# 囩Fresno City College 2019-20 CATALOG 



## Fresno City College at a Glance

## General Information

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

Address $\quad 1101$ E. University Avenue Fresno, California 93741<br>Web Address www.fresnocitycollege.edu

## Notice to Students

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

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

## Statement of Nondiscrimination

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

## Accreditation

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

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

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

## Frequently Called Numbers

(Area Code 559)
Main Switchboard ..... 442-4600
Admissions and Records ..... 443-8604
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 ..... 265-5700
Foundation ..... 243-7500
Health Sciences Division Office ..... 244-2604
Health Services ..... 442-8268
Honors Program ..... ext. 8470/8220
Humanities Division Office ..... 442-8281
International Students ..... 443-8256
Library, Circulation ..... 442-8204
Library, Reference ..... ext. 8764
Mathematics, Science \& Engineering Division Office ..... 442-8215
Police Academy ..... 442-8277
Public Information Office ..... 489-2218
Scholarship Information ..... 442-8293
Social Sciences Division Office ..... 442-8210
Student Activities ..... 443-8688
Theatre Box Office ..... 442-8221
Transfer Center ..... 442-8290
Training Institute ..... 243-7530
Transcripts ..... ext. 8661/8659
Tutorial Center ..... 442-8209
Veterans Office ..... 442-8224
Catalog Staff


## FRESNO CITY COLLEGE 2019-2020 CATALOG



A Public California Community College


## COLLEGE STATEMENT

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

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

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


## CONTENTS

INTRODUCTION
Fresno City College Mission ..... 7
Fresno City College Vision Statement ..... 7
Fresno City College Core Values ..... 7
Fresno City College Ethics Statement. .....  .7
Fresno City College Institutional Student
Learning Outcomes .....  8
History of Fresno City College .....  8
The District ..... 9
Student Right-to-Know and Campus .....  9Security Act
ACADEMIC CALENDAR
Fall Semester 2019 ..... 10
Spring Semester 2020 ..... 10
Summer Semester 2020 ..... 10
ADMISSION AND REGISTRATION
Admission of Students ..... 11
Who Needs to Apply? ..... 11
General Admission ..... 11
High School Enrichment/Dual Enrollment Admission. ..... 11
International Admission ..... 11
Returning Student Admission ..... 12
Transfer Admission ..... 12
Summary of Admission Requirements ..... 12
Residency. ..... 12
In-State ..... 12
Out-of-State/International ..... 12
Exemption from Nonresident Tuition (AB-540) ..... 12
Reclassification ..... 13
Appeal Procedure ..... 13
Matriculation ..... 13
Steps to Success. ..... 14
Matriculation Exemptions ..... 14
Advising ..... 14
Assessment. ..... 14
Registration ..... 15
Definitions ..... 16
Class Schedule Change ..... 16
Concurrent College Enrollment ..... 16
Dropping (Withdrawal from) a class or Withdrawing from College ..... 16
Holds on Records and Registration. ..... 16
Intra-District Transfer ..... 17
Registration Substitutes (Proxy Registration) ..... 17
Wait List Rules and Information ..... 17
Student Fees ..... 17
Enrollment Fee ..... 17
Nonresident and International Tuition ..... 17
Instructional Materials Fees ..... 18
Health Fee ..... 18
Parking Fee. ..... 18
Transcript Fee ..... 18
Associated Student Body Fee ..... 18
Associated Student Government Representation Fee ..... 18
Credit by Examination Fee ..... 19
Refund to Students ..... 19
Refund or Reversal of Enrollment Fees and Tuition ..... 19
Primary Term-Length (Full Semester) Classes, 18 Weeks ..... 19
Summer/Short-Term Classes ..... 19
Refund of Health Fee ..... 19
Refund of Parking Fee ..... 19
Refund of Associated Student Body Membership ..... 19
ACADEMIC REGULATIONS
Units of Academic Credit. ..... 20
Full-Time Enrollment ..... 20
Summer Units Allowed. ..... 20
Non-Credit Classes ..... 20
Distance Education. ..... 20
Attendance ..... 21
Illness. ..... 21


## Fresno City College

 strives to make students aware of the varied educational programs that are offered and to provide smooth access to these programs.Reports to Students ..... 33
Final Grade Report ..... 33
Certifications of Enrollment ..... 33
Honors and Awards ..... 33
Leon S. Peters Honors Program ..... 33
Dean's List ..... 34
Honors at Graduation ..... 34
College Sanctioned Accouterments at Graduation. ..... 34
Honors Societies ..... 34
CERTIFICATE AND DEGREE REQUIREMENTS Catalog Rights ..... 35
Certifcates ..... 35
Certificate of Achievement ..... 35
Certificate of Completion ..... 35
Course Classification ..... 35
GraduationRequirements ..... 35
General Education for the AA/AS Degree ..... 36
Multiple Degrees ..... 37
RequirementsfortheAssociateDegreesfor Transfer ..... 37
Requirements for AA and AS Degrees ..... 37
Application for Associate Degree or Certificate of Achievement ..... 39
TRANSFER INFORMATION AND REQUIREMENTS
Preparation to Enter Four-year Colleges or Universities ..... 40
Articulation ..... 40
Articulation System Stimulating Inter-Institutional Student Transfer (ASSIST) ..... 41
Agreements with Other Campuses-Campus Specific ..... 41
CourseIdentificationNumbering Systems(C-ID) ..... 41
Transferto California State University (CSU) ..... 46
TransferRequirementsto CaliforniaState University (CSU) ..... 46
CaliforniaStateUniversity (CSU)Admission ..... 46
Lower Division Transfer Students ..... 46
Upper Division Transfer Students ..... 47
General Education Requirements for CSU Transfer Certification (CSU-GE) ..... 47
Fresno City College CSU General Education- Breadth 2019-2020 ..... 47
U.S. History, Constitution, and American Ideals ..... 49
California State University Transfer Course List (CSU). ..... 49
Transfer to University of California (UC) ..... 50
Transfer Requirements of the University of California (UC) ..... 50
UC Transfer Admission Guarantee(Guaranteed Admission)51
University of California Transfer Course List (UC). ..... 51
Intersegmental General Education Transfer Curriculum52
Transfer Requirements of Private/Independentand Out-ot-State Colleges and Universities57
ADMINISTRATIVE POLICIESStudent Conduct Standards.58
State Center Community College District Policy Statement ..... 58
Student Assembly ..... 58
Exercise of Free Expression ..... 58
Student Protests and Demonstrations. ..... 59
Student Publications ..... 59
Computer/Networking Equipment Use Policy ..... 59
Tobacco Free Campus ..... 59
Drug Abuse Policy ..... 59
Academic Freedom ..... 60
General Principles. ..... 60
Academic Dishonesty. ..... 60
Cheating ..... 60
Plagiarism. ..... 60
Authority and Disciplinary Actions ..... 60
Student Rights. ..... 61
Removal from Class by Instructor ..... 61
Grievance Policy for Students ..... 62
Rights and Responsibilities. ..... 62
Open Enrollment ..... 62
Student Enrollment Responsibilities ..... 62
Parking Regulations ..... 62
Statement of Nondiscriminatory Policy and Obligations ..... 62
Declaración: Póliza de la No-Discriminación y las Obligaciones. ..... 63
Tsab Cai Tsis Pub Muaj Kev Ntxub-ntxaug
Thiab Tej Uas Yuav Tsum Tau Ua .....  .63
Family Education Rights and Privacy Act ..... 64
Sexual Harassment Policy ..... 64
Change of Address, Telephone Number ..... 64
Other Policies. ..... 64
STUDENT SUPPORT SERVICES
Bookstore. ..... 65
Return and Refund Policy ..... 65
CalWORKs ..... 65
Child Development Center ..... 66
College Relations ..... 66
Counseling Department ..... 66
Transfer Center ..... 66
Dream Center ..... 66
Disabled Students Programs and Services (DSP\&S). ..... 66
District Police ..... 67
Extended Opportunity Programs and Services (EOPS) ..... 67
Financial Aid ..... 68
Financial Aid and Scholarships ..... 68
Coursework Repeatability. ..... 68
Return of Federal Financial Aid Based Upon Total Withdrawal ..... 68
Financial Aid Satisfactory Progress ..... 68
Asistencia financiera ..... 69
Asistencia financiera y becas ..... 69
Repetición de un curso ..... 69
Devolución de la asistencia financiera federal luego del abandono total del curso ..... 69
Avance satisfactorio para la asistencia financiera.. ..... 69
Chaw Pab Nyiaj Kawm Ntawv (Financial Aid). ..... 70
Chaw Pab Nyiaj Kawm Ntawv Thiab Lwm Yam Nyiaj Tau Los Ntawm Kawm Ntawv Zoo ..... 70
Cov Hoob Uas Rov Qab Kawm Tau ..... 70
Kev Muab Cov Nyiaj No Them Rov Qab Tuaj Thaum Koj Muab Cov Hoob Rho Tawm ..... 70
Chaw Pab Nyiaj Qhov Kev Ncaj Ncees ..... 70
Food Services ..... 71
Health Services ..... 71
Housing Information ..... 71
Learning Resources Center (LRC) ..... 71
Library ..... 71
Tutorial Services ..... 71
Writing and Reading Center ..... 72
Math Support Center ..... 72
Extending the Class (ETC) ..... 72
English Support Center ..... 72
Academic Computer Lab ..... 72
Career Employment Center ..... 72
Lost and Found ..... 72
Psychological Services ..... 72
Public Information. ..... 73
Photo and Videotape Policy ..... 73
Special Student Programs ..... 73
IDILE Program ..... 73


