pass/No Pass)
PREREQUISITE: Student must have a diagnosed, verifiable disability. Designed for students with documented disabilities. Identification of learning strengths and weaknesses, educational, personal, career goals, study principles, methods and strategies to achieve them. Designed for students with communicative, and/or learning disabilities.

## 292 COLLEGE AWARENESS SURVIVAL SKILLS

2 units, 2 lecture hours, (Pass/No Pass)
PREREQUISITE: Student must have a diagnosed, verifiable disability. Designed for students with documented disabilities. Development of college survival skills. Emphasis on time management, note-taking, test taking, library skills, improvement of communication skills, and career exploration.

## 359 DIFFERENTIAL LEARNING DIAGNOSIS

8 lab hours, (Pass/No Pass), (Repeats = 3), (Open
Entry/Open Exit), (Formerly Developmental Services 59)

PREREQUISITE: Student must have a diagnosed, verifiable disability.
Designed for students with documented disabilities. Learning Assessment to identify learning strengths and deficits to provide information to the DSP\&S for validation \& verification of a disability and accommodations needed. Learning disability assessment to determine eligibility for services in California Community Colleges.

## DRAFTING (DRAFT)

SEE ALSO COMPUTER AIDED DRAFTING AND DESIGN

## 12 DRAFTING PRACTICES

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 255 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 designed for students not 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 1 A 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)

## 7 EXCEPTIONAL LEARNERS

3 units, 3 lecture hours, (Formerly Educational Aide
7and 61)
ADVISORY: Eligibility for English 1A recommended.
An introduction to the variations in development of children with special needs ages birth through eighteen and the implications for education settings. Includes an overview of development, characteristics of specific disabilities, and strategies and adaptations for supporting learning and development for all children. (A, CSU)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

 1-8 units, (Formerly Educational Aide 19)COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to 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. $(\mathrm{C}-\mathrm{ID}$ EDUC $200=$ EDUC $19+$ EDUC 30$)(\mathrm{A}, \mathrm{CSU})$

## 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)
(K-12). Includes the history of special education, laws and regulations governing service provision, philosophies, assessment methods and personnel requirements. (A, CSU)

## ELECTRICITY

SEE ELECTRICAL SYSTEMS TECHNOLOGY

## ELECTRICAL SYSTEMS TECHNOLOGY (EST) formerly electronic technology

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Formerly Electronic Technology 19)
COREQUISTTE: 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 electrical systems technology. Collaborative learning objectives established specific to electrical systems technology. Seventy-five hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 50 INTRODUCTION TO ELECTRONICS

2.5 units, 5 lecture hours, ( 9 weeks), (Formerly Electronic Technology 50)
ADVISORY: Eligibility for English 1A recommended.
An introduction to the electrical systems technology program. Intensive review and practice in the reading and math skills necessary for success in this career field. (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 and Applied Technology 130. ADVISORY: Eligibility for English 1A recommended.

Fundamental principles and applications of direct current circuits. Emphasis on properties of conductors, insulators, and basic components and circuit theory. (A, CSU)

## 52 ALTERNATING CURRENT FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A recommended.
Alternating current fundamentals including applicable laws, principles and devices. Designed to meet the needs of industry and for more advanced electronic courses. (A, CSU)

## 53 LAB SAFETY PRACTICES

2 units, 2 lecture hours, 1 lab hour, (Formerly
Electronic Technology 57)
ADVISORY: Eligibility for English 1A recommended.
Introduction to the proper and safe use of hand tools, electrical devices/instruments, and component identification, and general circuit assembly procedures. (A, CSU)

## 54 INTEGRATED DEVICES

3 units, 3 lecture hours, 1 lab hour, (Formerly
Electronic Technology 52)
ADVISORY: Electrical Systems Technology 51 and 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: Eligibility for English 1A recommended.
Introduction to digital systems and subcomponents. Introduction to analog vs. digital world, numbering systems, logic gates, digital transmission and communication, decoders, encoders, multiplexer and multiplexed transmission, registers and memory devices, as well as, digital circuit design on computers. (A, CSU)

## 55B FACILITY AUTOMATION

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A recommended.
Facility automation fundamentals identifying various aspects of the control systems within a commercial building. (A, CSU)

## 55C SCADA SYSTEMS

2 units, 2 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 51, 55A, and 58.
Principles and application of SCADA. Aspects of the data acquisition system from specification and application. Gives a solid understanding of interfacing a PC to real world measurement devices. (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 as applied to e ectrical power systems. (A, CSU)

## 56B MOTOR CONTROLS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54.
Investigation and implementation of motor control. Emphasis on the fundamentals of motor operation, electrical systems, controls as well as the National Electrical Code. (A, CSU)

## 56C INDUSTRIAL ELECTRONICS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54 and 58.
Application of electronic principles in the industrial environment. Emphasis on power circuits, control circuits and electronic components. (A, CSU)

## 57A ANALOG COMMUNICATIONS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54 and 55.
Analog modulation techniques and the frequency spectrum. (A, CSU)

## 57B DIGITAL COMMUNICATIONS

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Electrical Systems Technology 55A. ADVISORY: Electrical Systems Technology 54.

Digital multiplexing, digital conversions, and modems. (A, CSU)

## 57C VOICE AND DATA CABLING

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: Eligibility for English 1A recommended.
Programmable controllers, 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 51.
Basic instrumentation and control concepts with application in process control systems. Calibrating, terminology, and Piping and Instrument Diagram (P\&ID) symbols as established by the Instrumentation, Systems, and Automation Society. (A, CSU)

## 60 A+PC MAINTENANCE

3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 61)
ADVISORY: Eligibility for English 1A recommended.
Skills for computer hardware support; installation, configuration, diagnosing and troubleshooting computer hardware. (A, CSU)

## 61 NETWORKING FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour, (Formerly
Electronic Technology 59)
ADVISORY: Eligibility for English 1 A recommended. Electrical Systems Technology 55A, 60 and Applied Technology 10 strongly recommended.

Principles and structure of IP Addressing, the fundamentals of Ethernet, TCP/IP Protocol and equipment operation. This class prepares the student for the Cisco CCENT and/or CCNA Certification. (A, CSU)

## 62 ROUTER \& SWITCHING ESSENTIALS

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Electrical Systems Technology 61. ADVISORY: Eligibility for English 1A recommended.

Describes the architecture, components, and operations of routers and switches in a network. This class prepares the student for the Cisco CCENT and/or CCNA Certification. (A, CSU)

## 63 SCALING NETWORKS

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Electrical Systems Technology 62. ADVISORY: Eligibility for English 1A recommended.

Describes the architecture, components, and operations of routers and switches in a larger and complex network. This class prepares the student for the Cisco CCNA Certification. (A, CSU)

## 64 ADVANCED NETWORKING AND MANAGEMENT

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Electrical Systems Technology 63. ADVISORY: Eligibility for English 1A recommended.

Discusses the WAN technologies and network services required by converged applications in a complex network. This class prepares the student for the Cisco CCNA Certification. (A, CSU)

## 80 INTRODUCTION TO PHOTOVOLTAICS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 51, 52, 53, and 54.
Designed for students interested in a career in the solar industry. Introduction to the fundamental principles and functions of the photovoltaic industry along with the installation of necessary components for a photovoltaic system. Review the transmission and distribution of electric power as well as alternative means for energy generation. (A, CSU)

## 81 PHOTOVOLTAIC SYSTEMS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54 and 96D.
Introduction of photovoltaic system requirements, design and configurations, installation techniques, and their application in residential and commercial construction. Entry-level Certification Exam from NABCEP may be an option. (A, CSU)

## 82A INTRODUCTION TO ROBOTICS

3.5 units, 3 lecture hours, 2 lab hours

ADVISORY: Eligibility for English 1A recommended.
Equipment (tools, computers and machinery) and processes used in the development and construction of robotics used in manufacturing, medical and aerospace industries. Creating prototype drawings and constructing various prototype robots. (A, CSU)

## 82B ROBOTIC APPLICATIONS

3.5 units, 3 lecture hours, 2 lab hours

PREREQUISITE: Electrical Systems Technology 82A or with instructor approval.

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)

## 96A NATIONAL ELECTRICAL CODE PART 1

3 units, 3 lecture hours
PREREQUISITE: None.
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
PREREQUISITE: None.
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
PREREQUISITE: None.
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
PREREQUISITE: None.
Fundamentals of electrical safety as required by NFPA Document 70E. (A, CSU)

## 175 RESIDENTIAL WIRING

4 units, 3 lecture hours, 4 lab hours, (See also Construction 175), (Formerly Electronic Technology 75 and Electrical Systems Technology 75)
ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 125 and 126 or English for Multi-Lingual Students 67 or 68 recommended.

Introduction, technique and installation of the electrical wiring system for a single-family residence. Installation of the actual wiring system for the Fresno City College construction department's single-family residence at an off-campus location. Emphasis on current wiring practices and electrical codes. (A)

## 175A RESIDENTIAL WIRING 1

4 units, 3 lecture hours, 3 lab hours, (See also
Construction 175A)
COREQUISITE: Electrical Systems Technology 175AL. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 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 Construction 175A. (A)

## 175AL RESIDENTIAL WIRING LAB 1

0.5 unit, 1.5 lab hours, (See also Construction 175AL)
COREQUISITE: Electrical Systems Technology 175A. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Hands on rough wiring of a residential building. Course must be taken concurrently with Electrical Systems Technology 175A. (A)

## 175B RESIDENTIAL WIRING 2

4 units, 3 lecture hours, 3 lab hours, (See also Construction 175B)
COREQUISITE: Electrical Systems Technology 175BL. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Electrical Code. Emphasis on finish equipment installation, trouble shooting. Specialty circuits. Installation of the finish materials in the City College construction program's project house. Electrical Systems Technology 175BL must be taken concurrently with Electrical Systems Technology 175B. (A)

## 175BL RESIDENTIAL WIRING LAB 2

0.5 unit, 1.5 lab hours, (See also Construction 175BL)
COREQUISITE: Electrical Systems Technology 175B. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Students will apply classroom knowledge and gain hands on experience during the installation of finish apparatus in the FCC project house. Course must be taken concurrently with Electrical Systems Technology 175B. (A)

## ELECTRONICS

SEE ELECTRICAL SYSTEMS TECHNOLOGY (EST)

## ENGINEERING (ENGR)

## 1A ELEMENTARY PLANE SURVEYING 1

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Mathematics 4A. ADVISORY: Eligibility for English 1A recommended.

Principles and practice of surveying measurements, computation, and data analysis. Includes measurements of distance, angle and direction, error analysis, and topographic mapping. Application to the solution of surveying and construction field assignments. (A, CSU, UC)

## 1B ELEMENTARY PLANE SURVEYING 2

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Engineering 1A. ADVISORY: Eligibility for English 1A recommended.

Principles and practice of surveying measurement. Introduction to Global Positioning Systems (GPS), Geographical Information Systems (GIS), management and representation of surveying and mapping data, astronomy for surveying measurement. (A, CSU, UC)

## 2 GRAPHICS

4 units, 2 lecture hours, 6 lab hours
ADVISORY: Mathematics 4A and eligibility for English 1A recommended.

Principles of orthographic and axonometric projection, sketching, dimensioning and tolerances. Introduction to computer aided design (CAD). Application to the solution of engineering problems. (A, CSU, UC)

## 4 ENGINEERING MATERIALS

3 units, 3 lecture hours, (Formerly Engineering 32)
PREREQUISITE: Chemistry 1A and Physics 4A. ADVISORY: Eligibility for English 1A recommended.

Properties of engineering materials and their relation to atomic structure. The effect of microstructure on the mechanical, electrical, magnetic and thermal properties. Phase equilibria and strengthening processes for metals, ceramics, and polymers. (A, CSU, UC)

## 6 CIRCUITS WITH LAB

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Physics 4B. COREQUISITE: Mathematics 7. ADVISORY: Eligibility for English 1A recommended.

An introduction to the solutions of the equations arising from the applications of Kirchoff's laws and Thevinen's theorem to DC and AC circuits. Topics include mesh and nodal analysis, periodic forcing functions, phasors, frequency response, resonant circuits, natural and complete response, analog signal systems, dependent sources, and the characteristics of operational amplifiers. (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. (A, CSU, UC)

## 10 INTRODUCTION TO ENGINEERING

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An introduction to the engineering profession for students interested in a career in engineering or technology. Topics include analytical problem solving techniques, career opportunities, professional ethics, and the design process. Projects and field trips required. (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)

## ENGINEERING TECHNOLOGY

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SEE DRAFTING
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## ENGLISH (ENGL)

## 1A READING AND COMPOSITION

## 4 units, 4 lecture hours

PREREQUISITE: A "pass" grade in English 125 or English for Multi-Lingual Students 67 and English 126 or English for Multi-Lingual Students 68 or appropriate score on reading and writing sections of the Placement Test.

Reading, analyzing, and writing college-level prose, with emphasis on the expository; studying writing as a process; exploring different writing strategies; summarizing, editing, and critiquing; conducting research (gathering, organizing, evaluating, integrating and documenting information). (C-ID ENGL 100) (A, CSU-GE, UC, I)

## 1AH HONORS READING AND COMPOSITION

4 units, 4 lecture hours, (Formerly Honors 1E)
PREREQUISITE: A "pass" grade in English 125 or English for Multi-Lingual Students 67 and English 126 or English for Multi-Lingual Students 68 or appropriate score on reading and writing sections of the Placement Test. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Reading, analyzing, and writing college-level prose, with emphasis on the expository: studying writing as a process; exploring different writing strategies; summarizing, editing, and critiquing; conducting research (gathering, organizing, evaluating, integrating and documenting information). Honors sections may cover additional subject matter such as creative writing, peer response, the study of oral narrative and its relationship to writing and composing on the computer. (C-ID ENGL 100) (A, CSU-GE, UC, I)

## 1B INTRODUCTION TO THE STUDY OF LITERATURE

3 units, 3 lecture hours
PREREQUISITE: English 1A.
Reading and critical analysis of short stories, novels, poems, and plays. (C-ID ENGL 120) (A, CSU-GE, UC, I)

## 3 CRITICAL READING \& WRITING

3 units, 3 lecture hours
PREREQUISITE: English 1A.
Developing critical thinking skills in reading and writing beyond English 1 A . Reasoning for analysis and argument writing based mainly on non-fiction readings. (C-ID ENGL 105) (A, CSU-GE, UC, I)

## 3H HONORS CRITICAL READING \& WRITING

## 3 units, 3 lecture hours

PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Developing critical thinking skills in reading and writing beyond English 1A. Reasoning for analysis and argument writing based mainly on non-fiction readings. Honors sections may cover additional subject matter, such as more in-depth analytical research, extensive analysis of rhetorical discourse, and the study of how critical reasoning and argument is utilized in content area research and practice. (C-ID ENGL 105) (A, CSU-GE, UC, I)

## 12 THE BIBLE AS LITERATURE

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
A survey of the Bible as literature. Reading and critical analysis of the Old and New Testaments. (A, CSU-GE, UC, I)

## 14 FOLKLORE

3 units, 3 lecture hours
PREREQUISITE: English 1A or the equivalent. English 1 B is not a prerequisite for this course.

Reading and critical analysis of folklore and folk literature from around the world in literature, film, and the visual arts, including the cultural and literary roots of folklore and folk literature. (A, CSU-GE, UC, I)

## 15A CREATIVE WRITING: POETRY

3 units, 3 lecture hours, (Formerly English 15)
PREREQUISITE: English 1A or the equivalent.
Analysis and writing of poetry for critical review. (C-ID ENGL $200=$ ENGL 15A + 15B) (A, CSU, UC)

## 15B CREATIVE WRITING: FICTION

3 units, 3 lecture hours
PREREQUISITE: English 1A or the equivalent.
Writing fiction for critical review. (C-ID ENGL $200=$ ENGL 15A +
15B) (A, CSU, UC)

## 15C CREATIVE WRITING: PLAYWRITING

3 units, 3 lecture hours, (See also Theatre Arts 15C) PREREQUISITE: English 1A or the equivalent. Analysis and writing of plays for critical review. (A, CSU, UC)

## 15D CREATIVE WRITING: AUTOBIOGRAPHY

3 units, 3 lecture hours
PREREQUISITE: English 1A or the equivalent. Analysis and writing autobiography for critical review. (A, CSU, UC)

## 17 AFRICAN-AMERICAN LITERATURE

3 units, 3 lecture hours, (See also African-American
Studies 17)
PREREQUISITE: English 1A. English 1B is not a prerequisite for this course.

Reading critical works of African and African-American writers and understanding cultural values and themes as expressed in essays, short stories, novels, poetry, and plays. (A, CSU-GE, UC, I)

## 20 ASIAN-AMERICAN LITERATURE

3 units, 3 lecture hours, (See also Asian-American
Studies 20)
PREREQUISITE: English 1A or the equivalent.
Survey of Asian-American classic and contemporary literature. Reading and writing critical analysis of novels, short stories, poems and plays. (A, CSU, UC)

## 36 WOMEN IN LITERATURE

3 units, 3 lecture hours, (See also Women's Studies
36)

PREREQUISITE: English 1A or equivalent. English 1 B is not a prerequisite for this course.

Survey of literature by and about women in fiction, drama, poetry, biography, and essay. Covers multicultural and international literature from classical to contemporary periods, in addition to feminist and gender theory. (A, CSU-GE, UC, I)

## 40 CRITICAL THINKING ABOUT LITERATURE

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent. English 1B is not a prerequisite for this course.

Themes, authors, or genres through close readings, contextual approaches, interpretations, and critical evaluations. The subject will vary with the instructors, for example, "Rites of Passage in the American Consciousness," "The Detective as Hero"; Emily Dickinson, Carlos Fuentes; Popular Literature, Science Fiction. (A, CSU-GE, UC)

## 42 CLASSIC MYTHS

3 units, 3 lecture hours, (See also Humanities 42)
PREREQUISITE: English 1A. English 1B is not a prerequisite for this course.

Reading and critical analysis of basic mythic themes in literature, film, and the visual arts. The origin of myths in ritual, their development in western civilization, and their ultimate form and continued presence in the arts. (A, CSU-GE, UC, I)

## 44A WORLD LITERATURE TO THE RENAISSANCE

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent. English 1B is not a prerequisite for this class.

A survey of the mostenduring fiction, drama, and poetry from classical antiquity to the renaissance. (C-ID ENGL 140) (A, CSU-GE, UC, I)

## 44B WORLD LITERATURE SINCE THE RENAISSANCE

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent. Neither English 1B nor English 44 A is a prerequisite for this class.

A survey of the most enduring fiction, drama, and poetry from the neo-classic era to the present. (C-ID ENGL 145) (A, CSU-GE, UC, I)

## 45 CONTEMPORARY WORLD LITERATURE

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent. English 1 B is not a prerequisite for this class.

Contemporary works in world literature in fiction, drama, poetry, biography, and essay. (A, CSU-GE, UC, I)

## 46A ENGLISH LITERATURE TO 1800

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent. English 1B is not a prerequisite for this class.

A survey of British and Irish fiction, poetry, and drama from the earliest writings through 1800. (C-ID ENGL 160) (A, CSU-GE, UC, I)

## 46B ENGLISH LITERATURE FROM 1800 TO THE PRESENT

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent. Neither English 1B nor English 46A is a prerequisite for this class.

A survey of British and Irish fiction, poetry, and drama of the Romantic, Victorian, and Contemporary periods. (C-ID ENGL 165) (A, CSU-GE, UC, I)

## 47 INTRODUCTION TO SHAKESPEARE

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
An introduction to the plays and poetry of William Shakespeare, including selections from the tragedies, comedies, histories, and sonnets. (A, CSU-GE, UC, I)

## 48A INTRODUCTION TO AMERICAN LITERATURE TO WORLD WAR I

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent. English 1B is not a prerequisite for this class.

A survey of short stories, novels, poetry, essays, and plays produced by the diverse canon of American writers of the period. (C-ID ENGL 130) (A, CSU-GE, UC, I)

## 48B INTRODUCTION TO AMERICAN LITERATURE FROM WORLD WAR I TO THE PRESENT

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent. Neither English 1B nor English 48A is a prerequisite for this class.

A survey of short stories, novels, poetry, essays, and plays produced by the diverse canon of American writers of the period. (C-ID ENGL 135) (A, CSU-GE, UC, I)

## 105 GRAMMAR AND PUNCTUATION

2 units, 2 lecture hours, (Formerly English 5)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

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: Designated score on English placement test or satisfactory completion of English 252 or 282. Not recommended for students learning English as a second language.

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 by analyzing and utilizing rhetorical strategies appropriate to purpose and audience. Develops basic research skills. Prepares students for English 1A. (A)

## 126 READING SKILLS FOR COLLEGE

4 units, 4 lecture hours, (Formerly English 26)
PREREQUISITE: Designated score on English placement test with other relevant criteria or satisfactory completion of English 262. Not recommended for students learning English as a second language. Not recommended for students with identified learning disabilities.

Advances students' reading skills into college-level proficiencies in the areas of vocabulary usage, literal comprehension, and critical reading skills. Trains students to use various reading and reporting strategies for different writing styles. Emphasizes reading as a problem-solving process. (A)

## 252 WRITING IMPROVEMENT

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 52)
PREREQUISITE: Designated score on English placement test with other relevant criteria or satisfactory completion of English 250 or 281. Not recommended for students learning English as a second language. Not primarily for students with identified learning disabilities.

Develops writing skills. Understanding, finding and correcting grammatical errors. Prepares students for English 125. Students must satisfactorily complete course work to receive credit for the class.

## 260 BASIC READING

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 60)
PREREQUISITE: Designated score on English placement test with other relevant criteria. Not recommended for students learning English as a second language. Not recommended for students with identified learning disabilities.

Developing comprehension. Determining main ideas and important details. Encouraging positive attitudes toward reading. Prepares students for English 262. Students must satisfactorily complete course work and pass a reading comprehension test to receive credit for the course.

## 262 READING IMPROVEMENT

4 units, 4 lecture hours, (Formerly English 62)
PREREQUISITE: Designated score on English placement test with other relevant criteria or satisfactory completion of English 260. Not recommended for students learning English as a second language. Not recommended for students with identified learning disabilities.

Developing vocabulary and reading comprehension skills. Fostering positive attitudes toward reading. Prepares students for English 126. Students must satisfactorily complete course work and pass a reading comprehension test to receive credit for the course.

## 277 READING SKILLS

2.5 units, 2 lecture hours, 2 lab hours, (Pass/No

Pass), (Formerly English 77)
PREREQUISITE: Designated score on English placement test with other relevant criteria. Not recommended for students learning English as a second language. Students must have a diagnosed verifiable disability.

Development of basic reading readiness skills through learning main ideas and important details. Prepares students for English 262 and 278.

## 278 READING COMPREHENSION

2.5 units, 2 lecture hours, 2 lab hours, (Pass/No

Pass), (Formerly English 78)
PREREQUISITE: Designated score on English placement test with other relevant criteria or satisfactory completion of English 277. Not recommended for students learning English as a second language. Students must have a diagnosed verifiable disability.

Development of reading skills through vocabulary usage, literal comprehension, and critical comprehension. Development of various strategies for comprehending different types of written material. Prepares students for English 126.

## 281 GRAMMAR AND SENTENCE WRITING

2.5 units, 2 lecture hours, 2 lab hours, (Pass/No

Pass), (Formerly English 81)
PREREQUISITE: Designated score on English placement test with other relevant criteria. Not recommended for students learning English as a second language. Students must have a diagnosed verifiable disability.

Development of a basic understanding of paragraph and essay structures and an understanding that writing is for communication. Identification of possible essay topics and develop an ability to find and correct grammatical errors. Prepares students for English 252 or 282.

## 282 PARAGRAPH WRITING

2.5 units, 2 lecture hours, 2 lab hours, (Pass/No

Pass), (Formerly English 82)
PREREQUISITE: Designated score on English placement test with other relevant criteria or satisfactory completion of English 250 or 281. Not primarily recommended for students learning English as a second language. Students must have a diagnosed verifiable disability.

Development of writing skills through understanding, finding and correcting grammatical errors. Prepares students for English 125.

ENGLISH FOR MULTI-LINGUAL STUDENTS (EMLS)<br>FORMERLY ENGLISH AS A SECOND LANGUAGE

## 67 ADVANCED ACADEMIC WRITING AND GRAMMAR

4 units, 4 lecture hours, (Formerly English 54D and
English as a Second Language 67)
PREREQUISITE: Use of language other than English as a primary language. Designated score on the college placement test or completion of English for Multi-Lingual Students 265W with a grade of "C" or better.

At an advanced level, develops the process of writing, revising and editing compositions, a process which includes logical development and organization of ideas; develops analytical and critical thinking skills by reading and responding to model essays; reinforces grammar skills; develops study skills for an academic environment; prepares students of other languages and English Language Learners (ELL) for English 1A and mainstream courses. (A, CSU)

## 68 ADVANCED ACADEMIC READING AND VOCABULARY

4 units, 4 lecture hours, (Formerly English as a
Second Language 68)
PREREQUISITE: Use of language other than English as a primary language. Designated score on college placement test or completion of English for Multi-Lingual Students 265R with a grade of "C" or better.

Advances students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for mainstream college classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare students of other languages and English Language Learners (ELL) for English 1A and mainstream courses. (A, CSU)

## 263R LOW ACADEMIC INTERMEDIATE READING AND VOCABULARY

4 units, 4 lecture, (Pass/No Pass), (Formerly English as a Second Language 63R and 263R)
PREREQUISITE: Use of language other than English. Designated score on college placement test.

Advances students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for mainstream college classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 264R and mainstream courses.

## 263W LOW ACADEMIC INTERMEDIATE WRITING AND GRAMMAR

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 54A and English as a Second Language 63, 63 W and 263W)
PREREQUISITE: Use of language other than English as primary language. Designated score on college placement test.

Develops the process of writing, revising and editing at high-beginning to low-intermediate level. Includes preparation for and composition of paragraphs and appropriate grammar as taught through model paragraphs and exercises. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 264W.

## 264R INTERMEDIATE ACADEMIC READING AND VOCABULARY

4 units, 4 lecture, (Pass/No Pass), (Formerly English as a Second Language 64R and 264R)
PREREQUISITE: Use of language other than English as a primary language. Designated score on college placement test or completion of English for Multi-Lingual Students 263R with a grade of "C" or better.

Advances students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for mainstream college classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 265R and mainstream courses.

## 264W INTERMEDIATE ACADEMIC WRITING AND GRAMMAR

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 54B and English as a Second Language 64, 64 W and 264 W )
PREREQUISITE: Use of language other than English as primary language. Designated score on college placement test or completion of English for Multi-Lingual Students 263W with a grade of "C" or better.

Develops the process of writing, revising, and editing at a low intermediate level. Includes the preparation for and composition of paragraphs and appropriate grammar as taught through model essays and exercises. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 265W and mainstream courses.

## 265R HIGH ACADEMIC INTERMEDIATE READING AND VOCABULARY

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English as a Second Language 65R and 265R) PREREQUISITE: Use of language other than English as a primary language. Designated score on college placement test or completion of English for Multi-Lingual Students 264 R with a grade of "C" or better.

Advances students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for mainstream college classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 68 and mainstream courses.

## 265W HIGH ACADEMIC INTERMEDIATE WRITING AND GRAMMAR

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 54C and English as a Second Language 65, 65 W and 265 W )
PREREQUISITE: Use of language other than English as a primary language. Designated score on college placement test or completion of English Multi-Lingual Students 264W with a grade of "C" or better.

Develops the process of writing, revising, and editing at a high-intermediate level. Includes the preparation for and composition of essays and use of appropriate grammar as taught through model essays and exercises. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 67 and mainstream courses.

## FASHION MERCHANDISING (FM) FORMERLY RETAILING FASHION

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL 1-8 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to fashion merchandising. Collaborative learning objectives established specific to fashion merchandising. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 27 INTRODUCTION TO FASHION MERCHANDISING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Provides students an introduction to the world of fashion merchandising. Includes the history/global perspectives, uniqueness, and opportunities in fashion. Also presents fundamentals of fashion, basic fashion terminology, and an overview of textiles and apparel. (A, CSU)

## 28 VISUAL MERCHANDISING

3 units, 3 lecture hours, (See also Marketing 17), (Formerly Retailing Fashion 17)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Modern display techniques, equipment, materials, and analysis of current display methods as they apply to creating a store's image. Laboratory exercises to include planning, executing, and evaluating a variety of displays including signage, cases, windows, and banners. Field trips. (A, CSU)

## FILM (FILM)

## 1 INTRODUCTION TO FILM STUDIES

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to the study of motion pictures, with emphasis on aesthetics, theory, and methods of critical analysis. Lectures, discussions, and readings are supplemented by screenings of representative movies from around the world, including documentary and experimental films. (A, CSU-GE, UC, I)

## 2A HISTORY OF CINEMA 1895-1960

3 units, 3 lecture hours, (Formerly Film 1A)
ADVISORY: Eligibility for English 1A recommended.
A survey of international film history from the invention of cinema in the 1890 s to 1960 , including the development of narrative, documentary, and avant-garde film of the period; the aesthetic, technological, economic, and social factors that shaped this medium; and its impact on diverse societies and cultural values. (A, CSU-GE, UC, I)

## 2B HISTORY OF CINEMA 1960-PRESENT

3 units, 3 lecture hours, (Formerly Film 1B)
ADVISORY: Eligibility for English 1A recommended.
A survey of international film history from 1960 to the present, including the development of narrative, documentary, and avart-garde film of the period; the aesthetic, technological, economic, and social factors that shape this medium; and its impact on diverse societies and cultural values. (A, CSU-GE, UC, I)

## 3 FILM AND CULTURE

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The relationship between moving images and culture, including the images of race, ethnicity, class, and gender in film; the ways in which ideologies are conveyed through popular movies; and the technological, industrial, and aesthetic factors affecting screen content. Lectures, discussions, and readings are supplemented by screenings of representative films. (A, CSU-GE, UC, I)

## 5 DIGITAL FILMMAKING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended. Film 1 or Film 2 B recommended.

Introduction to video filmmaking, including scripting, shooting, and editing short digital films. Emphasis on personal and creative expression. (A, CSU, UC)

## 6 FILM GENRES

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Genre study to provide a clear context for appreciating the fundamental components of film as art and as social expression. Investigates the origins, evolution and transformations of various film genres, including film noir, the Western, science-fiction, the musical, horror, war, or the crime film. Covers the formal and thematic conventions of each genre and the genre as a reflection of the social environments that produced them. (A, CSU-GE, UC, I)

## FIRE TECHNOLOGY (FIRET)

## 1 FIRE PROTECTION ORGANIZATION

3 units, 3.27 lecture hours, (Formerly Fire Science 1)
ADVISORY: Eligibility for English 1A recommended.
An introduction to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as a part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions. (A, CSU)

## 2 FIRE PREVENTION TECHNOLOGY

3 units, 8.4 lecture hours, ( 7 weeks), (Spring), (Formerly Fire Science 6)
ADVISORY: Eligibility for English 1A recommended.
History and philosophy of fire prevention, organization, and operation of a fire prevention bureau; use of fire codes; identification and correction of fire hazards; the relationship of fire prevention with fire safety education; and understanding of detection and suppression systems. (A, CSU)

## 3 FIRE PROTECTION EQUIPMENT AND SYSTEMS

3 units, 8.4 lecture hours, (7 weeks), (Spring),
(Formerly Fire Science 7)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. (A, CSU)

## 4 BUILDING CONSTRUCTION FOR FIRE PROTECTION

3 units, 8.4 lecture hours, (7 weeks), (Spring), (Formerly Fire Science 5)
ADVISORY: Eligibility for English 1A recommended.
Components of building construction that relate to fire and life safety; focus on firefighter safety; elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. (A, CSU)

## 5 FIRE BEHAVIOR AND COMBUSTION

3 units, 8.4 lecture hours, (7 weeks), (Spring), (Formerly Fire Science 3)
ADVISORY: Eligibility for English 1A recommended.
Theory and fundamentals of how and why fires start, spread, and are controlled; fire chemistry and physics, fire characteristics of materials, extinguishing agents and fire control techniques. (A, CSU)

## 8 FIRE HYDRAULICS

3 units, 8.4 lecture hours, ( 7 weeks) (Spring), (Formerly Fire Science 8)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Hydraulic laws and formulas as applied to the fire service, including application of formulas and mental calculation to hydraulic problems, water supply problems, and underwriter's requirement for pumps. Reviews basic mathematics. (A, CSU)

## 9 FIRE FIGHTING PRACTICES

3 units, 8.4 lecture hours, (7 weeks), (Spring), (Formerly Fire Science 9)
ADVISORY: Eligibility for English 1A recommended.
An in-depth analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground; fire fighting strategy and tactics; methods of attack; pre-planning fire problems. (A, CSU)

14 PRINCIPLES OF FIRE \& EMERGENCY SERVICES SAFETY \& SURVIVAL
3 units, 8.4 lecture hours, ( 7 weeks)
ADVISORY: Eligibility for English 1A recommended.
Basic concepts of occupational health and safety as it relates to emergency services organizations; risk evaluation and control procedures for emergency and non-emergency situations. (A, CSU)

## 130A BASIC FIRE ACADEMY - PART 1

13 units, 8 lecture hours, 14.4 lab hours
PREREQUISITE: Fire Technology 131.
Skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications, the 2012 edition of NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications, and the 2008 edition of NFPA 472 Standard for Competence of Responders to Hazardous Materials/ Weapons of Mass Destruction Incidents. The seven overarching themes of the California State Fire Fighter I curriculum are: general knowledge germane to the profession, fire department communications, fireground operations, rescue operations, preparedness and maintenance, wildland suppression activities, and hazardous materials/WMD. An intensive physical fitness training program is also part of this course; course is offered on an intensive daytime format or an extended evening and weekend format. (A)

## 130B BASIC FIRE ACADEMY - PART 2

12.5 units, 8.42 lecture hours, 13.75 lab hours

PREREQUISITE: Successful completion of Fire Technology 130A when taken in tandem without a time separation between courses (Fire Technology 130A and Fire Technology 130B).

This course provides the skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications, the 2012 edition of NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications, and the 2008 edition of NFPA 472 Standard for Competence of Responders to Hazardous Materials/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)

## 131 EMERGENCY MEDICAL TECHNICIAN I

9.5 units, 8 lecture hours, 5.33 lab hours, (Formerly Fire Science and Fire Technology 31)
PREREQUISITE: Possession of a valid CPR card that proves training equivalent to the American Heart Associations' Guideline 2000 for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care at the Health Provider level. ADVISORY: Eligibility for English 1A recommended.

Designed to prepare personnel in the fire, life safety, and related fields to render pre-hospital basic life support including, but not limited to, advanced first aid and cardiopulmonary life support for the ill or injured at the scene of an emergency in preparation for transport in accordance with policies and procedures established by the Emergency Medical Services of the Fresno County Health Department. Twenty-four lab hours arranged. (A)

## 133 EMERGENCY MEDICAL TECHNICIAN - PARAMEDIC DIDACTIC

22 units, 12.5 lecture hours, 11.5 lab hours, (24 weeks)
PREREQUISITE: Fire Technology 131 or valid Emergency Medical Technician 1 certificate. ADVISORY: Eligibility for English 1A recommended.