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

## Table of Contents

Puente Project. ..... 73
Resources for American Indian Needs (RAIN) ..... 73
Strengthening Young Men by Academic Achievement (SYMBAA) ..... 74
USEAA Academic Program ..... 74
TRIO Programs ..... 74
StudentSupport Services Program(SSSP) ..... 74
Upward Bound Program ..... 74
Telephone and Mail Services ..... 74
STUDENT ACTIVITIES
Associated Students ..... 75
Organization of New Clubs ..... 75
Social Activities ..... 76
Athletics ..... 76
Publications ..... 76
About Ourselves ..... 76
The FCC Review ..... 76
The Rampage ..... 76
Forensics ..... 76
Museum of Anthropology ..... 77
Music Activities ..... 77
Theatre Arts and Dance ..... 77
SPECIAL AREAS OF STUDY
Allied Health ..... 78
Career \& Technology Center ..... 78
DevelopmentalEducationProgram ..... 80
Entrance into the Program ..... 80
Benefits of the Program ..... 81
Englishfor Multi-Lingual Students(EMLS) Program ..... 81
Fire Academy ..... 81
Honors Program ..... 81
Benefits ..... 81
Requirements for Consideration of Acceptance. ..... 81
Police Academy ..... 82
ROTC Studies-U.S. Army and U.S. Air Force ..... 82
Veterans Services ..... 82 ..... 448
Work Experience (Cooperative) Education ..... 83
Types of Cooperative Work Experience ..... 83
School Credit ..... 83Transfer Credits84 Emeritus FacultyQualifications84 In Memoriam
448
Fresno City College
Faculty and Administration ..... 449460
The Enrollment Process 84 Emeritus Classified Professionals ..... 473465
AREAS OF STUDY BY DIVISION 85 INDEX ..... 476
Campus Map Inside Back Cover

# INTRODUCTION 

Fresno City College is a college of the State Center Community College District, which operates within the broader mission of California's 114 community colleges. Fresno City College strives to be a premier learning community whose students, graduates and staff will be among the best prepared citizens to meet the challenges of an increasingly complex environment.

## Fresno City College Mission

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

## Fresno City College Vision Statement

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

## Fresno City College Core Values

Growth: We are committed to sharing and exploring new ideas through collaboration, respect for diversity, promoting equity, and professional development.

Leadership: We are leaders in our community, dedicated to behaving ethically, committed to open communication, and good stewards of our resources.

Success: We champion excellence, quality, celebrating individual differences, and providing a positive and supportive environment for all.

## Fresno City College

 Ethics StatementThe 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 respectto protect the rights and freedoms of others.

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

Adapted from HumberCollegeEthics 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.
- Effectivelycommunicateinformationthroughspeaking, writing and other appropriate modes of expression.


## Critical Thinking and Information <br> Competency

Students will demonstrate critical thinking skills in problemsolving acrossdisciplines andindailylife.

- Identify vital questions, problems, or issues and evaluate the reasonableness of a solution.
- Analyze, assess, and evaluate the validity of an argument.
- Analyze multiple representations of quantitative information, including graphic, formulaic, numeric, and verbal.
- Select and evaluate the accuracy, credibility, and relevance of information sources.


## Community and Global Awareness and Responsibility

Students will demonstrate knowledge of social, cultural, environmental and aesthetic perspectives.

- Examine individual and group responsibilities in society.
- Participate in active citizenship.


## Personal, Academic, and Career

## Development

Students will assess their own skills and abilities to develop personal, educational, and career goals, work independently and in group settings, and identify lifestyle choices that promote self-reliance, financial literacy, and physical, mental and social health.

- Assume personal responsibility for identifying academic and psychological-social needs, determining resources, and accessing appropriate services.
. Evaluate progress towards achieving personal goals, academic goals, career goals, and career resilience.


## History of Fresno City College

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

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

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

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

## The District

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

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

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

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

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


## ACADEMIC CALENDAR

## Fall Semester 2019

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

## Spring Semester 2020



## Summer Semester 2020

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

## Note: Evening classes observe the same holiday and

 examination schedule as day classes.
## ADMISSION AND REGISTRATION

## Admission of Students

Fresno City College is one of multiple colleges and centers within the State Center Community College District (SCCCD). Students need only submit one application for admission to any of the 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 consecutive primary semesters (fall to spring or spring to fall); if you are a high school graduate and previously attended as a high school student (enrichment or dual enrollment); you must complete the SCCCD online admissions application.

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

## General Admission

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

## High School Enrichment/Dual Enrollment Admission

High school students who wish to enroll in college courses before graduating high school, must complete a SCCCD online Enrichment/Dual Enrollment admissions
application as well as the required Enrichment or Dual Enrollment program packet for the campus or center he/ she would like to attend. Information regarding the Dual Enrollment/Enrichment program can be obtained from your high school counselor or contact the College Relations office at (559) 442-8225 for details

## International Admission

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

- May 1 for Fall admission
- October 1 for Spring admission

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

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

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


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 consecutive (fall and spring) semesters must complete an admission application for the semester they are planning to return. An official transcript of work taken at other institutions (including summer session and extension or online courses) since the date of last enrollment at Fresno City College must be sent to the Admissions and Records Office, 1101 East University Avenue, Fresno, CA 93741-0001.

## Transfer Admission

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

## Summary of Admission Requirements

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

- Complete a SCCCD Admission Application prior to the deadline as specified in the catalog, if applicable.
- If no other college work has been completed, provide official High School transcripts, GED scores or copy of the CHSPE Certificate to the Admissions \& Records office.
- Request each college of attendance to send a complete official transcript of work attempted whether or not credit was earned.
- Transcripts should be sent directly to:

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

## Residency

By law, every student must file a statement declaring their residence status. The form for such a statement is included in the admission process.

A maintenance allowance is available for students attending Fresno City College whose permanent residence is in a California nondistrict territory (district without a community college) and who live more than 60 miles from the "nearest community college attendance center." For further information, contact the Admissions \& Records Office, room 111, Student Services Building, lower level. (California Education Code 76160 Rev. 83).

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, they 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 established residency 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 one with United States Citizenship and Immigration Services (USCIS) nonimmigrant visa status (see exception below for students who have been granted T or U visa status), who meets all of the following requirements, shall be exempt from paying nonresident tuition at the California Community Colleges, the University of California, and the California State University (all public colleges and universities in California).
A student is exempt from paying nonresident tuition if the student meets all of the following four requirements:

1. The student must have:

- attended a combination of California high school, adult school, and California Community College for the equivalent of three or more years; or
- attained credits earned in California from a

California high school equivalent to three or more years of full-time high school course work and attended a combination of elementary, middle and/or high schools in California for a total of three or more years, and
2. The student must have:

- graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED or California High School Proficiency exam), or
- completed an associate degree from a California

Community College, or

- completed the minimum requirements at a California Community College for transfer to the California State University or the University of California, and

3. The student must register as an entering student at, or current enrollment at, an accredited institution of higher education in California, and
4. The student must file an affidavit with the college or university stating that if the student is a non-citizen without current or valid immigration status, the student has filed an application to legalize immigration status, or will file an application as soon as the student is eligible to do so.

- Students who are nonimmigrants who are victims of trafficking, domestic violence, and other serious crimes who have been granted $T$ or $U$ visa status, under Title 8 of the United States Code, sections 1101(a)(15)(T) or (U) are eligible for this exemption.
- Students who are nonimmigrants, other than those with $T$ or $U$ visa status as noted above, [for example, those who hold F (student) visas, B (visitor) visas, etc.] are not eligible for this exemption.
- The student must file an exemption request including a signed affidavit with the college that indicates the student has met all applicable conditions described above. Student information obtained in this process is strictly confidential unless disclosure is required under law.
- Students eligible for this exemption who are transfer- ring to another California public college or university must submit a new request (and documentation if required) to each college under consideration.
- Nonresident students meeting the criteria will be exempted from the payment of nonresident tuition, but they will not be classified as California residents. They continue to be "nonresidents."


## Reclassification

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

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

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

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

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

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

## Appeal Procedure

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

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

## Matriculation

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

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


Students who wish to be a candidate for graduation in two years must carry an average of

15 units per semester.