Designed to produce qualified and competent EMT - Paramedics educated and trained in all elements of prehospital advanced life support to the acutely ill or injured patients; scope of practice is in accordance with Title 22 of the California Code of Regulations. (A)

## 134 EMERGENCY MEDICAL TECHNICIAN - PARAMEDIC CLINICAL

4 units, 1.5 lecture hours, 11.5 lab hours, (15 weeks)
PREREQUISITE: Fire Technology 133. ADVISORY: Eligibility for English 1A recommended.

Conducted in a hospital environment which consists of rotations in various departments including: emergency, surgery, labor and delivery and pediatrics, specialty units and Advanced Cardiac Life Support (ACLS), certification. Designed to produce qualified EMT - Paramedics who are educated and trained in all elements of prehospital advanced life support to the acutely ill or injured patients, scope of practice is in accordance with Title 22 of the California Code of Regulations. (A)

## 135 EMERGENCY MEDICAL TECHNICIAN - PARAMEDIC FIELD INTERNSHIP

8.5 units, 32 lab hours, ( 15 weeks)

PREREQUISITE: Fire Technology 134. ADVISORY: Eligibility for English 1A recommended.

Responds with assigned paramedic preceptors; involved in patient assessment and treatment, designed to produce qualified and competent EMT-Paramedics who are educated and trained in all elements of prehospital advanced life support to the acutely ill or injured patients, in accordance with local protocols and Title 22 of the California Code of Regulations. (A)

## 150C FIRE MANAGEMENT 1

2 units, 8.4 lecture hours, ( 5 weeks), (Formerly Fire Science and Fire Technology 50C)
ADVISORY: Eligibility for English 1A recommended.
Management styles of leadership; promoting group cooperation; types of verbal orders; interpreting and implementing policies; methods of dealing with subordinates; duties and responsibilities of rank; line and staff functions; emotional and behavioral characteristics of individuals and working groups; group behavior within the organization; personnel procedures; types of corrective action, personnel interviews, and counseling. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)

## 150D FIRE COMMAND 1A

2 units, 8.4 lecture hours, (5 weeks), (Formerly Fire
Science and Fire Technology 50D)
ADVISORY: Eligibility for English 1A recommended. Fire Technology 130B or equivalent.

Introduction to the principles of command, an overview of the concepts of command safety and the risk management process, preincident planning considerations, command considerations at structure fire incidents, Company Officer initial actions at an incident including the development of incident priorities, strategy, and tactics, information on the roles and responsibilities of a Company Officer for post- incident actions. Each student will have the opportunity to gain experience in a controlled environment through structure fire incident simulations. (A)

## 150F FIRE INVESTIGATION 1A

2 units, 8.4 lecture hours, (5 weeks), (Formerly Fire
Science and Fire Technology 50F)
ADVISORY: Eligibility for English 1A recommended.
Basic overview of fire scene investigation; provides information on fire scene indicators to assist in determining the fire origin. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)

## 150G FIRE PREVENTION 1A

2 units, 8.4 lecture hours, (5 weeks), (Formerly Fire Science and Fire Technology 50G)
ADVISORY: Eligibility for English 1A recommended.
Organization and function of fire prevention; fire and life safety inspections; codes and ordinances relating to the use and storage of flammable, combustible, toxic, reactive, and radioactive materials; engineering and enforcing a solution of a fire hazard; fire extinguisher and fixed systems requirements. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)

## 150H FIRE PREVENTION 1B

2 units, 8.4 lecture hours, ( 5 weeks), (Formerly Fire
Science and Fire Technology 50H)
PREREQUISITE: Fire Technology 150G.
Relationship of Life Safety Codes and requirements to building construction principles and building occupancy classifications; fire rated construction; fire doors, windows, and shutters; stairwells and smoke proof enclosures; flame spread, smoke production, and interior finish considerations for various occupancies; exiting and egress requirements; basic electrical theory, electrical hazards, and inspection considerations; basic heat, smoke, and flame detection systems; sprinkler and fixed protection systems; municipal/residential alarm systems; fire drills and emergency evacuation procedures; inspection reports and filing techniques; processing of plans and specifications; handling fire prevention complaints. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)

## 150J FIRE INVESTIGATION 1B

2 units, 8.4 lecture hours, ( 5 weeks), (Formerly Fire Technology 50J)
PREREQUISITE: Fire Technology 150F.
The second class in a series of classes designed for career oriented or currently employed fire fighters; develops knowledge and skill in the area of fire investigation; legal codes and regulations governing the laws of evidence, interviews, and court proceedings; laboratory demonstrations. This is one of the California Fire Service Training and Education System classes needed for Fire Investigator I certification. (A)

## 150K FIRE COMMAND 1C

2 units, 8.4 lecture hours, ( 5 weeks)
PREREQUISITE: Fire Technology 150D or equivalent.
Provide emergency personnel with information on the three elements of wildland fire behavior including fuel, weather, and topography, elements of the Incident Command System with an emphasis on Incident Action Planning, and duties and responsibilities of the Strike Team leader. I-Zone firefighting as it relates to the communications process, the elements of size-up, and the key components of a report on conditions. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)

## 150L INSTRUCTOR I INSTRUCTIONAL METHODOLOGY

2 units, 8.4 lecture hours, ( 5 weeks)
ADVISORY: Eligibility for English 1A recommended.
Skills and knowledge needed for the entry level professional instructor to perform his or her duties safely, effectively, and competently. The curriculum is based on the 2012 edition of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications. At the end of this course, candidates for Instructor I certification will be able to teach and deliver instruction from a prepared lesson plan utilizing instructional aids and evaluation instruments. The Instructor I will also be able to adapt a lesson plan and complete the reporting requirements to the local jurisdiction. (A)

## 150N INSTRUCTOR II INSTRUCTIONAL DEVELOPMENT

2 units, 8.4 lecture hours, ( 5 weeks)
PREREQUISITE: Fire Technology 150L
This course provides the skills and knowledge needed for the intermediate level professional instructor to perform his or her duties safely, effectively, and competently. The curriculum is based on the 2012 edition of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications and the 2012 edition of NFPA 1403 Standard on Live Fire Training Evolutions. At the end of this course, candidates for Instructor II certification will be able to develop lesson plans and evaluation instruments, teach and deliver instruction, and evaluate and coach other instructors. The Instructor II will also be able to analyze resources and formulate a program budget. (A)

## 200 ADVANCED COMPANY/CHIEF OFFICER

0.3-2.5 units, 1-8 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it's limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

Provide students with concepts and theories of leadership and management. Planning, organizing, and emergency scene management will be discussed. Course curriculum meets the general knowledge requirements for the position of Fire Company Officer and Chief Officer. Course curric-
ulum is based on the general knowledge and skill requirements of the following National Fire Protection Association Standards. 1001 Standard for Professional Firefighter Qualifications, 1021: Standard for Fire Officer Professional Qualifications, 1026: Standard for Incident Management Personnel Professional Qualifications, 1250: Recommended Practice in Fire and Emergency Service Organization Risk Management, 1500: Standard on Occupational Safety and Health Program.

## 201 ADVANCED APPARATUS DRIVER/OPERATOR

## 0.5-3 units, 2-10 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it's limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

Course curriculum is based on and meets the general knowledge requirements for Apparatus/Operators following National Fire Protection Association Standards. 1002: Standard For Fire Apparatus/Operator Professional Qualifications, 1410: Standard on Training for Emergency Scene Operations, 1451: Standard for a Fire and Emergency Vehicle Operations Training Program, 1500: Standard on Fire Department Occupational Safety and Health Program, 1901: Standard for Automotive Fire Apparatus, 1906:

Standard for Wildland Fire Apparatus, 1911: Standard for the Inspection, Maintenance, Testing. And Retirement of In-Service Automotive Fire Apparatus, 1914: Standard for Testing Fire Department Aerial Devices, 1915: Standard for Fire Apparatus Preventative Maintenance Program.

## 202 ADVANCED FIREFIGHER

## 0.5-3 units, 2-10 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it's limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

Course curriculum meets the general knowledge requirements for the position of Firefighter. Course curriculum is based on the general knowledge and skill requirements of the following National Fire Protection Association Standards. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents.

## 203 ADVANCED EMERGENCY MEDICAL TECHNICIAN/ EMERGENCY MEDICAL TECHNICIAN - PARAMEDIC

 0.5-2 units, 2-6 lab hours, (Pass/No Pass), (Open Entry/Open Exit)PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it's limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

Course curriculum provides students with general knowledge first responders to medical emergencies and Emergency Medical Technicians and Emergency Medical Technician/Paramedic.

## 204 ADVANCED TECHNICAL RESCUE

0.5-2 units, 2-6 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it's limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

For students who have basic technical rescue training. Perishable skills are updated and new rescue techniques are presented.

## 205 ADVANCED FIRE PREVENTION/FIRE INVESTIGATION

## 0.5-2.5 units, 2-8 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it's limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

Provides students with the general knowledge for fire investigation and fire prevention. Course curriculum is based on and meets the general requirements and requisite knowledge requirement of National Fire Protection Standards, 921: Guide for Fire and Explosion Investigations, 1033: Standard for Professional Qualifications for Fire Investigator.

## 206 FIRE COMMAND 1A

0.5 unit, 40 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: Fire Fighter I training; I-200: Basic ICS; Prevention 1: Fire and Life Safety Inspections for the Company Officer or Prevention 1A: Introduction into the California Fire Code and Prevention 1B: Inspection of Fire Protection Systems/Special Hazards.

Provides an introduction to the principles of command, an overview of the concepts of command safety and the risk management process, pre-incident planning considerations, command considerations at structure fire incidents, Company Officer initial actions at an incident including the development of incident priorities, strategy, and tactics, information on the roles and responsibilities of a Company Officer for post-incident actions. Each student will have the opportunity to gain experience in a controlled environment through structure fire incident simulations.

## 207 FIRE COMMAND 1B

0.5 unit, 40 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: Fire Fighter I training or equivalent; Successful completion of Fire Command 1A: Command Principles for Company Officers or Command 1A: Structure Fire Command Operations for the Company Officer; I-200: Basic ICS; S-290: Intermediate Wildland Fire Behavior (NWCG online is acceptable)

Provides the student with information on tactics, strategies, and scene management for multi-casualty incidents, hazardous materials incidents, and wildland fires. Each student also has the opportunity to increase his or her knowledge and skills by handling initial operations at these types of incidents through simulation and class activities.

## 208 FIRE COMMAND 1C

0.5 unit, 40 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: Fire Fighter I training or equivalent, Successful completion of Fire Command 1A: Command Principles for the Company Officer or Command 1A: Structure Fire Command Operations for the Company Officer I 200: Basic ICS

S-290: Intermediate Wildland Fire Behavior (NWCG online is acceptable)

Provides information to bring the structural Company Officer out of the city and into the wildland urban interface; in other words, from his or her comfort zone into an area that could be very well quite unfamiliar.

## 209 FIRE COMMAND 2A: COMMAND TACTICS AT MAJOR FIRES

0.5 unit, 40 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: Firefighter 1 training or equivalent, Successful completion of ICS 300, Command 1A or Fire Command 1A.

Prepares the officer to use management techniques and the Incident Command System when commanding multiple alarms or large suppression forces.

## 210 FIRE COMMAND 2B: MANAGEMENT OF MAJOR HAZARDOUS MATERIALS

0.5 unit, 40 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: Firefighter 1 training or equivalent, successful completion of I-300, Fire Command 1B, Fire Command 2A.

Provides Incident Commanders with the skills and competency necessary to mitigate an incident, initiate remedial action, and ensure the restoration of normal services with a comprehensive resource management approach. The course is also intended to bring the student to the standard of competency established for On-Scene Commander by OSHA's Final Rule 29 CFR 1910.120 and NFPA 472. Students will participate in simulated incident scenarios and justify their actions in a mock civil court setting.

## 211 FIRE COMMAND 2C: HIGH RISE FIREFIGHTING TACTICS

 0.5 unit, 40 lab hours, (1 week), (Pass/No Pass)PREREQUISITE: Firefighter 1 and Firefighter 2 or equivalent, successful completion of I-300, and Fire Command 2A.

Provides firefighters with management systems for both small and large high rise buildings. Topic include pre-fire planning, building inventory, problem identification, ventilations methods, water supply, elevators, life safety, strategy and tactics, application of the Incident Command System, and specific responsibilities. Case studies and scenario based simulations are used.

## 212 FIRE COMMAND 2D: PLANNING FOR LARGE SCALE DISASTERS

0.5 unit, 40 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: Successful completion of ICS 100, ICS 300, Fire Command 1A, and Fire Command 2A.

Principles of disaster planning and management, fire service emergency plans, emergency operations centers, case studies of various natural and man-made disasters, roles of local, state and federal OES and emergency management agencies, discussion of multi-hazard planning techniques, ICS and SEMS concepts, and principles of exercising emergency management staffs.

## 213 FIRE COMMAND 2E: WILDLAND FIREFIGHTING TACTICS

0.5 unit, 40 lab hours, ( 1 week), (Pass/No Pass)

PREREQUISITE: Firefighter 1, Firefighter 2 or equivalent, successful completion of I-300, Fire Command 1C, Fire Command 2A.

Includes topics such as California's wildland fire problem, wildland fire safety, weather effects, wildland fuels, wildland fire behavior, initial attack methods, using support equipment, using topographic maps, strategy and tactics, and air attack operations. Involves class participation and simulation.

## 214 FIRE INSPECTOR 1A: DUTIES AND ADMINISTRATION

0.4 unit, 24 lab hours, (1 week), (Pass/No Pass) PREREQUISITE: Firefighter 1 and Firefighter 2 training or equivalent. Provides students with a basic knowledge of the roles and responsibilities of a Fire Inspector I including legal responsibilities and authority, codes and standards, the inspection process, confidentiality and privacy requirements, and ethical conduct, and administrative tasks including preparing inspection reports, recognizing the need for a permit or plan review, investigating common complaints, and participating in legal proceedings.

## 215 FIRE INSPECTOR 1B: FIRE AND SAFETY

0.4 unit, 24 lab hours, ( 1 week), (Pass/No Pass)

PREREQUISITE: Firefighter 1, Firefighter 2 training or equivalent, and successful completion of Fire Inspector 1A: Duties and Administration.

Provides students with a basic knowledge of fire and life safety aspects related to the roles and responsibilities of a Fire Inspector I including building construction, occupancy classifications, occupancy load, means of egress, hazardous conditions, fire growth potential, fire flow, and emergency planning and preparedness measures.

## 216 FIRE INSPECTOR 1C: FIELD INSPECTION

0.4 unit, 24 lab hours, ( 1 week), (Pass/No Pass)

PREREQUISITE: Successful completion of Fire Investigator 1A, 1B or equivalent.

Provides students with a basic knowledge of field inspection roles and responsibilities of a Fire Inspector I including basic plan review, emergency access for an existing system, hazardous materials, and the operational readiness of fixed fire suppression systems, existing fire detection and alarm systems, and portable fire extinguishers.

## 217 FIRE INSPECTOR 1D: FIELD INSPECTIONS CALIFORNIA SPECIFIC

0.2 unit, 16 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: Successful completion of Fire Inspector 1A, Fire Inspector 1B and Fire Inspector 1 C .

Provides students with a basic knowledge of a Fire Fighter I's field inspection roles and responsibilities specific to California including tents, canopies, and temporary membrane structures; fireworks and explosives; and wildland urban interface environments.

## 218 FIREFIGHTER II

0.5-3 units, 2-10 lab hours, (Pass/No Pass), (Open

Entry/Open Exit)
PREREQUISITE: Successful completion of a California State Fire Marshal's office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it's limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

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, fire ground operations, rescue operations, and prevention, preparedness, and maintenance.

## 221 FIRE CONTROL 3B

0.2 unit, 16 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it's limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

Develop fundamental skills in combating structure fires by providing the students with a thorough understanding of fire behavior, ventilation procedures and techniques, interior fire attack, and exterior fire attack using a live-fire simulator. In many cases, this will be the fire fighter's first exposure to live structural fire fighting.

## 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

2 units, 8.4 lecture hours, (5 weeks)
PREREQUISITE: Permission of the instructor or possession of a I-200 Basic ICS certificate.

ICS fundamentals review; incident/event assessment and agency guidance in establishing incident objectives; unified command; incident resource management; the planning process; demobilization; transfer of command; close out. One of the California Fire Service Training and Education System classes needed for Fire Officer certification.

## 269 ADVANCED FIREFIGHTER TOPICS

0.1-2 units, 1-40 lecture hours, 1-60 lab hours, (118 weeks), (Pass/No Pass), (Open Entry/Open Exit) PREREQUISITE: Currently employed by a fire agency.
Satisfies mandatory yearly requirements of the local fire agency, Fresno County Health Department, the California State Fire Marshal's Office, and appropriate sections of the California Code of Regulations; may be offered in seminar, lecture, and/or lab format; course content to be determined by the respective agencies.

## FOOD AND NUTRITION (FN)

## 1 PRINCIPLES OF FOOD PREPARATION

3 units, 2 lecture hours, 3 lab hours, (Formerly Home Economics 1)
ADVISORY: Eligibility for English 1A recommended. Mathematics 250 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)

ADVISORY: Eligibility for English 1A recommended.
Relationship of diet to physical and emotional health; nutrients; diet patterns throughout the life cycle. Optimal nutrition to reduce the risks of cancer, heart disease, allergies, and other diseases. Social, psychological, and cultural dictates which affect food selection and health. Personal strategies to develop a nutrition plan for better health. Not open to students with credit in FN 40. (A, CSU-GE, UC)

## 40 NUTRITION

3 units, 3 lecture hours, (Formerly Home Economics 40)

ADVISORY: Eligibility for English 1A recommended.
Nutrients and their ingestion, digestion, absorption, transport, metabolism, interaction, storage, and excretion. The relationship of diet to physical and emotional health, diet patterns through the life cycle, consumer concern, and recent developments. (C-ID NUTR 110) (A, CSU-GE, UC)

## 41 SPORTS NUTRITION

2 units, 2 lecture hours, (Formerly Home Economics 41)

ADVISORY: Eligibility for English 1A recommended.
Effect of diet on physical performance. Planning diets to meet needs of those involved in sports and others interested in physical 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.

Nutritional requirements of infants and children from conception through adolescence. Nutritional needs of pregnant and lactating women. Feeding infants and children for optimum physical and mental development. Child and maternal nutrition programs. Social and cultural influences affecting child and maternal nutrition. (A, CSU)

## 43 WOMEN'S NUTRITION

2 units, 2 lecture hours, (See also Women's Studies
43), (Formerly Home Economics 43)

ADVISORY: Eligibility for English 1A recommended.
The relationship between nutrition and various contemporary health issues affecting women. Significance of nutrition as it relates to the health of women during specific stages of the life cycle. Current trends and research. (A, CSU)

## 45 THERAPEUTIC DIETS

3 units, 3 lecture hours, (Formerly Home Economics 5)

ADVISORY: Eligibility for English 1A recommended. Food and Nutrition 40 or equivalent strongly recommended. Concurrent enrollment in Food Service Management 19 is 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 35 recommended. Eligibility for English 1 A recommended. Mathematics 250 recommended. Concurrent enrollment in Food Service Management 19 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 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)

## 25 FOOD AND BEVERAGE PURCHASE AND CONTROL

2 units, 2 lecture hours, (Formerly Food Services 66)
ADVISORY: Eligibility for English 1A recommended. Mathematics 250 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. Concurrent enrollment in Food Service Management 19 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)
ADVISORY: Eligibility for English 1A recommended. Mathematics 250 recommended. Food Service Management 35 and Food and Nutrition 1 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 67 and 68 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 67 and 68 recommended. Mathematics 250 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 67 and 68 recommended. Mathematics 250 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 67 and 68 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 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 contribution 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 1 A recommended.

Second semester beginning American Sign Language and the visu-al-gestural language used by the Deaf in the United States and Canada. Explores the culture of Deaf people in the United States. (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 Deaf culture, values, language, identity, rules of interaction, and traditions. Students will learn about the deep-rooted ties that Deaf people have with residential schools; Gallaudet University; and national, state, and local organizations. (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; organization of sentences according to old and new information; and the structure of stories. Emphasis in grammatical features of American Sign Language, such as classifiers, verb modulations and aspects, and the role of facial expression, 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.
Examination of the historical eras of different stages in Deaf people's lives. Emphasis on deafness in historical perspective. (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)

## 20 INTRODUCTION TO INTERPRETING

3 units, 3 lecture hours
PREREQUISITE: American Sign Language 2 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Introduction to the role and responsibilities of interpreters, environments in which interpreters are involved and assessment within the profession. (A, CSU)

## 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)

## 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. (0ffered 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 two years of high school Japanese 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, UC)

## 3 INTERMEDIATE SPANISH

5 units, 5 lecture hours, (Formerly Spanish 2A)
PREREQUISITE: Spanish 2 or three years of high school Spanish or equivalent (Extensive living experience with the language). ADVISORY: Eligibility for English 1A recommended.

Third semester Spanish listening, speaking, grammar, reading, writing, and vocabulary. (C-ID SPAN 200) (A, CSU-GE, UC, I)

## 3NS INTERMEDIATE SPANISH FOR SPANISH SPEAKERS

5 units, 5 lecture hours, (Formerly Spanish 21)
PREREQUISITE: Spanish 2 and 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 a 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 Spanish 4NS or equivalent (Experience using Spanish at home, work, or abroad). 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 U.S., Mexico, and Spain. (A, CSU-GE, UC, I)

## 6 THE SHORT STORY: LATIN AMERICA

4 units, 4 lecture hours, (Formerly Spanish 3B)
PREREQUISITE: Spanish 4 or 4 NS or equivalent (Experience using Spanish at home, work, or abroad). (Spanish 5 is not a prerequisite to Spanish 6.) 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 or equivalent (Experience using Spanish at home, work, or abroad). 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 or equivalent (Experience using Spanish at home, work, or abroad). 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)

## 13 CULTURAL OVERVIEW OF A SPANISH-SPEAKING COUNTRY

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Cultural overview of a Spanish-speaking country and their roots in pre-Hispanic civilization. Designed for students enrolled in the Summer Study Abroad Program in a Spanish-speaking country. (A, CSU)

## 17 HISPANIC AMERICAN CULTURE

4 units, 4 lecture hours
PREREQUISITE: Spanish 4 or 4NS or equivalent (Experience using Spanish at home, work, or abroad). ADVISORY: Eligibility for English 1A recommended.

Study of the most important cultural and political issues in Hispanic American civilization and culture from Columbus to the present day. Chronicles, essays, and public speeches provide the main texts and sources of information for discussion. (A, CSU-GE, UC, I)

## FRENCH

SEE FOREIGN LANGUAGES

## GEOGRAPHY (GEOG)

## 1 PHYSICAL GEOGRAPHY

3 units, 3 lecture 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 GE0G 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 research 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 $4 \mathrm{~A}+4 \mathrm{~B})(\mathrm{A}, \mathrm{CSU}-\mathrm{GE}, \mathrm{UC}, \mathrm{I})$

## 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.
Processes of formation: application of principles of physical geography to maps and photographs. Landform features (soils, natural vegetation and water bodies). (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.
Map projections; location on the earth's surface, time, oceans, climatological methods; meteorological instruments; interpretation of weather maps. (A, CSU-GE, UC, I)

## 10 INTRODUCTION TO GIS

3 units, 2 lecture hours, 4 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 computers, data input, raster GIS, vector GIS, querying, methods of spatial analysis, and application of GIS. (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)

## 18 INTRODUCTION TO REMOTE SENSING

3 units, 2.5 lecture hours, 2 lab hour
ADVISORY: Eligibility for English 1A 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)

## 20 GEOGRAPHY OF CALIFORNIA

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Course covers California's physical, cultural, and regional geography. Content includes geology and geomorphology, climate, vegetation, water resources, and natural hazards in the state; Native American and Spanish settlement; statehood and 19th century settlement; contemporary patterns of population, migration, ethnic diversity, and political and economic geography. (C-ID GEOG 140) (A, CSU-GE, UC, I)

## 30 TOPICS IN GEOGRAPHY

1-6 units, 1-3 lecture hours, 0-9 lab hours, (Repeats = 3)
ADVISORY: Eligibility for English 1A recommended.
Examination of topics, current trends, and/or issues in the subdisciplines of Geography not covered by regular catalog offerings. Course content and unit credit to be determined by faculty. May be offered in seminar, lecture, laboratory, and/or field studies format. Recommended preparation varies with topic. (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 1 A 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)

## 1H HONORS PHYSICAL GEOLOGY

4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A recommended. Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

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. Field trips to classic geologic locations, guest lectures, and student presentations are included in this honors course. (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)

## 2 HISTORICAL GEOLOGY LAB

1 unit, 3 lab hours
COREQUISTE: 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)

## 7 NATURAL HISTORY OF DINOSAURS

3 units, 3 lecture hours
PREREQUISITE: Biology 3. ADVISORY: Eligibility for English 1A recommended.

Introduction to dinosaurs using the concepts of plate tectonics, evolution, and physiology. Emphasis will be given to fossil morphologies, origin, types, relatives and relationships, modes of life, temporal and spatial distributions, environments, and extinctions. Optional field trips may be offered. (A, CSU-GE, UC, I)

## 8 GEOLOGY OF MOONS AND PLANETS

3 units, 3 lecture hours
COREQUISITE: Physics 2A. ADVISORY: Eligibility for English 1A recommended.

Introduction to the planets and moons of the solar system using the concepts of geology and physics. Emphasis will be given to planet and moon formation, physical characteristics, chemical composition, and orbital features. Optional field trips to planetariums or museums may be offered. (A, CSU-GE, UC, I)

## 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)

## 12 ENVIRONMENTAL SCIENCE

3 units, 3 lecture hours, (Formerly Environmental Studies 7)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

The application of scientific principles to the understanding of environmental problems and issues. Seeking solutions to contemporary environmental problems; historical, economical, political and social implications; relationships to scientific principles; ecosystems, urban affairs, housing, land planning, transportation, air and water pollution, water development, food production, wildlife, pest control, and population studies. (A, CSU-GE, UC, I)

## GERMAN

SEE FOREIGN LANGUAGES

## GRAPHIC COMMUNICATIONS (GRC)

FORMERLY PRINTING TECHNOLOGY

## 14 ADOBE ACROBAT PROFESSIONAL

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Adobe Acrobat software and others used for the generation of digital documents for the world wide web, cloud storage, paperless business, distribute and print workflows, or inclusion in media productions. Fulfills computer literacy graduation requirement. (A, CSU)

## 15 WEB PAGE CONSTRUCTION 1

4 units, 3 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Adobe Brackets or comparable HTML editor, CSS, and components of Adobe Design Suite with emphasis on graphic design principles and digital photography included in exercises and project work. Skill development in recognition of artwork appropriate for web site design. Students capture images, design, create, and post working web sites using Adobe Creative Cloud. Fulfills computer literacy graduation requirement. (A, CSU)

## 16 WEB DESIGN TECHNIQUES

4 units, 3 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. Graphic Communications 15 recommended.

Techniques, tips, tricks and software products to help the web designer: Opportunities to work with new technologies and methods of deploying content over the Internet. Fulfills computer literacy graduation requirement. (A, CSU)

## 17 ADOBE ILLUSTRATOR

3 units, 2 lecture hours, 3 lab hours, (Formerly Printing Technology 17)
ADVISORY: Eligibility for English 1A recommended.
Use Adobe Illustrator to design and create vector images that solve a variety of graphic problems. Hands-on work creating projects for reproduction. Fulfills computer literacy graduation requirement. (A, CSU)

## 18 INTRO TO PRODUCTION METHODS

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introductory production methods of graphic communication systems incorporating print media, web design, and video production. Project work explores considerations and limitations of software for output. Units include professional development for the workplace. Fulfills computer literacy graduation requirement. (A, CSU)

## 20 INTRO TO APPLIED GRAPHICS

3 units, 2 lecture hours, 3 lab hours, (Formerly
Printing Technology 20)
ADVISORY: Eligibility for English 1A recommended.
Overview of graphic communication processes as related to the graphics industry. Terminology, input/output considerations, current trends, and hands-on projects using Adobe Photoshop, Adobe Illustrator, and Adobe InDesign for production operations. Fulfills computer literacy graduation requirement. (A, CSU)

## 22 DIGITAL MEDIA

4 units, 3 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to digital media. Project work using an assortment of current software. Combine images, audio and video into cross-platform productions. Digital slide shows, image capture, and short video. Fulfills computer literacy graduation requirement. (A, CSU)

## 23 DIGITAL MEDIA 2

4 units, 3 lecture hours, 3 lab hours
PREREQUIITTE: Graphic Communications 22.
Digital media content creation and publication. Terminology, input/ output considerations and individual student project work using current software and production techniques. Fulfills computer literacy graduation requirement. (A, CSU)

## 24 FLASH ANIMATION

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Use Adobe Flash to author two-dimensional animation. Design and production of interactive media projects. Fulfills computer literacy graduation requirement. (A, CSU)

## 25 CMS WEB DESIGN

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Design, configuration, and implementation of scalable web sites using a content management system. Fulfills computer literacy graduation requirement. (A, CSU)

## 27 DIGITAL VIDEO PRODUCTION

4 units, 3 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to digital video production with emphasis on editing techniques. Units include planning, storytelling, vocabulary, camera handling, lighting, sound, and working with professional editing software. Students complete short exercises and create video projects. Fulfills computer literacy graduation requirement. (A, CSU)

## 28 INDEPENDENT STUDY - GRAPHICS

1-3 units, 3-9 lab hours
ADVISORY: Eligibility for English 1A recommended. Completion of one of the following courses: Graphic Communications 15, 17, 20, 22, 27 or 30 recommended.

Individual graphic projects designed to allow the student to expand on a specific area of previous study. The production of a pre-employment portfolio with field trips to professional studios, shops, television stations, newspapers or galleries. Fulfills computer literacy graduation requirement. (A, CSU)

## 30 ADOBE INDESIGN/PROFESSIONAL PUBLISHING

3 units, 2 lecture hours, 3 lab hours, (Formerly
Printing Technology 30)
ADVISORY: Eligibility for English 1A recommended.
Adobe InDesign page layout software. Emphasis on production for print, e-book, and emerging technologies. Components from Adobe Photoshop and Adobe Illustrator programs. Fulfills computer literacy graduation requirement. (A, CSU)

## 31 PHOTOSHOP FOR GRAPHICS

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Adobe Photoshop with emphasis on graphic design and production. Units include production for print, web, and digital media applications. Fulfills computer literacy graduation requirement. (A, CSU)

## 32 VIDEO TECHNIQUES

4 units, 3 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Production processes and post-production processes with a focus on technical aspects. Lighting, audio, camera work, and color correction. Fulfills computer literacy graduation requirement. (A, CSU)

## 34 INTRODUCTION TO 3-D ANIMATION

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to 3-D animation using Blender software. Projects dealing with workflow, interface, layouts, objects, lighting, animation, and rendering. Fulfills computer literacy graduation requirement. (A, CSU, UC)

## 39A INTRODUCTION TO GRAPHIC DESIGN

3 units, 2 lecture hours, 3 lab hours, (Formerly
Printing Technology 39 and Graphic Communications 39)

COREQUISITE: Graphic Communications 20 or permission of instructor. ADVISORY: Eligibility for English 1A recommended.

Principles and methods of graphic communication. Projects incorporate symbols and typography into visual design, exploring interrelationships between formal elements and symbolic content. Fulfills computer literacy graduation requirement. (A, CSU)

## 40A INTERMEDIATE GRAPHIC DESIGN

3 units, 2 lecture hours, 3 lab hours, (Formerly Printing Technology and Graphic Communications 40)

PREREQUISITE: Graphic Communications 39A or permission of instructor: ADVISORY: Eligibility for English 1A recommended.

Advanced principles and methods of graphic communication. Projects incorporate symbols and typography into visual design, exploring interrelationships between the formal elements and symbolic content. Fulfills computer literacy graduation requirement. (A, CSU)

## 41 VISUAL COMMUNICATIONS

3 units, 2 lecture hours, 3 lab hours, (Formerly
Printing Technology 41)
ADVISORY: Eligibility for English 1A recommended.
Survey of the significant techniques and examples of visual communication as employed by the mass media, including newspapers, magazines, television, and advertising. Discussion and demonstration of the tools used in analyzing visual communication. Creation and analysis of images for print, web, and video. Fulfills computer literacy graduation requirement. (A, CSU)

## 51 STORYBOARDING

1 unit, 2 lecture hours, ( 9 weeks)
ADVISORY: Eligibility for English 1A recommended.
Pre-visualization for animation, video, web, and game production. Introduction to media-specific storyboarding processes and techniques. (A, CSU)

## 52 ADOBE LIGHTROOM

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Production digital image management and adjustment with Adobe Lightroom. Fulfills computer literacy graduation requirement. (A, CSU)

## 53 ADOBE AFTER EFFECTS

3 units, 2 lecture hours, 3 lab hours ADVISORY: Eligibility for English 1A recommended.
Introduction to motion graphics and video post-processing using Adobe After Effects. Projects incorporate a series of techniques used to create video special effects. Fulfills computer literacy graduation requirement. (A, CSU)

## GUIDANCE STUDIES

SEE COUNSELING

## HEALTH INFORMATION TECHNOLOGY (HIT)

FORMERLY MEDICAL RECORD TECHNOLOGY

## 1 INTRODUCTION TO HEALTH INFORMATION MANAGEMENT

3 units, 3 lecture hours, (Formerly Medical Record Technology 1)
ADVISORY: Eligibility for English 1A recommended.
Introduction to health care delivery systems, hospital organization, the medical record, the processes of health information management including access, retention, data collection, quantitative and qualitative analysis, and computerized health information systems; accreditation, licensure, and regulatory requirements; the role of the health information management professional. (A, CSU)

## 2 LEGAL ASPECTS OF HEALTH INFORMATION

3 units, 3 lecture hours, (Formerly Medical Record Technology 2)
COREQUISITE: Health Information Technology 1. ADVISORY: Eligibility for English 1A recommended.

Legal basis for the control, use, and release of health information; concepts of consent for treatment; HIPAA privacy and security rules; federal and state laws and regulations governing the handling of special health information; ethical practices in health information; procedures used in responding to requests for health information. (A, CSU)

## 3 QUALITY IMPROVEMENT

2 units, 2 lecture hours, (Formerly Medical Record Technology 3)
PREREQUISITE: Computer Information Technology 15 and Health Information Technology 1. ADVISORY: Eligibility for English 1A recommended.