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

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


## Steps to Success

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

Complete the online orientation at www.scccd.edu/orientation
3. ASSESSMENT/ADVISING Meet with a FCC counselor and complete your first semester Student Education Plan (SEP).
4. REGISTRATION

Register for classes at www.scccd.edu/register
5. FINANCIAL AID (optional)

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

## 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 Calculus AB or Calculus BC test
- Earned a grade of C or higher in Elementary Algebra or Integrated Math 1
- Earned a high school cumulative GPA 2.0 or higher for Math
- Earned a high school cumulative GPA above 2.7 or higher for English
2019-2020 Fresno City College Catalog

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

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


## Advising

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

## Assessment

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

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

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

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

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

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

2. See a counselor.
3. Take Counseling 48, Career Planning course.

## Registration

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

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

| TIER | PRIORITY GROUP | REQUIREMENTS |
| :---: | :---: | :---: |
| 1a | *CVP with Reedley or Clovis majors - may register for Spring 2019 <br> Spring classes at CCC and RC sites only | - Fully Matriculate - CVP: fully matriculated by published deadline) <br> - Good Academic Standing (not req. for Foster Youth or homeless) <br> - Do not Exceed 90 SCCCD degree applicable units |
| 1b | Active Military/Veterans, CalWORKs, Disabled Student Programs and Services (DSPS), Foster Youth, Extended Opportunity Programs and Services (EOPS), verified homeless, Tribal TANF, and Central Valley Promise (CVP)*. | - Fully Matriculate - CVP: fully matriculated by published deadline) <br> - Good Academic Standing (not req. for Foster Youth or homeless) <br> - Do not Exceed 90 SCCCD degree applicable units |
| 2 | District approved groups based upon AR 5055: ASG, Athletics, DSPS Note takers, Future Nurses, Honors, Middle College High Schools, ROTC, TRIO, Student Ambassadors | - Good Academic Standing <br> - Continuing students must have an SEP by published deadline <br> - Do not exceed 90 SCCCD degree applicable units <br> - First-time college students MUST be fully matriculated |


| 3 | Continuing students who have completed a Student Education Plan (SEP)*. Based upon Quality Points | - Good Academic Standing <br> - Continuing students must have an SEP by published deadline <br> - Do not exceed 90 SCCCD degree applicable units <br> - First-time college students MUST be fully matriculated |
| :---: | :---: | :---: |
| 4a | First-time college students - from SCCCD feeder High Schools | - Fully Matriculated by published deadline |
| 4 C | First-time college students - Home Schooled within the SCCCD service area | - Fully Matriculated by published deadline |
| 4b | First-time college studentsfrom non-feeder high schools | - Fully Matriculated by published deadline |
| 5 | Continuing students without a Student Education Plan (SEP). Based upon Quality Points | - Good Academic Standing <br> - Do not exceed 90 SCCCD degree applicable units |
| 6a | First-time college students who are not fully matriculated, College Advancement Program | N/A |
| 6b | Returning students with a Student Education Plan (SEP) | - SEP on file by published deadline Good Academic Standing <br> - Do not exceed 90 SCCCD degree applicable units |
| 6c | Returning students without a Student Education Plan (SEP) and transfer students | - Good Academic Standing <br> - - Do not exceed 90 SCCCD degree applicable units |
| 7 | All not meeting criteria above may register during any open enrollment. | - Not good <br> - Over 90 SCCCD degree applicable units <br> - High School Enrichment |

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

Definitions
First-time students: Students who are attending college for the first time, excluding high school enrichment students.
Continuing students: Students who are continuously enrolled from one primary (fall or spring) term to the next.
Returning students: Students who previously attended that stopped out for at least one primary (fall or spring) term.
Good Academic Standing: A student who is not on academic or progress probation, or whose most recent term was successful, is in Good standing for enrollment priority only.
Academic Probation: after attempting 12 units, student's cumulative GPA falls below 2.0.
Progress Probation: after attempting 12 units, student does not complete more than $50 \%$ of units attempted.
SEP: Student Educational Plan. The plan outlines suggested courses for students based on degree, certifc ate, or transfer plans.
*SEPC: Comprehensive Student Education Plan. Students who complete an SEPC may have their registration date advanced by 1 day within the student's current tier.
Fully Matriculated: Students who complete the college orientation, assessment/placement test, and student educational plan.
90 Degree Applicable Units: Based on units earned at SCCCD. Excludes units earned from basic skills and special courses.

## Class Schedule Change

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

## Concurrent College Enrollment

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

Dropping (Withdrawal from) a class or Withdrawing from College

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

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

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

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

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

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

## Holds on Records and Registration

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

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

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

## Intra-District Transfer

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

## Registration Substitutes (Proxy

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

## Wait List Rules and Information

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

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

## Student Fees

## Enrollment Fee*

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

## Nonresident and International Tuition

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

Regular and Summer Sessions
Each full unit taken:

- International Student Tuition................... \$265**
- Nonresident Student Tuition .................... \$265**
- Plus enrollment Fee per unit..................... \$46**
** Note: Nonresident fees are computed each year in accordance with a state mandated formula and are therefore subject to change. Contact the College Business Office for current information. *Fees are subject to change without notice.

* Fees are subject to change without notice.

A "nonresident" student is a student who has not resided in the state for more than one year immediately preceding the first day of the regular semester/summer session (Title 5, Section 54002), and has not demonstrated evidence of intent to be a California resident.

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

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

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

## Instructional Materials Fees*

In accordance with Education Codes (E.C. 73365, 81457, 81458, 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 $\$ 20$ health fee for each semester (fall and spring terms) and a \$17 health fee for the summer session. Off-campus students are required to pay a $\$ 12$ health fee for each term (fall, spring and summer). For students enrolled in both on-campus and off-campus sites the health fee is charged at the on-campus rate. Effective Fall 2006, on-campus sites will include Fresno City College, Reedley College, Clovis Community College, and Madera Community College Center. (E.C. 76355)

## Parking Fee*

Student vehicles must display a State Center Community College District parking permit to park in campus parking lots. Parking permits may be purchased at the FCC Bookstore or the College Business Office. The fee for parking on approved parking facilities is $\$ 30$ per semester; summer semester is $\$ 20$. One-day permits may be purchased at walk- and drive-up dispensers and metered parking is also available. Enforcement for parking permits will begin the first day of class. Students requiring handicap parking should contact the Disabled Students Programs and Services Office.
2019-2020 Fresno City College Catalog

## Transcript Fee*

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

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

## Associated Student 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 participate in or attend all activities sponsored by the ASB. The card can also be used for reduced admission to all college-sanctioned athletic home games (except playoffs), theatrical productions and music programs. Students who are ASB members and carry 9 units or more are eligible for Associated Student funded emergency book loans and scholarships as available. A FAX/Q bus pass is included with the purchase of the ASB card. Any misuse of this pass will terminate your bus pass and you will not be allowed any future passes.

## 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 twothirds 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.

Torequestawaiver, the studentmustfill out aform available atFresno City College in the StudentActivities, or College Business Offices or online at the College Business Officemainwebpage AtReedley 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 GovernmentOffice at(559) 442-8275.

## Credit by Examination Fee*

Studentsarerequiredtopayafeeintheamountof \$10.00*forthefirstunitplus $\$ 5.00 *$ for each additional unit for each course challenged. This fee is specific to the Credit by Examination charge. An additional $\$ 46.00$ per unitfeeis requiredbyStateLaw(E.C.76300;5, CCR58753).

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

## Refund to Students

## Refund or Reversal of Enrollment Fees and Tuition

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

Refunds shall be initiated upon receipt of a written request to the Business Office. Requestsmayalso be made online at Fresno City College admissions website business-office/fee-reversals-and-refunds.html

Refund requests are subject to an audit of the student's record to verify balance. Credit balances may be carried forwardtothenewterminlieu of a refund. Balancesgreater than or equal to $\$ 15$ will remain on the account for three yearsandamountslessthan\$15willremainontheaccount for one year.

## Primary Term-Length (Full Semester)

## Classes, 18 Weeks

. Withdrawal during the first two weeks of the
semester ...........................................100\% refund
Withdrawalafterthesecondweekofthe
semester ........................................................... refund

## Summer/Short-Term Classes

State code defines the drop deadlines to qualify for fee refund/reversals of enrollment fees for short-term classes asonorbefore 10 percentofthedurationoftheclass.

A100\% refund is given upon withdrawal by the 10 percent point. No refund is given after withdrawal beyond the 10 percent point.

| *NUMBER <br> OFACTUAL <br> CLASS <br> MEETINGS: | 10\%POINT <br> (ROUNDED <br> DOWN) | 100\% REFUND IF <br> WITHDRAWAL IS <br> ON OR BEFORE: |
| :--- | :--- | :--- |
| 8 | $0.8=0$ | 1stday ofclass |
| 16 | $1.6=1$ | 1stday ofclass |
| 24 | $2.4=2$ | 2nddayofclass |
| 38 | $3.8=3$ | 3rdday ofclass |
| *Do notcount <br> holidays, <br> weekends, or <br> any otherday <br> the classis <br> not <br> scheduled to |  |  |

## Refund of Health Fee

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

## Refund of Parking Fee

Full refunds for parking permits will be made during the firsttwoweeksofthefall/springsemestersandthefirstweek of the summer sessions upon proof of complete withdrawal fromschool. TheparkingpermitsmustbeattachedtoaRequest for Refund form and returned to the College Business Office in order to obtain the refund. There is norefundfor limited-term parking permits.

## Refund of Associated Student Body Membership

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

## ACADEMIC REGULATIONS

## Units of Academic Credit

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

## Full-Time Enrollment

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

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

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

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

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

## Summer Units Allowed

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

## Non-Credit Classes

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

Students will be governed by the same attendance policies and responsibilities as those students taking credit classes. (A student may not attend a class without enrolling.)
Note: Credit status is required for pursuit of Associate Degrees and Certificates of Achievement.