History and development of quality improvement efforts in health care; quality assessment techniques and processes; software tools for data collection and reporting; roles and responsibilities of individuals involved in quality improvement; medical staff organization; peer review, utilization review, and risk management. (A, CSU)

## 4 DISEASE PROCESS

3 units, 3 lecture hours
PREREQUISITE: Health Information Technology 10 and Biology 5 . 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. (A, CSU)

## 5 INTRODUCTION TO CODING

3 units, 3 lecture hours
PREREQUISITE: Health Information Technology 10. COREQUISITE: Health Information Technology 4. ADVISORY: Eligibility for English 1A recommended.

Introduction to ICD-10-CM code assignment and ICD 10 PCS; rules, principles, guidelines, and conventions; state and federal regulations; documentation to support coding; manual and electronic coding applications. Review of other systems used in health care: DSM, SNOMED, and ICD-10-CM. This is the first of a two-course sequence for ICD-10-CM and ICD-10-PCS coding. (A, CSU)

## 6 CODING AND REIMBURSEMENT

## 3 units, 3 lecture hours

PREREQUISITE: Health Information Technology 5. ADVISORY: Eligibility for English 1A recommended.

Advanced ICD-10-CM and ICD-10-PCS code assignment. Emphasis on case studies, health records, encoders and groupers; federal regulations regarding prospective payment systems, and methods of billing and reimbursement. Second of a two-course sequence for ICD-10-CM and ICD-10-PCS coding. (A, CSU)

## 7 DIRECTED PRACTICE

4 units, 1 lecture hour, 9 lab hours, (Pass/No Pass)
PREREQUISITE: Health Information Technology 3 and 6 . ADVISORY: Eligibility for English 1A recommended.

Practical application of advanced principles and practices of health information technology; directed practice combines a supervised field experience performing HIT competencies in an affiliated healthcare organization. (A, CSU)

## 8 HEALTH INFORMATION MANAGEMENT AND <br> SUPERVISION

3 units, 3 lecture hours
PREREQUISITE: Health Information Technology 1. ADVISORY: Eligibility for English 1A recommended.

Effective management of technical and human factors in health information management: leadership, work design and process improvement, human resources, training and development, strategic and organizational management, financial management, project management, and ethics. (A, CSU)

## 9 HOSPITAL AND HEALTH STATISTICS

2 units, 2 lecture hours
PREREQUISITE: Computer Information Technology 15 and Health Information Technology 1. ADVISORY: Eligibility for English 1A recommended. Eligibility for Mathematics 201 recommended.

Basic hospital and health statistics including the sources, definitions, and calculation of common rates and percentages; methods for collection, computation and reporting; analysis of data; common research methodologies used in healthcare. (A, CSU)

## 10 MEDICAL TERMINOLOGY

3 units, 3 lecture hours, (Formerly Medical Record Technology 10)
ADVISORY: Eligibility for English 1A recommended.
Medical vocabulary with concentration on prefixes, suffixes, and root words. Emphasis on word dissection and definitions as applied to the body systems including the terminology used in examinations, diagnoses, procedures, laboratory investigations, and medical reports. (A, CSU)

## 11 CPT CODING

3 units, 3 lecture hours
PREREQUISITE: Health Information Technology 10. COREQUISITE: Health Information Technology 4. ADVISORY: Eligibility for English 1A recommended.

Common Procedural Terminology (CPT) coding; Healthcare Common Procedure Coding System (HCPCS), and Ambulatory Pay Classification (APCs); emphasis on application of coding conventions and guidelines, application to billing processes and reimbursement issues; use of manual and electronic coding systems. (A, CSU)

## 12 HEALTH INFORMATION IN ALTERNATIVE SETTINGS

2 units, 2 lecture hours
PREREQUISITE: Health Information Technology 1. ADVISORY: Eligibility for English 1A recommended.

Introduction to non-traditional health information systems and settings including organizational structure, accreditation and licensing requirements, documentation requirements, and the role of the health information practitioner. Emphasis on long-term care, mental health, and ambulatory care settings. (A, CSU)

## 14 HIM TECHNOLOGY AND SYSTEMS

3 units, 3 lecture hours
PREREQUISITE: Health Information Technology 1 and Computer Information Technology 15. ADVISORY: Eligibility for English 1A recommended.

Electronic health records, computer applications, and information systems used in healthcare and health information management; system selection, implementation, and analysis; data quality, storage, retrieval and reporting; privacy and security. (A, CSU)

## 15 MEDICAL CODING DIRECTED PRACTICE

1 unit, 3 lab hours, (Pass/No Pass)
PREREQUISITE: Health Information Technology 6. COREQUISITE: Health Information Technology 11. ADVISORY: Eligibility for English 1A recommended.

Supervised practice in a healthcare setting or by virtual simulation of diagnostic and procedure coding; demonstration of knowledge in regulatory compliance, revenue cycle, and reimbursement methodologies. (A, CSU)

## HEALTH SCIENCE (HLTH)

## 1 CONTEMPORARY HEALTH ISSUES

3 units, 3 lecture hours, (Formerly Health Education 1)

ADVISORY: Eligibility for English 1A recommended.
Contemporary scientific concepts and medical information designed to promote health, prevent disease, increase life span and improve the quality of life involving the cardiovascular system, physical fitness, nutrition, emotional health, human sexuality, sexually transmitted diseases, reproduction and birth control, heredity, substance abuse, cancer, consumer and environmental health and health care systems. (A, CSU-GE, UC)

## 2 FIRST AID AND SAFETY

3 units, 3 lecture hours, (Formerly Health Education 2)

ADVISORY: Eligibility for English 1A recommended.
Basic concepts and skills necessary to give first aid (including cardiopulmonary resuscitation). Satisfies the requirements of the American Red Cross for certification in Adult, Child and Infant Cardiopulmonary Resuscitation and Basic First Aid. (C-ID KIN 101) (A, CSU, UC)

## HISTORY (HIST)

## 1 WESTERN CIVILIZATION TO 1648

## 3 units, 3 lecture hours

ADVISORY: English 1A.
A survey of the political, social, economic, cultural, and intellectual developments of European civilization from its prehistoric antecedents in the Middle East to the rise of modern European nations in the seventeenth century. (C-ID HIST 170) (A, CSU-GE, UC, I)

## 1H HONORS WESTERN CIVILIZATION TO 1648

3 units, 3 lecture hours, (Formerly Honors 1H)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

A survey of the political, social, economic, cultural, and intellectual developments of European civilization from its prehistoric antecedents in the Middle East to the rise of modern European nations in the seventeenth century. In addition, Honors sections take a greater cross-disciplinary perspective, critically evaluate issues and controversies in historiography, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 170) (A, CSU-GE, UC, I)

## 2 WESTERN CIVILIZATION SINCE 1648

3 units, 3 lecture hours
ADVISORY: English 1A.
The philosophical, political, and economic development of the European civilizations and their "offspring" in the New World and elsewhere from the 17th century to the present era. (C-ID HIST 180) (A, CSU-GE, UC, I)

## 2H HONORS WESTERN CIVILIZATION SINCE 1648

3 units, 3 lecture hours, (Formerly Honors 2H)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

The philosophical, political, and economic development of the European civilizations and their "offspring" in the New World and elsewhere from the 17 th century to the present era. In addition, Honors sections take a greater cross-disciplinary perspective, critically evaluate issues and controversies in historiography, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 180) (A, CSU-GE, UC, I)

## 3 HISTORY OF ANCIENT ROME

3 units, 3 lecture hours
ADVISORY: English 1A and History 1.
The history, politics, social life, literature, art, architecture, religion and archaeology of Rome from the foundation of the city to the early Byzantine period. (A, CSU-GE, UC, I)

## 11 HISTORY OF THE UNITED STATES TO 1877

3 units, 3 lecture hours
ADVISORY: English 1A.
Political, social, and economic development from the colonial period through the Reconstruction Era. (C-ID HIST 130) (A, CSU-GE, UC, I)

## 12 HISTORY OF THE UNITED STATES SINCE 1877

3 units, 3 lecture hours
ADVISORY: English 1A.
Political, social and economic development since Reconstruction Era; the US as a world power. Satisfies the US history requirement for BA degree. (C-ID HIST 140) (A, CSU-GE, UC, I)

## 12H HONORS HISTORY OF THE UNITED STATES SINCE 1877

3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Political, social and economic development since the Reconstruction Era; the U. S. as a world power. In addition, honors sections offer more in-depth study of modern U. S. history, critically evaluate controversies in historiography, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 140) (A, CSU-GE, UC, I)

## 15 HISTORY OF THE BRITISH ISLES

3 units, 3 lecture hours
ADVISORY: English 1A.
Political, social, economic, and cultural history of the British Isles from pre-history to the present. (A, CSU-GE, UC, I)

## 17 HISTORY OF THE MUSLIM WORLD TO 1405

3 units, 3 lecture hours
ADVISORY: English 1A and History 1.
An analytical survey of Islamic history from the life of Muhammad to the Ottoman Empire. Discussion of the political and military aspects of Islam, Islamic science and medicine, and mystical movements within Islam. (A, CSU-GE, UC, I)

## 18 HISTORY OF ANCIENT GREECE

3 units, 3 lecture hours
ADVISORY: English 1A and History 1.
An intensive survey of Greek history from the Bronze Age to the Hellenistic period. Discussion of the Homeric poems, the development of the polis system in Athens and Sparta, the Persian and Peloponnesian Wars, and Hellenistic science and technology. (A, CSU-GE, UC, I)

## 20 WORLD HISTORY I, TO 1600

3 units, 3 lecture hours
ADVISORY: English 1A.
Economic, political, and social developments in World Civilization from the emergence of human communities to around 1600. (C-ID HIST 150) (A, CSU-GE, UC, I)

## 21 UNITED STATES CIVIL WAR

3 units, 3 lecture hours
ADVISORY: English 1A. Satisfactory completion of History 11 recommended.

Causes, events, and consequences of the American Civil War. (A, CSU-GE, UC, I)

## 22 HISTORY OF AMERICAN WOMEN

3 units, 3 lecture hours
ADVISORY: English 1A.
Women in American history: social, political, and economic actions and reactions of American women; racial, ethnic, religious, geographic, and class differences. (A, CSU-GE, UC, I)

## 23 WORLD HISTORY II, SINCE 1500

3 units, 3 lecture hours
ADVISORY: English 1A.
Economic, political, and social development in world history from around 1500 to the present. (C-ID HIST 160) (A, CSU-GE, UC, I)

## 25 HISTORY OF RELIGION IN THE UNITED STATES

3 units, 3 lecture hours
ADVISORY: English 1A.
Survey of religion in the United States from the colonial period to the present. (A, CSU-GE, UC, I)

## 29 HISTORY OF MEXICO, COLONIAL TO CONTEMPORARY PERIOD <br> 3 units, 3 lecture hours, (See also Chicano-Latino Studies 29)

ADVISORY: Eligibility for English 1A recommended.
A social, economic and political survey of Mexican history from the colonial (1521) to the contemporary period. (A, CSU-GE, UC, I)

## 30 CALIFORNIA HISTORY

3 units, 3 lecture hours
ADVISORY: English 1A.
Growth and development of California politically, economically, and culturally from 1523 to the present, emphasizing 20th century issues. (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

HOME ECONOMICS
SEE FASHION AND TEXTILES STUDIES AND INTERIOR DESIGN

## HONORS (HONORS)

## ACCOUNTING 4AH, HONORS FINANCIAL ACCOUNTING

4 units, 4 lecture hours, 1 lab hour
ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

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)

## ACCOUNTING 4BH, HONORS MANAGERIAL ACCOUNTING

4 units, 4 lecture hours, 1 lab hour
PREREQUISITE: Accounting 4A or equivalent. ADVISORY: Meet the requirements for consideration for acceptance into the Honors Program. See Honors Program listing in the college catalog.

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)

## ANTHROPOLOGY 2H, HONORS CULTURAL ANTHROPOLOGY

3 units, 3 lecture hours, (Formerly Honors 2A)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Principles, methods, and concepts of cultural anthropology. The relationship between culture, society, and the individual. A cross-cultural, integrated analysis of human marriage and family, child rearing, personality development, kinship, social institutions, ideology, politics and social control, economics and ecological adaption, language, artistic expression, and cultural change. In addition, the Honors course takes a greater cross-disciplinary perspective, places greater emphasis on the use of anthropology on the understanding of the modern world, and more critically evaluates the methods and theory of anthropology. (C-ID ANTH 120) (A, CSU-GE-UC, I)

## ART 5H, HONORS ART HISTORY 1

3 units, 3 lecture hours, (Formerly Honors 5A)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

A survey of the Western Art from prehistory to the Gothic period that may include one or more areas of non-Western art from the same time period. Honors sections will include special introduction for non-art majors into the characteristics and components of art and a brief introduction into art criticism. (C-ID ARTH 110) (A, CSU-GE, UC, I)

## ART 6H, HONORS ART HISTORY 2

3 units, 3 lecture hours, (Formerly Honors 6A)
ADVISORY: Meet the qualifications for consideration for acceptance into the 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 that may include one or more areas of non-Western Art from the same time period. Honors sections will include a special introduction for non-art majors into the characteristics and components of art and a brief introduction into art criticism. (C-ID ANTH 120) (A, CSU-GE, UC, I)

## BIOLOGY 3H, HONORS INTRODUCTION TO LIFE SCIENCE

## 3.5 units, 3 lecture hours, 2 lab hours

ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

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, guest speakers, literature and scientific research, use of technology and student presentations are included in this honors level course. (A, CSU-GE, UC, I)

BIOLOGY 11AH, HONORS BIOLOGY FOR SCIENCE MAJORS I
5 units, 4 lecture hours, 3 lab hours
PREREQUISITE: Mathematics 103 with a grade of "C" or better. Completion within the last five years recommended. COREQUISITE: Chemistry 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

The chemistry of life, the cell, cellular structure, metabolism, photosynthesis, aerobic and anaerobic respiration, mitosis, meiosis, Mendelian genetics, human genetics, molecular biology, biotechnology, and evolution. Intended for science majors and for pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors. Field trips, guest speakers, literature and scientific research, use of technology, and student presentations are included in this honors level course. (C-ID BIOL 190) (A, CSU-GE, UC, I)

## BUSINESS ADMINISTRATION 10H, HONORS INTRODUCTION TO BUSINESS

3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

A survey in business providing a multidisciplinary examination of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization's policy and practices within the U.S. Demonstrates how these influences impact the primary areas of business including: organizational structure and design; leadership, human resource management, and organized labor practices; marketing; organizational communication; technology; and entrepreneurship; and legal, accounting, and financial practices; and therefore affect a business' ability to achieve its organizational goals in the U.S. economic system with enrichment and service learning activities and linkages to a Business Economics Honors colloquium. (C-ID BUS 110) (A, CSU, UC)

## ECONOMICS 40H, HONORS INTRODUCTION TO MICROECONOMICS

3 units, 3 lecture hours, (Formerly Economics 1BH)
PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog. Eligibility for English 1A recommended.

The "free enterprise" system. Theories of consumer and individual firm behavior. Market structure analysis and comparison. Government programs to assist, regulate, and promote various industries. The American labor movement and international trade. In addition, Honors sections will discuss and analyze the works of historical economic figures. (C-ID ECON 201) (A, CSU-GE, UC, I)

## ECONOMICS 50H, HONORS INTRODUCTION TO MACROECONOMICS

3 units, 3 lecture hours, (Formerly Economics 1AH)
PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog. Eligibility for English 1A recommended.

An introductory analysis of aggregate economic variables. Topics include: market systems, aggregate measures of economic activity, macroeconomic equilibrium, money and financial institutions, monetary and fiscal policy, international economics and economic growth. Honors sections will discuss and analyze the works of historical economic figures. (C-ID ECON 202) (A, CSU-GE, UC, I)

## ENGLISH 1AH, HONORS READING AND COMPOSITION

4 units, 4 lecture hours, (Formerly Honors 1E)
PREREQUISITE: A "credit" grade in English 125 or English for Multi-Lingual Students 67, and English 126 or English for Multi-Lingual Students 68 or appropriate score on the reading and writing sections of the placement test. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Reading, analyzing, and writing college-level prose, with emphasis on the expository: studying writing as a process; exploring different writing strategies; summarizing, editing, and critiquing; conducting research (gathering, organizing, evaluating, integrating and documenting information). Honors sections may cover additional subject matter such as creative writing, peer response, the study of oral narrative and its relationship to writing and composing on the computer. (C-ID ENGL 100) (A, CSU-GE, UC, I)

## ENGLISH 3H, HONORS CRITICAL READING \& WRITING

3 units, 3 lecture hours
PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Developing critical thinking skills in reading and writing beyond English 1 A . Reasoning for analysis and argument writing based mainly on non-fiction readings. Honors sections may cover additional subject matter, such as more in-depth analytical research, extensive analysis of rhetorical discourse, and the study of how critical reasoning and argument is utilized in content area research and practice. (C-ID ENGL 105) (A, CSU-GE, UC, I)

## GEOLOGY 1H, HONORS PHYSICAL GEOLOGY

## 4 units, 3 lecture hours, 2 lab hours

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

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. Field trips to classic geologic locations, guest lectures, and student presentations are included in this honors course. (C-ID GEOL 101) (A, CSU-GE, UC, I))

## HISTORY 1H, HONORS WESTERN CIVILIZATION TO 1648

3 units, 3 lecture hours, (Formerly Honors 1H)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

A survey of the political, social, economic, cultural, and intellectual developments of European civilization from its prehistoric antecedents in the Middle East to the rise of modern European Nations in the seventeenth century. In addition, Honors sections take a greater cross-disciplinary perspective, critically evaluate issues and controversies in historiography of the ancient-through-early-modern periods, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 170) (A, CSU-GE-UC, I)

## HISTORY 2H, HONORS WESTERN CIVILIZATION SINCE 1648

3 units, 3 lecture hours, (Formerly Honors 2H)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

The philosophical, political, and economic development of European civilizations and their "offspring" in the New World and elsewhere from the 17th century to the present era. In addition, Honors sections take a greater cross-disciplinary perspective, critically evaluate issues and controversies in historiography of the early-modern-to-present periods, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 180) (A, CSU-GE, UC, I)

## HISTORY 12H, HONORS HISTORY OF THE UNITED STATES

## SINCE 1877

3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Political, social and economic development since the Reconstruction Era; the U. S. as a world power. In addition, honors sections offer more in-depth study of modern U. S. history, critically evaluate controversies in historiography, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 140) (A, CSU-GE, UC, I)

HONORS 1A, HONORS SCIENCE COLLOQUIUM: BIOLOGICAL SCIENCE THROUGH SCHOLARLY RESEARCH
1 unit, 1 lecture hour
COREQUISITE: Meet the qualifications for acceptance into the Honors Program. Biology 11AH or English
1AH. See Honors Program listing in college catalog.
Interdisciplinary approach to biological research integrating scientific writing and scholarly presentation methods. Critical topics and concepts beyond content offered in Biology 11A Honors. (A, CSU, UC approved as variable topics; evaluation completed by individual campuses after admission.)

HONORS 1C, HONORS HUMANITIES COLLOQUIUM: HUMANITIES THROUGH THE AGES
1 unit, 1 lecture hour
COREQUISITE: Meet the qualifications for acceptance into the Honors Program. Philosophy 1AH, History 1H or 2H, Art 5H or 6H, or English 1BH or 3 H or Humanities 10 H or 11 H . See Honors Program listing in college catalog.

Interdisciplinary investigation of human creativity and expression as they intersect across the Humanities. Examination of various topics as manifested in literature, poetry, visual arts, performing arts, music and philosophy. (A, CSU, UC)

## HONORS 1D, HONORS BUSINESS, ECONOMICS AND

ACCOUNTING COLLOQUIUM: THE LOCAL ECONOMY AND AGRIBUSINESS
1 unit, 1 lecture hour
COREQUISITE: Meet the qualifications for acceptance into the Honors Program. Accounting 4AH, Economics 40AH or 50H, and Business Administration 10H. See Honors Program listing in college catalog.

Interdisciplinary investigation of aspects of economic theory and business systems and their relationship to economic cycles and general business and accounting practices. Global and national economic, business, and accounting theories are applied to the conditions of agribusiness in the San Joaquin Valley. (A, CSU)

## HONORS 1E, HONORS SOCIAL SCIENCE COLLOQUIUM: CONTEMPORARY ISSUES IN SOCIAL SCIENCE

## 1 unit, 1 lecture hour

COREQUISITE: Meet the qualifications for acceptance into the Honors
Program. Anthropology 2H or Psychology 2H. See Honors Program listing in college catalog.

Interdisciplinary investigation of a contemporary issue in society, culture, and human behavior. Topics studied and researched in relationship to anthropological and psychological theories. (A, CSU)

HONORS 1F, HONORS PHI THETA KAPPA COLLOQUIUM: PHI THETA KAPPA STUDY TOPICS
1 unit, 1 lecture hour
COREQUISITE: Meet the qualifications for acceptance into the Honors Program. See Honors Program listing in college catalog.

Interdisciplinary investigation of the annual study topic of Phi Theta Kappa International Honor Society. Topic determined by the Honors Study Topic Guide and drawn from the humanities, natural sciences and social sciences. (A, CSU)

## HUMANITIES 10H, HONORS CLASSICAL HUMANITIES

3 units, 3 lecture hours
PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

An integrated study of the art, music, literature, philosophy, and drama of Western civilization from the Greeks through the Renaissance. Honors sections may cover additional subject matter such as more extensive reading and research as well as additional writing. (A, CSU-GE, UC, I)

## HUMANITIES 11H, HONORS MODERN HUMANITIES

3 units, 3 lecture hours
PREREQUISITE: English 1A. Humanities 10 is not a prerequisite for this course. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.

An integrated study of the art, music, literature, philosophy, and drama of Western civilization from the seventeenth century to the present. Honors sections may cover additional subject matter such as more extensive reading and research as well as additional writing. (A, CSU-GE, UC, I)

## LINGUISTICS 10H, HONORS INTRODUCTION TO LANGUAGE

3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Examination of the nature of language, its historical development, its structural elements, the stages of language acquisition, and their applications in the world. Emphasis on systematic linguistic analysis of language systems and usage. Honors sections will cover additional subject matter such as cognitive linguistics, forensic linguistics, and computational linguistics. (A, CSU-GE)

## PHILOSOPHY 1AH, HONORS THEORIES OF KNOWLEDGE

 AND REALITY3 units, 3 lecture hours, (Formerly Honors 1P)
PREREQUISITE: English 1A or equivalent. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

An introduction to traditional and contemporary views on the nature of knowledge, truth, and thought; alternative views of God, the universe and human nature. Develops skills in philosophical analysis and logical thinking. Honors sections may also focus on an historical overview or a more in-depth study of a significant branch of philosophy e.g. philosophy of language or philosophy of mind. (C-ID PHIL 100) (A, CSU-GE, UC, I)

## POLITICAL SCIENCE 2H, HONORS AMERICAN GOVERNMENT

## 3 units, 3 lecture hours

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Analysis of political and judicial institutions and processes, political ideology, political economy, the role of the media, civil rights, California state and local government. Satisfies the U.S. Constitution requirements and the national, state and local government requirements for transfer students. In addition Honors sections investigate in detail the original design of the American political system, including the values imbued in the Constitution, the construction of the federal system, and the legal responsibilities of the major actors, and contrast those features with the current conditions in American politics. Emphasis is given to explaining the differences between the two situations, and requiring students to suggest how access to the present system can be gained and used. (C-ID POLS 110) (A, CSU-GE, UC, I)

## PSYCHOLOGY 2H, HONORS GENERAL PSYCHOLOGY

3 units, 3 lecture hours, (Formerly Honors 7P and Psychology 7H)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Scientific study of behavior and mental processes. Topics include history, methodology, biopsychology, lifespan development, sensation and perception, consciousness and altered states, learning and memory, thought and language, intelligence, motivation and emotion, personality, psychopathology and therapy, stress and health, and social and cultural influences. The Honors section of this course places a greater emphasis on understanding the human being as an integrated physiological, social, and psychological organism and further enriches that perspective with data and theories from related disciplines. (C-ID PSY 110) (A, CSU-GE, UC, I)

SOCIOLOGY 1AH, HONORS INTRODUCTION TO SOCIOLOGY
3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.

Basic concepts, theoretical approaches, and methods of sociology. Analysis and explanation of social systems, socialization, and self, institutions, stratification, inter/intra-group dynamics, multi-/cross-cultural relations, demography, deviance, collective behavior, social change, and global trends. The Honors section of this course places a greater emphasis on methods of conducting scientific research in the field of Sociology. Additional emphasis is placed on contemporary social issues as explored through supplemental readers or texts. (C-ID SOC 110) (A, CSU-GE, UC, I)

## HUMAN SERVICES (HS)

## 10 INTRODUCTION TO AGING STUDIES

3 units, 3 lecture hours, (See also Sociology 10)
ADVISORY: Eligibility for English 1A recommended.
Overview of social, economic, biological and psychological functions of aging. Exploration of issues of the aged with emphasis on consumerism, housing, health, leisure time, family roles, retirement, widowhood and sexuality. (A, CSU-GE, UC, I)

## 18 ALCOHOL AND DRUG ABUSE COUNSELING: PROFESSIONAL AND PERSONAL GROWTH

## 2 units, 2 lecture hours

ADVISORY: Eligibility for English 1A recommended.
This course 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

PREREQUSITTE: 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.

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: Eligibility for English 1A recommended.
Introduction to the social, economic, political, historical and philosophical components in the development of social welfare and social work in western society. Emphasis on knowledge base, value systems, and specific fields of social work practice. (A, CSU, UC)

## 24 FUNDAMENTALS OF INTERVIEWING AND COUNSELING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Principles of interviewing and counseling, both theory and practice. Focus on specific skills within a human service setting. Analysis of the dynamics between counselor and client. (A, CSU)

## 25 ASSERTIVENESS TRAINING

2 units, 2 lecture hours, (See also Women's Studies 25)

ADVISORY: Eligibility for English 1A recommended.
Becoming more effective and creative in expressing oneself in a courteous and dignified manner. Discovering the communication options available in various life situations. (A, CSU)

## 30 GROUP AND COMMUNITY SOCIAL SERVICES

3 units, 3 lecture hours
COREQUISITE: Human Services 20. ADVISORY: Eligibility for English 1A recommended.

Methods of human services and social work intervention with individual, group, and community; problem analysis and available services. (A, CSU)

40 ALCOHOL AND DRUG ABUSE COUNSELING: LAW AND ETHICS, PREVENTION, EDUCATION, OUTREACH AND REFERRAL
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Classification of drugs, legal solutions, restrictions, community prevention, outreach, screening techniques, intervention and referral, and crisis counseling. (Not open to students with credit in Human Services/ Sociology 41.) (A, CSU)

## 42 INTRODUCTION TO ALCOHOL AND DRUG COUNSELING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The history of alcohol and other mood changing drugs in the U.S.; myths and stereotypes of alcohol use; socio-cultural factors that contribute to the use of drugs; patterns and progression of alcoholism; and the dynamics of treatment. (A, CSU)

## 43 ALCOHOL AND DRUG ABUSE COUNSELING: CASE MANAGEMENT

3 units 3 lecture hours
PREREQUISITE: Human Services 42. ADVISORY: Eligibility for English 1A recommended.

Elementary techniques in the treatment of alcohol dependency for the individual and the family; student participation in counseling techniques in a group study experience. Bookkeeping, referral, consultation, and follow-up skills. (A, CSU)

## 44 DRUG USE: PHYSICAL AND PSYCHOLOGICAL EFFECTS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The physical and psychological aspects of drug use, including abuse and addiction, physical and psychological dependencies, physiological effects of commonly used drugs, and treatment and prevention. Not open to students with credit in Human Services 45. (A, CSU)

## 60 INTRODUCTION TO CHILD WELFARE

3 units, 3 lecture hours, (See also Child
Development 60)
ADVISORY: Eligibility for English 1A recommended.
Introduction to the child welfare system. Exploration of the goals of child welfare including safety, a permanent family and well-being of every child. Emphasis on the practice of preventing, remedying, or ameliorating child maltreatment. (A, CSU)

## HUMANITIES (HUMAN)

## 10 CLASSICAL HUMANITIES

3 units, 3 lecture hours PREREQUISITE: English 1A.
An integrated study of the art, music, literature, philosophy, and drama of Western civilization from the Greeks through the Renaissance. (A, CSU-GE, UC, I)

## 10H HONORS CLASSICAL HUMANITIES

3 units, 3 lecture hours
PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

An integrated study of the art, music, literature, philosophy, and drama of Western civilization from the Greeks through the Renaissance. Honors sections may cover additional subject matter such as more extensive reading and research as well as additional writing. (A, CSU-GE, UC, I)

## 11 MODERN HUMANITIES

3 units, 3 lecture hours
PREREQUISITE: English 1A. Humanities 10 is not a prerequisite for this course.

An integrated study of the art, music, literature, philosophy, and drama of the Western civilization from the seventeenth century to the present. (A, CSU-GE, UC, I)

## 11H HONORS MODERN HUMANITIES

## 3 units, 3 lecture hours

PREREQUISITE: English 1A. Humanities 10 is not a prerequisite for this course. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.

An integrated study of the art, music, literature, philosophy, and drama of Western civilization from the seventeenth century to the present. Honors sections may cover additional subject matter such as more extensive reading and research as well as additional writing. (A, CSU-GE, UC, I)

## 42 CLASSICAL MYTHS

3 units, 3 lecture hours, (See also English 42)
PREREQUISITE: English 1A.
Reading and critical analysis of basic mythic themes in literature, film, and the visual arts. The origin of myths in ritual, their development in western civilization, and their ultimate form and continued presence in the arts. (A, CSU-GE, UC, I)

## INDIVIDUAL STUDY

## 49 (COURSE TITLE TO BE SELECTED)

1-3 units, minimum of 54 hours required per unit PREREQUISITE: To be determined by the faculty.
Creative or research project leading to a paper, report, construction, composition or other product. An exploration of a subject not normally covered in a regular course. The course name, title and content are to be identified by the instructor after consultation with the student. A course application form must be completed by the student and approved by the instructor and the division dean of instruction. (A, CSU, UC approved as variable topics; evaluation completed by individual campuses after admission.)

## INDUSTRIAL EDUCATION <br> SEE APPLIED TECHNOLOGY (AT)

## INDUSTRIAL TRAINING, CTC

## 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)

## INTERIOR DESIGN (INTRDSN)

## 7 INTERIOR DESIGN

3 units, 3 lecture hours, 1 lab hour, (Formerly Home Economics 7 and 20)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

A comprehensive introduction to the economic, social, psychological, and aesthetic aspects of housing and interior design. Integration of design principles, space planning, furniture selection and creative expression with consumer information pertaining to living space. Laboratory experiences include space analysis, color and materials coordination, and furniture arrangement. (A, CSU)

## JAPANESE <br> SEE FOREIGN LANGUAGE

## JOURNALISM (JOURN)

## 1 INTRODUCTION TO MASS COMMUNICATION

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
A survey of major mass mediums and their influence on the artistic and cultural expression of contemporary society. From books through the internet, and from pop culture to advertising, public relations, media law and ethics, a close examination of the historical and technological developments that have shaped the structures and practices of mass media as well as emerging trends in mass communication, audiences, and technologies. Students learn analytical skills to help become critical consumers/ developers of media. (C-ID JOUR 100) (A, CSU-GE, UC, I)

## 2 INTERPRETING CURRENT EVENTS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Discussion and analysis of important national and international events. Readings from newspapers, magazines and on-line news sources on interpreting and evaluating information in light of journalistic objectivity, propaganda, government censorship and the influence of various groups on news gathering. (A, CSU)

## 3 NEWSWRITING

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
News information gathering and writing for print media. Includes the basics of news writing, methods and practices, interviewing, feature writing, and emphasis on writing against deadlines. Ethical, policy and legal questions confronting reporters, their editors and publishers. (C-ID JOUR 110) (A, CSU)

## 4 WRITING FOR THE COLLEGE NEWSPAPER

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended and Journalism 3 (can be concurrent) or equivalent.

Writing articles for the school newspaper; writing for other journalism publications on a regular schedule throughout the semester; editing articles for the publications; gathering information from a variety of sources; synthesizing a story; preparing information for dissemination; handling ethical and legal aspects of communication. (C-ID JOUR 130) (A, CSU)

## 5 NEWSPAPER PRODUCTION

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. For photographers, demonstrated ability to use a camera. For artists and designers, demonstrated ability in the field of art or graphics.

Organize and publish a student newspaper on a regular schedule throughout the semester; participate in bi-weekly budget meetings for college newspaper content; edit news stories written by students in Journalism 4; produce accompanying photography and graphics; complete newspaper and advertising layout and design. (A, CSU)

## 6 MAGAZINE PRODUCTION

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. For photographers, demonstrated ability to use a camera. For artists and designers, demonstrated ability in the field of art or graphics.

Introduction to magazine production with emphasis on developing, researching, interviewing and writing non-fiction articles. Includes complete presentation of stories, photos, design and layout. Students will edit and publish a magazine that can be adaptable for on-line publication. (A, CSU)

## 9 FEATURE WRITING

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Journalism 3 or concurrent enrollment, and eligibility for English 1A recommended.

Fundamentals in feature writing for magazines, newspapers and on-line publications. Special emphasis on profile and interpretative news features. Provides practical experience in interview and in-depth research techniques. (A, CSU)

## 11A BEGINNING MEDIA WRITING PRACTICUM

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Journalism 3.
Students practice and refine beginning newsgathering, reporting, persuasion and writing skills by working as staff members of the college newspaper and other print and online student publications; focus of study is on basic news, feature and opinion stories. (C-ID JOUR 130) (A, CSU)

## 11B INTERMEDIATE MEDIA WRITING PRACTICUM

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Journalism 11A.
Students practice and refine intermediate newsgathering, reporting, persuasion and writing skills by working as staff members of the college newspaper and other print and online student publications. Focus of study is on specialized and in-depth news, feature and opinion stories. (C-ID JOUR 131) (A, CSU)

## 11C ADVANCED MEDIA WRITING PRACTICUM

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Journalism 11B.
Students practice and refine advanced newsgathering, reporting, persuasion and writing skills by working as staff members of the college newspaper and other print and online student publications. Focus of study is on investigative and enterprise news stories and series, and related opinion articles. (C-ID JOUR 130 and JOUR 131) (A, CSU)

## 11D EDITORIAL LEADERSHIP

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Journalism 11C or relevant experience as determined by the instructor.

Producing the Rampage, print and online version; leadership positions on The Rampage and TheRampageOnline.com; and specialized workshops. (C-ID JOUR 130 and JOUR 131) (A, CSU)

## 12 ONLINE NEWSPAPER STAFF

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Journalism 3.
Production of the online version of the college newspaper, the Rampage. Discussion and criticism by staff of the publication. Students will get practical experience in writing for an online production, including using digital photography, video and audio clips for story enhancement. The course prepares student s for future print and electronic media work. (A, CSU)

## 13 ADVANCED REPORTING AND WRITING

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Journalism 3.
Advanced reporting and news gathering techniques; emphasis on interviewing and research skills; investigative, special assignment and online reporting. (C-ID JOUR 210) (A, CSU)

## 14 MULTIMEDIA REPORTING

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Journalism 3.
Integrate print and broadcast techniques to produce multimedia pieces for the web and other electronic media. Multimedia storytelling incorporating writing, digital photography, video, audio and automation. (C-ID JOUR 120) (A, CSU)

## 15 BASIC EDITING FOR JOURNALISTS

2 units, 2 lecture hours
ADVISORY: Journalism 3 or concurrent enrollment, and eligibility for English 1A recommended.

Skills building course for journalism students covers parts of speech, word use, sentence construction, spelling, punctuation, and principles of effective writing as it applies to journalistic proofreading and copyediting; emphasizes the set of rules for understanding how language works; and communicating clearly, concisely, and coherently. (A, CSU)

## 16 RACE, GENDER AND THE MEDIA

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
A critical examination of the role of media in enabling, facilitating, or challenging the social construction of race and gender in our society. Using a variety of entertainment and news content in print, electronic, and the internet, an appreciation and evaluation of how the media influence everyday notion of race and gender and review the historical roles news and entertainment media have played in creating awareness about the experiences of women and ethnic minorities. (A, CSU-GE, UC, I)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

 1-8 unitsCOREQUISITE: Journalism 4. Fall and Spring Semesters: Must be enrolled in at least one other course, including occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to journalism. Collaborative learning objectives established specific to journalism. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## LABORATORY ASSISTANT

## 159 LABORATORY ASSISTANT

1 unit, 3 lab hours
PREREQUISITE: Verification of eligibility by instructor and division dean.

Opportunity to work independently with and assist instructor in subject area. Student must register no later than the third week of a regular semester. (A)

## LEARNING ASSISTANCE (LA)

## 1 TUTOR TRAINING

1 unit, 1 lecture hour, 1 lab hour
PREREQUISITE: None.
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)
PREREQUISITE: None.
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. Prepares student for Tutor Training Level II. This course is open for writing tutors employed by the Writing and Reading Center only. (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 and online tutoring with an emphasis on developmental reading and writing and English as a Second Language. (A, CSU)

## 277A ESSENTIAL SKILLS WORKSHOP SERIES

0.5 unit, .5 lecture hour, (Open Entry/Open Exit), (Pass/No Pass)
PREREQUISITE: None.
Designed to deliver specific learning skills in areas such as reading, writing, math, computer literacy, and student success strategies, which have been identified as necessary to assist students in learning the content taught in their coursework.

## LIBRARY SKILLS (LIBSKL)

## 1 INFORMATION COMPETENCY/RESEARCH SKILLS

1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended.
Introduction to research skills for college students, including basic concepts of information, its organization, location, evaluation, and use. (A, CSU)

## 2 INFORMATION AND COMPUTER LITERACY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
In-depth research skills for college students, including the concept of information, its organization, location, evaluation, and use. General computer/technology concepts, email, and navigating the World Wide Web. (A, CSU)

## LIBRARY TECHNOLOGY (LITEC)

## 51 INTRODUCTION TO LIBRARY SERVICE

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Explores the general organization and governance of various types of libraries, their mission, roles and materials; library service from past to present and its role in society; basic duties, ethics and values of the library paraprofessional. Foundation course for the program leading to a certificate in library technology. (A, CSU)

## 52A ORGANIZATION OF INFORMATION

3 units, 3 lecture hours, (Formerly Library
Technology 52)
ADVISORY: Library Technology 51 recommended.
Cataloging of materials using Library of Congress and Dewey Decimal Classification systems. (A, CSU)

## 52B COLLECTION MANAGEMENT

1 unit, 1 lecture hour
ADVISORY: Library Technology 51 and 52A recommended.
Library technical services, acquisitions and processing of materials, collection maintenance and materials repair. (A, CSU)

## 54 LITERATURE AND SERVICES FOR YOUTH

3 units, 3 lecture hours
ADVISORY: Library Technology 51 recommended.
Library services to children and young adults in the areas of literature, collection development, information services, programming, reader's advisory, reference and information literacy. (A, CSU)

## 55 LIBRARY PUBLIC SERVICE

3 units, 3 lecture hours
ADVISORY: Library Technology 51 recommended.
Library services offered to the public, including readers' advisory, interlibrary loan, and the circulation of materials. (A, CSU)

## 56 INFORMATION TECHNOLOGY

3 units, 3 lecture hours
ADVISORY: Library Technology 51 recommended.
Use and management of computers, computer networks, non-print materials and emerging technologies used in libraries. Educating the users in their use. (A, CSU)

## 57 REFERENCE: PRINT AND ONLINE SOURCES

3 units, 3 lecture hours
ADVISORY: Library Technology 51.
Library reference services, research methodologies, standard reference sources, utilization of print, non-print and electronic format sources; reference interview techniques and style; collection development issues related to library reference services. (A, CSU)

## LINGUISTICS (LING)

## 10 INTRODUCTION TO LANGUAGE

3 units, 3 lecture hours
PREREQUISITE: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68. ADVISORY: Eligibility for English 1A recommended.

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)

## 11 INTRODUCTION TO LANGUAGE FOR EDUCATORS

3 units, 3 lecture hours
PREREQUISITE: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68. ADVISORY: Eligibility for English 1A recommended.

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)

## MANUFACTURING MECHANIC (MFGMCTC)

## 351 INTRODUCTION TO MANUFACTURING

0.5 lecture hour, (Pass/No Pass)

PREREQUISITE: None.
Career in manufacturing, local job market, pay scales; basic mechanical skills required throughout the industrial areas; safety and safe working environment will be stressed.

## 352A TRADE MATHEMATICS

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

## 352B PROGRAMMABLE CONTROLLERS

0.25 lecture hour, 0.75 lab hour, (Pass/No Pass) PREREQUISITE: None.
An introduction to the equipment and peripheral devices used to interface with industrial controlling devices.

## 352C JOB PREPARATION

0.25 lecture hour, 0.75 lab hour, (Pass/No Pass) PREREQUISITE: None.
Preparing resumes, portfolios, and improving employment-seeking skills.

## 352D TECHNICAL REPORT WRITING

0.25 lecture hour, 0.75 lab hour, (Pass/No Pass)

PREREQUISITE: None.
Identify and write various manufacturing types of reports; analyze data, and record data that are associated with production work.

## 353A FLUID POWER FUNDAMENTALS

0.5 lecture hour, (Pass/No Pass)

PREREQUISITE: None.
Fundamentals of fluid power; physics principles pertaining to fluid power; various differences in hydraulics and pneumatics; characteristics of liquids and gases.

## 353B PNEUMATIC FUNDAMENTALS

0.25 lecture hour, 0.75 lab hour, (Pass/No Pass) PREREQUISITE: None.
Theory and application in the operation, service, and function of pneumatic systems including design and application of systems in industrial environments.

## 353C HYDRAULIC FUNDAMENTALS

0.25 lecture hour, 0.75 lab hour, (Pass/No Pass)

PREREQUISITE: None.
Theory and application in the operation, service, and function of hydraulic systems including design and application of systems in industrial environments.

## 354A POWER TRANSMISSION

0.5 lecture hour, (Pass/No Pass)

PREREQUISITE: None.
Fundamental concepts of power transmission. Application of gears, belts, chains, and pulleys will be discussed.

## 354B WELDING FUNDAMENTALS

0.25 lecture hour, 2.25 lab hours, (Pass/No Pass)

PREREQUISITE: None.
Basic metallurgy and properties of metals, oxyacetylene welding and cutting processes, arc welding, and safety within the work environment.

## 354C ELECTRICAL FUNDAMENTALS

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

## MARKETING (MKTG)

## 10 PRINCIPLES OF MARKETING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Utilizing both traditional and contemporary approaches, this course explores marketing's role in creating profitable exchanges including the examination, analysis, reasoning, advocacy, and critique of planning, product development, pricing, distribution, and promotion. Also researches and evaluates how consumer behavior, market research, retailing, and current technologies are used to achieve organizational goals. (A, CSU)

## 11 SELLING AND SALES MANAGEMENT

3 units, 3 lecture hours, (Spring only)
ADVISORY: Eligibility for English 1A recommended.
Fundamentals of personal selling including the steps in the sales process; communicating and relationship building; creating value; sales management; making sales presentations and negotiating; buyer motivation/resistance; organizing a territory, and time management. Career opportunities in the sales industry and selling occupations. (A, CSU)

## 12 ADVERTISING AND PROMOTION

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Explores the elements of advertising and sales promotion from an integrated marketing communications perspective. Topics include consumer and market analysis, identification of target market, creative strategy, media selection, campaign evaluation, and career opportunities. (A, CSU)

## 14 RETAILING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Explores the basic elements of retailing with an application of marketing concepts. Topics include retail formats, retail strategies, target market analysis, customer relationship management, personnel management, merchandise selection, current technologies, and career opportunities. (A, CSU)

## 17 VISUAL MERCHANDISING

3 units, 3 lecture hours, (See also Fashion Merchandising 28)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Modern display techniques, equipment, materials, and analysis of current display methods as they apply to creating a store's image. Laboratory exercises to include planning, executing, and evaluating a variety of displays including signage, cases, windows, and banners. (A, CSU)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

 1-8 unitsCOREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors. ADVISORY: Eligibility for English 1A recommended.

Supervised employment extending the classroom based on occupational learning related to marketing. Collaborative learning objectives established specific to marketing. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 21 DIGITAL MARKETING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Examines digital marketing as a strategic business tool. Explores the roles digital commerce and social media play in an integrated marketing campaign. Builds a foundational knowledge of how companies use social media platforms, metrics, 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: Eligibility for English 1A recommended.
Provides students an introduction to the world of fashion merchandising. Includes the history/global perspectives, uniqueness, and opportunities in fashion. Also presents fundamentals of fashion, basic fashion terminology, and an overview of textiles and apparel. (A, CSU)

## MATHEMATICS (MATH)

## 4A TRIGONOMETRY

4 units, 4 lecture hours, (Formerly Mathematics 4) PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended. Mathematics 102 recommended.

Angles, trigonometric and inverse trigonometric functions, right and oblique triangles, graphs, identities, trigonometric equations, vectors, polar coordinates, DeMoivre's Theorem, and applications. (C-ID MATH 851) (A, CSU-GE)

## 4B PRE-CALCULUS

4 units, 4 lecture hours
PREREQUISITE: Mathematics 4 A or equivalent. ADVISORY: Eligibility for English 1A recommended.

Equations and inequities; polynomial, rational, exponential, logarithmic, trigonometric functions; graphing, analytic geometry, and conic sections; vectors; matrices; systems of equations; the binomial theorem, sequences, and series. (C-ID MATH 151) (A, CSU-GE, UC, I)

## 5A MATHEMATICAL ANALYSIS I

5 units, 5 lecture hours
PREREQUISITE: Mathematics 4 B or equivalent. ADVISORY: Eligibility for English 1A recommended.

Introduction to differential and integral calculus, analytical geometry, differentiation and integration of functions, limits continuity, the Fundamental Theorem of Calculus, and applications of differentiation. (C-ID MATH 120 and C-ID MATH 900S $=$ MATH 5A + MATH 5B) (A, CSU-GE, UC, I)

## 5B MATHEMATICAL ANALYSIS II

4 units, 4 lecture hours
PREREQUISITE: Mathematics 5A or equivalent. ADVISORY: Eligibility for English 1A recommended.

Applications and techniques of integration including logarithmic, exponential, trigonometric, and transcendental functions; conic sections; infinite series; differential equations; approximations. (C-ID MATH 220 and C-ID MATH 900S $=$ MATH $5 \mathrm{~A}+$ MATH 5B) $(\mathrm{A}, \mathrm{CSU}-\mathrm{GE}, \mathrm{UC}, \mathrm{I})$

## 6 MATHEMATICAL ANALYSIS III

4 units, 4 lecture hours
PREREQUISITE: Mathematics 5B or equivalent. ADVISORY: Eligibility for English 1A recommended.

Solid analytic geometry; partial differentiation; integral calculus of multivariable functions; two and three dimensional vectors; vector valued functions; topics in vector calculus including Green's, Divergence, and Stoke's Theorems. (C-ID MATH 230) (A, CSU-GE, UC, I)

## 7 INTRODUCTION TO DIFFERENTIAL EQUATIONS

4 units, 4 lecture hours
PREREQUISITE: Mathematics 6 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Introduction to ordinary differential equations; solutions by power series, phase planes, and Laplace Transforms; linear algebra; Fourier Series; complex variables. (C-ID MATH 240) (A, CSU, UC)

## 10A STRUCTURE AND CONCEPTS IN MATHEMATICS I

3 units, 3 lecture hours
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Development of quantitative reasoning skills via in-depth, integrated explorations of topics in mathematics. Topics include real number systems and subsystems. The emphasis is on comprehension and analysis of mathematical concepts and applications of logical reasoning. Designed for elementary credential candidates. (C-ID MATH 120) (A, CSU-GE, UC, I)

## 10B STRUCTURE AND CONCEPTS IN MATHEMATICS II

3 units, 3 lecture hours
PREREQUISITE: Mathematics 10A and Mathematics 102, or equivalent. ADVISORY: Eligibility for English 1A recommended.

Development of probability, statistics, geometry, measurement, motion geometry, and tessellations. Designed for elementary credential candidates. (A, CSU-GE, UC, I)

## 11 ELEMENTARY STATISTICS

4 units, 4 lecture hours
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Descriptive measures, probability, probability distributions, sampling distributions, central limit theorem, one and two sample hypothesis tests, estimation, correlation, regression and analysis of variance. (C-ID MATH 110) (A, CSU-GE, UC, I)

## 21 FINITE MATHEMATICS

3 units, 3 lecture hours, (Formerly Mathematics 31)
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Applications of linear, exponential, and logarithmic functions, matrix operations, and inverse matrices. Linear programming techniques, mathematics of finance, probability, and counting theory. Limits, rates of change, and derivatives. (C-ID MATH 130) (A, CSU-GE, UC, I)

## 26 ELEMENTARY LINEAR ALGEBRA

3 units, 3 lecture hours
PREREQUISITE: Mathematics 5A or equivalent. ADVISORY: Eligibility for English 1A recommended.

Matrices and linear transformations, vector spaces, determinants, eigenvalues and eigenvectors. (C-ID MATH 250) (A, CSU-GE, UC, I)

## 42 STATISTICS FOR THE BEHAVIORAL SCIENCES

4 units, 4 lecture hours, (See also Psychology 42)
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Descriptive statistics, sampling, hypothesis testing, estimation, selected non-parametric techniques, ANOVA, and regression, with applications from psychology, biology, and social sciences. This course is designed for psychology majors and UC transfers. (C-ID MATH 110) (A, CSU-GE, UC, I)

## 45 CONTEMPORARY MATHEMATICS

3 units, 3 lecture hours
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.

An introduction to mathematical problem solving: statistics, social choice, and management science. (A, CSU-GE, UC)

## 102 PLANE GEOMETRY

3 units, 3 lecture hours, (Formerly Mathematics 2)
PREREQUISITE: Mathematics 201 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Angles; parallel lines; congruent and similar triangles; geometric constructions; right triangle trigonometry; application of formulas for perimeter, area, and volume of geometric figures; and inductive and deductive reasoning. (A)

## 103 INTERMEDIATE ALGEBRA

5 units, 5 lecture hours, (Formerly Mathematics 3)
PREREQUISITE: Mathematics 201 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Simplify and solve polynomial, rational, and algebraic expressions and equations; linear, quadratic, exponential, and logarithmic functions; systems of equations and inequalities; radicals; conic sections; graph functions and relations; sequences and series; and the binomial theorem. (A)

## 201 ELEMENTARY ALGEBRA

5 units, 5 lecture hours, (Formerly Mathematics 1 and 101)
PREREQUISITE: Mathematics 255 or designated math placement. ADVISORY: Eligibility for English 125 and 126 recommended.

Signed numbers, algebraic expressions, linear equations, exponents, polynomials, factoring, rational expressions and equations, graphing, inequalities, systems of equations, radicals, quadratic equations, and applications. Students not eligible for Mathematics 250 if Mathematics has been successfully completed.

## 250 COLLEGE ARITHMETIC

3 units, 3 lecture hours, (Formerly Mathematics 50)
PREREQUISITE: Mathematics 260B or placement score required for placement into Mathematics 260C. ADVISORY: Eligibility for English 125 and 126 recommended.

Arithmetic operations of common fractions and decimal fractions; ratio and proportions; percents; order of operations; the metric system; word problems and applications of arithmetic. Designed as a quick refresher of college arithmetic. Students not eligible for Mathematics 250 if Mathematics 260D has been successfully completed.

## 255 PRE-ALGEBRA

5 units, 5 lecture hours, (Formerly Mathematics 55)
PREREQUISITE: Mathematics 250 or Mathematics 260D or a test score to place out of or above Mathematics 260D. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Designed to increase the student success in Elementary Algebra; ideal for students who have math anxiety or who do not feel ready for the fast pace of Mathematics 201. And introduction to selected topics that are often difficult for Mathematics 201 students (e.g., signed numbers, simplification, equations and inequalities, word problems, factoring, and graphing).

## 260A ARITHMETIC REVIEW: WHOLE NUMBERS

2 units, 5 lecture hours, ( 6 weeks), (Pass/No Pass), (Formerly Mathematics 60A)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Review of arithmetic involving computing with whole numbers. Emphasis on word problems and applications of whole numbers.

## 260B ARITHMETIC REVIEW: FRACTIONS

2 units, 5 lecture hours, ( 6 weeks), (Pass/No Pass), (Formerly Mathematics 60B)
PREREQUISITE: Mathematics 260A or appropriate placement score. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Review of arithmetic involving computing with fractions. Emphasis on word problems and applications of fractions.

## 260C ARITHMETIC REVIEW: DECIMALS

2 units, 5 lecture hours, ( 6 weeks), (Pass/No Pass), (Formerly Mathematics 60C)
PREREQUISITE: Mathematics 260B or appropriate placement score. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Review of arithmetic involving computing with decimals. Emphasis on word problems and applications of decimals.

260D ARITHMETIC REVIEW: RATIOS, PROPORTIONS, PERCENTS, AND GEOMETRY
2 units, 5 lecture hours, ( 6 weeks), (Pass/No Pass),
(Formerly Mathematics 60D)
PREREQUISITE: Mathematics 260C or appropriate placement score. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Review of arithmetic involving ration, proportion, and percents. Introduction to basic geometry topics. Emphasis on word problems.

## 277 ARITHMETIC FOR THE LEARNING DISABLED

2 units, 6 lab hours, (Pass/No Pass), (Formerly Mathematics 77)
PREREQUISITE: Students must have a diagnosed verifiable disability. Review of the mechanics of arithmetic involving computing with whole numbers, fractions, decimals, and percents. Includes word problems and applications of arithmetic. Designed for students with severe disabilities and/or learning disabilities.

## 312 ADVANCED ARITHMETIC FOR PRE STEM STUDENTS

3 lecture hours
PREREQUISITE: None.
Designed as an alternative preparatory path for students who want to pursue careers in STEM related areas. Will focus on the four advanced arithmetic topics that are extensively used in allied health, science, technology, and other STEM related programs. Introductory level, contextualized applications will be emphasized.

## MEDICAL ASSISTING (MA)

## 1 LEGAL AND ETHICAL CONCEPTS

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Medical ethics, jurisprudence, and professional relations in the medical office setting as applied to the medical assistant profession and specialty fields. Assists the students in understanding the medical assistant role as an integral part of the medical profession. (A, CSU)

## 2 PHARMACOLOGY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended. Mathematics 250 or $260 \mathrm{~B}, 260 \mathrm{C}$, and 260 D . Biology 5 recommended.

Mathematical concepts needed to calculate a patient's medication dosage correctly combined with a detailed explanation of topics essential to understanding drug sources, legislation relating to drugs, drug reference and classification, actions and administration. (A, CSU)

## 4 OFFICE LABORATORY PROCEDURES

3 units, 2.5 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 250. Biology 5 or equivalent recommended.

Preparation of patient specimens for laboratory study and/or transportation. Specimen screening analysis techniques, recording of findings, regulations, and safety hazards. Precautionary measures relevant to specimen handling, personal and patient safety. (A, CSU)

## 5 DIAGNOSTIC AND THERAPEUTIC PROCEDURES

3 units, 2.5 lecture hours, 2 lab hours
PREREQUISITE: Medical Assisting 4. ADVISORY: Eligibility for English
1 A recommended. Mathematics 255 recommended.
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 equivalent recommended.

Topics pertinent to medical assisting: infection control, medical asepsis, interview and communication techniques, vital signs, patient education, and assisting in physical exams. (A, CSU)

## 6B ADVANCED TRAINING

3 units, 3 lecture hours, 1 lab hour, (Formerly Medical Assisting 60B)
PREREQUISITE: Medical Assisting 6A. ADVISORY: Eligibility for English 1A recommended. Biology 5 or equivalent recommended.

Medical assisting procedures in the specialty office and handling of medical emergencies within the scope of practice of a Medical Assistant. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. 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 LEADERSHIP AND PERSONAL DEVELOPMENT <br> 1 unit, 1 lecture hour <br> ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended. <br> Effective leadership and communication; personal development; life skills; cultural understanding; goal setting; time management; stress management; and comprehensive fitness. Basic knowledge and comprehension of Army leadership dimensions; attributes and core leader competencies. (A, CSU, UC)

## 2 INTRODUCTION TO TACTICAL LEADERSHIP

1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended.

Leadership fundamentals; focus on problem solving, planning, small unit tactics, and the major components of the Army's leadership philosophy. (A, CSU, UC)

## 11 FOUNDATIONS OF LEADERSHIP

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended.

Creative and innovative tactical leadership strategies; and two historical leadership theories of the Army leadership framework. Personal motivation; team building; assessing team exercises. Developing knowledge of leadership attributes; core leader competencies through the understanding of Army rank, structure, and duties. Broadening knowledge of land navigation and squad tactics. (A, CSU, UC)

## 12 FOUNDATIONS OF TACTICAL LEADERSHIP

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended.

Leading teams in the complex operational environment. Terrain analysis; patrolling; and operation orders. Dynamics of adaptive leadership in the context of military operations. (A, CSU, UC)

## 50A FRESHMAN LEADERSHIP LABORATORY

1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended.

Hands-on leadership experience via application of field skills and tactical maneuvers in small units of up to platoon size (approximately thirty personnel). Focus is on development of creative problem-solving and resilience while learning basic individual and small-unit tactical drills. (A, CSU)

## 50B SOPHOMORE LEADERSHIP LABORATORY

1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended.

Hands-on leadership experience via application of field skills and tactical maneuvers in small units of up to platoon size (approximately thirty personnel). Focus is on development of creative problem-solving and resilience while learning basic individual and small-unit tactical drills. (A, CSU)

## MUSIC (MUS)

For information concerning course requirements for the major, see page 168.

## THEORY

## 1A MUSIC THEORY I

3 units, 3 lecture hours, (Fall only)
COREQUISITE: Music 7A. ADVISORY: Music 3 or the ability to read music as determined by testing. Eligibility for English 1A recommended.

Writing and analysis; fundamentals of music. Designed for the music major. Introduction to the notation and primary elements of tonal music with regard to music from Western history and non-Western cultures: Examples from music literature will demonstrate staff notation in treble and bass clefs, rhythm and meter; basic properties of sound; intervals; diatonic scales and triads; and diatonic chords. History and social context of the above concepts will be discussed. (C-ID MUS 120) (A, CSU, UC)

## 1B MUSIC THEORY II

3 units, 3 lecture hours, (Spring only)
PREREQUISITE: Music 1A. COREQUISITE: Music 7A. ADVISORY: Eligibility for English 1A recommended.

Writing and analysis; functional tonality, harmonization, diatonic and dominant seventh chords, and secondary function. Designed for the music major. (C-ID MUS 130) (A, CSU, UC)

## 2A MUSIC THEORY III

3 units, 3 lecture hours, (Fall only)
PREREQUISITE: Music 1B. COREQUISITE: Music 7C. ADVISORY: Eligibility for 1A recommended.

Writing and analysis; 2 voice counterpoint and fugue; chromatic harmony and forms of the 18th century; and reductive analysis. Emphasis on classical and early romantic periods. Designed for the music major. (C-ID MUS 140) (A, CSU, UC)

## 2B MUSIC THEORY IV

3 units, 3 lecture hours, (Spring only)
PREREQUISITE: Music 2A. COREQUISITE: Music 7D. ADVISORY: Eligibility for English 1A recommended.

Writing and analysis; late 19th and 20th century compositional practices including serial procedures and indeterminacy. Designed for the music major. (C-ID MUS 150) (A, CSU, UC)

## 3 MUSIC FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A recommended.
Fundamental theory of music: pitch, rhythm, meters, scales, keys, key signatures, intervals, rhythm, and scale dictation. Designed for the general student, the music major with limited music theory experience, the commercial music student, and the classroom teacher. (A, CSU-GE, UC, I)

## 4 JAZZ THEORY

3 units, 3 lecture hours, (Fall only)
ADVISORY: Ability to read and notate music. Familiarity with basic scale and chord construction.

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, (Spring only)
ADVISORY: Ability to read and play simple melodies on a keyboard. Basic computer skills.

Use of synthesizers, computers, sequencing and sound design software to compose, edit, and record music. Students will create and compose original music and personal arrangements in styles reflecting historical periods of popular music. (A, CSU)

## 6 JAZZ ARRANGING AND COMPOSITION

3 units, 3 lecture hours, (Spring only)
ADVISORY: Ability to read and notate music in treble and bass clefs strongly recommended. Music 1A or 3 or 4 recommended.

Scoring and composing for jazz and popular vocal/instrumental combinations; emphasis on contemporary sound; projects will be performed. Designed for the commercial music student. (A, CSU)

## 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. ADVISORY: Eligibility for English 1A recommended.

Develops the materials of Music Theory III through ear training, sight singing, analysis, and dictation. (C-ID MUS 145) (A, CSU, UC)

## 7D EAR TRAINING: LEVEL IV

1 unit, 1 lecture hour, 1 lab hour
PREREQUISITE: Music 7C. COREQuIIITE: Music 2B. ADVISORY: Eligibility for English 1A recommended.

Develops materials of Music Theory IV through ear training, sight singing, analysis, and dictation. (C-ID MUS 155) (A, CSU, UC)

## 8 AUDIO ENGINEERING

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
A basic view of the digital recording studio as a sound storage, manipulation, and reproduction facility. Designed for the music major and the commercial music student. (A, CSU)

## 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.

Writing short musical compositions; emphasis on 20th century practices; compositions performed in recital. (A, CSU, UC)

## 111 THE MUSIC BUSINESS

3 units, 3 lecture hours, (Formerly Music 11)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Survey of topics of importance to the professional musician: management, copyrights, publishing, contracts, promotion, and career development. (A)

## 112 INTRODUCTION TO FINALE

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to read music and basic computer skills recommended.

Use of Finale music notation software program for the creation of musical scores and parts. (A)

## HISTORY \& APPRECIATION

## 12 MUSIC APPRECIATION

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Middle Ages through the 21st century. Concert attendance required. Designed for the general student. (C-ID mUS 100) (A, CSU-GE, UC, I)

## 13 HISTORY OF MUSIC

3 units, 3 lecture hours, (Formerly Music 11)
PREREQUISITE: Ability to read music and understand basic musical terminology. ADVISORY: Eligibility for English 1A recommended.

Music Literature 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)

## 16 JAZZ HISTORY AND APPRECIATION

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
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: Eligibility for English 1A recommended.
This course examines the music of the most important rock artists and groups from the 1950s through the present. The sociological, economic and cultural factors that shaped rock music, as well as the music's influence on popular culture, will also be covered. (A, CSU-GE, UC, I)

## APPLIED MUSIC

## 10A BEGINNING JAZZ IMPROVISATION

2 units, 1 lecture hour, 3 lab hours, (Formerly Music 10)

ADVISORY: Ability to play an instrument at the intermediate/advanced level is recommended. Ability to read music recommended.

Study of the fundamentals of jazz improvisation: scales, modes, the blues, simple chord progressions, ear training, development of melodic ideas. (A, CSU)

## 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)

## 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 ELEMENTARY VOICE: LEVEL I

1.5 units, 1 lecture hour, 2 lab hours, (Formerly Music 25A)
PREREQUISITE: None.
Beginning tone production and technique using simple songs drawn from a variety of historical periods and cultures in a variety of languages. Designed for the student with little or no formal voice training. (A, CSU, UC)

## 25 ELEMENTARY VOICE: LEVEL II

1 unit, 1 lecture hour, 1 lab hour, (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 the general student. (A, CSU, UC)

## 27 BEGINNING GUITAR: LEVEL I

1.5 units, 1 lecture hour, 2 lab hours, (Formerly Music 28A)
PREREQUISITE: Own instrument required.
Classical and social guitar playing styles: playing techniques, rhythms, theory, and note reading. Beginning tone production and technique using simple songs drawn 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

1.5 units, 1 lecture hour, 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. 0 wn instrument required.

Continuation and expansion of knowledge and techniques learned in 27. Baroque, classical, 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. Emphasis on classical guitar techniques: reading, left and right-hand techniques, positions, extension of the fingerboard, rhythms, meters, multi-line music, theory, and classical music styles. Designed for the serious student of guitar. (A, CSU, UC)

## INTERMEDIATE/ADVANCED ENSEMBLES AND INDIVIDUAL LESSONS

## 22 INTERMEDIATE/ADVANCED PIANO

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3), (Formerly Music 21)

PREREQUISITE: Music 21 or the equivalent as determined by testing. Technical, stylistic and aesthetic elements of the performing repertory from the standard literature of piano solo and ensemble music. Weekly individual instruction: ensemble and solo performance required. Students are required to perform solo juries in front of faculty each semester. Please consult instructor regarding variable units. (C-ID MUS 160) (A, CSU, UC)

## 26 INTERMEDIATE/ADVANCED VOICE

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3)

PREREQUISITE: Music 25 or intermediate or advanced level ability as determined by testing. ADVISORY: Eligibility for English 1A recommended.

Studies in technical, stylistic, and aesthetic elements of performing repertory from the standard literature of vocal solo and ensemble music. Solo and/or ensemble performance required. Artistic self-expression will be developed through performance of the standard literature of solo and ensemble music. Baroque, classic, romantic, 20th century literature and world music literature 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. ADVISORY: Eligibility for English 1A recommended.

Studies in technical, stylistic and aesthetic elements of the performing repertory from the standard literature of guitar music. Repertoire from varying historical periods of classical music and different world cultures. Ensemble performance required. Studies in technical, stylistic, and aesthetic elements of the performing repertory from the standard literature of solo and ensemble music. Weekly individual instruction; ensemble and solo performance required; designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. Students are required to perform solo juries in front of faculty each semester. Please consult instructor regarding variable units. Audition required. (C-ID MUS 160) (A, CSU, UC)

## 42A INTERMEDIATE/ADVANCED BRASS (BRASS CHOIR)

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3), (Formerly Music 42)

COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

Provides a performance venue for music majors taking weekly individual private lessons in brass which will include historical and cultural investigation of 20th and 21 st century brass ensemble literature. Students are required to perform solo juries in front of faculty each semester: Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1 -unit. All others take 2 -units. (C-ID mUS 160) (A, CSU, UC)

## 42B INTERMEDIATE/ADVANCED WOODWINDS (WOODWIND CHOIR)

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3), (Formerly Music 43)

COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

Provides a performance venue for music majors taking weekly required individual private lessons in woodwinds which will include historical and cultural investigation of 20th and 21st century woodwind ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1 -unit. All others take 2 -units. (C-ID MUS 160) (A, CSU, UC)

## 42C INTERMEDIATE/ADVANCED STRINGS (STRING ORCHESTRA)

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3), (Formerly Music 44)

COREQUISITE: Audition required. ADVISORY: Eligibility for English 1 A recommended.

Provides a performance venue for music majors taking weekly required individual private lessons in strings which will include historical and cultural investigation of 20th and 21 st century string ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

## 42D INTERMEDIATE/ADVANCED PERCUSSION (PERCUSSION ENSEMBLE)

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3), (Formerly Music 46)

COREQUISITE: Audition required. ADVISORY: Eligibility for English 1 A recommended.

Provides a performance venue for music majors taking weekly required individual private lessons in percussion which will include historical and cultural investigation of 20th and 21st century percussion ensemble literature. Students are required to perform solo juries in front of faculty each semester: Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1 -unit. All others take 2 -units. (C-ID MUS 160) (A, CSU, UC)

## 49 ADVANCED LARGE ENSEMBLES

## 1 unit, 3 lab hours

ADVISORY: Ability to perform advanced level large ensemble music (as determined by audition) recommended.

Study of large ensemble literature (vocal or instrumental). Designed for music major or transfer students. Audition required. (A, CSU, UC) (C-ID MUS 160)

## 57 SOLO REPERTOIRE STUDIES I

1 unit, 3 lab hours
PREREQUISITE: Four semesters of Music 22, 26, or 29 or the equivalent as determined by audition. ADVISORY: Advanced vocal or instrumental performance skills recommended.

Vocal and instrumental solo music of the Baroque and Classical periods. (A, CSU)

## 59 ADVANCED CHAMBER ENSEMBLES

1 unit, 3 lab hours
ADVISORY: Ability to perform advanced level chamber music recommended. Audition required.

Study of vocal and instrumental chamber music, with emphasis on small ensembles. Designed for music major or transfer students. Audition required. (A, CSU)

## 73A INTERMEDIATE/ADVANCED CHAMBER ENSEMBLE (BRASS)

1-2 units, 1 lecture hour, 1-3 lab hours
COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

Provides a performance venue for music majors taking weekly individual private lessons in brass which will include 19th 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 wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree need to take 1-unit. All others take 2-units. Audition required. (C-ID MUS 160) (A, CSU, UC)

## 73B INTERMEDIATE/ADVANCED CHAMBER ENSEMBLE (W00DWINDS)

1-2 units, 1 lecture hour, 1-3 lab hours
COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

Provides a performance venue for music majors taking weekly individual private lessons in woodwind which will include 19th 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)

## 73C INTERMEDIATE/ADVANCED CHAMBER ENSEMBLE (STRINGS)

1-2 units, 1 lecture hour, 1-3 lab hours
COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

Provides a performance venue for music majors taking weekly individual private lessons in strings which will include 19th century string ensemble literature. Students are required to perform solo juries in front
of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU)

## 73D INTERMEDIATE/ADVANCED CHAMBER ENSEMBLE (PERCUSSION) <br> 1-2 units, 1 lecture hour, 1-3 lab hours <br> COREQUISITE: Audition required. ADVISORY: Eligibility for English

 1A recommended.Provides a performance venue for music majors taking weekly individual private lessons in percussion which will include 19th century percussion ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

## 74A INTERMEDIATE/ADVANCED BRASS PERFORMANCE PRACTICES

1-2 units, 1 lecture hour, 1-3 lab hours
COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

Provides a performance venue for music majors taking weekly individual private lessons in brass which will include 17th and 18th century brass ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

## 74B INTERMEDIATE/ADVANCED WOODWIND PERFORMANCE PRACTICES

1-2 units, 1 lecture hour, 1-3 lab hours
COREQUISITE: Audition required. ADVISORY: Eligibility for English 1 A recommended.