## Distance Education

Courses offered at FCC through Distance Education (DE) represent the high quality standards that FCC is committed to in all of its course offerings. Some courses can be taken fully online, where no face to face meetings are required while other courses are offered in a hybrid format, requiring one or more on campus class meetings. Almost all other curriculum that is neither fully online or hybrid is web-enhanced at FCC, meaning that internet based resources are used by students for homework and/or research. In all offerings, FCC is committed to high quality standards that offer our students the unique flexibility needed to achieve their academic goals. Regular internet and access to a computer are required for students to gain access to course materials 24/7. Online and hybrid classes are not self-paced. Students should visit the "Quest for Success" materials on the FCC website prior to enrollment. In addition, all students who enroll in an online or hybrid course have student readiness modules sent to them in order to evaluate their readiness for online and/or hybrid courses.

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

## Attendance

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

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

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

## IIIness

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

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

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

## Makeup Work

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

## Final Examinations

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

## Grading System

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

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

2019-2020 Fresno City College Catalog

| NON-EVALUATIVE <br> SYMBOLS | MEANING | GRADE <br> POINTSPER <br> UNIT |
| :--- | :--- | :--- |
| I | Incomplete | 0.0 |
| W | Withdrawal | 0.0 |
| EW | Withdrawal for <br> Extenuating <br> Circumstances | 0.0 |
| MW | Military <br> Withdrawal | 0.0 |
| IP | InProgress | 0.0 |
| RD | Report De- <br> layed | 0.0 |

## I, Incomplete

The I, Incomplete, symbol may be assigned in a course only by approval ofthe course instructorifall 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 finalsemestergrade.
- The studenthas a serious and verifiable reason for not completing the required course work.
- The studenthas apassing grade inthe course atthe 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 astudent, butitwill affectthe progressstatus. An incomplete, I, grade must be replaced by the appropriate evaluative grade symbol nolater than one full semester after ithas 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 ineffect.

## W, Withdrawal

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

## EW, Excused Withdrawal

An "EW" symbol is recorded upon approval of a Petition to WithdrawUnderExtenuating Circumstances.

## MW, Military Withdrawal

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

## IP, In Progress

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

## RD, Report Delayed

The RD symbol may be assigned only by the registrar and is used when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student. It is a temporary notation to be replaced by a permanent symbol as soon as possible. RD shall not be used in calculating grade point averages.

## P/NP, Pass/No Pass

Most college courses allow students the option of a final course grade of $P$, Pass, or $N P$, No Pass, instead of traditional letter grades ( $A, B, C, D$, or $\mathcal{F}$. 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 $P$, 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 $N P$, No Pass, will be assigned if the student earns the grade equivalent of $D$ or $F$, and no units of credit will be awarded for the course. Neither the $P$, Pass, grade nor the $N P$, 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 Pass option is not recommended for any course in a student's major. Not all courses graded on a Pass/No Pass basis are accepted for transfer by other institutions. Students planning to transfer to another college or university should be aware of the policy of that institution regarding Pass/No Pass grades.

Students may elect the Pass/No Pass grading option in courses in which it is available by notifying the college Office of Admissions and Records, using the appropriate online form, available athttp://onlineforms.scccd.edu/passnopass. aspx. no later than the end of the fith week of a full-term course or within the first 30 percent of a shorter-term course. Students who have elected the Pass/No Passgrading 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 <br> class | By end of fitth week |
| :--- | :--- |
| For all short-term classes <br> (including summer) | By 30\% of total class <br> meeting dates (this will <br> vary class by class) |

## 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 submita written grievance. See Student Grievance Procedure on page 62.

## Grade Point Average (GPA)

A student's grade point average (GPA) is computed by dividing the total number of grade points earned by the total number of grade point units. Units for which a grade or other symbol of $C R, N C, P, N P, W, I, I P, M W, E W, R D$, 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.

## Earning Course and Unit Credit

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

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

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

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

Advanced Placement Exams (AP)

| Fresno City College | Fresno <br> City <br> College | Fresno City College | CSUGEArea(units) | IGETC Area <br> (units) |
| :---: | :---: | :---: | :---: | :---: |
| AP Examination/Subject Area | Minimum <br> Score | GE Area | GE Area | GE Area |
| ART: ART HISTORY | 3 | C:Humanities (3) | C1orC2(3) | 3A or 3B (3) |
| BIOLOGY | 3 | A: Natural Sciences (4) | B2\&B3(4) | 5B\&5C(4) |
| CALCULUS AB | 3 | MathCompetency \& D2:Language \& Rationality (5) | B4 (3) | 2A (3) |
| CALCULUS BC | 3 | MathCompetency \& D2:Language \& Rationality $(5,4)$ | B4 (3) | 2A (3) |
| CALCULUS BC/AB Subscore | 3 | MathCompetency \& D2:Language \& Rationality (5) | B4 (3) | 2A (3) |
| CHEMISTRY | 3 | A: Natural Sciences (5) | B1\&B3(4) | 5A\&5C(4) |
| CHINESE LANGUAGE and CULTURE | 3 | C:Humanities (3) | C2 (3) | 3B\&6 (3) |
| COMPARATIVE GOVERNMENT AND POLITICS | 3 | B2:Social\&BehavioralSciences (3) | D (3) | 4(3) |
| COMPUTER SCIENCE A | 3 | Elective (3) | NA (Only one CS exam may be applied) | N/A |
| COMPUTER SCIENCE PRINCIPLES | 3 | Elective (3) | NAA (Only one CS exam may be applied) | N/A |
| ECONOMICS: MACROECONOMICS | 3 | B2:Social\&Behavioral Sciences (3) | D (3) | 4(3) |
| ECONOMICS:MICROECONOMICS | 3 | B2:Social\&BehavioralSciences (3) | D (3) | 4(3) |
| ENGLISH LANGUAGE/COMPOSITION | 3 | Writing/ReadingCompetency\&D1: Language \& Rationality (4) | A2 (3) | 1A(3) |
| ENGLISH LITERATURE/COMPOSITION | 3 | Writing/ Reading Competency \& C:Humanities D1:Language and Rationality $(4,3)$ | A2\&C2 (6) | 1Aor3B(3) |
| ENVIRONMENTAL SCIENCE | 3 | A: Natural Sciences (4) | B1\&B3(4) | 5A\&5C(3) |
| FRENCH LANGUAGE and CULTURE | 3 | C:Humanities (5) | C2 (3) | $3 \mathrm{~B} \& 6$ (3) |
| GERMANLANGUAGEandCULTURE | 3 | C:Humanities (5) | C2 (3) | 3B\&6 (3) |
| HISTORY, EUROPEAN | 3 | B2: Social\&Behavioral Sciences or C:Humanities (3) | C2orD(3) | 3Bor4(3) |
| HISTORY, U.S. | 3 | B2:Social\&BehavioralSciences (3) | C2 orD\&U.S.-1(3) | $\begin{aligned} & 3 B \text { or 4 \& } \\ & \text { US-1 (3) } \\ & \hline \end{aligned}$ |
| HISTORY, WORLD | 3 | B2:Social\&Behavioral Sciences (3) | C2orD(3) | 3Bor4(3) |
| HUMAN GEOGRAPHY | 3 | B2:Social\&BehavioralSciences (3) | D (3) | 4(3) |
| ITALIANLANGUAGE and CULTURE | 3 | C:Humanities (3) | C2 (3) | 3B\&6 (3) |
| JAPANESE LANGUAGE and CULTURE | 3 | C:Humanities (3) | C2 (3) | 3B\&6 (3) |
| LATIN | 3 | C:Humanities (3) | C2 (3) | 3B\&6 (3) |
| MUSICTHEORY | 3 | Elective (3) | N/A | N/A |
| PHYSICS1 | 3 | A: Natural Sciences (4) | B1\&B3(4) | 5A\&5C(4) |
| PHYSICS2 | 3 | A: Natural Sciences (4) | B1\&B3(4) | 5A\&5C(4) |

## 2019-2020 Fresno City College Catalog

| PHYSICS C MECHANICS | 3 | A: Natural Sciences (4) | B1 \& B3 (4) | 5A \& 5C (3) |
| :---: | :---: | :---: | :---: | :---: |
| PHYSICS C, ELECTRICITY/ MAGNETISM | 3 | A: Natural Sciences (4) | B1 \& B3 (4) | 5A \& 5C (3) |
| PSYCHOLOGY | 3 | Lifetime Wellness \& B2: Social \& Behavioral Sciences (3) | D (3) | 4 (3) |
| SPANSH LANGUAGE and CULTURE | 3 | C: Humanities (5) | C2 (3) | 3B \& 6 (3) |
| SPANSH LITERATURE and CULTURE | 3 | C: Humanities (3) | C2 (3) | $3 B \& 6(3)$ |
| STATISTICS | 3 | Math Competency\& D2: Language \& Rationality (4) | B4 (3) | 2A (3) |
| STUDIO ART - 2D DESIGN | 3 | Elective (3) | N/A | N/A |
| STUDIO ART - 3D DESIGN | 3 | Elective (3) | N/A | N/A |
| STUDIO ART - DRAWING | 3 | C: Humanities (3) | N/A | N/A |
| U.S. GOVERNMENT \& POLITICS | 3 | B1: Social \& Behavioral Sciences (3) | D \& US-2 (3) | $4 \text { \& US-2 }$ <br> (3) |

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

## Advanced Placement Program Credit (AP)

Courses offered through the College Entrance Examination Board are recognized and individual colleges of this district are authorized to award appropriate placement and/ or credit for these courses in accordance with established college standards. Petitions to apply for credit may be obtained from the Admissions and Records Office.
A residency of 12 units of satisfactory work ("C" average) must be completed at Fresno City College prior to allowance of credit under this program. Currently, AP credit is granted as follows:

Humanities Division

| EXAM <br> TITLE | MINIMUM <br> SCORE | EQUIVALENT <br> FCC COURSE | UNITS <br> GRANTED |
| :--- | :--- | :--- | :--- |
| English <br> Lang/ <br> Comp | 3 | English 1A | 4 |
| English <br> Lit/Comp | 3 | English 1B | 3 |
| French <br> (Lan- <br> guage) | 3 | French 3 | 5 |
| Spanish <br> (Lan-- <br> guage) | 3 | Spanish 3 \& 4 | 10 |
| Spanish <br> (Litera- <br> ture) | 3 | Spanish 5 \& 6 | 8 |

Mathematics, Science and Engineering Division

| EXAM <br> TITLE | MINIMUM <br> SCORE | EQUIVALENT <br> FCC COURSE | UNITS <br> GRANTED |
| :--- | :--- | :--- | :--- |
| Biology | 3 | Biology 3 | 4 |
| Chemistry | 3 | Chemistry 3A | 4 |
| Calculus <br> AB or BC | 3 | Mathematics <br> 5 A | 5 |
| Physics 1 <br> $\& 2$ | 3 | Physics 2A | 4 |
| Statistics | 3 | Mathematics <br> 11 or 42 | 4 |

Social Sciences Division

| EXAM <br> TITLE | MINIMUM <br> SCORE | EQUIVALENT <br> FCC COURSE | UNITS <br> GRANTED |
| :--- | :--- | :--- | :--- |
| U.S. <br> History | 3 | History 11 <br> $\& 12$ | 6 |
| European <br> History | 3 | History 2 | 3 |
| World <br> History | 3 | History 23 | 3 |
| Macro- <br> econom- <br> ics | 3 | Economics 50 | 3 |
| Microeco- <br> nomics | 3 | Economics 40 | 3 |


| Compara- <br> tiveGovt | 3 | Political <br> Science 5 | 3 |
| :--- | :--- | :--- | :--- |
|  <br> Politics | 3 | *Political <br> Science 2 | 3 |
| Psychol- <br> ogy | 3 | 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 3 or higher 2) Official transcripts from an accredited college where astudent earned a final grade of "C" or higher in a 1 unit (minimum) course covering California State and LocalGovernment/Politics.
. Note: AP credit in American Government does meet the U.S. Constitution requirement for teaching credential candidates(Ed. Code Sec. 13132). However, itdoes 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 governmentrequirements. 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 whichareofferedbytheCollegeEntranceExaminationBoard.

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 Testresultto the Fresno City College Admissions and Records Office, CounterA.

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

Business Division

| EXAM <br> TITLE | MINIMUM <br> SCORE | EQUIVALENT <br> FCCCOURSE | UNITS <br> GRANTED |
| :--- | :--- | :--- | :--- |
| Financial <br> Account- <br> ing | 50 | ACCTG 4A | 4 |
| Business <br> Law | 50 | BA18 | 4 |
| Intro to <br> Business | 50 | BA10 | 3 |
| Computer <br> Concepts | 50 | CIT15 | 3 |

Humanities Division

| EXAM <br> TITLE | MINIMUM <br> SCORE | EQUIVALENT <br> FCCCOURSE | UNITS <br> GRANTED |
| :--- | :--- | :--- | :--- |
| American <br> Literature | 50 | ENGL 48A \& B | 6 |
| College <br> Composi- <br> tion | 50 | ENGL 1A | 4 |
| Engl <br> Comp <br> (General) <br> (1978 <br> through <br> April <br> 1986) | 500 | ENGL 125 | 4 |
| Engl <br> Comp <br> (General) <br> (afterMay <br> 1986 or <br> before <br> 1978) | 390 | ENGL 125 | 4 |
| Engl <br> Comp w/ <br> Essay | $* 600$ | None |  |
| English <br> Literature | 50 |  <br> $46 B$ | 6 |
| Human- <br> ities <br> (General) | 500 |  <br> ART6 | 6 |

Mathematics, Science and Engineering Division

| EXAM <br> TITLE | MINIMUM <br> SCORE | EQUIVALENT <br> FCC COURSE | UNITS <br> GRANTED |
| :--- | :--- | :--- | :--- |
| Trigonom- <br> etry | 50 | MATH 4A | 4 |
| Microbiol- <br> ogy | 50 | BIOL 31 | 5 |
| Natural <br> Sciences <br> (Gen) | 500 | Natural <br> Science1A | 4 |

Social Sciences Division

| EXAM <br> TITLE | MINIMUM <br> SCORE | EQUIVA- <br> LENT FCC <br> COURSE | UNITS <br> GRANTED |
| :--- | :--- | :--- | :--- |
| Afro-Ameri- <br> can History | 50 | AFRAM 1 | 3 |
| American <br> Government <br> ** | 50 | None |  |
| American <br> History I | 50 | HIST 11 | 3 |
| American <br> History II | 50 | HIST 12 | 3 |
| Macroeco- <br> nomics, <br> Intro | 50 | ECON 50 | 3 |
| Microeco- <br> nomics, <br> Intro | 50 | ECON 40 | 3 |
| Sociology | 50 | SOC 1A | 3 |
| Psychology, <br> General | 50 | PSY 2 | 3 |
| Western <br> Civiliza- <br> tion I | 50 | HIST 1 | 3 |
| Western <br> Civilization <br> II | 50 | HIST 2 | 3 |
|  <br> 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).

International Baccalaureate (IB) Exams (Higher Level only)

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

Fine, Performing, and Communication Arts Division

| IB EXAM <br> TITLE | MINIMUM <br> SCORE | EQUIVALENT <br> FCC COURSE | UNITS <br> GRANTED |
| :--- | :--- | :--- | :--- |
| Theare HL | 4 | Thearre Arts <br> $30 \& 41$ | 6 |

Humanities Division

| IB EXAM <br> TITLE | MINIMUM <br> SCORE | EQUIVALENT <br> FCC COURSE | UNITS <br> GRANTED |
| :--- | :--- | :--- | :--- |
| Language <br> A: Lang/ <br> Lit HL | 4 | English 1B <br> \& 40 | 6 |
| Language <br> A: Litera- <br> ture HL | 4 | English 1B <br> \& 40 | 6 |

Math, Science, and Engineering Division

| IB EXAM <br> TITLE | MINIMUM <br> SCORE | EQUIVALENT <br> FCC COURSE | UNITS <br> GRANTED |
| :--- | :--- | :--- | :--- |
| Biology <br> HL | 5 | Biology 3 | 4 |
| Chemistry <br> HL | 5 | Chemistry 3A | 4 |

Social Sciences Division

| IB EXAM <br> TITLE | MINIMUM <br> SCORE | EQUIVALENT <br> FCC COURSE | UNITS <br> GRANTED |
| :--- | :--- | :--- | :--- |
| Econom- <br> ics HL | 5 | Economics 25 | 3 |

International Baccalaureate may also be used to fulfill one ormoreGEareas.

| FRESNO CITY COLLEGE: INTERNATIONAL BACCALAUREATE (IB) | CSU <br> GE <br> AREA: <br> MINI- <br> MUM <br> SCORE |  | IGETC <br> AREA: <br> MINI- <br> MUM <br> SCORE | IGETC <br> AREA: <br> GE <br> AREA <br> (UNITS) |
| :---: | :---: | :---: | :---: | :---: |
| IB Biology HL | 5 | B2(3) | 5 | 5B(3) |
| IBChemistry HL | 5 | B1(3) | 5 | 5B(3) |
| IBEconomics HL | 5 | D (3) | 5 | 4B(3) |
| IB Geography HL | 5 | D (3) | 5 | 4E |
| IB History (any region) HL | 5 | $\mathrm{C} 2 \text { or } \mathrm{D}$ <br> (3) | 5 | 3Bor 4F (3) |
| IBLanguageA <br> Literature HL <br> (any language, <br> except <br> English) |  |  | 5 | $\begin{aligned} & \text { 3B and } \\ & 6 \mathrm{~A}(3) \end{aligned}$ |
| IB Language A Language and Literature HL(anylanguage, except English) |  |  | 5 | $\begin{aligned} & 3 \mathrm{~B} \text { and } \\ & 6 \mathrm{~A}(3) \end{aligned}$ |
| IB Language <br> A Literature <br> HL (any <br> language) | 4 | C2(3) | 5 | 3B(3) |
| IB Language <br> A Language <br> and Literature <br> HL (any <br> language) | 4 | C2(3) | 5 | 3B(3) |
| IB Language A1 (any language) HL | 4 | $\begin{aligned} & \text { C2(3) } \\ & \text { F13* } \end{aligned}$ |  |  |
| IB Language A2 (any language) HL | 4 | $\begin{aligned} & \text { C2(3) } \\ & \text { F13* } \end{aligned}$ |  |  |


| IB Language <br> B (anylan- <br> guage) HL | 4 | n/a | 5 | $6 \mathrm{~A}(3)$ |
| :--- | :--- | :--- | :--- | :--- |
| IB Mathemat- <br> icsHL | 4 | $\mathrm{~B} 4(3)$ | 5 | $2 \mathrm{~A}(3)$ |
| IB Physics HL | 5 | $\mathrm{~B} 1(3)$ | 5 | $5 \mathrm{~A}(3)$ |
| IB Psychology <br> HL | 5 | $\mathrm{D}(3)$ | 5 | $4(3)$ |
| IBTheatreHL | 4 | $\mathrm{C} 1(3)$ | 5 | $3 \mathrm{~A}(3)$ |

## Credit by Examination

Tobe eligible for course credit by examination, a student must be enrolled at the college and be in good standing during the semester in which they apply for credit by examination. Creditby examination will not be allowed ifthe 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 byexamination.