18th century woodwind ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

## 74C INTERMEDIATE/ADVANCED STRING PERFORMANCE PRACTICES

1-2 units, 1 lecture hour, 1-3 lab hours
COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

Provides a performance venue for music majors taking weekly individual private lessons in strings which will include 17th and 18th century string ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

## 74D INTERMEDIATE/ADVANCED PERCUSSION PERFORMANCE PRACTICES

1-2 units, 1 lecture hour, 1-3 lab hours
COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

Provides a performance venue for music majors taking weekly individual private lessons in percussion which will include 17th and 18th century percussion ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

## LARGE PERFORMING ORGANIZATIONS

## 30 COLLEGE CHOIR

1-2 units, 4-6 lab hours, (Repeats $=3$ )
ADVISORY: Ability to perform advanced high school choral music or the equivalent performance skills as determined through audition.

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: Previous choir experience recommended. Audition required.

Study and performance of choral chamber music specializing in early music. Repertoire from the historical periods of the Middle Ages, Renaissance and Baroque will be explored. Concert 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)

## 35 CITY SINGERS

2 units, 6 lab hours, (Repeats = 3), (Formerly Music
33)

ADVISORY: Audition and approval. Ability to perform advanced high school choral music or the equivalent performance skills.

Study and performance of choral music for small ensemble. Repertoire is drawn from a variety of historical periods of classical music and different world cultures. Concert and tour participation required. (A, CSU, UC)

## 39A BAROQUE/CLASSICAL OPERA

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Music 26 or the equivalent as determined by audition recommended.

The rehearsal, study, and performance of scenes and complete shows from the Baroque and Classical periods. (C-ID MUS 180) (A, CSU, UC)

## 39B ROMANTIC AND MODERN OPERA

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Music 26 or the equivalent as determined by audition recommended.

The study, rehearsal, and performance of major Romantic and Modern operatic works. (C-ID MUS 180) (A, CSU, UC)

## 39C CLASSICAL MUSICAL THEATRE

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Music 26 or the equivalent as determined by audition recommended.

The study, rehearsal, and performance of classic musical theatre, review, or operetta. (A, CSU, UC)

## 39D CONTEMPORARY OPERA AND MUSICAL THEATRE

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Music 26 or the equivalent as determined by audition recommended.

The study, rehearsal, and performance of contemporary opera and/ or musical theatre. Performance of new original works is included. (A, CSU, UC)

## 40 CONCERT BAND

1-2 units, 4-6 lab hours, (Repeats $=3$ )
ADVISORY: Ability to perform advanced high school band music or the equivalent performance skills as determined by audition recommended.

Modern literature with an emphasis on compositions of composers from the 20th and 21st century will be performed and studied. Interpretation of a variety of band music drawn from various historical periods of classical music and different world cultures with awareness of self-expression. Performances at selected college events. Participation in all performances required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

## 41 JAZZ ENSEMBLE

1-2 units, 4-6 lab hours, (Repeats = 3)
ADVISORY: Advanced high school band or jazz ensemble experience or the equivalent performance skills as determined by audition recommended. 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. Repertoire from varying historical periods of classical music and different world cultures. Combines college students and community members. Participation in all performances is required (two or three each semester). Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

## 47A JAZZ COMBO: NEW ORLEANS, SWING AND BOP

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended.

Performance and analysis of New Orleans, Swing and Bop jazz literature for the small jazz combo. Designed for the music major and the commercial music student. (C-ID MUS 180) (A, CSU, UC)

## 47B JAZZ COMBO: COOL AND MAINSTREAM

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended.

Study and performance of Cool and Mainstream jazz literature for the small ensemble. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

## 47C JAZZ COMBO: MODERN AND FUSION

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended.

Study and performance of Modern and Fusion jazz literature for the small ensemble, with emphasis on original compositions. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

## 47D JAZZ COMBO: WORLD MUSIC

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended.

Study and performance of World Music literature for the small ensemble with emphasis on original compositions. (C-ID MUS 180) (A, CSU, UC)

## 48 LATIN JAZZ ENSEMBLE

2 units, 1 lecture hour, 3 lab hours, (See also
Chicano-Latino Studies 18)
PREREQUISITE: Advanced high school band, orchestra, or jazz ensemble experience or the equivalent performance skills. Audition required.

Study and performance of Latin jazz and Afro-Cuban music. Students will develop an awareness and appreciation of the music of Latin America and Cuba through artistic and cultural creation Participation in concerts and jazz festivals required. (A, CSU, UC)

## 53 LATIN JAZZ WORKSHOP

2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Advanced high school jazz ensemble or band experience, or equivalent performance skills recommended. Audition required.

Study and performance of contemporary jazz-based music based on Caribbean, Brazilian, other South American, and Afro-Cuban styles. Repertoire is drawn from historical multi-cultural perspectives. Participation in concerts and jazz festivals required. (A, CSU, UC)

## 54 AFRO-LATIN ENSEMBLE

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level.

Study and performance of traditional and contemporary music based on shared African and Caribbean influences and heritage. Participation in concerts is required. (C-ID MUS 180) (A, CSU, UC)

## 55 AFRO-CARIBBEAN ENSEMBLE

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level.

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)

## 61 A CAPPELLA 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 a cappella choral works of the sixteenth through nineteenth centuries for large ensemble. 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)

## 63 CHAMBER SINGERS

2 units, 6 lab hours
ADVISORY: Audition and approval. Ability to perform advanced high school/collegial level choral music or equivalent performance skills.

Study and performance of choral chamber music, with emphasis on Renaissance and Classical works. Participation in concerts, festivals, and tours is required. (A, CSU)

## 64 VOCAL ENSEMBLE

2 units, 6 lab hours
ADVISORY: Audition and approval required. Ability to perform advanced high school and collegiate level choral music or the equivalent performance skills.

Study and performance of small ensemble vocal music, specializing in contemporary music of the 20th and 21st century. Participation in concerts, festivals and performance tours required. (A, CSU)

## 66 OPERA PERFORMANCE PRACTICES

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Intermediate/advanced vocal performance skills recommended.

The study, rehearsal, and performance of a major operatic work. Participation in public performances is required. (A, CSU)

## 67 MUSICAL THEATER PERFORMANCE PRACTICES

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Intermediate/advanced vocal performance skills recommended.

The study, rehearsal, and performance of a musical theater production or review, or of an operetta. Participation in public performances is required. (A, CSU)

## 68 SYMPHONIC BAND

1-2 units, 4-6 lab hours, (Repeats $=3$ )
PREREQUISITE: Intermediate/advanced level skill on a band instrument recommended. Audition required. ADVISORY: Eligibility for English 1A recommended.

Concepts of intonation, balance, blend, basic articulation and public performance. Rehearsal and performance of symphonic band literature with an emphasis on 19th and 20th century works. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (A, CSU)

## 69 WIND BAND

1-2 units, 4-6 lab hours, (Repeats $=3$ )
PREREQUISITE: Intermediate/advanced level skill on a band instrument recommended. Audition required. ADVISORY: Eligibility for English 1 A recommended.

Music literature including compositions and composers from the 18th and 19th century will be performed and studied. Concepts of technique, scales, harmony, expressive playing will be studied. Extensive sight reading and extensive public performance will be a significant part of the curriculum. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (A, CSU)

## 70 CONTEMPORARY JAZZ ENSEMBLE

1-2 units, 4-6 lab hours, (Repeats $=3$ )
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills (as determined by audition) are recommended.

Study and performance of contemporary jazz ensemble literature. Participation in concerts and festivals required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU)

## 71 LAB JAZZ ENSEMBLE

1-2 units, 4-6 lab hours, (Repeats $=3$ )
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills (as determined by audition) are recommended.

Study and performance of jazz ensemble literature, with emphasis on traditional and mainstream composers. Participation in concerts and festivals required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU)

## 72 JAZZ COMPOSER'S ORCHESTRA

2 units, 1 lecture hour, 4 lab hours
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills (as determined by audition) are recommended.

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)

## 75 COMMUNITY 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 concerti featuring student and community soloists. Community musicians are encouraged to participate. 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)

## 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)

## 77 STUDIO JAZZ COMBO

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended.

Study and performance of mainstream jazz literature for the small ensemble. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU)

## 78 LAB JAZZ COMBO

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended.

Study and performance of contemporary jazz literature for the small ensemble, with emphasis on original compositions. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU)

## 90 JAZZ COMPOSERS WORKSHOP

2 units, 1 lecture hour, 4 lab hours
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills recommended.

Performance and analysis of original literature for the jazz ensemble/ jazz orchestra, with an emphasis on artistic self-expression through student compositions. Repertoire is drawn from varying historical periods of jazz and world cultural influences. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

## 91 JAZZ COMPOSERS ENSEMBLE

2 units, 1 lecture hour, 4 lab hours
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills recommended.

Performance of original literature for contemporary jazz ensemble/ jazz orchestra, featuring non-standard ensemble groupings, non-traditional instrumentation, with an emphasis on artistic self-expression. Repertoire is drawn from varying historical periods of jazz and world cultural influences. (C-ID MUS 180) (A, CSU, UC)

## 92 VOCAL JAZZ ENSEMBLE

2 units, 1 lecture hour, 4 lab hours, (Repeats = 3)
ADVISORY: Advanced high school vocal experience or equivalent performance skills recommended.

Rehearsal and performance of vocal jazz ensemble literature. Repertoire is drawn from varying historical periods of jazz and world cultural influences. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

## NATIVE AMERICAN STUDIES <br> SEE AMERICAN INDIAN STUDIES

## NATURAL SCIENCE (NATSCI)

## 1A INTEGRATED SCIENCE: PHYSICS AND CHEMISTRY

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Mathematics 103. ADVISORY: Eligibility for English 1A recommended.

Basic concepts of chemistry and physics and their relation to the everyday environment. Includes laboratory and demonstrations with special application to K-6 teachers. Specifically designed to satisfy the requirements of students who intend on transferring to the CSU Liberal Studies Major. (C-ID PHYS 140 and CHEM 140) (A, CSU-GE, UC)

## 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 <br> 4 units, 4 lecture hours, (Formerly Registered Nursing 1) <br> PREREQUISITE: Acceptance into the Registered Nursing Program. COREQUISITE: Registered Nursing 32 and 32A. <br> 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, 12 lab hours, ( 9 weeks), (Formerly
Registered Nursing 2)
PREREQUISITE: Registered Nursing 32A. COREQUISITE: Registered

## Nursing 31.

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, 12 lab hours, (9 weeks)
PREREQUISITE: Acceptance into the Registered Nursing Program. COREQUISITE: Registered Nursing 31.

Basic nursing skills performance in a simulated clinical environment for the beginning nursing student. (A, CSU)

## 33 TRANSCULTURAL HEALTH CARE

1 unit, 1 lecture hour, (Formerly Registered Nursing
21)

COREQUISITE: Registered Nursing 31.
Cultural and spiritual concepts as they relate to the application of nursing care. (A, CSU)

## 33I TRANSCULTURAL HEALTHCARE, INTERNATIONAL

1 unit, 1 lecture hour
PREREQUISITE: None.
Cultural and spiritual concepts as they relate to the application of nursing care in an international setting. Intended for study abroad. (A, CSU)

35A PHARMACOLOGY A: INTRODUCTION TO PHARMACOLOGY
1 unit, 1 lecture hour
COREQUISITE: Registered Nursing 31, 32, and 32A.
General principles of pharmacology, legal, ethical and safety aspects of medication administration. Drug information includes pharmacotherapeutics, pharmacodynamics, pharmacokinetics, contraindications and precautions, adverse effects and drug interactions, as well as client variables such as health status, life span and gender, diet, lifestyle and habits, environment, and culture in relationship to drug therapy. (A, CSU)

## 35B PHARMACOLOGY B: NURSING PHARMACOLOGICAL APPLICATIONS

2 units, 2 lecture hours
PREREQUISITE: Registered Nursing 35A with a grade of "C" or better. COREQUISITE: Registered Nursing 41, 42, and 42A.

Methodical application of drug information that impacts physiologic body systems including contraindications and precautions, adverse effects and drug interactions. Emphasis is placed on nursing responsibilities such as maximizing therapeutic effects and minimizing adverse effects of drug therapy, appropriate client and family teaching, and ongoing assessment of the client. (A, CSU)

## 41 NURSING CARE OF THE ADULT WITH COMMON HEALTH PROBLEMS

2.5 units, 2.5 lecture hours

PREREQUISITE: Registered Nursing 31 and 35 A 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 CLINICAL2 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 <br> 1 unit, 3 lab hours <br> PREREQUISITE: Registered Nursing 31, 32 and 32A with a grade of "C" or better. COREQUISITE: Registered Nursing 41 and 42. <br> 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

 THEORY2 units, 2 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

2 units, 6 lab hours, (Formerly Registered Nursing 6)
PREREQUISITE: Registered Nursing 31, 32, 32A, 33 and 35A with a grade of "C" or better. COREQUISITE: Registered Nursing 45.

Clinical application of the principles and practices of nursing care of the child bearing family surrounding the ante-, intra-, and postpartum physical and psychosocial adaptations. (A, CSU)

## 51 NURSING CARE OF THE ADULT WITH COMPLEX HEALTH PROBLEMS

3 units, 3 lecture hours
PREREQUISITE: Registered Nursing 35B, 41, 42, and 42A with a grade of "C" or better. COREQUISITE: Registered Nursing 52, 52A and 53.

Synthesize and correlate nursing knowledge and skills in providing care to adults who have complex, multi-system illnesses. Focus will be for the registered nursing students to predict client needs and priorities, and evaluate outcomes on care. (A, CSU)

## 52 NURSING CARE OF THE ADULT AND OLDER ADULT WITH COMPLEX HEALTH PROBLEMS CLINICAL

2 units, 6 lab hours
PREREQUISITE: Registered Nursing 35B, 41, 42, and 42A with a grade of "C" or better. COREQUISITE: Registered Nursing 51, 52A, and 53.

Nursing care of the adult and older adult client with complex health problems in the acute hospital setting and community based support agencies. (A, CSU)

## 52A NURSING CARE OF THE ADULT AND OLDER ADULT WITH COMPLEX HEALTH PROBLEMS SKILLS

0.5 unit, 1.5 lab hours

PREREQUISITE: Registered Nursing 41, 42 and 42A with a grade of "C" or better. COREQUISITE: Registered Nursing 51, 52 and 53.

Advanced nursing skills performance in a simulated clinical environment for the advanced nursing student caring for the adult and older adult with complex health problems. (A, CSU)

## 53 NURSING CARE OF THE OLDER ADULT

1 unit, 1 lecture hour
PREREQUISITE: Registered Nursing 35B, 41, and 42 with a grade of "C" or better. COREQUISITE: Registered Nursing 51, 52, and 52A.

Theoretical concepts of the aging process and the Registered Nurse's role in meeting the needs of older adult clients in the community and acute care settings. (A, CSU)

## 55 NURSING CARE OF INFANTS AND CHILDREN

2 units, 2 lecture hours, (Formerly Registered
Nursing 13)
PREREQUISITE: Registered Nursing 35B, 41, 42, 42A, 45 and 46 with a grade of "C" or better. COREQUISITE: Registered Nursing 56.

Theoretical concepts and integration of the nursing process as it relates to the nursing care of infants, children, and their families. Emphasis is on the concepts and skills related to age appropriate family centered care. (A, CSU)

## 56 NURSING CARE OF INFANTS AND CHILDREN CLINICAL

2 units, 6 lab hours, (Formerly Registered Nursing 14)

PREREQUISITE: Registered Nursing 35B, 41, 42, 42A, 45 and 46 with a grade of "C" or better. COREQUISITE: Registered Nursing 55.

Clinical application of the nursing process when caring for infants, children, and their families in a pediatric setting. Clinical experience will take place in the acute care setting on pediatric medical-surgical units and various specialty units. (A, CSU)

61 NURSING CARE OF THE CRITICALLY ILL ADULT AND COORDINATOR OF CARE

## 2.5 units, 2.5 lecture hours

PREREQUISITE: Registered Nursing 35B, 51, 52, 52A, and 53 with a grade of "C" or better. COREQUISITE: Registered Nursing 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

3.5 units, 10.5 lab hours

PREREQUISITE: Registered Nursing 35B, 51, 52, 52A, and 53 with a grade of "C" or better. COREQUISITE: Registered Nursing 61 and 62A.

Nursing care of the critically ill adult client and coordination of care in the acute hospital setting. Emphasis is placed on coordinating care for multiple adult clients. (A, CSU)

## 62A NURSING CARE OF THE CRITICALLY ILL ADULT SKILLS

0.5 unit, 1.5 lab hours

PREREQUISITE: Registered Nursing 51, 52, and 52A with a grade of "C" or better. COREQUISITE: Registered Nursing 61 and 62 .

Advanced nursing skills performance in a simulated clinical environment for the advanced nursing student caring for critically ill clients. (A, CSU)

## 65 NURSING CARE OF THE CLIENT WITH BEHAVIORAL AND EMOTIONAL DISORDERS

2 units, 2 lecture hours, (Formerly Registered Nursing 9)
PREREQUISITE: Registered Nursing 35B, 51, 52, and 53 with a grade of "C" or better. COREQUISITE: Registered Nursing 66.

Theoretical concepts comprising a comprehensive overview of functional and dysfunctional human behavior, therapeutic communication, age related problems, treatment modalities, delivery of mental health care services, mental health legislation, and the role and responsibilities of the psychiatric/mental health nurse. (A, CSU)

## 66 NURSING CARE OF THE CLIENT WITH BEHAVIORAL AND EMOTIONAL DISORDERS CLINICAL

2 units, 6 lab hours, (Formerly Registered Nursing
10)

PREREQUISITE: Registered Nursing 35B, 51, 52, and 53 with a grade of "C" or better. COREQUISITE: Registered Nursing 65 .

Clinical application of the nursing principles and practices of clients with emotional and behavioral disorders in the acute care and community settings. (A, CSU)

## 101 TRANSItION TO FRESNO CITY COLLEGE REGISTERED NURSING PROGRAM <br> 1.5 units, 1.5 lecture hours <br> 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)

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## 105 MEDICATION MATH

0.5 unit, 0.5 lecture hour, (Pass/No Pass), (Formerly Registered Nursing 23)
COREQUISITE: Acceptance into the Registered Nursing Program. Calculation of medication dosages, including review of mathematical concepts. (A)

## 107 INTRODUCTION TO NURSING PROCESS

0.5 unit, 0.5 lecture hour, (Pass/No Pass), (Formerly

Registered Nursing 25)
COREQUISITE: Acceptance into the Registered Nursing Program.
Introduction to the nursing process and development of nursing care plans. (A)

## 201 NCLEX-RN REVIEW

2 units, 2 lecture hours, (Pass/No Pass)
COREQUISITE: Registered Nursing 61.
Review and preparation for National Council Licensure Exam for Registered Nursing (NCLEX-RN). Includes test format, content review, and test-taking strategies.

## 202 SUCCESS STRATEGIES FOR RN STUDENTS

1 unit, 1 lecture hour, (Pass/No Pass)
PREREQUISITE: Acceptance into the nursing program.
Study and test-taking skills for the student nurse. Assessment of learning styles and development of strategies for student success, including application of critical thinking in Registered Nursing.

## 203 RN REFRESHER COURSE

3 units, 3.5 lecture hours, 13.5 lab hours, ( 9 weeks), (Pass/No Pass)
PREREQUISITE: RN License or NCLEX-RN eligible.
Didactic review, hospital based practice, and application of professional nursing skills for registered nurses and foreign educated nurses planning to return to the workforce.

## 204 INTRODUCTION TO THE NURSING PROFESSION

1.5 units, 3 lecture hours, ( 9 weeks), (Pass/No Pass)

PREREQUISITE: Acceptance of application into the Fresno City College RN program.

Introduction to the Registered Nursing program and the Registered Nursing profession for the pre-nursing student.

## 205 CARE OF THE CHILDBEARING AND PARENTING FAMILY THEORY

0.5-1.5 units, 0.5-1.5 lecture hours

COREQUISITE: Registered Nursing 206.
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

0.5-1.5 units, 1.5-4.5 lecture hours

COREQUISITE: Registered Nursing 205.
Application in a simulated setting of the principles and practices of nursing care for childbearing and parenting families.

## PARALEGAL (PLEGAL)

Courses required for paralegal degree/certificate are offered regularly. Some elective courses are scheduled less frequently than others.

## 1 INTRODUCTION TO PARALEGALISM

3 units, 3 lecture hours
COREQUISITE: Business Administration 20. ADVISORY: Eligibility for English 1A recommended.

Overview of paralegal profession, including historical development, employment, ethics, job responsibilities, litigation process, legal analysis, and legal research and writing. (A, CSU)

## 2A LEGAL RESEARCH AND WRITING I

## 3 units, 3 lecture hours

PREREQUISITE: Paralegal 1
Development of legal research skills through the use of primary and secondary sources. Development of legal writing skills through the preparation of various legal writing assignments. (A, CSU)

## 2B LEGAL RESEARCH AND WRITING II

3 units, 3 lecture hours
PREREQUISITE: Paralegal 2A.
Development of advanced legal research skills using more sophisticated legal research tools. Development of more sophisticated legal writing skills through preparation of more advanced and specialized legal writing assignments. (A, CSU)

## 3 FAMILY LAW

3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Marriage, divorce, nonmarital cohabitation, invalid marriages, separation, annulments, client interviewing, commencing the 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 PRACTICES

3 units, 3 lecture hours
COREQUISITE: Paralegal 1.
Principles of law office management and operation to include human relations, general office procedures, and office supervision. Preparation for working in law office environment. (A, CSU)

## 8 TORTS/CONTRACTS

3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Overview of tort law and contract law doctrines. Basic tort/contract concepts and terminology including negligence, strict liability, intentional and constitutional torts, defenses and immunities, offer and acceptance, consideration, performance and discharge, contract drafting, and contract interpretation. (A, CSU)

## 10 CRIMINAL LAW AND PROCEDURE

3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Introduction to substantive/procedural aspects of criminal law including crimes against persons and property, defenses to crimes, motions to suppress evidence, jury and court trials, sentencing, and appeals. (A, CSU)

## 11 EVIDENCE

3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Legal concepts and terminology associated with the law of evidence, including relevance, hearsay, presumptions, cross-examinations, impeachment, and privileges. (A, CSU)

## 12 BANKRUPTCY

3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Introduction to bankruptcy law including bankruptcy proceedings, evaluating a client's options in regard to such proceedings, and learning the rights/responsibilities of debtors and creditors. (A, CSU)

## 13 DISCOVERY AND TRIAL PREPARATION

3 units, 3 lecture hours
PREREQUISITE: Paralegal 6A.
The purposes of discovery, right to discovery, and "hands-on" experience with civil discovery procedures including client interviews, depositions and transcript summarization, interrogatories, requests for inspection, physical and mental examinations, requests for admission, subpoenas, expert witness disclosures, and the organization of discovery for retrieval. Essentials of trial preparation and assisting during the course of trial including courtroom etiquette, selecting and subpoenaing witnesses, preparing exhibits, and jury selection. (A, CSU)

## 14 LAW OFFICE COMPUTING

3 units, 2 lecture hours, 3 lab hours
COREQUISITE: Paralegal 1 or Paralegal 156 or Business Technology 140.

Introduction to the use of various legal-specific computer software programs (litigation support, forms creation, docketing, document management, etc.) commonly found in law offices. Hands-on training on use of selected programs. (A, CSU)

## 15 DEBT COLLECTION AND ENFORCEMENT OF JUDGMENTS

3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Emphasis on the procedures and forms required for levying on real and personal property pursuant to judgments entered. Specific topics include enforcement strategies, filing judicial liens, issuing writs of execution, levying on personal and real property, preparing wage garnishment, claiming exemptions, and issuing and obtaining orders. (A, CSU)

## 17 ADMINISTRATIVE LAW/WORKERS' COMPENSATION

3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Introduction to basic concepts of administrative law and workers' compensation law. Emphasis placed on agency rulemaking, agency investigations, agency adjudications, judicial review, compensable injuries, temporary disability, permanent disability, and Worker's Compensation Appeals Board proceedings. (A, CSU)

## 18 EMPLOYMENT LAW

3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Overview of legal relationship between employer and employee. Emphasis placed on basic understanding of employment-related laws, and federal and state regulatory environment. Subjects covered include pre-employment concerns, legal aspects of the employer/employee relationship, discrimination issues and actions, terminations, and ethical issues in employment law. (A, CSU)

## 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 paralegalism. Collaborative learning objectives established specific to a paralegal career. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 20 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 or basic knowledge of a word processing. Ability to type at least 25 gross words per minute is recommended. Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 recommended.

Producing and formatting business and legal correspondence and documents using a current word processing program. (A)

## PHILOSOPHY (PHIL)

## 1A THEORIES OF KNOWLEDGE AND REALITY

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
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. (C-ID PHIL 100) (A, CSU-GE, UC, I)

## 1AH HONORS THEORIES OF KNOWLEDGE AND REALITY

3 units, 3 lecture hours, (Formerly Honors 1P)
PREREQUISITE: English 1A or equivalent. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

An introduction to traditional and contemporary views on the nature of knowledge, truth, and thought; alternative views of God, the universe and human nature. Develops skills in philosophical analysis and logical thinking. Honors sections may also focus on an historical overview or a more in-depth study of a significant branch of philosophy e.g. philosophy of language or philosophy of mind. (C-ID PHIL 100) (A, CSU-GE, UC, I)

## 1B SOCIAL AND POLITICAL PHILOSOPHY

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
An introduction to social and political philosophies, ancient and modern; inquiry into views of human nature, the nature and varieties of institutions, and the personal and social implications of the human experience. (A, CSU-GE, UC, I)

## 1C ETHICS

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
Reading and critical analysis of primary texts on moral theory. Examinations of ethical concepts such as good, evil, moral obligation. Conditions necessary to ethical decision-making, conscience, moral rules, justice, and free will. (C-ID PHIL 120) (A, CSU-GE, UC, I)

## 1D WORLD RELIGIONS

3 units, 3 lecture hours, (Formerly Philosophy 10)
PREREQUISITE: English 1A or equivalent.
Basic beliefs and practices of Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam. (A, CSU-GE, UC, I)

## 2 CRITICAL REASONING AND ANALYTIC WRITING

3 units, 3 lecture hours, (Formerly Philosophy 4)
PREREQUISITE: English 1A or equivalent.
Principles and methods of good reasoning, including identification of arguments, developing and assessing basic deductive and inductive reasoning, common fallacies, and application of each element to the student's major area of study. (A, CSU-GE, UC, I)

## 5 PHILOSOPHY OF RELIGION

3 units, 3 lecture hours
PREREQUISITE: English 1A.
The philosophical, critical, scrutiny of some of the issues arising from the monotheistic classical tradition. For example: the nature of God; the existence of God; experience of God; the relation between faith and reason; the problem of evil; free will; immortality. (A, CSU-GE, UC, I)

## 6 SYMBOLIC LOGIC

3 units, 3 lecture hours
PREREQUISITE: Mathematics 103. ADVISORY: Eligibility for English 1A recommended.

Deductive systems of logic, including syllogistic logic as well as propositional and predicate symbolic logic. (C-ID PHIL 210) (A, CSU-GE, UC)

## PHOTOGRAPHY (PHOTO)

## 5 INTRODUCTION TO PHOTOGRAPHY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Non-lab beginning photography course introducing the basic principles, practices, and aesthetics of image making using digital or film cameras. Survey of photography's historical and contemporary role in our multicultural society. Emphasis on: using the camera, light, and visual language for expressing ideas photographically. Students must provide their own basic camera. (A, CSU-GE, UC)

## 6 DIGITAL IMAGING FUNDAMENTALS

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Theories and practices of manually adjustable digital cameras; technical and creative use of manual camera controls and capture. Topics include: automatic vs. manual shooting modes, camera menus, exposure control, depth of field, motion control, basic flash, white balance, file formats, capture workflow, and camera care as well as the legal and ethical issues of photography. Image processing involving tonal range, organization and color adjustment using Adobe Lightroom. Students must provide their own manually adjustable digital camera or use a manual film camera provided by the Photography Department. (A, CSU)

## 12 PHOTOSHOP 1: PHOTOSHOP FOR PHOTOGRAPHERS

3 units, 2 lecture hours, 3 lab hours, (Formerly Photography 22)
ADVISORY: Eligibility for English 1A recommended.
Photoshop in a photographer's workflow, 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)

## 15 PHOTOGRAPHY AND VISUAL LITERACY

3 units, 2 lecture hours, 3 lab hours
COREQUISITE: Photography 5 or Photography 6 or Photography 17 or equivalent or by Portfolio Review. ADVISORY: Photography 12.

The nature and character of photography; is use for communication and expression. Visual literacy and photography as a universal language. How concept, design, and execution of the photographic image are utilized in our culture. The use of small format cameras and digital workflows. Field trips as required. (A, CSU)

## 17 CLASSIC BLACK AND WHITE PHOTOGRAPHY

3 units, 2 lecture hours, 3 lab hours, (Formerly Photography 10)
ADVISORY: Photography 5. Eligibility for English 1A recommended. Theories and practices of traditional 35 mm and $4 \times 5$ Black and White film photography; technical and creative use of manual camera controls and accessories, film development, printing, print presentation techniques and legal and ethical aspects of photography. Projects emphasize aesthetics and photographic problem solving utilizing text and classroom information. (A, CSU, UC)

## 18 DIGITAL BLACK AND WHITE PHOTOGRAPHY

3 units, 2 lecture hours, 3 lab hours, (Formerly Photography 20)
PREREQUISITE: Photography 12 or equivalent. ADVISORY: Photography 17.

Interpreting reality through the many pathways to digital black and white photography using Adobe Photoshop and other software applications on a variety of projects. Projects emphasize the vision, language, and technique of black and white print along with legal and ethical issues. Field trips as assigned. (A, CSU)

## 23 PHOTOSHOP 2: DIGITAL DARKROOM

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 12 or equivalent.
Intermediate and advanced techniques for computer-aided still photography, image capture, processing, and output technologies. Use of enhancement software to complete real world assignments and produce a portfolio of digital photography. (A, CSU)

## 26 LIGHTING PRINCIPLES

3 units, 2 lecture hours, 3 lab hours, (Formerly Photography 24 and 35)
PREREQUISITE: Photography 5 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)

## 27 ALTERNATIVE PHOTOGRAPHIC PROCESSES

3 units, 2 lecture hours, 3 lab hours, (Formerly
Photography 30, 33 and 40)
PREREQUISITE: Photography 6 or 17 or equivalent. ADVISORY: Photography 12 and 15.

Developing a personal vision by seeing and working with non-traditional methods for creating photographic images. Historical silver, non-silver and digital processes will be used and combined for representational and non-representational images. Field trips as required. (A, CSU)

## 30 EDITORIAL PHOTOGRAPHY

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 5 or equivalent. COREQUISITE: Photography 6 or equivalent. ADVISORY: Photography 12 and 15 or equivalent.

Theories and practices of photography in the field of mass communication. Photography as it is applied to: newspapers, magazines, public relations, websites, business and publishing applications. Emphasis on communication of ideas, storytelling, and social reportage using the power of photographs as a force in communication. Close consideration of the legal and ethical aspects of photography. (C-ID JOUR 160) (A, CSU)

## 32 COMMERCIAL PORTRAITURE

3 units, 2 lecture hours, 3 lab hours, (Formerly
Photography 23 and 25)
PREREQUISITE: Photography 6 or equivalent. ADVISORY: Photography 12 and 26 .

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)

## 37 EDITORIAL PORTRAITURE

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 5 or equivalent. COREQUISITE: Photography 6 or equivalent. ADVISORY: Photography 12 and 32 .

Theories and practices using the location portrait as an editorial tool in visual reportage. Emphasis will be on subject relationships, location lighting setups, design, critical lens choice, and color utilization to create an accurate interpretation of the subject. Course may be used as an elective for the Commercial Photography Degree or Certificate. (A, CSU)

## 40 PROFESSIONAL PHOTOGRAPHIC PRACTICES

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 5 or equivalent. COREQUISITE: Photography 6 or equivalent. ADVISORY: Photography 12, 15, or equivalent.

Theories and practices of picture selection for portfolios and other visual environments such as publishing, gallery presentations, annual reports, websites, magazines, commercial clients or visual media of any kind. Topics include advanced theory in communication with emphasis on visual language, legal and ethical considerations, organization and design in developing a professional portfolio strategy to be successful in both traditional and online marketplaces. (A, CSU)

## 45 ADVANCED PROJECTS

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 18 or 23 or 26 or 27 or 30 or 37 or 47 . ADVISORY: Photography 40.

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)

## 47 B00K/VIDEO PUBLISHING

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 5. COREQUISITE: Photography 6 or equivalent. ADVISORY: Photography 15 and 30.

Principles and theories of photographic book and video publishing concerning design concepts relating to content, flow, legal and ethical considerations, composition and design. Emphasis will be on a themed project with two distinct media presentations; a finished book and a simultaneously produced video using the same subject matter, with accompanying live video, audio and voice over narration. Course may be used as an elective for the Commercial Photography Degree or Certificate. (A, CSU)

## 57 APPLIED COLOR AND ALTERNATIVE PHOTOGRAPHIC MEDIA

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: 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, non-silver, and 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. Field trips as required. (A, CSU)

## PHYSICAL EDUCATION (PE)

## GENERAL ACTIVITY COURSES

## 3 ARCHERY

1 unit, 3 lab hours, (Formerly Physical Education ACT 14)

ADVISORY: Eligibility for English 1A recommended.
Techniques of shooting, correct use of equipment, and safety procedures. Events include target archery, tournament rounds, and competitive shooting. (A, CSU, UC)

## 4 BADMINTON

1 unit, 3 lab hours, (Formerly Physical Education ACT1)
ADVISORY: Eligibility for English 1A recommended.
Strokes, rules, etiquette, and strategy. Singles and doubles game experience. (A, CSU, UC)

## 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.
Activities offered to meet individual needs in posture, strength, flexibility, endurance, and relaxation. Universal weight machines not used. (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 irons, woods, putting, and sand play. Swing evaluation for each student. Course play and conduct etiquette. Golf range practice included; golf course assignments; range \& golf course fee is student's responsibility. (A, CSU, UC)

## 9 PHYSICAL FITNESS

1 unit, 3 lab hours, (Formerly Physical Education ACT 17A)
ADVISORY: Eligibility for English 1A recommended.
Designed to test individuals, assign an exercise program and re-test to note progress. Emphasis on individual training. Use of weightlifting machines. (A, CSU, UC)

## 12 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)

## 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)

## 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)

## 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. Safety 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)

26 SPORTS PSYCHOLOGY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Physical Education 26 is the study and application of psychological principles and foundations to sport and exercise across the lifespan activity contests. This course is designed to promote an understanding of the concepts and applied principles of sport and exercise psychology. Findings and principles from the sport and exercises psychology literature will be applied to sport and physical activity participants, ranging from youth sport and community exercise programs to elite and world class performers. (A, CSU)

## 27 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 200600 meters. (A, CSU)

## 50 ADAPTED FITNESS AND FLEXIBILITY

1 unit, 1 lecture hour, 1 lab hour
PREREQUISITE: None.
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

1 unit, 2 lab hours
PREREQUISITE: None.
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

1 unit, 2 lab hours
PREREQUISITE: None.
Designed for students with disabling conditions. Sports skills of Frisbee, Frolf, Bocci, Horseshoe. (A, CSU, UC)

## 53 ADAPTED STRENGTH TRAINING

1 unit, 2 lab hours
PREREQUISITE: None.
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
PREREQUISITE: None.
Designed for students with disabling conditions. Development and/ or maintenance of basic physical/mental conditioning skills with and introduction to basic nutrition, disability and pharmaceutical issues. Measured cardiovascular fitness, stretching, nutritional evaluation and current disability/pharmaceutical topics. (A, CSU, UC)

## 55 ADAPTED FLEXIBILITY AND STRENGTH

1 unit, 1 lecture hour, 1 lab hour
PREREQUISITE: None.
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)

## PREPROFESSIONAL COURSES

## 20 ATHLETIC TRAINING

4 units, 3 lecture hours, 3 lab hours, (Formerly Physical Education PRE 32)
ADVISORY: Eligibility for English 1A recommended. (A background in science is preferred).