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 anykindis availableforcreditbyexam.

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

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

## Credit for Military Service

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

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

```
Army
1 credit hour - Physical Conditioning/Fitness
1 credit hour - Marksmanship
1 credit hour - Outdoor Skills
1 credit hour - First Aid
Navy
1 credit hour - Physical Conditioning/Fitness
1 credit hour - Personal/Community Health
1 credit hour - First Aid and Safety
1 credit hour - Swimming
Marines
1 credit hour - Physical Conditioning/Fitness
1 credit hour - Marksmanship
1 credit hour - Outdoor Skills
1 credit hour - First Aid/Health
Air Force
1 credit hour - Physical Conditioning/Fitness
1 credit hour - Marksmanship
1 credit hour - Outdoor Skills
1 credit hour - First Aid/Safety
Coast Guard
1 credit hour - Physical Conditioning/Fitness
1 credit hour - Swimming
1 credit hour - Boating/Seamanship
1 credit hour - First Aid
```

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

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

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

## Individual Study

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

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

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

## Travel-Study Credit

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

## Withdrawal/Dropping

## Withdrawal from College

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

## Dropping/Withdrawal Due to

## Extenuating Circumstances

- Exceptions to the 50 percent drop deadline may apply due to extenuating circumstances.
Extenuating circumstances are verified cases of accidents, illnesses, death in the immediate family, jury duty, declaration of war, natural calamity, military conscription, family or job displacement, instructor error, or other circumstances beyond the control of the student which are justifiable in the judgment of the college president or their designee. (CCR, Title 5, Section 55024.)

Petitions for withdrawal due to extenuating circumstances are available from the Admissions and Records Office.

1. The extenuating circumstances must be fully documented and verified when appropriate.
2. The petition for withdrawal must be submitted no later than the end of the semester immediately following the semester in which the extenuating circumstance occurred.
3. The student must petition to withdraw from all classes she/he is enrolled in (consult with Admissions \& Records for certain exceptions that may apply).
4. The student's instructor(s) will be consulted concerning the request for withdrawal.
5. Approved class withdrawals due to extenuating circumstances shall be recorded as an "EW." The "EW" shall not be used in the following: calculating grade point average, towards progress probation or dismissal calculations, towards the permitted number of withdrawals, or counted as an enrollment attempt.
6. Once final grades have been posted, the instructor of record must be consulted for an appropriate grade review.
7. Exceptions may be considered on a case-by-case basis upon appeal to the college's Academic Standards Committee.

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


## Academic Renewal

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

## Course Repetition

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

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

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

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

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

## Repetition of Courses Designated as Non-Repeatable

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

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

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

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

## Petition to Repeat Courses for Alleviation of Substandard Grades

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

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

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

- Why the student has been unable to complete the course work successfully, supporting documentation may be provided as well.
- Why the student will be able to be successful in college in the future. What will be different now and in the future?
All fourth attempt petitions are reviewed by the Academic Standards Committee or designee. If the petition is approved, the grade earned in the fourth or more attempts will be averaged with the third grade earned in computing the cumulative grade point average.


## Repetition of Courses with a Satisfactory Grade

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

Reasons for such repetition include but are not limited to:

- $\quad$ 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:

| COURSE FAMILY | RELATED CONTENT GROUPS |
| :--- | :--- |
| ART | Ceramics, Crafts, Drawing, <br> Painting, Printmaking, Sculpture, <br> Visual Art Fundamentals |
| DANCE | Ballet, Competition/Conference, <br> Flexibility, Performance, Folk, <br> Jazz, Modern, Social, Tap |
| MUSIC | Brass, Chamber Concert <br> Ensemble, Guitar, Jazz Chamber <br> Ensemble, Jazz Large Ensemble, <br> Large Concert Ensemble, Percus- <br> sion, , iano, Specialty Ensemble, <br> Strings, Voice, Woodwinds |


| PHYSICAL | Aerobics, Archery, Badminton, <br> Basketball, Cardio Interval <br> Training, Circuit Training, Con- <br> ditioning, Fitness \& Health, Golf, <br> Self Defense, Swimming, Tennis, <br> Volleyball, Weight Training, Yoga |
| :--- | :--- |
| THEATRE ARTS | Acting, Competition/Conference, <br> Performance Practicum, Technical <br> Practicum |

## 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 repeetition (see Course Repetition, page 30). Course work thought to be no longer appropriate for repetition may be alleviated by the student making formal application to the Admissions and Records Office.

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

- A period of at least two years has elapsed since the work to be alleviated was recorded.
- A student is pursuing a specific academic goal (e.g. associate degree or certificated program in the District).
- A student has completed 12 semester units with at least a 3.0 GPA ; or
- A student has completed 24 semester units with at least a 2.5 GPA; or
- A student has completed a total program with a 2.0 GPA or better.
For students who change majors attending FCC, courses will be alleviated from the old major under the following condition:
- All of the conditions stated in AR4240 must be met.
- The student should have completed half of the new major core courses. Only major specific courses count toward this requirement. General Education courses related to the major do not count toward this requirement.
- The student's four most recent semesters must have an average GPA of 2.00 or higher and must be from within SCCCD.
In determining eligibility for this provision the college will consider the most recently completed semester first and look to previous semesters total GPA in descending chronological order.

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

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

## Probation and Dismissal

## Satisfactory Progress

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

## Placement on Progress Probation

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

## Removal from Progress Probation

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

## Placement on Academic Probation

A student shall be placed on academic probation when:

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

## Removal from Academic Probation

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

## Counseling for Probationary Students

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

## Academic/Progress Dismissal

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

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

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

## Circumstances for Appeal or Exception of Academic Progress Dismissal

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

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

## Readmission Following Academic/ Progress Dismissal

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

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

## Reports to Students

## Final Grade Report

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

## Certifications of Enrollment

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

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

| Full-time | 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 gitted students. Students who qualify, and are accepted to enter the Honors Program, benefit from an enriched educational experience that consists of a specially selected curriculum set within the framework of the transfer programs of all University of California and California State University campuses.


Special honors sections of regular classes usually have 25 or fewer students per section. They are taught by specially selected, experienced and highly qualified faculty. The entire program can be completed in four semesters. Entrance into the program is competitive. For additional details about the benefits, requirements, and curriculum, see the Honors Program section in this catalog, and consult with the Honors Program Coordinator, who can be reached by calling (559) 442-4600, ext. 8470.

## Dean'sList

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

## Honors at Graduation

## High Honors

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

## Highest Honors

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

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

## College Sanctioned Accouterments at Graduation

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

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

| African American Graduation | Sash |
| :--- | :--- |
| Alpha Gamma Sigma Honor <br> Society | Gold Cord |
| Dean's Medallion | Medallion |
| President's Medallion | Medallion |
| High Honors | Gold Tassel |
| Latino Graduation | Sash |
| Leon S Peters Honors Program | Stoll |
| Phi Theta Kappa Honor Society | Gold Cord |
| Veteran Student |  <br> 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 (559) 442-4600, ext. 8470.

## Phi Theta Kappa

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

## CERTIFICATE AND DEGREE REOUIREMENTS

## Catalog Rights

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

A student may elect to meet the requirements for an academic program from one of the following:

1. The catalog in effect at the time the student first applied or reapplied and began continuous enrollment;
2. In the event of a major/program change, the student may assume new catalog rights under the following conditions:

- The change of major/program must be approved by counselor, and
- The major selected must be within a catalog during the student's continuous enrollment;

3. The catalog in effect at the time of the student's program completion.

## Certificates

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

See page 86 for a list of certificates.

## Certificate of Achievement

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

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

See page 86 for a list of certificates of achievement.

## Certificate of Completion

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

See page 86 for a list of certificates of completion.

## Course Classification

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

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

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

## Graduation Requirements

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

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

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

## General Education for the AA/AS Degree

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

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

Students who complete natural sciences general education courses will be able to:

1. Analyze basic concepts of biological and/or physical science to evaluate and debate the validity of scientific information.
2. Express an understanding of the relationships between science and other human activities.

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

Students who complete social and behavioral sciences general education courses will be able to:

1. Analyze how people act and have acted to shape and respond to their societies and the natural environment.
2. Describe how societies and social subgroups and individuals operate in specific historical and contemporary contexts.
3. Compare and critique the principles, perspectives, and methods of inquiry and measurement appropriate to the particular discipline being studied.
Humanities.Courses in the humanities examine the philosophical, literary, aesthetic, and cultural expressions of humans. These courses develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them through artistic and cultural creation. They develop aesthetic understanding and, through study of traditional and changing cultural perspectives, foster better informed value judgments. These courses also offer students the opportunity to explore their creativity and imagination and to move consciously towards an awareness of their capability for artistic self-expression. This category will include art history, literature and fil m , philosophy and morality, comparative religion, the fine and performing arts and language. When we ask who we are, and what our lives ought to mean, we are using the humanities.