Taping, treating, prevention, and evaluating athletic injuries. Emergency first aid. (A, CSU, UC)

## 23 LIFEGUARD TRAINING

3 units, 2 lecture hours, 3 lab hours, (Formerly
Physical Education PRE 31A)
PREREQUISITE: Intermediate swimming test: freestyle, elementary backstroke, breaststroke, and sidestroke. ADVISORY: Eligibility for English 1A recommended.

Lifeguarding and water safety techniques. Red Cross Certification available. (A, CSU, UC)

## 24 SPORTS OFFICIATING

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Understanding and interpreting the rules and regulations of officiating one or more of the following activities: baseball, basketball, football, soccer, softball, track, volleyball, and wrestling. (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.

## 29A THEORY OF BADMINTON

1 unit, 1 lecture hour, 1 lab hour
Techniques, strategies, and biomechanics of badminton. (A, CSU, UC)

## 29B COMPETITIVE BADMINTON

3 units, 9.5 lab hours, (Repeats = 2)
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)
Off-season conditioning activities for badminton players. (A, CSU, UC)

## 30A THEORY OF BASEBALL

1 unit, 1 lecture hour, 1 lab hour, (Formerly Physical Education PRE 33B)
Techniques, strategies, and biomechanics of baseball. (A, CSU, UC)

## 30B COMPETITIVE BASEBALL

3 units, 9.5 lab hours, (Spring), (Repeats = 2),
(Formerly Physical Education INT 41)
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)
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)

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 $=2$ )
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)
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)

## 32C OFF-SEASON CONDITIONING FOR CROSS COUNTRY

1 unit, 3 lab hours, (Repeats $=2$ )
Off-season training for cross country runners with an emphasis on developing a high mileage base. (A, CSU, UC)

## 33B COMPETITIVE FOOTBALL

3 units, 9.5 lab hours, (Fall), (Repeats $=2$ ), (Formerly Physical Education INT 42)
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)
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)
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)
Off-season conditioning activities for golfers. (A, CSU, UC)

## 35B PEP AND CHEER

2 units, 6 lab hours, (Repeats $=2$ ), (Formerly Physical Education PRE 38)
Designed primarily for students possessing the desire, ability, and skills necessary to participate in cheer and pep 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)
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)
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)
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 $=2$ )
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)
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)
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)
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)

39C OFF-SEASON CONDITIONING FOR TRACK AND FIELD
1 unit, 3 lab hours, (Repeats = 2)
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)
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)
Off-season conditioning activities for volleyball players. (A, CSU, UC)

## 41B COMPETITIVE WRESTLING

3 units, 9.5 lab hours, (Fall), (Repeats = 2),
(Formerly Physical Education INT 45)
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

## 41C OFF-SEASON CONDITIONING FOR WRESTLING

1 unit, 3 lab hours, (Repeats = 2)
Off-season conditioning activities for wrestlers. (A, CSU, UC)

## 42B COMPETITIVE WATER POLO

3 units, 9.5 lab hours, (Repeats $=2$ )
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

## 42C OFF-SEASON CONDITIONING FOR WATER POLO

1 unit, 3 lab hours, (Repeats =2)
Off-season conditioning activities for water polo players. (A, CSU, UC)

## 43B COMPETITIVE SWIMming AND DIVING

3 units, 9.5 lab hours, (Repeats $=2$ )
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)
Off-season conditioning activities for swimmers and divers. (A, CSU)

45 PERFORMANCE TRAINING AND CONDITIONING TECHNIQUES FOR INTERCOLLEGIATE ATHLETICS
1-2 units, 3-6 lab hours, (Repeats = 3)
PREREQUISITE: None.
Resistance training for intercollegiate athletics. (A, CSU)

## PHYSICAL SCIENCE (PHYSC)

## 11 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)

## 42 APPLICATIONS OF PHYSICAL SCIENCE

1-3 units, 1-3 lecture hours, (Pass/No Pass)
ADVISORY: Eligibility for English 1A recommended. Mathematics 250.
Physical Science field studies of an international location such as Iceland, England, Switzerland, etc. Required field trips. Additional costs for travel abroad. (A, CSU)

## PHYSICS (PHYS)

## 2A GENERAL PHYSICS 1

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Mathematics 4A. ADVISORY: Eligibility for English 1 A recommended.

Mechanics, thermal physics, oscillations, and waves. Designed primarily for life science and related majors. (C-ID PHYS 105 and PHYS 100 S $=$ PHYS 2A +2 B ) (A, CSU-GE, UC, I)

## 2B 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 $+2 \mathrm{~B})(\mathrm{A}, \mathrm{CSU}-\mathrm{GE}, \mathrm{UC}, \mathrm{I})$

## 4A PHYSICS FOR SCIENTISTS AND ENGINEERS

4 units, 3 lecture hours, 3 lab hours
COREQUISITE: Mathematics 5B. ADvISORY: Eligibility for English 1 A recommended.

Classical mechanics and mechanical waves. Designed primarily for physics, engineering, and related majors. (C-ID PHYS 205 and PHYS 200S $=$ PHYS 4A $+4 \mathrm{~B}+4 \mathrm{C})(\mathrm{A}, \mathrm{CSU}-\mathrm{GE}, \mathrm{UC}, \mathrm{I})$

## 4B PHYSICS FOR SCIENTISTS AND ENGINEERS

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Physics 4A. COREQUISITE: Mathematics 5B. ADVISORY: Mathematics 6.

Thermodynamics, electricity, and magnetism. Designed primarily for physics, engineering, and related majors. (C-ID PHYS 210 and 200S = PHYS $4 \mathrm{~A}+4 \mathrm{~B}+4 \mathrm{C})(\mathrm{A}, \mathrm{CSU}-\mathrm{GE}, \mathrm{UC}, \mathrm{I})$

## $4 C$ PHYSICS FOR SCIENTISTS AND ENGINEERS

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Physics 4 A . Physics 4 B is not a prerequisite. COREQUISITE: Mathematics 5B. ADVISORY: Mathematics 6.

Electromagnetic waves, optics, relativity, quantum mechanics, nuclear physics, and elementary particles. Designed primarily for physics, engineering, and related majors. (C-ID PHYS 215 and 200S $=$ PHYS 4A + $4 \mathrm{~B}+4 \mathrm{C})(\mathrm{A}, \mathrm{CSU}-\mathrm{GE}, \mathrm{UC}, \mathrm{I})$

## POLITICAL SCIENCE (POLSCI)

## 1 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, political ideologies, political systems, and political science 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 <br> 3 units, 3 lecture hours <br> ADVISORY: Eligibility for English 1A. <br> Examination of various theoretical approaches to politics and of basic political problems and proposed solutions. Analysis of selected political theories and of the relevance of theory to contemporary problems. (C-ID POLS 120) (A, CSU-GE, UC, I)

## 5 COMPARATIVE GOVERNMENT

3 units, 3 lecture hours
ADVISORY: Political Science 2 and eligibility for English 1A, and Mathematics 260D.

Comparative analysis of different kinds of political systems; their history, political institutions, processes and policies, the environments in which they occur and their consequences. (C-ID POLS 130) (A, CSU-GE, UC, I)

## 13 LEGAL AND JUDICIAL REASONING

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: Eligibility for English 1A is recommended.
Scientific study of behavior and mental processes. Topics include history, methodology biopsychology, lifespan development, sensation and perception, consciousness and altered states, learning and memory, thought and language, intelligence, motivation and emotion, personality, psychopathology and therapy, stress and health, and social and cultural influences. (C-ID PSY 110) (A, CSU-GE, UC, I)

## 2H HONORS GENERAL PSYCHOLOGY

3 units, 3 lecture hours, (Formerly Honors 7P and Psychology 7H)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.

Scientific study of behavior and mental processes. Topics include history, methodology, biopsychology, lifespan development, sensation and perception, consciousness and altered states, learning and memory, thought and language, intelligence, motivation and emotion, personality, psychopathology and therapy, stress and health, and social and cultural influences. The Honors section of this course places a greater emphasis on understanding the human being as an integrated physiological, social, and psychological organism and further enriches that perspective with data and theories from related disciplines. (C-ID PSY 110) (A, CSU-GE, UC, I)

## 5 SOCIAL PSYCHOLOGY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Systematic analysis of the social determinants of human behavior and mental processes. Focus on the mutual influence between the individual and the social environment. Emphasized topics include social perception, social cognition, attitudes, persuasion, conformity and obedience, attraction, gender roles, prosocial behavior, aggression, prejudice and discrimination, group phenomena, and cultural norms. (C-ID PSY 170) (A, CSU, UC)

## 12 CHILD ABUSE

3 units, 3 lecture hours, (See also Child Development 12)
ADVISORY: Eligibility for English 1A recommended.
Issues related to abused, battered, and neglected children including issues related to child sexual molestation and pornography. Characteristics of different types of abusers, pedophiles, and adolescent molesters. Reporting laws and the legal process. Identification, prevention, and treatment of abused children and abusers. (A, CSU)

## 16 ABNORMAL PSYCHOLOGY

3 units, 3 lecture hours
ADVISORY: Psychology 2 and eligibility for English 1A recommended.
Psychological, sociocultural, and biological bases of abnormal behavior. Definitions of abnormality; current models of etiology, classification, therapy, and prevention; critical analysis of research techniques and findings. (C-ID PSY 120) (A, CSU, UC)

## 18 CRIMINAL PERSONALITIES

3 units, 3 lecture hours, (See also Criminology 18)
ADVISORY: Eligibility for English 1A recommended.
Focus on the physiological, cognitive, and social factors involved in crime and the development of criminal personalities. An examination of an offender's expectations, rationalizations, and justifications for his/her criminal behavior. Emphasis on modern concepts of criminal personalities including sociopaths, psychopaths, and criminal psychopaths. The role of corrections at the federal, state, and local levels. Treatment classifications and management of the criminal personality, including sociopaths and psychopaths, within institutional settings. (A, CSU)

## 25 HUMAN SEXUALITY

## 3 units, 3 lecture hours

ADVISORY: Psychology 2 and eligibility for English 1A recommended.
Sexual behaviors and values in contemporary society from a biological, psychological, social, cultural, historical and lifespan perspective. Anatomy and physiology of sex, gender development and socialization, contraception and abortion, conception and prenatal development, sexual orientation, love and communication, sexual patterns and techniques, sexual dysfunctions, sexually transmitted diseases, and the causes and consequences of sexual victimization. Presented in an explicit and scientific manner. (C-ID PSY 130) (A, CSU-GE, UC)

## 33 PERSONAL AND SOCIAL ADJUSTMENT

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
The psychology of effective and ineffective coping patterns. Topics include personality, lifespan development, psychological factors of physical health and illness, stress, gender roles, interpersonal relationships, work and leisure, psychological disorders, and therapy. These topics will be explored with an emphasis on both theory and practical application in everyday life. (C-ID PSY 115) (A, CSU-GE, UC)

## 36 BIOLOGICAL PSYCHOLOGY

3 units, 3 lecture hours
PREREQUISITE: Psychology 2. ADVISORY: Biology 3 or 5, and eligibility for English 1A recommended.

Biological mechanisms central to fundamental concepts and issues of psychology. Topics include basic neuroanatomy and neurophysiology, and genetics; research methods in biological psychology; the physiological mechanisms underlying sensation, perception, motivation, emotion, stress, sexual behavior, hunger, eating, language, intelligence, learning memory, neurological disorders, psychopharmacology, and psychological disorders; and the biology of behavior within the context of society. (C-ID PSY 150) (A, CSU, UC)

## 38 LIFESPAN DEVELOPMENT

3 units, 3 lecture hours, (See also Child
Development 38)
ADVISORY: Eligibility for English 1A recommended.
Basic theories, research concepts, and principles of typical and atypical physical, cognitive and psychosocial development at each major stage of life from conception to death. All major topics of human development (e.g. human behavior, sexuality, nutrition, health, stress, key relationships of humankind to the social and physical environment, and implications of death and dying) presented in an integrated manner. (C-ID PSY 180) (A, CSU-GE, UC, I)

## 39 CHILD GROWTH AND DEVELOPMENT

3 units, 3 lecture hours, 1 lab hour, (See also Child Development 39)
ADVISORY: Eligibility for English 1A recommended. Verification of freedom from tuberculosis is recommended.

Basic theories, research, concepts, and principles of physical, cognitive, and psychosocial development at each major stage of life from conception through adolescence. Emphasis on environmental and genetic influences on typical and atypical development. The "To Be Arranged" hours may include observation and documentation of children at various stages of development. (C-ID CDEV 100) (A, CSU-GE, UC, I)

## 42 STATISTICS FOR THE BEHAVIORAL SCIENCES

4 units, 4 lecture hours, (See also Mathematics 42)
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Descriptive statistics, sampling, hypothesis testing, estimation, selected non-parametric techniques, ANOVA, and regression, with applications from psychology, biology, and social sciences. This course is designed for psychology majors and UC transfers. (A, CSU-GE, UC, I)

## 45 INTRODUCTION TO RESEARCH METHODS IN PSYCHOLOGY

3 units, 3 lecture hours
PREQUISITE: Psychology 2 or 2 H and Psychology 42 or Mathematics 42. ADVISORY: English 1A or 1AH.

Survey of psychological research methods. Emphasis placed on research design, descriptive techniques, experimental procedures, and the characteristics of valid assessment tools. Focus on the collection, analysis, interpretation, and reporting of research data. Cultural considerations and the ethics of research with humans and animals included. Designed for psychology majors and others who require familiarity with such research techniques. (C-ID PSY 200) (A, CSU, UC)

## RADIOLOGIC TECHNOLOGY (RAD)

## 1A FUNDAMENTALS OF RADIOLOGIC TECHNOLOGY

6 units, 6 lecture hours
PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1B, 1C, and 1D. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Radiography and its relation to radiology and the hospital; X-ray production, darkroom chemistry, radiographic quality, medical ethics, and use of X-ray equipment. (A, CSU)

## 1B BASIC RADIOGRAPHIC POSITIONING LABORATORY

1 unit, 3 lab hours
PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1A, 1C, and 1D. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Demonstration and practice in positioning of the chest, abdomen, upper and lower extremities, and shoulder girdle. (A, CSU)

## 1C CLINICAL ORIENTATION LABORATORY

3 units, 9 lab hours, (Formerly Radiologic Technology 3A)
PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1A, 1B, and 1D. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Practice of the applicable rules and regulations of the clinical facility. Assist with basic radiographic procedures. (A, CSU)

## $1 D$ NURSING PROCEDURES IN RADIOLOGIC TECHNOLOGY

3 units, 3 lecture hours,
PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1A, 1B, and 1C. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Procedures and methods pertaining to X -ray, emergency patients, and surgical procedures. (A, CSU)

## 2A RADIATION BIOLOGY

6 units, 6 lecture hours
PREREQUISITE: Radiologic Technology 1A, 1B, 1C and 1D. COREQUISITE: Radiologic Technology 2B, 2C, and 2D.

Biological effects of radiation, protection standards, personnel monitoring, and concepts of radiation units. (A, CSU)

## 2B ADVANCED RADIOGRAPHIC POSITIONING LABORATORY

1 unit, 3 lab hours
PREREQUISITE: Radiologic Technology 1A, 1B, 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, billiary ducts, urinary system and mammography. (A, CSU)

## 2C CLINICAL OBSERVATION LABORATORY

3 units, 9 lab hours
PREREQUISITE: Radiologic Technology 1A, 1B, and 1D. COREQUISITE: Radiologic Technology 2A, 2B, and 2D.

Practice of the applicable rules and regulations of the clinical facility. Under direct supervision, perform basic radiographic procedures. (A, CSU)

## 2D QUALITY ASSURANCE IN RADIOLOGIC TECHNOLOGY

1 unit, 3 lab hours
PREREQUISITE: Radiologic Technology 1A, 1B, 1C, and 1D. COREQUISITE: Radiologic Technology 2A, 2B, and 2C.

Evaluation of radiographic systems to assure consistency in the production of quality images. Fulfills the computer literacy graduation requirement for Radiologic Technology majors only. (A, CSU)

## 3 BASIC CLINICAL RADIOLOGIC TECHNOLOGY

8 units, 24.45 lab hours, (Summer only), (Formerly Radiologic Technology 3B)
PREREQUISITE: Radiologic Technology 2A, 2B, 2C, and 2D.
Basic radiographic positioning and fluoroscopy. Supervised clinical experience in local hospital radiology departments. (A, CSU)

4A PATHOLOGY IN RADIOLOGIC TECHNOLOGY
2 units, 2 lecture hours
PREREQUISITE: Radiologic Technology 3. COREQUISITE: Radiologic Technology 4B and 4C.

Abnormal conditions of patients that preclude routine radiography; pathological conditions that need recognition and special treatment by radiologic technologists. (A, CSU)

## 4B ADVANCED CLINICAL RADIOLOGIC TECHNOLOGY

12 units, 36 lab hours
PREREQUISITE: Radiologic Technology 3. COREQUISITE: Radiologic Technology 4A and 4C.

Advanced radiographic exposure and positioning; procedures in medical-surgical conditions. (A, CSU)

## 4C ADVANCED RADIOGRAPHIC POSITIONING LABORATORY-CRANIUM

1 unit, 3 lab hours
PREREQUISITE: Radiologic Technology 3. COREQUISITE: Radiologic Technology 4A and 4B.

Demonstration and practice in positioning of the skull, facial bones, nasal bones, zygomatic arches, mandible, paranasal sinuses and temporal bones for radiographic examination. (A, CSU)

5A SPECIAL PROCEDURES IN RADIOLOGIC TECHNOLOGY
2 units, 2 lecture hours
PREREQUISITE: Radiologic Technology 4A, 4B, and 4C. 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)

## 205 RADIOGRAPHY REVIEW

1 unit, 2 lab hours
PREREQUISITE: None.
This review course will prepare individuals for the Examination in Radiography offered by the American Registry of Radiologic Technologists (ARRT) and the State Fluoroscopy Examination.

## REAL ESTATE (RE)

Certain real estate courses offered by the college presently meet the course requirements imposed by the California Department of Real Estate in order to take the real estate salesperson and/or broker examination. However, these courses are not intended as licensing test preparation courses. The course requirements applicable to these examinations may be viewed at the California Department of Real Estate website www.dre.ca.gov.

## 40 REAL ESTATE PRINCIPLES

3 units, 3 lecture hours, (Formerly Real Estate 50)
ADVISORY: Eligibility for English 1A recommended.
California real estate history, real property descriptions, public and private restriction terminology, agency and contracts, forms, licensure, and careers in real estate. (A, CSU)

## 41 REAL ESTATE PRACTICE

3 units, 3 lecture hours, (Formerly Real Estate 51)
PREREQUISITE: Real Estate 40 or hold a license as a real estate salesperson or broker in California.

Day-to-day operations affecting brokers and sales persons, listings, advertising and marketing techniques. (A, CSU)

## RECREATION (REC)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL 1-8 units

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to recreation. Collaborative learning objectives established specific to recreation. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 20 INTRODUCTION TO RECREATION

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Educational opportunities; federal, state, and local relationships; planning programs; finance, and leadership. (A, CSU)

## 21 RECREATION LEADERSHIP

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Theoretical and philosophical basis for leadership. Social dynamics of participation in recreation activities. (A, CSU)

## 23 OUTDOOR RECREATION

3 units, 2 lecture hours, 3 lab hours
COREQUISITE: Recreation 20.
History, development, principles and trends of organized camping, nature and conservation, and outdoor recreation. Laboratory and field trips, including camping and hiking activities. Practical skills in firecrafts, outdoor cooking, and backpacking. Leadership training in camp counseling. Required for recreation majors. (A, CSU)

## RESPIRATORY CARE PRACTITIONER (RCARE)

## 16 PATIENT ASSESSMENT

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Acceptance into the Respiratory Care Program; Biology 24 or Biology 20 and 22 or Biology 21A and 21B, Chemistry 3A, and Mathematics 103. COREQUISITE: Respiratory Care 17, 18 and 20. ADVISORY: English 1A.

Basic cardiopulmonary assessment of patients with acute and chronic issues through the use of diagnostic tools and techniques. (A, CSU)

## 17 RESPIRATORY CARE PHARMACOLOGY

4 units, 4 lecture hours
PREREQUISITE: Acceptance into the Respiratory Care Program; Biology 24 or Biology 20 and 22 or Biology 21A and 21B, Chemistry 3A, and Mathematics 103. COREQUISITE: Respiratory Care 16, 18 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

2 units, 2 lecture hours
PREREQUISITE: Acceptance into the Respiratory Care Program; Biology 24 or Biology 20 and 22 or Biology 21A and 21B, Chemistry 3A, and Mathematics 103. COREQUISITE: Respiratory Care 16, 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, acid-base regulation, and hemodynamics. (A, CSU)

## 20 INTRODUCTION TO RESPIRATORY CARE

5 units, 5 lecture hours, 1 lab hour
PREREQUISITE: Acceptance into the Respiratory Care Program; Biology 24 or Biology 20 and 22 or Biology 21A and 21B, Chemistry 3A, and Mathematics 103. COREQUISITE: Respiratory Care 16, 17 and 18. ADVISORY: English 1A.

Selected modalities for respiratory care with the physical, mechanical, and scientific principles associated with all attendant equipment. (A, CSU)

## 21 APPLICATIONS AND PROCEDURES IN RESPIRATORY CARE

10.5 units, 8 lecture hours, 8 lab hours

PREREQUISITE: Respiratory Care 16, 17, 18 and 20.
Selected therapeutic and diagnostic modalities for respiratory care, with the physical, mechanical and scientific principles associated with all attendant equipment. Mechanical ventilation (theory and applications), sustained maximal inspiration, pulmonary function testing and chest physiotherapy. Supervised clinical performance in area hospitals. (A, CSU)

## 22 CLINICAL APPLICATIONS AND VENTILATOR MANAGEMENT IN RESPIRATORY CARE I

9 units, 2 lecture hours, 22 lab hours
PREREQUISITE: Respiratory Care 21. COREQUISITE: Respiratory Care 24.

Fully supervised clinical experience of the student respiratory care practitioner with didactic concentration on management of patients requiring ventilator support. (A, CSU)

## 23 CLINICAL APPLICATIONS IN RESPIRATORY CARE II

9 units, 2 lecture hours, 22 lab hours
PREREQUISITE: Respiratory Care 22 and 24. COREQUISITE: Respiratory Care 25.

Fully supervised clinical experience of the student respiratory care practitioner, in the intensive care setting. Selected computer clinical simulations for exit-testing are integrated with a computer-based research paper. Fulfills the computer literacy graduation requirement for Respiratory Care Practitioner majors only. (A, CSU)

## 24 NEONATAL AND PEDRIATIC DISEASES

2 units, 2 lecture hours
PREREQUISITE: Respiratory Care 21. COREQUISITE: Respiratory Care 22.

Pathology, etiology, and management of neonatal and pediatric disorders, including normal and abnormal fetal development. (A, CSU)

## 25 RESPIRATORY DISEASE

2 units, 2 lecture hours, (Spring)
PREREQUISITE: Respiratory Care 22 and 24. COREQUISITE: Respiratory Care 23.

The pathology, etiology and management of respiratory diseases and trauma. (A, CSU)

## RETAILING FASHION <br> SEE FASHION MERCHANDISING

## SOCIAL SERVICE

SEE HUMAN SERVICES (HS)

## SOCIOLOGY (SOC)

## 1A INTRODUCTION TO SOCIOLOGY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Basic concepts, theoretical approaches, and methods of sociology. Analysis and explanation of social structure, culture, socialization, the self and social interaction, group dynamics, institutions, deviance, stratification, social change, social problems, and global dynamics. (C-ID SOCI 110) (A, CSU-GE, UC, I)

## 1AH HONORS INTRODUCTION TO SOCIOLOGY

3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.

Basic concepts, theoretical approaches, and methods of sociology. Analysis and explanation of social structure, culture, socialization, the self and social interaction, group dynamics, institutions, deviance, stratification, social change, social problems, and global dynamics. Places a greater emphasis than SOC 1A on methods of conducting scientific research in the field of sociology. Additional emphasis is placed on contemporary social issues as explored through supplemental readers or texts. (C-ID SOCI 110) (A, CSU-GE, UC, I)

## 1B CRITICAL THINKING ABOUT SOCIAL PROBLEMS

3 units, 3 lecture hours
ADVISORY: English 1A and Sociology 1A or 1AH.
An identification and analysis of contemporary social problems including causes, consequences and possible solutions. Explanation of theoretical perspectives used to explain social problems. Consideration of sociological methods of research and analysis. Application of critical thinking skills, specifically taught in the course, designed to result in heightened critical thinking ability as well as strengthened social awareness. (C-ID SOCI 115) (A, CSU-GE, UC)

## 2 AMERICAN MINORITY GROUPS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Overview of sociological, institutional, ecological, 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, I)

## 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)

## 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)

## 10 INTRODUCTION TO AGING STUDIES

3 units, 3 lecture hours, (See also Human Services
10), (Formerly Sociology 22)

ADVISORY: Eligibility for English 1A recommended.
Overview of social, economic, biological and psychological functions of aging. Exploration of issues of the aged with emphasis on consumerism, housing, health, leisure time, family roles, retirement, widowhood and sexuality. (A, CSU-GE, UC, I)

## 14 SOCIOLOGY OF THE MEXICAN AMERICAN COMMUNITY 3 units, 3 lecture hours, (See also Chicano-Latino Studies 14)

ADVISORY: Eligibility for 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: Eligibility for English 1A recommended.
Explores personal and social aspects contributing to the relationships and social problems facing children: socialization, the dysfunctional family, abuse, deprivation, disabilities and special needs, drugs, delinquency and sexuality. (A, CSU)

## 32 INTRODUCTION TO MARRIAGE AND FAMILY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Sociological analysis of marriage and the family, including historical and contemporary changes, and the socio-cultural and economic forces shaping these changes. Topics may include but are not limited to: love, courtship, mate selection, sexuality, family planning, pregnancy and childbirth, sexually transmitted diseases, family conflict, conflict resolution, communication skills, divorced families, step-families, aging and widowhood. (C-ID SOCI 130) (A, CSU-GE, UC)

## 160 BASIC SOCIOLOGY

3 units, 3 lecture hours, (Formerly Sociology 60)
PREREQUISITE: None.
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. (A)

Note: If a student takes SOC 1A and receives a grade of " C " or better subsequent to receiving a "D" or "F" in SOC 160, then the student may apply for academic renewal of the deficient grade in SOC 160.

## 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) <br> 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 17th 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 18th 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. (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 or equivalent. ADVISORY: Theatre Arts 43 recommended. 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 41 and 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. (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)

## 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."

Builds skills 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."

Builds skills in musical theatre such as dancing and/or acting. Intended to help students considering auditioning and performing in the annual "New Wrinkles" production at Fresno City College.

## 348 SENIOR PLAY PRODUCTION

1 lecture hour, 9 lab hours, (16 weeks), (Unlimited
Repeats), (Formerly Theatre Arts 80)
ADVISORY: Theatre Arts 347.
Organize, write, cast, rehearse, and perform a major seniors' musical variety show for public performance.

## VOCATIONAL ENGLISH AS A SECOND LANGUAGE (VESL)

## 266R APPLIED INTERMEDIATE READING FOR COLLEGE AND CAREERS

4 units, 8 lecture hours, ( 9 weeks), (Pass/No Pass)
PREREQUISITE: English for Multi-Lingual Students 264R or designated score on the placement test. Use of language other than English as primary language.

Intermediate reading, vocabulary, critical thinking and study skills applied to tasks for a variety of career fields. Reading strategies reinforced through use of workplace materials and other texts. Acquisition and effective use of workplace vocabulary. Course content includes: teamwork, problem solving, critical thinking, organizational and research skills, self-editing and the use of technological resources.

## 266W APPLIED INTERMEDIATE WRITING FOR COLLEGE AND

 CAREERS4 units, 8 lecture hours, ( 9 weeks), (Pass/No Pass)
PREREQUISITE: English for Multi-Lingual Students 264W or designated score on the placement test. Use of language other than English as primary language.

Intermediate writing, grammar, critical thinking and study skills applied to tasks for various career fields. Focus on a broad range of professional communication genres. Acquisition and application of appropriate syntactic and semantic elements. Course content includes: problem solving, teamwork, critical thinking, organizational and research skills, self-editing and use of technological resources.

## 269R APPLIED ADVANCED READING FOR COLLEGE AND CAREERS

4 units, 8 lecture hours, ( 9 weeks)
PREREQUISITE: English for Multi-Lingual Students 265R, or designated score on the placement test, or completion of Vocational English as a Second Language 266R. Use of language other than English as primary language.

Advanced reading, vocabulary, critical thinking and study skills applied to tasks for a variety of career fields. Reading strategies reinforced through the use of workplace materials and other texts. Acquisition and effective use of workplace vocabulary. Course content includes: teamwork, problem solving, critical thinking, organizational and research skills, self-editing, and the use of technological resources.

## 269W APPLIED ADVANCED WRITING FOR COLLEGE AND CAREERS

4 units, 8 lecture hours, ( 9 weeks)
PREREQUISITE: English for Multi-Lingual Students 265W, or designated score on the placement test, or completion of Vocational English as a Second Language 266W. Use of language other than English as primary language.

Advanced writing, grammar, critical thinking and study skills applied to tasks for various career fields. Emphasis on a broad range of professional communication genres. Acquisition and application of syntactic, lexical and grammatical rules. Course content includes: problem solving, teamwork, critical thinking, organizational and research skills, self-editing and the use of technological resources.

## WELDING TECHNOLOGY (WELD)

## 1 EXPLORING WELDING/METALS

3 units, 2 lecture hours, 3 lab hours, (Formerly Industrial Education 5)
ADVISORY: Eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

An introduction to oxyacetylene and plasma cutting. Shielded metal arc welding (SMAW) and gas metal arc welding (GMAW) in the flat and horizontal positions, along with other methods of joining steel together. An emphasis is placed on safety and developing good manipulative skills. (A, CSU)

## 2A INTRODUCTION TO WELDING TECHNOLOGY

6 units, 4 lecture hours, 6 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

Oxyacetylene cutting, shielded metal arc, gas metal arc (MIG), Flux Cored Arc Welding (FCAW) and gas tungsten arc (TIG) welding. An emphasis on good manipulative welding skills for joining steel, stainless steel and aluminum. Use of various electrodes. An introduction to the electrode and base metal classification system. (A, CSU)

## 2B ADVANCED MULTI-PROCESS WELDING

5 units, 3 lecture hours, 7 lab hours
PREREQUISITE: Welding Technology 2A.
Vertical and overhead welding with the shielded metal arc process leading to the American Welding Society (AWS) Structural Welding Code 3G and 4G Unlimited Certification Test. Advanced welding skills with gas metal arc (MIG), fluxed cored (FCAV) and gas tungsten arc (TIG). (A, CSU)

## 3A WELDING DESIGN AND FABRICATION

5 units, 3 lecture hours, 7 lab hours
PREREQUISITE: Computer Aided Drafting and Design 16 and Welding 2B. ADVISORY: Drafting 12 recommended.

Design and fabrication of metal projects by welding. Manufacturing processes, production techniques, and material cost estimation. (A, CSU)

## 3B ADVANCED WELDING DESIGN AND FABRICATION

5 units, 3 lecture hours, 7 lab hours PREREQUISITE: Welding 3A.
A continuation of Welding 3 A in the design, construction, and finishing of welded projects. (A, CSU)

## 4A HEAVY PLATE, STRUCTURAL STEEL AND WELDING CERTIFICATION

5 units, 3 lecture hours, 7 lab hours
ADVISORY: Welding 2B or equivalent, Drafting 12 , and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

An emphasis on obtaining certification in vertical and overhead welding positions ( 3 G and 4 G ) 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 <br> 5 units, 3 lecture hours, 7 lab hours

PREREQUISITE: Welding Technology 4A. ADVISORY: Drafting 12 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

Shielded metal arc, gas metal arc welding, gas tungsten arc, and flux cored arc welding processes on different piping systems. Fit up and assemble joint configurations used in pressure vessel, power systems, cross country and refinery applications. Certification procedures in accordance with API, AWS, and ASME codes. (A, CSU)

## 56 BLUEPRINT READING FOR WELDERS

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

Basic fundamentals of blueprint reading and welding symbol interpretation as required by the welding trade. (A, CSU)

## WOMEN'S STUDIES (WSTS)

## 5 SOCIOLOGY OF RAPE

3 units, 3 lecture hours, (See also Sociology 5)
ADVISORY: Eligibility for English 1A recommended.
A micro and macro overview of rape including the history of rape, a study of what creates a rape culture, social and psychological characteristics and pathology of rapists, sociological impact upon and psychology of the survivor. Includes examination of various forms of sexual assault such as acquaintance rape, marital rape, male rape, gang rape and child sexual assault. The sociological foundation and history of current laws and their execution are also explored. (A, CSU)

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)

## 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. (A, CSU-GE, UC, I)

## 24 LA CHICANA AND LATINA

3 units, 3 lecture hours, (See also Chicano-Latino Studies 24)
ADVISORY: Eligibility for English 1A recommended.
A sociological analysis of the Mexican American female in contemporary society. Special emphasis placed on her role in the family, church, education, economics, and politics. (A, CSU, UC)

## 25 ASSERTIVENESS TRAINING

2 units, 2 lecture hours, (See also Human Services
25)

ADVISORY: Eligibility for English 1A recommended.
Becoming more effective and creative in expressing oneself in a courteous and dignified manner. Discovering the communication options available in various life situations. (A, CSU)

## 30 ASIAN-AMERICAN WOMEN

3 units, 3 lecture hours, (See also Asian-American Studies 30)
ADVISORY: Eligibility for English 1A recommended.
Historical experiences of early and later Asian immigrant women.
Emphasis is on Asian American women today. Topics include growing up Asian American, relationship with parents, marriage, identity, raising children, doll image, voice, and American feminism. (A, CSU, UC)

## 36 WOMEN IN LITERATURE

3 units, 3 lecture hours, (See also English 36)
PREREQUISITE: English 1A or equivalent. English 1B is not a prerequisite for this course.

Survey of literature by and about women in fiction, drama, poetry, biography, and essay. Covers multicultural and international literature from classical to contemporary periods, in addition to feminist and gender theory. (A, CSU-GE, UC, I)

## 41 AFRICAN-AMERICAN WOMEN'S STUDIES

3 units, 3 lecture hours, (See also African-American Studies 41)
ADVISORY: Eligibility for English 1A recommended.
Analyzes the social, political, and cultural history of African American women in US society 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)

## 43 WOMEN'S NUTRITION

2 units, 2 lecture hours, (See also Food and Nutrition 43)
ADVISORY: Eligibility for English 1A recommended.
The relationship between nutrition and various contemporary health issues affecting women. Significance of nutrition as it relates to the health of women during specific stages in the life cycle. Current trends and research. (A, CSU)

## 44 WOMEN IN MANAGEMENT

3 units, 3 lecture hours, (See also Business
Administration 44)
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Management and entrepreneurial behaviors for women seeking leadership skills, particularly for managers and those aspiring to executive levels. (A, CSU)

## 47 INTRODUCTION TO LESBIAN AND GAY STUDIES

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The interdisciplinary field of Lesbian and Gay Studies through the disciplines of history, literature, law, science, political science, media, psychology, and education. Issues to be covered will include but not be limited to identity development and coming out, cultural ideology, sub-cultures, activism, gay marriage, gay parenting and community. Theoretical perspectives concerning the historical development of sexual identity, the marginalization of sexual minority communities within social institutions and concomitant issues of class, race and gender in contemporary U.S. society and around the world will be explored. (A, CSU-GE, UC, I)

## WORK EXPERIENCE, GENERAL (WKEXP)

## 19 WORK EXPERIENCE (COOPERATIVE), GENERAL

## 1-6 units

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to work experience. Summer Session: Enrollment in another college course is optional. Work experience need not be related to student's educational goal.

Acquisition of desirable work habits, attitudes and career awareness. Exploring basic academic skills, communicating, adapting to new situations, and problem solving. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of six (6) units total in one enrollment period and not repeatable. (A, CSU)

## ZOOLOGY

SEE BIOLOGY

## COLLEGE PERSONNEL

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Resources
Pedro Avila
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Enrollment Management,
Admissions and Records and
Information Services

## Fresno City College

## Administration

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Don Lopez
Interim Vice President of Instruction

Rojelio Vasquez
Interim Vice President of Student Services

Cheryl Sullivan
Vice President of Administrative
Services

## Instructional Deans

Lydia Anderson
Interim Dean of Instruction, Business Division

Renee Craig-Marius
Dean of Instruction, Student
Success and Learning Division
Dr. Jennifer L. Johnson
Dean of Instruction,
Humanities Division
Shirley McManus
Dean of Instruction,
Math, Science and Engineering Division

Dr. Margaret E. Mericle
Dean of Instruction,
Social Sciences Division

Lorraine Smith Dean of Instruction, Allied Health, Physical Education, and Athletics Division
Neil Vanderpool
Dean of Instruction, Fine, Performing, and Communication Arts Division

Dr. Timothy J. Woods
Dean of Instruction, Career and Technology Center and Workforce Development Division

Vacant
Dean of Instruction, Applied Technology Division

## Student Services Deans

Monica Cuevas
Dean of Student Services,
Counseling and Guidance
Sean Henderson
Interim Dean of Students, EOPS

## Faculty and Administration

Adams, Darren (2013)
Electrical Systems Technology
Allen, Nathan (2011)
Mathematics
A.A., Reedley College
B.A., M.A., California State University, Fresno

Alvarado, Samuel L. (2004)
Counselor, Disabled Students
Programs \& Services
B.A., M.S., California State University, Fresno

Anderson, Lydia (1997)
Interim Dean of Instruction,
Business Division
A.A., Reedley College
B.S., M.B.A., California State University, Fresno

Anderson, Sasha (2008)

## Mathematics

B.A., University of California, Santa Barbara M.A., California State University, Fresno

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B.S., M.S., Southern Illinois University Ph.D., Indiana University, Bloomington
Antonio, Estefana (2013) Child Development Coordinator B.S., M.A., California State University, Fresno

Arakelian, Charlotte A. (1983) Counselor
B.S., M.A., California State University, Fresno

Avery, Douglas D. (2002)
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

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Communication
B.A., M.A., California State University, Fresno

Baker, Brian (2012)
Computer Information Technology
B.A., M.S., California State University, Fresno

Balakian, Amber (2015)
Entrepreneurship/Business
Administration
B.A., University of California, San Diego M.A., Harvard University

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

Bascom, Brandon (2014) Music
B.M., Brigham Young University
M.M., Manhattan School of Music
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Begley, Polly (2000)
Communication
B.A., M.A., San Diego State

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English
B.A., University of Washington
M.A., California State University, Bakersfield

Benefiel, Diane M. (2004)
Nursing
B.S., Point Loma College, San Diego
M.S., California State University, Dominguez

Hills Ed.D., California State University, Fresno
Bertolani Jr., William J. (1987)
Criminology
B.A., Fresno State College
M.A., California State University, Sacramento

Bezerra-Nader, Rosemarie (1990)
Developmental Mathematics
B.A., California State University, Fresno
M.A., Fresno Pacific College

Bigham, Craig (1999)
Mathematics
B.S., M.S., California State University, Fresno

Blackerby-Slater, Laurel (2001)
Mathematics
B.S., University of California, Davis
M.A., Fresno Pacific University

Blodgett, Ryan (2008)
Counselor, Disabled Students
Programs \& Services
B.A., M.A., California State University, Fresno

Bluth, Gary (1991)
Physical Education
B.A., M.A., San Francisco State

Bolen, Gennean (2001)
English
B.A., Oral Roberts University
M.A., California State University, Fresno

Ed.D., Alliant International University
Bolt, Sandra B. (1999)
Business \& Technology
A.A., Fresno City College
B.S., California State University, Fresno
M.B.A., National University

Boyd, Robert (1996)
Philosophy
B.A., Trinity College
M.A., Texas Christian University

Ph.D., University of Wales, Lampeter
Boyle, Anna (2014)
English
B.A, M.A., California State University, Fresno

Brandl, Jeremy (2011)

## Mathematics

B.A., M.A., California State University, Fresno

Brewer, Melinda (2001)
Child Development
B.S., M.S., California State University, Fresno

Brito, Simone (2016)
Biology
B.S., M.S., Universidade Estadual Paulista

Brotsis, William (2007)
Fire Technology
A.A., Fresno City College
B.A., Fresno Pacific College

Bugay, Elnora (1995)
Nursing
G.N., University of the Philippines
B.S.N., Long Island University
M.S.N, California State University, Fresno

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
Campbell, Lynn (2001)
English
B.A., Southeastern College M.S.Ed., State University of New York, Geneseo

Carrigan, Janel (2012)
Business Administration
B.A., Pepperdine University M.B.A., National University

Carroll, Jean (2001) English for Multi-Lingual Students B.A., California State University, Fresno M.A., University of South Florida

Caviglia, Tony (1999)
Physical Education
A.A., Chabot College B.A., California Polytechnic, San Luis Obispo
M.A., University of Southern California

Cerda, Ricarda (2000)
Food \& Nutrition
B.A., M.S., California State University, Fresno

Cerkueira, Ronald C. (1996) Computer Aided Drafting and Design
B.A., M.A., California State University, Fresno

Chacon, Kenneth R. (2005) Developmental English B.A., University of California, Davis M.FA., California State University, Fresno

Chandler, Donna (2001) Librarian
A.A., University of Maryland B.A., M.L.S., San Jose State University

Chaney, Lisa (2014) Coordinator, Health Services
A.S., Solano Community College B.S.N., University of San Francisco M.S.N., University of Phoenix

Chavez, Kenneth R. (1988) Counselor
B.A., California State University, Fresno M.S., National University
Cho, John (2001)
Asian-American Studies
B.A., M.A, California State University, Fresno

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

Contreras, Luis (1999)
English
B.A., M.S.W., M.A., California State University, Fresno
Cooper, Kevin (2009)
Music
B.M., Ithaca College
M.M., D.M.A., University of Southern California

Coronel, Maria (2007) Spanish
A.A., Imperial Valley College
B.A., M.A., California State University, San Diego

Craig-Marius, Renee (1999) Dean of Instruction, Student Success and Learning Division
B.A., M.S., California State University, Fresno

Crawford, Kathleen (1999) History
B.A., California State University, Fresno
M.A., University of California, Los Angeles

Crocket, Karen (1998)
English
B.A., M.A., California State University, Fresno

Crooks, Elizabeth, (2015)
Medical Assisting
B.A., State University of New York at Plattsburgh M.A., Alliant University

Cuevas, Monica (2014)
Dean of Students, Counseling B.A., California State University, Fresno M.S., National University
Culver-Dockins, Natalie (2008)
Director of Counseling and Special
Projects
B.S., California State University, Stanislaus
M.A., San Jose State University Ed.D., California State University, Fresno

Curtis, Carol (1994)
Mathematics
B.A., M.A., Ed.D., California State University, Fresno

Dana, Julie (1999) Music
B.A., San Diego State University
M.Mus.Ed., University of Northern Colorado

Dana, Michael E. (1990)
Music
B.A., M.A., 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.FA., 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

DeAnda, Carolyn (2010)
Photography
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

Demanett, Paula (2000)
Librarian
B.A., University of California, Riverside
M.L.S., Brigham Young University
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Denis-Arrue, Nuria M. (2005)
Biology/Microbiology
B.A., M.A., California State University, Fresno

Denver, Monta (1986)
Dental Hygiene
A.A., Montgomery County Community College
A.S., Fresno City College
B.S., M.S., California State University, Fresno

DeSantiago-Gomez, Laura (1999) Counselor
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

Doud, Laurel M. (2005)
Librarian
B.A., Stanford University
M.L.S., San Jose State University

Dowis, Hawkins (2007)
Biology
B.A., Pepperdine University
M.S., California State University, Fullerton

Dunklin, Marianne (2001)
Business Administration/
Marketing
B.S., M.B.A., Creighton University

Ph.D., University of Kansas
Dustin, Ron (1996)
Accounting
A.A., Fresno City College
B.S., M.B.A., California State University, Fresno

Edison, James S. (1997)
Police Academy Coordinator
A.A., Shasta College

Edwards, Sarah (1998)
Health Information Technology
A.A., Reedley College
B.A., California State University, Fresno
B.S., Loma Linda University
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Elizondo, Tony (1993)
Automotive Mechanics (CTC)
A.A., San Joaquin Delta College
B.A., M.A., California State University, Fresno

Emerzian, Janice M. (1975)
District Director, Disabled
Students Programs \& Services
B.A., M.A., California State University, Fresno Ed.D., University of Laverne
Engstrom, Dale (2001)
Music
B.A., M.A., California State University, Fresno

Erickson, Mark (2016)
Industrial Mechanic
Erven, Debra P. (1990)
Theatre Arts
B.A., M.A., California State University, Fresno

Erven, Milton "Chuck" (1999)
Theatre Arts
B.S., Eastern New Mexico
M.A., University of Maryland

Ezaki, Gretchen (2010) Nursing
B.S., Pacific Lutheran University M.S., California State University, Fresno

Fernandez, Kathleen (2016) Criminology
B.S., M.S., California State University, Fresno

Ferrer, Sharon (1995)
Spanish
B.A., M.A., California State University, Fresno

Fief, Gary (2016)
Director, Police Academy
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Fisher, Jessica (2015)
Adaptive English
A.A., Fresno City College
B.A., M.S., California State University, Fresno

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

Forestiere, Marc C. (1996)
Computer Information Technology
B.S., California State University, Sacramento M.A., Fresno Pacific College

Frain, Victoria (2013)
Respiratory Care
A.S., Lehigh County Community College
B.S., Grand Canyon University

Garcia-Lupian, Sonia (2008) Counselor
B.A., M.S.W., California State University, Fresno

Garoupa, Clifford (1997) Sociology
A.A., Fresno City College
M.S., Ohio State University
J.D., San Joaquin College of law

Gaxiola, Thomas J. (2001) Director of EOPS/CARE
B.S., M.A., California State University, Fresno

Gennity, Joseph M. (1996) Biology
B.A., New York University

Ph.D., Texas A \& M
Germond, Oliver (2001) Physical Education B.S., California State University, Northridge M.S., National University

Gilbert, Michael (2004) Biology
B.SC., University of Central England Ph.D., Leeds, School of Physiotherapy, UK
Gilmore, Paul C. (2004) History
B.A., Furman University
M.A., University of Wisconsin, Milwaukee
M.S., Georgia Institute of Technology

Goehring, Stephen (2007) Auto Collision Repair Technology
Goldsmith, Carole (2016) President
B.A., California State University, Fresno M.S., National University, Fresno Ed.D., California State University, Fresno and University of California, Davis
Gonzales, Janine (2015) Counselor
A.A., Fresno City College
B.A., M.S., California State University, Fresno

Gonzalez, Eileen (2000) Nursing B.S.N., M.S.N., California State University, Fresno

Gose, Kristine (2001) Child Development B.A., M.A., California State University, Fresno

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Granata, Charity (1985)
    Communication
    B.A., M.A., California State University, Fresno
Green, JoEllen (2016)
    Decision Science
    B.S., M.S., University of California, Riverside
    M.S., Capella University
Gruet, Karin (2005)
    Chemistry
    Licence, Mâitruse, DEA Chemistry, Univasile Paul
    Sabatier, France
    M.S., Ph.D.,, Yale University
Guglielmino, Rosemarie Spight
(1989)
    English
    A.A., West Hills Community College
    B.A., California State University, Humboldt
    M.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
Halls, Thom (2001)
    Photography
    B.A., California Polytechnical State University,
    San Luis Obispo
Hao, Jian-Min (2006)
    Dance
    B.F.A., Central Beijing Dance Academy
    M.FA., University of California, Los Angeles
Harris, Stephanie (2007)
    Counselor
    A.A., Fresno City College
    B.A, M.A., California State University, Fresno
Hart, Robyn R. (1997)
    Business & Technology
    A.S., Merced Junior College
    B.S., California State University, Fresno
    M.B.A., National University
Haskell, Marc C. (1999)
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Licence, Mâitruse, DEA Chemistry, Univasile Paul Sabatier, France
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Guglielmino, Rosemarie Spight
(1989)

English
A.A., West Hills Community College
M.A., California State University, Fresno

Gutierrez-Osborne, Virginia (2005) Biology

Angeles M.A., California State University, Fresno

Gutierrez-Sauceda, Nancy M. (2005) Sociology
ry Fresno
Univerity of Wisconsin
Guzman, Juan (2013)
English
B.A., M.F.A, California State University, Fresno

Halls, Thom (2001)
Photography
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Hao, Jian-Min (2006)
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Harris, Stephanie (2007)
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Hart, Robyn R. (1997)
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A.S., Merced Junior College . M.B.A., National University

Haskell, Marc C. (1999)
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He, Jiandong (Jin) (1999)
Mathematics
B.S., Jilin University, Peoples Republic of China
M.S., California State University, Fresno

Henderson, Caleb (2015)
Art
B.F.A., Utah Valley University
M.F.A., Tulane University

Henderson, Sean (2010)
Interim Dean of Students, EOPS
B.A., M.A., California State University, Fresno

Henry, Amanda (2006)
Chemistry
B.S., Central Washington University
M.S., Western Washington University

Hernandez, Maria (2013)
Automotive Technology
A.S., Fresno City College

Hernandez, Timothy (2013)
Art
A.A., Mesa Community College
B.S., University of Oregon
M.F.A., Arizona State University

Herren, Brett (2007)
Mathematics
B.S., MS., California Polytechnic, San Luis Obispo
Herrick, Lee (1997)
Developmental English
B.A., M.A., California State University, Stanislaus

Hester-Haynes, Juanita (2016)
Mathematics
A.S., Chabot College
B.A., M.A., California State University, Fresno

Heyne, Bridget (2001)
Nursing
A.A., Reedley College
B.S., University of California, Los Angeles A.D.N., Forest Park Community College M.S.N., California State University, Fresno Ed.D., California State University, Fresno

Hiebert, Margaret P. (2005)
Developmental English
A.A., Reedley College
B.A., M.A., California State University, Fresno

Ph.D., State University of New York
Hill, Bruce (2007)
Criminology
B.A., Occidental College
J.D., University of California, Los Angeles

Himes, Daniel J. (1987)
Electrical Systems Technology
A.A., Modesto Jr. College
B.S., California State University, Fresno

Hodges, Cynthia (1990)
American Sign Language
B.S., Gallaudet College
M.S., University of Arizona

Holford, Susan (2001)
Human Services, Sociology
B.S.W., San Jose State
M.S.W., California State University, Sacramento

Holland, Nancy (2001)
Business Administration/
Marketing
A.S., College of the Sequoias
B.A., California State University, Fresno
M.S., Chapman University

Honda, Lorence (1997)
Music
B.A., California State University, Fresno
M.M., University of Southern California

Hood, Brett (2006)
Nursing
B.S., California State University, Fresno
M.B.A., National University

Hopper, Clarence (1999)
Mathematics
B.S., M.S., California State University, Fresno

Howard, Jeanice (2013)
Dental Hygiene
A.S., Fresno City College
B.A., M.A., Fresno Pacific University

Hubbard, Greg (2006)
Photography
A.A., Butte Community College
B.A., California State University, Sacramento
M.A., California State University, Fresno

Huneault-Schultze, Sylvie (2001)
English for Multi-Lingual Students
A.A., Cape Cod Community College
B.A., University of Massachusetts, Boston
M.A., Monterey Institute of International Studies

Hunter, Timothy D. (2004)
Automotive Mechanics (CTC)
A.S., Reedley College
B.S., M.S., California State University, Fresno

Jamison, Gregory (1997)
Mathematics
B.A., M.A., California State University, Fresno

Jauregui, Enrique (2000)
Student Services Office
B.A., M.A., California State University, Fresno

Johal, Sarbjit (1999)
Political Science
B.A., University of Reading (UK)
M.A., University of British Columbia

Ph.D., University of California, Santa Barbara
Johansson, Carl A. (1999)
Biology
A.A., Fresno City College
B.S., California State University, Fresno
m.S., Brigham Young University

Johnson, Frederick (2008)
Police Academy Instructor/
Coordinator
A.S., Fresno City College
B.S., National University

Johnson, Gerard (2015)
Counselor
B.A., California State University, Fresno
M.A., San Jose State University

Johnson, Jennifer L. (2011)
Dean of Instruction, Humanities

## Division

B.A., University of Southern California
M.A., California State University, Northridge

Ph.D., University of Southern California
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
Kadingo, Carol J. (1984)
Physical Education
B.S., Lock Haven University
M.S., Pennsylvania State University

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

Kawagoe, Kirk (1997)
Chemistry
B.A., University of California, Santa Cruz Ph.D., University of North Carolina, Chapel Hill

Kelley, Monique (2001)
Accounting
B.A., Morris Brown College
M.P.A., Georgia State University

Kerfoot, Mark (2015)
Physics
B.S., California State University, Sacramento
B.A., University of California, Davis

Ph.D., University of California, Merced
Keysaw, Paul (2006)
Physical Education
B.A., M.A., California State University, Bakersfield

Khan, Kherstin (2011)
Communication
B.A., M.S., California State University, Fresno

Kirby, James (2008)
Human Services
A.A., Ventura College
B.A., M.S.W., California State University, Fresno

Kirk, Karla (2011)
African-American Studies
B.A., M.A., Fresno Pacific University

Kobashigawa, Linda (2015) Librarian
B.A., California State University, Fresno
M.L.S., University of California, Los Angeles

Koshear, Jeannine (2005)
Geography
B.A., University of California, Santa Cruz M.A., Ph.D., University of California, Berkeley

Krauter, Larry (2008)
Photography
B.S., California State University, Fresno

Lee, Bryan (2015)
Air Conditioning
B.S., Western Governors University

Lewis, Deborah (2007)
Child Development
A.A., Fresno City College
B.A., National University
M.A., California State University, Fresno

Lewis, Kristin (1995)
English
B.A., Colorado State University
M.Ed., Voldosta State College

Linder, Colby (2001)
Biology
B.A., M.A., California State University, Fresno

Loftis, Darlene (1991)
High Tech Center
B.A., California State University, Fresno
M.A., Fresno Pacific College

Logan, L. Zay (2004)
Developmental English
A.A., Fresno City College
B.A., M.F.A., California State University, Fresno

Lopez, Donald F. (1995)
Interim Vice President of Instruction
B.S., M.B.A., California State University, Fresno

Lozano, Alicia (2008)
Nursing
L.V.N., Clovis Adult School
A.D.N., Fresno City College
B.S.N., M.S.N., California State University, Fresno

Luna, Cynthia (2001)
Communication
A.A., Moorpark College
B.A., M.A., California State University, Fresno

Madec, Edward (2006) Physical Education
B.A., Sonoma State University M.A., California State University, Chico

Magnia, Martha (2008) Child Development
B.S., M.A., California State University, Fresno

Makofske, James P. (1989)
Accounting, Computer Information Technology B.A., B.S., University of Central Florida M.B.A., Chapman College

Mannon, Kayla (2014) Counselor B.A., California State University, Fresno M.S., National University

Maroot, Nereyda (1999) Spanish B.A., M.A., California State University, Fresno

Martin, Sheila (1990) Business \& Technology A.A., Saddleback College B.A., M.S., National University, Irvine

Martinez, Renato (1999) Spanish M.A., Ph.D., University of California, San Diego

Martinez, Robert II (2000) Electrical Systems Technology B.S., California State University, Fresno

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Martinez, Todd (1999)
    Psychology
    B.A., M.A., California State University, Fresno
    Ph.D., University of Connecticut
Mazzoni, Amie (2004)
    Biology
    B.A., M.A., California State University, Fresno
McCollough, Mark D. (1999)
    Computer Aided Design/Computer
    Aided Manufacturing CAD/CAM
    A.A., Hartnell College
    B.A., California State University, Long Beach
McDonald, Travis (2015)
    Mathematics
    B.A., M.A., California State University, Fresno
McLeod, Todd (2001)
    Computer Information Technology
    B.A., University of California, Santa Cruz
    M.B.A, California State University, Fresno
McManus, Shirley (1992)
    Dean of Instruction, Mathematics,
    Science and Engineering Division
    B.S., M.A., California State University, Fresno
McMichael, John (2016)
    Humanities
    B.A.,The Master's College
    M.A.T., Fuller Theological Seminary M.Div,
    Golden Gate Baptist Theological Seminary
    M.A., Ph.D., University at Albany, SUNY
Mejia, Dana (2016)
    Nursing
    A.S., Fresno City College
    B.S.N., M.S.N., California State University, Fresno
Mendez, Linda (1999)
    Counselor
    B.A., M.A., California State University, Fresno
Mericle, Margaret E. (1999)
    Dean of Instruction, Social
    Sciences Division
    A.B., Ohio University M.A.,
    Ph.D., State University of New York at Stony
    Brook
Meserve, Peter (2001)
    Geography
    B.A., University of Kansas
    M.A., Ph.D., University of Washington
Miller, Bruce A. (1996)
    Electrical Systems Technology
    A.A.S., Ferris State College, Michigan
    B.S., California State University, Fresno
Martinez, Todd (1999)
Psychology
B.A., M.A., California State University, Fresno
Ph.D., University of Connecticut
Mazzoni, Amie (2004)
Biology
B.A., M.A., California State University, Fresno
McCollough, Mark D. (1999)
Computer Aided Design/Computer
Aided Manufacturing CAD/CAM
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McDonald, Travis (2015)
Mathematics
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McLeod, Todd (2001) Computer Information Technology
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Mejia, Dana (2016)
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Mendez, Linda (1999) Counselor B.A., M.A., California State University, Fresno
Mericle, Margaret E. (1999)
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Meserve, Peter (2001) Geography
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Miller, Bruce A. (1996)
Electrical Systems Technology
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Child Development
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Anthropology/Archaeology
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M.A., Ph.D., University of California, Riverside

Mitchell-Carroll, Nancy (2006)
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

Mohle, Dennis I. (2004)
Computer Information Technology
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Mooneyham, David E. (2003)
Maintenance Mechanic (CTC)
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Moses, John (1999)
English
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Munoz, Shana (2001)
English
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B.A., M.A., California State University, Fresno

Natal, Lori (2008)
Counselor
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Navarro, Bernard M. (2005)
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B.A., California State University, Fresno
M.A., Ph.D., University of Oregon

Nelson, Gretchen (2009)
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Nelson, Rebecca (2007)
Business \& Technology
A.A., Reedley College
B.A., Fresno Pacific University
M.B.A., National University

Nitzsche, Eric J. (1996)
Construction
B.A., California State University, Fresno

Oaks, Scott (2007)
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

Ockey, Debbie (1995)
Linguistics/English for
Multi-Lingual Students
B.A., M.A., California State University, Fresno

Olsen, Rodney G. (2002) Biology
B.S., M.S., California State University, Fresno

Ostrander, Theodore E. (1989)
Mathematics, Developmental Math
B.A., California State University, Fresno
M.A., Fresno Pacific College

Owens, Daniel L. (1999)
Computer Information Technology
B.S., California State University, Fresno
M.B.A., National University

Pacheco, Joanne (2001)
Dental Hygiene
A.S., Fresno City College
B.A., Fresno Pacific University
M.A., Alliant International University

Palmer, Richard (1990)
Biology
B.S., Oregon State University
M.S., California State University, Fresno

Pankratz, Aaron (2008)
Economics
B.A., M.P.P., Pepperdine University

Papavasiliou, Nell (2015)
Engineering
B.S., University of California, Los Angeles
M.S., California State University, Fresno

Parker, Joshua (2015) Biology
B.S., California State University, Stanislaus M.S., Ph.D., University of Wyoming

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
Patton, Michelle (2008) English
A.A., Fresno City College B.A., M.F.A., California State University, Fresno

Pinkard, Joyce (1997) Spanish
B.A., M.A., Mississippi State University

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

Poole, Thomas Craig (1999) Geology
B.S., M.S., California State University, Fresno

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

Radnejad, Forouzandeh (2005) Counselor
B.A., Esfahan University, Iran M.S., California State University, Fresno

Ramirez, Graciela (1996) Counselor
B.A., M.A., California State University, Fresno

Ramos, Loretta (1994)
Communication
B.A., University of Southern California M.A., California State University, Fresno J.D., San Joaquin College of Law

Razee, Alan (2008)
Communication
B.A., California Polytechnic University, San Luis Obispo
M.A., Ph.D., University of Washington

Reitz-Robinson, Stephanie (2008)
Director of Nursing
A.S., Fresno City College
B.S., California State University, Dominguez Hills
M.H.A., Chapman University

Reyes, Jesus (2011)
Physical Education
A.A., Mt. San Antonio College
B.A., San Diego State University
M.A., St. Mary's College

Riley, David (2001)
Electrical Systems Technology
B.S., M.S., California State University, Fresno

Rivera, Ricardo (2016)
Art
B.F.A., M.FA., San Francisco Art Institute

Roblee, Kieran (2016)
Physical Education
A.A., Santa Barbara City College
B.A., California State University, Fresno City College
M.A., Fresno Pacific University

Rooks, Clay (1999)
English
B.S., Iowa State University
M.A., California State University, Fresno

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

Saiz, Sallie (2014)
English
A.A., Fresno City College
B.A., M.A., M.F.A., California State University, Fresno

Samra, Sandi (2004)
Counselor
B.A., California State University, Fresno
M.S., National University

Sanders, Eric (2016)
Tutorial Center Coordinator
B.A., Duke University Master of Exercise and Sports Sciences, University of Florida, Gainsville M.S., Capella University

Santos, Geraldine (1999) Counselor
B.A., M.A., California State University, Fresno

Santos, Jeannie (2009) English
B.A., M.A., California State University, Fresno

Santos, Richard (1994)
Linguistics/English for
Multi-Lingual Students
B.A., M.A., Ed.D.., California State University, Fresno
Sause, James (2000) Computer Information Technology B.S., California State University, Fresno M.B.A., National University

Scheidt, Richard (1997)
Physical Education
B.S., San Francisco State University
M.A., California State University, Fresno

Schmalle, Robert C. (2005)
Business Administration/
Business Law
A.A., Fresno City College
B.A., Fresno Pacific University
J.D., San Joaquin College of Law

Scott, Daniel J. (2005)
Communication/Assistant
Forensics Coach
A.A., Fresno City College.
B.A., California Polytechnic University, San Luis Obispo
M.A., California State University, Fresno

Scott, Ronald A. (1990)
Physical Education
B.S., California State University, San Jose
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

Shelley, Deborah (2008)

## Biology

B.A., California State University, Chico

Ph.D., Purdue University
Shirey, Melinda (2006)
Business \& Technology
B.A., M.A., Fresno Pacific University

Shultz, Joseph (1996)
Radiologic Technology
B.S., California State University, Fresno M.Ed., National University

Silva, Leslie (2001)
Counselor, Disabled Students
Programs and Services
A.A., Kings River Community College
B.A., M.S., California State University, Fresno

Siroky, Allen (1999)
History
B.A., Rocky Mountain College
M.A., Trinity College

Ph.D., City University of New York
Slaton, Rebecca L. (1991) Psychology
B.A., California State University, Fresno
M.S., Ph.D., University of California, Santa Cruz

Smith, Bonnie (1996)
Computer Information Technology
B.S., San Francisco State University
M.S.A., California State University, Fresno

Smith, Lorraine M. (2005)
Dean of Instruction, Allied Health,
Physical Education and Athletics
B.A., Harvard University
M.B.A., National University

Smith, Mary (2009)
Nurse
A.A., A.S., Fresno City College
B.A., University of California, Davis F.N.P., M.S., California State University, Fresno

Solberg, Eric (1999)
Physical Education
B.S., California State University, Fresno
M.S., U.S. Sports Academy

Sosa, 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

Sousa, Daniel J. (1992)
Apprenticeship
A.A., Fresno City College
B.S., M.S., California State University, Fresno

Spohrer, Nicholas (2006)
Art, Printmaking
B.A., University of California, Santa Cruz M.FA., University of Nebraska

Staebler, Diane (2013) Biology
B.A., M.A., California State University, Fresno

Stanton, Ray (1990)
Mathematics
B.S., University of the Pacific
M.A., Fresno Pacific College

Ed.D., University of Southern California
Stavytska-Barba, Marina (2015) Chemistry
A.S., Merced College
B.S., East Ukrainian National University
B.S., California State University, Stanislaus Ph.D., University of California, Merced
Steeley, Jodie (2016)
Director of Distance Education
A.A., Modesto Junior College
B.A., California State University, Stanislaus
M.A., California State University, Sacramento

Ph.D., Capella University
Stephenson, Wendell (1999)
Philosophy
B.A., Westmont College
M.A., Ph.D., University of California, Santa Barbara

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

Sullivan, Cheryl (2012)
Vice President of Administrative Services
A.S., Fresno City College
B.S., M.S., California State University, Fresno

Swain, Eric (2015)
Athletic Director
B.A., University of Nevada
M.A., California State University, Fresno

Takeda, Michael (2014)
English
B.A., Sonoma State University
M.A., Fresno Pacific University

Tannen, Jeffery (2008)
English
B.A., M.F.A., California State University, Fresno

Tarazi, Teresa (2000)
English
B.A., M.A., California State University, Fresno

Teeple, John (2011) Geography
B.A., M.A., University of Kansas

Temmerman, Simon (2011)
Mathematics
B.A., M.A., California State University, Fresno

Tessler, Brian (1999)
Physical Education
B.A., California State University, Fresno
M.S., National University

Thepphavong, Khamphon (2014)
Counselor
A.A., Fresno City College
B.A., M.A., California State University, Fresno

Thiessen, Jolene (2001)
Business \& Technology
B.A., Tabor College
M.B.A., National University

Thurston, Gerald (2003)
Communication
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

Tuttrup, Richard J. (2000)
Business and Technology
B.A., California State University, Long Beach
M.B.A., California State University, Fresno

Ugwu-Oju, Dympna (1994)
Journalism
B.A., Briarcliff College
M.S., Syracuse University

Ph.D., California State University, Fresno and
University of California, Davis
Uvarov, Catherine (2016)
Chemistry
B.S., Ph.D., University of California, Davis

Valentino, Mary Ann (2004)
Psychology
B.A., San Diego State University Ph.D., California School of Professional Psychology
Van Vleet, Patricia N. (1991) Linguistics/English for Multi-Lingual Students B.A., M.A., California State University, Fresno

Vanderpool, Neil (2015) Dean of Instruction, Fine, Performing and Communication Arts Division
B.A., Brigham Young University
M.F.A., University of Oregon

Vang, Linda (2007) Sociology
B.A., Mount Union College M.S.W., M.A., University of Pittsburgh Ed.D., University of California, Davis/California State University, Fresno
Vasquez, Guadalupe (2015) Coordinator Psychological Services Ph.D., Alliant International University
Vasquez, Rojelio (2014) Interim Vice President of Student Services
B.A., Fresno Pacific University
M.B.A., University of Phoenix
M.B.A., California State University, Fresno

Velasquez, Sarah (2007)
Political Science
B.A., California State University, Long Beach
M.A., California State University, Fullerton

Vellandi, Christian J. (2005)
Chemistry
A.S., Columbia College
B.S., M.S., California State University, Fresno

Vidinoff, John M. (2003)
Mathematics
B.A., California State University, Fresno
M.A., Fresno Pacific University

Villalba, Tabitha (2009) Writing and Reading Center Coordinator B.A., M.F.A., California State University, Fresno

Vinicor, Melinda (2009) Sociology
B.A., Pepperdine University
M.A., San Jose State University

Vogel, Pamela (2014)
Nursing
B.S., St. Louis University
M.S., Southern Illinois University

Voth, Joseph (2015) English
B.A., M.F.A., California State University, Fresno

Waller, Tammie (2005)
Computer Information Technology
A.S., West Hills College
B.S., California State University, Fresno M.S., National University

Wasemiller, 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

Watts, Anne (2008) Director of CalWORKs B.A., M.B.A., Eastern Washington University

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

West, Laura (1999) Art
B.F.A., Southern Illinois University M.F.A., Idaho State University

Williams, Forrest (2007) Psychology B.A., M.A., California State University, Chico

Williams, Rhonda (1999) Physical Education B.A., Fresno Pacific M.A., California State University, Fresno

Williams, Ria (2015) English
B.A., M.F.A., California State University, Fresno

Woods, Matthew (2015) Mathematics
B.A., M.A., California State University, Fresno