Students who complete humanities general education courses will be able to

1. Describe how peoples of different times and cultures relate to their environments through individual artistic expression and shared cultural traditions.
2. Articulate an understanding of the relationships between the arts, the humanities and themselves.
3. Describe, explain, discuss, evaluate, compare and contrast theories to understand the nature of reasoning, reality and value.
Language and Rationality. Courses in language and rationality are those which develop for the student principles and applications of language that lead to logical thought, clear and precise expression, and critical evaluation of communication in any endeavor.
4. English Composition: Courses fulfilling this requirement include both expository and argumentative writing.
5. Communication and Analytical Thinking: Courses fulfilling these requirements include oral communication, mathematics, logic, statistics, computer language and programming, and related disciplines.

Students who complete language and rationality general education courses will be able to:

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

## Multiple Degrees

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

## Requirements for the Associate Degrees for Transfer

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

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120unit 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 1 AH 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 1 A or 1 AH with a grade of " C " or better.
6. Competence in oral communication, demonstrated by the completion of Communication 1, 2, 4, 8, 8H or 25 with a grade of 2.0 , " $C$ " or better.
7. Competence in mathematics, demonstrated by (a) An appropriate placement test score or (b) Completion with a grade of 2.0 , " C " or better one of the following classes: Mathematics $4 \mathrm{~A}, 4 \mathrm{~B}, 5 \mathrm{~A}, 5 \mathrm{~B}, 6,7,10 \mathrm{~A}, 10 \mathrm{~B}$, $11,21,26,42,45,102,103$.

8. Familiarity with computer concepts and computer use, demonstrated by completing with a grade of "C" (2.0) or better, one of the following: (a) Applied Technology 10; Business \& Technology 1, 2, 9, 10, or 28; Computer Information Technology 12, 15, or 17; Graphic Communications 14, 15, 16, 17, 20A, 20B, 22, 23, 24A, 25, 27, 28, 30, 31, 32, 34, 39A, 40A, 41, 52, 53; Library Skills 2; or (b) A course in the student's major that has been designated by the division of that major as meeting the computer literacy requirement; or (c) A college examination of computer literacy.
9. Awareness of lifetime physical and mental wellness, demonstrated by completion of Allied Health 1 , Health Science 1, Psychology 2, Psychology 2H, Psychology 33, or Child Development 38/Psychology 38.
10. Two physical education and/or dance classes. The physical education courses that will meet this requirement are DEVSER 50-55; PE 3-9, 12-15C, 17, 23, 27, 29B-43B, 29C-31C, 33C-43C, 45, and 70-72.
Exceptions will be considered for:

- Veterans, P.O.S.T program candidates, Basic Fire

Academy graduates, or

- Students who submit a physician's statement certifying that they are not physically able to participate in physical education classes.
o Exemption forms are available at the Health Services office, Students Services Building, lower level.
o Must be documented as permanent by student's physician. 0 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 , 2 H , 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, 5, 7, 11A/AH, 11B, 14, 20 , 21A, 21B, 46, 55
Chemistry 1A, 3A, 3B
Geography 1, 7, 8
Geology 1, 2, 4, 5, 7, 8, 9, 12
Physics 2A, 2B, 4A
Physical Science 11, 42

## B. Social and Behavioral Sciences

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

1. Political Science $2 / 2 \mathrm{H}$, 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, 12, 28
Asian-American Studies 1, 8, 10, 15, 25, 30
Business Administration 20
Chicano-Latino Studies 11, 12, 13, 14, 24, 28 , 29, 30
Child Development 5, 39
Criminology 5
Economics 25, 40/40H, 50/50H
Food and Nutrition 43
Geography 2, 4A, 4B, 20
Global Studies 1, 2
History $1 / 1 \mathrm{H}, 2 / 2 \mathrm{H}, 3,11,12 / 12 \mathrm{H}, 15,17,18$, $21,22,25,29,30,34$
Human Services 20
Political Science 1, 5, 24, 25
Psychology 5, 25, 36, 39
Sociology 1A/1AH, 2, 10, 14, 31, 32
Women's Studies 10, 22, 24, 41, 43, 47

## C. Humanities (3 units)

African-American Studies 3, 8, 15, 17
American Indian Studies 35
American Sign Language 1, 2, 3, 4, 5, 6, 7, 8
Architecture 10, 11, 15A, 15B, 20, 30
Armenian 1, 2
Art 2, 3, 4, 5/5H, 6/6H, 7, 8, 9, 10, 11, 12A, 12B, 14, 15, 16, 17, 18, 19, 20, 21, 22B, $23,25 \mathrm{~A}, 28,29,31,32 \mathrm{~A}, 32 \mathrm{~B}, 52,55$
Asian American 8, 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, 7
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, 15, 16, 17, 20, 21, 22, 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/1CH, 1D, 5, 6
Photography $5,6,15,17,18,30,32,40$
Portuguese 1,2
Spanish 1, 2, 2NS, 3, 3NS, 4, 4NS, 5, 6, 7, 41, 42
Theatre Arts $12,23,25,27 \mathrm{~A}, 27 \mathrm{~B}, 28,30$, $31,32,35,36,38,41,42,43,44 \mathrm{~A}, 44 \mathrm{~B}$, 46, 49
Women's Studies 36

## D. Language and Rationality

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

1. Composition
(The course used to fulfill this general education
area requirement may also be used to satisfy degree
requirement 4 , competence in writing, above.)
English 1A/1AH
2. Communication and Analytical Thinking

Applied Technology 10
Business Administration 10/10H, 18, 30, 33
Communication 25
Computer Information Technology 60, 63, 65, 66, 69
Computer Science 40, 41
Criminology 13
Decision Science 21, 23
Electrical Systems Technology 51
English $3 / 3 \mathrm{H}$
Graphic Communications 14, 15, 16, 17, 20A, 20B, 22, 23, 30, 41, 51
Marketing 10
Math $102,103,4 \mathrm{~A}, 4 \mathrm{~B}, 11 / 11 \mathrm{H}, 42$ or any advanced math class
Philosophy 2/2H, 6
Political Science 13
Psychology 42
Sociology 1B
See a counselor for other courses which fulfill this requirement.

## Application for Associate Degree or Certificate of Achievement

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


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

## TRANSFER INFORMATION AND REOUIREMENTS

## Preparation to Enter Four-year Colleges or Universities

Fresno City College provides the first two years of a fouryear 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 48 of this catalog. The courses so designated by Fresno City College shall be accepted by any campus of the State University for elective credit toward its baccalaureate degrees. Students can complete the general education requirements for all of the California State Universities by following the appropriate pattern which follows. Completion of the general education requirements will be certified on the Fresno City College final transcript upon the student's request.

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

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

## Articulation

Articulation is a process of developing formal written agreements that identify courses at one college that are accepted in lieu of specific courses at another college or that fulfill a specific statewide pattern of general education.

Fresno City College has developed numerous articulation agreements with California State University and University of California campuses. These agreements may be viewed at www.assist.org or in the Fresno City College Transfer Center.

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

## Articulation System Stimulating Inter-Institutional Student Transfer (ASSIST)

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

- CSU Transferable Courses

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

- CSU GE-Breadth Certification Courses

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

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

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

| C-ID Number | Fresno City College Course |
| :--- | :--- |
| ACCT 110 | Accounting 4A or 4AH, <br> Financial Accounting |
| ACCT 120 | Accounting 4B or 4BH, <br> Managerial Accounting |
| AJ 110 | Criminology 1, Introduction to <br> Criminology |
| AJ 120 | Criminology 6, Concepts of Criminal <br> Law |
| AJ 122 | Criminology 4, Principles and Practic- <br> es of the Justice System |
| AJ 124 | Criminology 3, Legal Aspects of <br> Evidence |
| AJ 140 | Criminology 8, Criminal <br> Investigation |