Woods, Timothy (2010)
Dean of Instruction, Career and Technology Center and Workforce Development Division
B.A., University of California, Riverside M.A., California State University, Fresno Ph.D., Walden University
Yang, David (2013)
Mathematics
B.A., M.A., California State University, Fresno Ph.D., University of California, San Diego
Yang, Jim (2016)
Mathematics
B.A., M.A., California State University, Fresno

Yang, Mai (2007)
Librarian
B.A., California State University, Fresno
M.A., University of Illinois, Urbana

Yang, Shou (2014)
EOPS Counselor
B.A., M.S., California State University, Fresno

Yang, Victor Bee (1999) Counselor
B.S., University of Nebraska at Omaha
M.S., National University

Yates, Seth (2010)
Chemistry
B.A., Fresno Pacific University
M.S., California State University, Fresno

Ybarra, Kerry (2007)
Philosophy/Humanities
B.A., California State University, Fresno
M.A., California State University, San Francisco
M.A., University of Colorado, Boulder

Zamora, Kenneth C. (1992)
Architecture
A.A., College of the Sequoias
B. Arch., B.S., California Polytechnic University, San Luis Obispo
Zhai, Lijuan (2010)
Director of Institutional Research, Assessment and Planning
B.S., Shandong Agriculture University sM.S., Ph.D., Ohio State University

## Classified Professionals

|  |
| :---: |
| Erica Abbs <br> Administrative Secretary I |
| Miles Abrahamson Bookstore Manager |
| Alexis Adams Institutional Research Coordinator |
| Anne Adams Office Assistant III |
| Norma Aguilar Financial Aid Assistant II |
| Stephanie Alaniz <br> Administrative Aide |
| Jose Alcorta Custodian |
| Mary Alfieris Veterans and International Student Services Coordinator |
| Frank Anaya, III Instructional Technician $\oplus$ Auto Body and Fender |
| Randy Anaya General Utility Worker |
| Thomas Andrews General Utility Worker |
| Ivy Arana <br> Bookstore Shipping/Receiving Specialist |
| Joanna Arenas Department Secretary |
| Monica Armenta Administrative Aide |
| Jamien Armstrong Library/Learning Resources Assistant II |
| Moses Avila <br> Audio Visual Technician |
| Edward Baiz General Utility Worker |
| Carrie Baize Office Assistant III |
| Howard Barile <br> Accounting Technician I |
| Jeffrey Barrett <br> Theatre Manager |

Arthur Baylon
Custodian
Virginia Beamer
Department Secretary
Heather Beltran
Department Secretary
Judith Bennett
College Relations Specialist
Kelley Benzler
Administrative Aide
Stephanie Bisbee
Instructional Assistant - Nursing
Kathleen Bonilla
Public Information Officer
Michael Bourbonnais
Micro-Computer Specialist
William Bowlin
Micro-Computer Resource Technician

Anthony Bravo
Educational Advisor
Kathy Braze
Department Secretary
Cristina Bremer
College Director of Marketing and Communications

Richard Briones
Custodian
Rose Brownell
Educational Advisor
Eleanor Bruce
Accounting Clerk III
Melanie Bryant
Office Assistant II
Lisa Cartwright
Department Secretary
Victoria Castro
Instructional Technician $\cap$ Biology
Frances Catlapp
Department Secretary
Robert Cawley
Library/Learning Resources
Assistant III

David Chacon
Custodian
Ellen Chernekoff
Early Childhood Education
Associate
Joyce Clark
Department Secretary
Nathan Clark
Micro-Computer Specialist
Nileen Clark
Administrative Aide
Terri Clement
Early Childhood Education
Associate
Sheila Collins
Early Childhood Education Specialist

Cory Condry
Instructional Technician - Art
David Cook
Printing Trades Technician
Mike Coppedge
Accounting Technician II
Alicia Cowan
Office Assistant III
David Cowan
Copy Center Specialist
Kendra Cronk
Sign Language Interpreter IV
Jered Crump
Custodian
Sylvia Cuevas
Financial Aid Assistant I
Christopher Cupp
Bookstore Sales Clerk III
Naira Danielyan Evaluator
Steve DaSilva
Instructional Technician $\cap$ Greenhouse

Elizabeth Davidian Accounting Technician I
Rachel Del Real Instructional Aide

Theresa Delaney
Library Technical Services Assistant
Julian Delgado Micro-Computer Specialist

Mary Delgado Library/Learning Resources
Assistant III
Cindy DeSutter
Instructional Aide
Larry Dickson
General Utility Worker
Marta Diliberto
Administrative Aide
Sherri Dodd
Accounting Clerk III
Mary Doyle
Print, Media \& Communications Manager
Cynthia Dunn Job Placement Coordinator
Katherine Echols Student Services Specialist
Leah Edwards Department Secretary
Theresa Ervin Accounting Technician I
Kathleen Ervine Early Childhood Education Specialist
Anthony Estrada
Instructional Technician
$\bigoplus$ Automotive
Leslie Farrell Student Personnel Services Assistant

Mary Ferdinand-Smith Sign Language Interpreter III
Beth Fields
Office Assistant III
Daniel Fierro
Custodian
James Fink
Physical Education Attendant
Judi Fischer
Bookstore Sales Clerk II

| Kimberly Fischer Office Assistant III | Christine Gough <br> Sign Language |
| :---: | :---: |
| Denise Flores | Interpreter/Coordinator |
| Administrative Secretary I | Sabrina Gray |
| Abrian Florez | Office Assistant II |
| Lead Custodian | Alvin Greathouse |
| Jennifer Franklin | Custodian |
| Administrative Aide | Homer Greene, Jr. |
| Kathy Frary | Educational Advisor |
| Office Assistant III | Nancy Gross |
| Tammy Gallagher | Administrative Aide |
| Early Childhood Education | Ricco Guajardo |
| Associate | Electronics/Microcomputer |
| Frank Gallegos | Technician |
| Mobility Driver | Sue Hammond |
| Terri Gallegos | College Trainer |
| Bookstore Sales Clerk III | Maria Handy |
| Stephanie Gamez | Library Services Assistant |
| Early Childhood Education Associate | Loretta Haney Department Secretary |
| Lili Gao Institutional Research Coordinator | Kenneth Hardin Office Assistant III |
| Sandra Garachana Administrative Aide | Lisa Hayes Administrative Secretary I |
| Ernesto Garcia Educational Advisor | Wilhemina Henderson Office Assistant II |
| Graciela Garcia Food Service Worker I | Gavino Heredia Office Assistant III |
| Jacque Gaston Micro-Computer Specialist | Tamara Herman Department Secretary |
| Michael Gerard | Abel Hernandez |
| Instructional Technician- | Custodian |
| Micro-Computer Lab | Monica Hernandez |
| Scott Gerety Student Services Specialist | Custodian and Physical Education Attendant |
| Page Getty Evaluator | Randal Hernandez Instructional Aide |
| Maile Glover Martin College Center Assistant | Sheng Herr Accounting Technician I |
| Heather Golden Office Assistant II | Barbara Hinkle Department Secretary |
| Melissa Goodlad | Josefa Huckeba |
| Instructional Technician - | Department Secretary |
| Chemistry/Physical Science | Trina Hughes Administrative Secretary |

Sign Language Interpreter/Coordinator
Sabrina Gray Office Assistant II

Alvin Greathouse Custodian
Homer Greene, Jr. Educational Advisor

Nancy Gross Administrative Aide
Ricco Guajardo Electronics/Microcomputer Technician

Sue Hammond College Trainer
Maria Handy Library Services Assistant
Loretta Haney Department Secretary
Kenneth Hardin Office Assistant III

Lisa Hayes Administrative Secretary I
Wilhemina Henderson Office Assistant II

Gavino Heredia
Office Assistant III
Tamara Herman Department Secretary
Abel Hernandez Custodian
Monica Hernandez Custodian and Physical Education Attendant
Randal Hernandez Instructional Aide
Sheng Herr Accounting Technician I
Barbara Hinkle Department Secretary
Josefa Huckeba Department Secretary
Trina Hughes Administrative Secretary

| Kelly Hurst DSP\&S Mobility Driver | Rosa Lopez Evaluator |
| :---: | :---: |
| Linda Jackson | Benjamin Lozano |
| Library/Learning Resources | Graphic Artist |
| Assistant III | John Luna |
| Fidel Jauregui | Custodian |
| Custodian | Rita Luna |
| Dale Jimenez | Department Secretary |
| Accounting Clerk III | Brittany Lusk |
| Donnie Johnson Athletic Equipment Manager | Instructional Technician Chemistry/Physical Science |
| Mikki Johnson Campus Financial Aid Manager | Linda Lyness Accounting Technician I |
| Susan Johnson Administrative Secretary | Mayra Machain Accounting Technician I |
| Tasha Johnson Educational Advisor | Tamara Maddox Accounting Supervisor |
| Marvin Jordan, II Custodian | Sunnie Mahavong Student Services Specialist |
| Aarne Kela Piano Accompanist | Rosemary Mahoney Office Assistant III |
| Cathleen Kozielski Accounting Technician II | Lynn Mallory Administrative Assistant |
| Charles Kralowec Research Assistant | Josephine Mancillas-Llanos Scholarship Specialist |
| Renee Kubo | Pearl Mangum |
| Library/Learning | Administrative Aide |
| Resources Assistant III | Eleni March |
| Christopher Lang | Student Services Specialist |
| Theatre Manager | Janine Marklund |
| Jenny Langworthy | Educational Advisor |
| Sign Language Interpreter II | Christopher Martin |
| Gwun Lau Accounting Technician I | Micro-Computer Resource Technician |
| Sherry Lawson Department Secretary | Nora Martin Accounting Clerk II |
| Joseph Lescoulie Micro-Computer Specialist Resource Technician | Sean Martin Audio-Visual Maintenance Specialist |
| Susan Lopes Office Assistant III | Dawn Martinez <br> Instructional Technician-Costume |
| Stephanie Lopez Pedrosa | Maker |
| Office Assistant III | Patricia Martinez |
| Erasmo Lopez | Office Assistant II |
| Custodian | Steven Mata Custodian |

Mary Mathos Financial Aid Assistant I
Mary Mattern Early Childhood Education Specialist

Keelin McCabe Administrative Assistant
Debra McCollum Phone Communications Operator II

Samantha McGregor Office Assistant I

Shannon McKibben Administrative Assistant

Mark McNiff Educational Advisor
Jonathan Medina Student Services Specialist

Barbara Mendoza Textbook Purchasing Clerk
Tamra Miller Administrative Secretary

Jeannie Morgan Accounting Technician I
Susan Mosqueda Office Assistant II

Mary Beth Mosette Director of CalWORKs

Jennifer Mtunga Theater Box Office Cashier

Jose Munoz Custodian

Jennifer Nassar Accounting Clerk III
John Nelson College Trainer
Nathan Newsom Custodian
Debra Nichols Webmaster
Laurie Nichols Office Assistant III
Mark Nichols Micro-Computer Resource Technician

| Susan Nitzel <br> Campus Business Assistant | Michael Richards Lead Custodian |
| :---: | :---: |
| Kelli O'Rourke Curriculum Analyst | Erica Riggs Financial Aid Assistant I |
| Katelyn Oliver Accounting Technician I | Melody Riversmith Business Facilities Assistant |
| Francisco Olvera Custodian | Andrew Rocha Micro-Computer Specialist |
| Emelita Pacada Office Assistant II | Heather Rodriguez Office Assistant III |
| Alemario Padua Accounting Technician II | Ryan Rooks Micro-Computer Specialist |
| Cynthia Peek Tutorial Assistant | Roy Rosa <br> Financial Aid Assistant I |
| Yadira Peralta Financial Aid Assistant I | Jim Rothford Athletic Equipment Manager |
| Denee Perea Office Assistant III | Dwight Samuel Custodian |
| Maria Petrogonas Early Childhood Education Associate | Silvia Sanchez Office Assistant III Penny Sandlin |
| Channie Phantharath Evaluator | Accounting Clerk III Delfina Sandoval |
| Henry Polanco, Jr. Custodian | Office Assistant III Suzanne Sankey |
| Nicole Pondexter Office Assistant I | Automotive Parts Technician Jeffrey Santellano |
| Ronald Potter, Jr. Lead Custodian | Instructional Technician Microcomputer Lab |
| Stephanie Powers-Puahi Office Assistant III | Frances Santillan Custodian |
| Tanya Pryor Accounting Technician I | Janet Santillan Bookstore Purchasing Clerk |
| Carlos Puente, Jr. Custodian Manager <br> Kim Quesada | Roland Schreiner Systems Technical Resource Analyst |
| Secretary to the President | Carolina Shimer |
| Jeanette Quiroz | Assessment Coordinator |
| Financial Aid Assistant I Carol Rains-Heisdorf | Helen Shubin Custodian |
| Institutional Research Coordinator Charles Record | Anthony Slade Custodian |
| Custodian | Emilee Slater |
| Edwin Reed Custodian | Director of College Relations and Outreach |

Phila So Office Assistant II
Eddie Standifer II Custodian

Deborah Stovall Bookstore Sales Clerk III
Amy Strobel Faculty Sign Language Interpreter

Marci Survanto Office Assistant III
Cynthia Tafoya-Gipson Office Assistant II

Gina Tarvin Accounting Technician II
Bobbie Tello-Perez Student Services Specialist
Irene Thirlwall Department Secretary
Crystyn Thorpe Office Assistant II

Pamela Tibbet Educational Advisor
Andrea Torrez Office Assistant III

Robert Torrez Assessment Technician
Joseph Tristan Custodian

Ruthann Van Buren Office Assistant II
Anne Van Galder Office Assistant III

Choua Vang Office Assistant II

Sunny Vang Evaluator

Teng Vang Accountant/Auditor
Majru Varughese Instructional Technician - Biology

Jose Vasquez Rivera Office Assistant I
Joel Villar Instructional TechnicianAutomotive

| Albert Villegas-Villagomez | Jonathan Wilson | John Yang |
| :--- | :---: | :---: |
| Custodian | Distance Ed/Information | Upward Bound Assistant |
| Lisa Vincent | Technology Support Technician | Neng Yang |
| College Relations Specialist | Nancy Withrow | Custodian |
| Jill Webb | Office Assistant III | Pa Nhia Yang |
| Piano Accompanist | Daniel Wong | Early Childhood Education |
| James Went | Instructional Technician- | Associate |
| Custodian | Reprographics | Pao Yang |
| Leah Whitaker | Janice Wong | Phone Communications |
| Department Secretary | College Center Assistant | Operator II |
| Maria Wiget | Mary Beth Wynn | Amy Yocupicio |
| Office Assistant II | Job Placement Specialist | Human Resources Technician |
| Artie Williams | Peter Xiong | Harold Zahlis, Jr. |
| General Utility Worker | Mobility Driver | Network Coordinator |
| Phyllis Willis | Houa Yang | Ramon Zapata |
| Administrative Secretary | Educational Advisor | Instructional Technician- |
|  |  | Body and Fender |

## Emeritus Faculty

Aguilar, Luis E.
1985-2014
Automotive Collision Repair (CTC)
Albright, Linda S.
1981-2009
Nurse
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
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
Bates, Robyn L.
1990-2015
Art
Beck, Allen
1974-2008
Anthropology

Bell, Calvin
1968-1984
Counselor
Bell, Edward
1979-1986
Auto Mechanics
Bengel, Earl
1968-1997
Engineering
Bill, Gerald M.
1970-2008
Sociology
Bingham, Isabell H.
1970-1982
Home Economics
Blackburn, Norma D.
1961-1979
Legal Secretaryship
Boucher, Richard
1964-1996
Electronic Technology
Bourdet, Malcolm L.
1957-1990
Physical Education
Brennan, Jennifer A.
2004-2014
Nurse
Brooks, Walter
1970-2008
Counselor
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
Byrd, Ronald F.
1968-2001
Librarian
Byrns, Dennis C. 1995-2011
Fire Technology

Carlisle, Elizabeth
2005-2007
Speech
Castagna, Paula
1992-2011
Mathematics
Cheney, Judith
1999-2016
Dental Hygiene
Chow, Richard
1968-1991
Reprographics, Industrial Education
Christian, Peter C.
1958-1981
English
Christl, Richard I.
1970-2011
Dean of Instruction, Applied Technology
Division
Cleveland, Sandra
1976-2007
Nursing
Colby, Camilla
1969-2007
Spanish
Cole, Wayne
1990-2011
English
Cornwell, Gerald D.
1961-1990
Business
Covington, Jeanette A.
1982-2014
Learning Disabilities, English
Crider, Andrew B.
1998-2012
Director of Career \& Technology Center
Culp, Robbey C.
1995-2010
Chemistry
Cummings, John H.
1996-2011
Vice President, Admissions and Records
Curry, Ruth
1981-1998
Philosophy, English, Humanities
Davy, Thelma L.
1965-1973
English

| Deeter, Gary, <br> 1981-2008 <br> Music |
| :---: |
| DeKoning, Richard M. 1958-1982 <br> Drafting, Mathematics, Architecture, Industrial Education |
| DePry, Ronald N. 1970-1993 Biology |
| Dickie, David R. 1965-1996 <br> Drafting, Industrial Education |
| Discont, Conrad M. 1963-1994 English, Humanities, Speech |
| Dose, Kenneth D. 1971-1999 Physical Education |
| Dotts, John 1981-1996 <br> Industrial Education, Construction, Mathematics |
| Dougherty, Sara 1955-1981 <br> Physical Education |
| Douty, Douglas A. <br> 1984-2012 <br> Electronic Technology |
| Doyland, Russell A. <br> 1961-1983 <br> Accounting |
| Drake, Carolyn C. 1978-2013 <br> Dean of Instruction, Health Sciences Division |
| Draper, C. Dean 1960-1987 Art |
| Duncan, Janet 1990-2006 Business \& Technology |
| Dzerigian, Steven V. 1987-2008 Photography |
| Eckenrod, Gervase A. 1955-1984 <br> Associate Dean of Instruction, Business Division |
| Eckenrod, Sherian H. 1979-2003 <br> Associate Dean of Instruction, Business Division |

Edman, Leland M.
1975-1991
Administration of Justice
Eischen, Clifford
1964-1998
Business Administration, Management
Elgin, Judy A.
1987-2010
Business and Technology
Elgorriaga, Carmen
1970-1994
English, Spanish
Elliott, Jacqueline
1995-2006
Art
Emerling III, Fred M.
1984-2013
Counselor
Engel, Kathleen
1980-2008
Nursing
Estrada, Gonzolo
1965-1984
English
Estrada, Joan E.
1964-1989
Accounting
Ewing, James
1990-2013
English
Farley, Lee
1981-2015
Dean of Students, EOPS
Farrington, Gerald
1970-2003
History, Political Science
Ferguson, Phillip
1972-1982
Mathematics
Fischer, Laurene J.
1965-1995
Business Administration, Computer Information Technology
Fox, Robert E.
1980-2009
Vice President of Students
Franz, James J.
2000-2008
Economics
Frese, Joan
1995-2016
Computer Information Technology

Fries, Bobby
1965-1991
Health Education, Track
Fuller, Pauline M.
1977-2013
Counselor
Gaither, Loren F.
1964-1996
Mathematics
Gaona, Venancio Garcia 1969-1999
Spanish
Gartman, Grace 1989-2005 Tutorial Resources
Gibbs, Richard R. 1966-1994 Economics, Psychology
Glenn, Marilyn R. 2002-2014 Counselor
Gonzales, Paul 1989-2007 Radiologic Technology
Graham, Ronald J.
1987-2005
Criminology
Green, M. Fred 1962-1984
Engineering
Grover, Stanford C. 1966-1977
Counselor
Grover, Stephen C.
1984-2015
Mathematics
Gunn, Donald L. 1971-1992
Theatre Arts, Speech
Hald, Kenneth
1949-1972
Biological Sciences
Hallstone, Kenneth 1968-2002
Psychology
Handley, Richard 1955-1980
Associate Dean of Instruction, Occupational Education
Hanson, William F. 1946-1978
Director, Vocational Training Center


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
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

District Associate Dean of Financial Aid

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
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
Mascarenas, Timothy E.
1971-2004
Automotive Technology
Mateo-Laeno, Mary Ann
1990-2007
Child Development
Mattox, Jack V.
1966-2001
Health Science
McCarthy, John R.
1951-1977
Health Education
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
Merlier, Christiane M. 1984-2008
ESL, French
Meyer, Kent R.
1962-1987
Accounting
Miller, Mary E. 1960-1984 Secretarial Science
Moller, Richard T.
1968-1990
Mathematics
Moncibais, Gordon
2011-2016
Fire Technology
Moore, Bessie M. 1971-1984 Vocational Nursing
Moore, Joseph Jr. 1966-1999 History, Political Sciences
Moore, Marilyn 1984-2013
Child Development
Moorehouse, Richard L. 1974-1993
Director, Dental Hygiene Program
Moran, Charles L. 1959-1989
Botany, Biology
Morgan, Carl H. 1955-1973
Physics, Mathematics
Muldoon, Marcia 1995-2006
English
Munshower, Donald 1984-2003
Counselor
Murphy, Connie J. 1984-2007 Business \& Technology
Naimpally, Ashok 2007-2014 Dean of Instruction, Mathematics, Science and Engineering Division

Neal, Stanley B.
1990-2005
Welding, Metal Fabrication
Neal, William A.
1961-1990
Mathematics
Nelson, Carl C.
1966-1994
Biology
Neuman, Darlene H.
1962-2000
Business \& Technology
Newcomb, Joan T.
1971-2001
Sociology, Child Development
Nielsen, Robert 1961-2001
Music
Nishimoto, Henry
1980-2007
Economics
Ogden, Gordon L.
1975-1994
Director, Health Sciences
Ohanian, Gregory
1999-2015
Physics, Engineering
Okkerse, Victor J.
1959-1984
Secretarial Science
Olson, Kenneth E. 1990-2012
Electronic Technology, Automated Technologies
Osborne, Leon 1959-1995
Art
Owens, Kenneth B. 1963-1999 Art
Parks, John L. 1996-2009 Air Conditioning
Pauls, Albert N. 1963-1990 Secretarial Science
Paulson, Richard S. 1955-1984 Speech
Paz, Isias E. 1971-1996 Spanish, German

Peart, Gilbert M.
1958-1977
Marketing
Perkins, Alvan E.
1964-1990
Counselor
Pool, June E.V.
1956-1984
Vocational Nursing
Porter, Ralph W.
1971-2003
Biology
Putnam, Marlene S.
1984-2001
Business \& Technology
Quercia, Olga
1996-2014
Music
Quinn, Charles T.
1970-2003
Theatre Arts, Speech
Quintana, Frank M.
1970-2006
Associate Dean of Instruction, Fine,
Performing, and Communication Arts Division
Racki, David
1985-2013
Librarian
Rail, Lester DeWayne
1971-2000
Director, Arts, Honors \& Student Success
Ramay, Morris W.
1972-2000
Respiratory Care
Ramon, Frank
1972-2010
Director, Financial Aid
Rash, Lucille 1970-2003
Business \& Technology
Rawate, Prabhu
1990-2005
Chemistry
Reid, Birt
1973-2007
Counselor
Reynolds, Jr., William A.
1957-1978
French
Reznik, Zwi
1990-2010
Mathematics

Richardson, Robert L.
1968-2005
Counselor
Ritter, James J.
1984-2002
Maintenance Mechanic (CTC)
Rios, Cruz F.
1976-1986
Automotive Mechanics
Roach, Darlene
1985-2012
Counselor
Roberts, Michael 1992-2015
English
Rohrer, Martha J.
1976-1981
Home Economics
Rose, Bronwen Wendy 1984-2003
Native American Studies
Ross, James Edward
1971-2002
Mathematics
Rowe, Andrew F.
1962-1990
Mathematics
Ruston, James R.
1967-1995
English, Speech
Ryan, Judy L. 1988-2015 English
Ryska, John W. 1965-1982
Counselor
Sabbatini, LeRoy A. 1976-1999 Automotive Collision Repair
Saddler, James
1990-2008
English
Safer, Joseph
1963-1985
Data Processing
Sakata, Kenneth
1981-2003
Cabinetmaking Technology
Sall, Gerald
1977-2007
CTC Counselor

Salrin, Ralph E.
1961-1986
Accounting
Sample, Brooke
1990-2016
Instructor, Disabled Students
Programs and Services
Sandau, Richard R. 1959-1983
English
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, Rueben A.
1971-2005
English, Philosophy
Scott, William F. 1967-1984
Geography
Seaberg, William
1980-1998
Associate Dean of Instruction, Learning
Resources
Seely, Irene 0.
1989-2009
Biology
Shepard, James H.
1987-2005
Art
Shine, G. Dennis Jr.
1968-1993
Economics, Business Administration
Shirley, W. Delton
1968-2001
Biology
Simba, Ceroasetta 1997-2013
English
Smith, Bernice V. 1972-1978
Librarian

| Smith, Dorothy E. 1965-1978 Nursing | Takeuchi, Leo S. 1959-1992 <br> Associate Dean of Instruction, | Waters, Rosemary <br> 1972-2009 <br> Biology |
| :---: | :---: | :---: |
| Smith, Shannon | Technical \& Industrial Division | Watson, Donald G. |
| 1958-1980 | Taylor, Mary A. | 1968-2005 |
| Flight Science, Industrial Education | 1975-2011 | Counselor |
| Solwazi, Kehinde | Nursing | Wayte, William R. |
| 1970-2011 | Temple, Donald | 1968-1999 |
| African-American Studies | 1990-2016 | Physical Education |
| Sorensen, Royal $1976-1978$ | Decision Science/Computer <br> Information Technology | Weinschenk, Franz A. 1954-1980 |
| Microbiology | Templer, William F. | Associate Dean of Instruction, Humanities |
| Sosa, Luis R. 1977-1993 | 1975-1999 <br> Physical Geography, Earth Science | Weidenhoefer, Hans 1948-1984 |
| Sociology, Human Services | Terry, Blair | Director of Athletics, Physical Education |
| Spencer, Lowell 1948-1978 | 1974-2001 Accounting | Whitt, C. Thomas 1969-2001 |
| Music | Thomas, Pamella | Criminology |
| Spolsdoff, John 2000-2008 | 1984-2013 <br> English | Wilson, Vernon L. 1976-1988 |
| Director, Student Success \& Honors | Tognazzini, Eugene A. | Radiologic Technology |
| Stanley, Vance 1972-1999 | 1984-2011 <br> Mathematics | Woodman, Joseph B. 1948-1976 |
| Physical Education | Toomasian, John | Auto Mechanics |
| Stark, Charles M. 1966-1990 | 1961-1995 History | Woodruff, Jr., Elbert N. 1971-1984 |
| Physical Education | Tucker, James | English |
| Statham, Yolanda A. <br> 1964-1984 <br> English | 2006-2011 <br> Dean of Instruction, Library and Student Learning Support Services | Woods, MaryAnn 1989-1999 <br> Medical Assisting, Health |
|  | Valencia, Richard | Information Technology |
| 1962-1984 <br> Physical Education | 1976-2007 <br> Sociology | Wosika, Kathleen A. 1975-2012 |
| Stokle, J. Gerald | Van Gerpen, Maurice | Art |
| 1967-1999 <br> Associate Dean of Instruction, | 1959-1999 <br> Political Science | Wrzalinski, Eugene S. 1984-2003 |
| Social Science Division | Vinicor, Donald J. | Environmental Technology |
| Stone, Carol J. 1990-2010 | 1970-1997 | Yarbrough, Thomas 1997-2014 |
| Home Economics | Waddle, Carl D. | Engineering |
| Stubblefield, Gertrude 1930-1960 <br> Secretarial Science | 1965-1997 <br> Associate Dean of Instruction, Humanities, and Health Sciences \& the Arts | Yates, Susan 1984-2013 <br> Athletic Director, Physical Education |
| Susnick, Ruthford 1999-2010 <br> Automotive Mechanics CTC | Wall, Kenneth G. 1979-2002 <br> Construction | Young, Nain T. 1962-1984 <br> Registered Nursing |
| Syvertson, William A. 1990-2015 <br> Business Administration/Marketing | Walzberg, Laura Ann 1985-2014 <br> Nursing | Zepeda-Esparza, Josephine 1969-1995 <br> English, Spanish |
|  | Wash, Dennis C. 1974-1996 <br> Air Conditioning, Industrial Education |  |

## Emeritus Classified Professionals

Aeikens, Patricia
1983-2016
Accounting Technician I
Aguilar, Yolanda
2001-2011
Student Services Specialist
Anderson, Robin
1979-2011
Department Secretary
Andrews-Boock, Sharon
1988-2008
Administration Aide
Archuleta, Irene
1990-2004
Administrative Aide
Barber, Joan
1974-2007
Office Assistant III
Barlow, John
1991-2011
Custodian
Barnett, Karin
2003-2011
Textbook Purchasing Clerk
Battcher, Shirley
1999-2011
0ffice Assistant II
Belk, James
1982-2004
Library/Learning Resources Assistant III
Biddy, Delores
1977-2015
0ffice Assistant III
Bischel, Steve
1973-2007
Custodian
Bogdanoff, Gerald
1980-2004
Electronics/Microcomputer Technician
Bravo, Juan
1988-2014
Custodial Manager
Brooks, Edward
1977-2010
Custodian
Depell, Cartment Secretary
Depmen
Ald

Carr, William
1999-2010
Financial Aid Assistant II
Christiansen, Argilia
1977-2003
Textbook Purchasing Clerk
Cox, James
1992-2010
Athletic Equipment Manager
Culbertson, Christine
1987-2014
Early Childhood Education Specialist
Day, Charlezsette
1989-2016
Job Developer
Ediger, Patricia
2006-2013
Department Secretary
Ediger, Stanley
2006-2014
Educational Advisor
Estrada, Ruthina
1987-2013
Administrative Aide
Faith, Linda
2001-2010
Department Secretary
Flanders, Veronica
2007-2015
Department Secretary
Flores, Delfina
1977-2007
Student Services Specialist
Fouquette, Brenda
1988-2012
Library/Learning Resources Assistant II
Gerety, Cheryl
1990-2012
Office Assistant III
Greenwood, Phyllis
1990-2010
Department Secretary
Guillen, Guillen
2006-2011
Custodian
Hagler, Linda
1992-2008
School Relations Specialist

Harris, Elizabeth
1980-2005
Administrative Assistant
Harris, Linda
1990-2015
Textbook Purchasing Clerk
Harrison, Richard
1990-2015
Print, Media \& Communications Manager
Hendricks, Debra
2006-2014
Administrative Aide
Jimenez, Jess
1997-2004
Athletic Equipment Manager
Johnson, Cathie
1989-2015
Financial Assistant I
Kilgore, Richard
1992-2011
Instructional Technician - Art
Kohl, Mona
2001-2014
Administrative Aide
Komaki, Hiro
1975-2005
Graphic Artist
Kroeker, Jay
1970-2004
Audio Visual Maintenance Specialist
Larsen, Dale
2002-2007
Financial Aid Assistant
La Voie, Charles
1990-2013
Micro-Computer Resource Technician
Lippmann, Frances
1992-2015
Admissions and Records Manager
Linn, Carolyn
1991-2004
Administrative Aide
Livengood, Robert
1982-2005
Instructional Technician-Auto
McSwain-Tennent, Holly
1997-2005
Administrative Aide

Mena, Salvador
1973-2007
Educational Advisor
Mendoza, Linda
1993-2013
Office Assistant III
Miller, Donna
1985-2003
Business Facilities Assistant
Miller, Toni 0.
1973-2004
Educational Advisor
Moorer, Lewis
1983-2008
Lead Custodian
Murrietta, Leticia
1974-2014
Administrative Aide
Myers, Doris
1988-2009
Office Assistant III
Pelham-Wiley, Emma
1987-2003
Nursing Skills Resource Assistant
Peterson, Sandra
2007-2012
Department Secretary
Pinley, Lisa
2000-2014
Evaluator
Pisching, George
1990-2008
Graphic Artist
Points, Susan
1987-2011
Duplicating Operations Technician
Rackin, Marilyn
1975-2007
Secretary to the President
Ragasa, Erlinda 2001-2016
Accounting Technician I
Ramirez, Judith
1992-2014
Educational Advisor
Reid, Ora
1985-2010
Custodian

Rice, Mary
1998-2012
Student Services Specialist
Riegel, Rhea
2001-2012
Institutional Research Coordinator

## Rivera, Donna

1973-2009
Assistant Bookstore Manager
Roe, Franklin
1998-2010
Job Development
Rogers, Phyllis
2006-2016
Office Assistant II
Ruby, Michelle
1990-2016
Assessment Coordinator
Slevkoff, Hazel
1970-2006
Curriculum Assistant
Sullivan, Francis
1975-2003
Theatre Manager
Staebler, Kathleen
1995-2009
Administration Secretary
Taylor, Gail
1997-2011
Administrative Aide
Tortensen, Jeffrey
1992-2007
Department Secretary
Supersad, Pearl
1972-2011
Department Secretary

Uribes, Regina
1999-2011
College Relations Specialist
Van Dyken, Robert
2003-2014
Custodian
Vargas, Sandra
1973-2011
Campus Business Assistant
Vennard, Michael
1992-2005
Instructional Technical-Reprographics
Wilk, Woody
1985-2009
News Writer/ Sports
Willingham, Tandy 1982-2004
Library/Learning Resources Assistant III
Willis, Carole
1999-2004
Office Assistant I
Whisenhunt, Lydia
1969-2010
Secretary to the President
Whittle, Oscar
1987-2013
Custodian

## In Memoriam

## Doug Barnard

Air Conditioning Instructor

Thomas Yarbrough
Engineering Instructor

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[^6]ㅍNN్ల~ District Office (DO)
Career and Employment Center (LI)
Language Arts (LA)
Art/Home Economics (AH)
Speech/Music (MS)


Campus Buildings:
Old Administration Building (OAB) Cafeteria/Student Lounge/ Staff Dining Room (C)
Gymnasium(P)
Practice Gym (PG) Memorial
Student Center/Bookstore (SC) Business Education (BE)
Social Sciences (SO)
C
1
2
3


## Fresno City College <br> IIOI East University Avenue Fresno, California 9374 I www.fresnocitycollege.edu


[^0]:    * Fees are subject to change without notice.

[^1]:    * Fees are subject to change without notice.

[^2]:    * Fees are subject to change without notice.

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

[^4]:    * AT 40 can be substituted for BT 23.
    ** EST 57A and EST 57B may be substituted for CIT 45.

[^5]:    102 TRANSITION TO FRESNO CITY COLLEGE REGISTERED NURSING PROGRAM SKILLS
    1-2 units, 3-6 lab hours
    COREQUISITE: Registered Nursing 101.
    Required for all students entering the Fresno City College Registered Nursing Program as an advanced placement student including LVN to RN and transfer students from other nursing programs. Focus on skills acquisition and validation prior to entering the hospital setting. (A)

[^6]:    District Police Office (PD)
    District Operations
    Child Development Center (CDC) Ratcliffe Stadium (RS) Soccer Field (SF)

    Physical Performance Center (PPC)
    Fieldhouse (F)
    Police Academy (PA)
    