42 Transfer Information and Requirements

| AJ 150 | Criminology 9, Crime Scene Investigation | BIOL190 | Biology11A or 11AH, Biologyfor Science Majors I |
| :---: | :---: | :---: | :---: |
| AJ 160 | Criminology 5, Community Relations | BUS 110 | Business Administration 10 or 10H, Introduction to Business |
| AJ 200 | Criminology 20, Introduction to Corrections | BUS 120 | Business Administration 18, Business and the Legal |
| AJ 220 | Criminology 11, Juvenile Delinquency |  | Environment |
|  |  | CDEV100 | Child Development 39 or Psychology 39, Child Growth and Development |
| ANTH110 | Anthropology 1, Biological Anthropology |  |  |
| ANTH120 | Anthropology2or2H,Cultural Anthropology | CDEV110 | Child Development 30, Child, Family and Community |
| ANTH130 | Anthropology 8, Language and Culture | CHEM 101 | Chemistry 3A, Introductory General Chemistry |
| ANTH150 | Anthropology 4, Introduction to Archaeology | CHEM 102 | Chemistry 3B, Introductory Organic and Biological |
| ARTH100 | Art 2, Art Appreciation |  | Chemistry |
| ARTH110 | Art 5 or 5H, ArtHistory Ancientto Medieval | CHEM 110 | Chemistry 1A, General Chemistry |
| ARTH120 | Art 6 or 6H, Art History Renaissance to Modern | CHEM 120S | Chemistry $1 B+$ Chemistry 1A, General Chemistry and Qualitative Analysis |
| ARTH130 | Art55, Introductionto Asian Art |  | and General Chemistry |
| ARTH145 | Art60orChicano-LatinoStudies22, <br> Art of the Ancient Americas | CHEM 140 | Natural Science 1A, Integrated Science: Physics and Chemistry |
| ARTS 100 | Art 3, Two-Dimensional Design | CHEM 150 | Chemistry 28A + Chemistry 29A, |
| ARTS 101 | Art 4, Three-Dimensional Design |  | Organic Chemistry I and Organic Chemistry Laboratory I |
| ARTS 110 | Art 7, Beginning Drawing |  |  |
| ARTS 200 | Art 8, Beginning Figure Drawing and Anatomy | CHEM 160S | Chemistry 28A + Chemistry 29A + <br> Chemistry 28B + Chemistry 29B, Organic Chemistry I and II |
| ARTS 205 | Art 17, Intermediate Drawing | COMM 110 | Communication 1, Introd |
| ARTS 210 | Art 9, Beginning Painting: Oil/Acrylic |  | Public Speaking |
| ARTS 250 | Art52, IntroductiontoDigital Art/New Media | COMM 120 | Communication 25, Argumentation |
| ARTS 280 | Art 12A, Craft Workshop: Living Traditions | COMM 130 | Communication 2, Interpersonal Communication |
| BIOL110B | Biology 20, Human Anatomy | COMM 140 | Communication 8, Group Communication |
| BIOL115S | Biology 21A + Biology 21B, Human Anatomy \& Physiology |  |  |
|  |  | COMM 160B | Communication 26, Intercollegiate ForensicsLaboratory |
| BIOL120B | Biology 22, Human Physiology |  |  |
| BIOL130S | Biology 4 + Biology 6 , <br> Principles of Zoology and Principles of Botany | COMM 190 | Communication 4, Persuasion |
|  |  | COMP 112 | Computer Science 1, Introduction to Programming Concepts and Method- |
| BIOL140 | Biology 11B, Biology for Science Majors II |  |  |
|  |  | COMP 142 | Computer Science 45, Computer Architecture and Organization |

## 2019-2020 Fresno City College Catalog

| COMP 152 | Computer Science 26, Discrete Mathematics for Computer Science |
| :---: | :---: |
| ECE 120 | Child Development 1, Principles and Practices of Teaching Young Children |
| ECE 130 | Child Development 3, Introduction to Curriculum |
| ECE 200 | Child Development 20, Observation and Assessment |
| ECE 210 | Child Development 37A, Early Childhood Practicum |
| ECE 220 | Child Development 6, Health, Safety and Nutrition in Early Childhood Education |
| ECE 230 | Child Development 15, Diversity and Culture in Early Childhood Education Programs |
| ECON 201 | Economics 40 or 40H, Introduction to Microeconomics |
| ECON 202 | Economics 50 or 50H, Introduction to Macroeconomics |
| EDUC 200 | Education 30 + Education 19, Introduction to Teaching and Work Experience (Cooperative), Occupational |
| EDUC 200 | Education 30 + Education 19X, Introduction to Teaching and Work Experience (Cooperative), Occupational |
| ENGL 100 | English 1A or 1AH, Reading and Composition |
| ENGL 105 | English 3 or English $3 H$, Critical Reading \& Writing |
| ENGL 120 | English 1B, Introduction to the Study of Literature |
| ENGL 130 | English 48A, Introduction to American Literature to 1865 |
| ENGL 135 | English 48B, Introduction to American Literature from 1865 to the Present |
| ENGL 140 | English 44A, World Literature to the Renaissance |
| ENGL 145 | English 44B, World Literature since the Renaissance |
| ENGL 160 | English 46A, English Literature to 1800 |
| ENGL 165 | English 46B, English Literature from 1800 to the Present |


| ENGL 200 | English 15A + English 15B, Creative Writing: Poetry and Creative Writing: Fiction |
| :---: | :---: |
| ENGR 110 | Engineering 10, Introduction to Engineering |
| ENGR 130 | Engineering 8, Statics |
| ENGR 150 | Engineering 2, Graphics |
| ENGR 180 | Engineering 1A, Elementary Plane Surveying 1 |
| ENGR 220 | Engineering 5, Programming and Problem Solving in MATLAB |
| ENGR 260 | Engineering 6, Circuits with Lab |
| ENGR 260L | Engineering 5, Circuits with Lab |
| FIRE 100X | Fire Technology 1, Fire Protection Organization |
| FIRE 110X | Fire Technology 2, Fire Prevention Technology |
| FIRE 120X | Fire Technology 3, Fire Protection Equipment and Systems |
| GEOG 110 | Geography 1, Physical Geography |
| GEOG 120 | Geography 2, Cultural Geography |
| GEOG 125 | Geography 4A + Geography 4B, World Geography and World Geography |
| GEOG 140 | Geography 20, Geography of California |
| GEOG 160 | Geography 30, Regional Field Studies |
| GEOL 101 | Geology 1, Physical Geology |
| GEOL 110 | Geology 2, Historical Geology |
| GEOL 110L | Geology 2L, Historical Geology Lab |
| GEOL 121 | Geology 9, Introduction to Earth Science |
| GEOL 200 | Geology 4, Geology of California |
| HIST 130 | History 11, History of the United States to 1877 |
| HIST 140 | History 12 or 12H, History of the United States since 1877 |
| HIST 150 | History 20, World History I, to 1600 |
| HIST 160 | History 23, World History II, since 1500 |
| HIST 170 | History 1 or 1H, Western Civilization to 1648 |
| HIST 180 | History 2 or 2 H , Western Civilization since 1648 |

44 Transfer Information and Requirements

| ITIS 120 | Computer Information Technology 15, ComputerConcepts | MATH 230 | Mathematics 6, Mathematical Analysis III |
| :---: | :---: | :---: | :---: |
| JOUR 100 | Journalism 1, Introduction to Mass Communication | MATH 240 | Mathematics 7, Introduction to Differential Equations |
| JOUR 110 | Journalism 3, Newswriting | MATH 250 | Mathematics 26, Elementary Linear Algebra |
| JOUR 120 | Journalism 14, Multimedia Reporting |  |  |
|  |  | MATH 851 | Mathematics 4A, Trigonometry |
| JOUR 130 | Journalism4, WritingfortheCollege Newspaper | MATH 900S | Mathematics $5 A$ and $5 B$, Mathematical Analysis I and Mathematical Analysis II |
| JOUR 130 | Journalism 11A, Beginning Media Writing Practicum |  |  |
|  |  | MUS 100 | Music 12, Music Appreciation |
| JOUR 130 | Journalism 11C, Advanced Media Writing Practicum | MUS 110 | Music 3, Music Fundamentals |
|  |  | MUS 120 | Music 1A, Music Theoryl |
| JOUR 130 | Journalism 11D, Editorial Leadership | MUS 125 | Music 7A, Ear TrainingI |
|  |  | MUS 130 | Music 1B, Music Theoryll |
| JOUR 131 | Journalism 11B, Intermediate Media Writing Practicum | MUS 135 | Music 7B, EarTraining:Levelll |
| JOUR 131 | Journalism 11C, Advanced Media Writing Practicum | MUS 140 | Music2A,Music Theory III |
|  |  | MUS 145 | Music 7C, Ear Training: Level III |
| JOUR 131 | Journalism 11D, Editorial Leadership | MUS 150 | Music, 2B, Music Theory IV |
|  |  | MUS 155 | Music 7D, Ear Training: Level IV |
| JOUR 160 | Photography 30, Editorial Photography | MUS 160 | Music 22, Intermediate/Advanced Piano |
| JOUR 210 | Journalism 13, Advanced Reporting and Writing | MUS 160 | Music 26, Intermediate/Advance Voice |
|  |  | MUS 160 | Music 29, Intermediate/Advanced Guitar |
| KIN 100 | Physical Education 62, Introduction to Kinesiology |  |  |
|  |  | MUS 160 | Music 42A, Intermediate/Advanced Brass (Brass Choir) |
| KIN 101 | Health Science 2, First Aid and Safety |  |  |
| MATH 110 | Decision Science 23, Business Statistics | MUS 160 | Music 42B, Intermediate/Advanced Woodwinds (Woodwind Choir) |
| MATH 110 | Mathematics 11, Elementary Statistics | MUS 160 | Music 42C, Intermediate/Advance Strings (String Orchestra) |
| MATH 110 | Mathematics 42 or Psychology 42, Statistics for the Behavioral Sciences |  |  |
|  |  | MUS 160 | Music 42D, Intermediate/Advanced Percussion(PercussionEnsemble) |
| MATH 120 | Mathematics 10A, Structure and Concepts in Mathematics |  |  |
|  |  | MUS 160 | Music 74A, Intermediate/Advanced Brass Performance Practices |
| MATH 130 | Decision Science 21, Finite Mathematics |  |  |
|  |  | MUS 160 | Music 74B, Intermediate/Advanced Woodwind PerformancePractices |
| MATH 130 | Mathematics 21, Finite Mathematics |  |  |
| MATH 151 | Mathematics 4B, Pre-Calculus | MUS 160 | Music 74C, Intermediate/Advanced StringsPerformance Practices |
| MATH 160 | Computer Science 26, Discrete Mathematics for Computer Science |  |  |
|  |  | MUS 160 | Music 74D, Intermediate/Advanced Percussion Performance Practices |
| MATH 210 | Mathematics 5A, Mathematical Analysis I |  |  |
|  |  | MUS 180 | Music 30, CollegeChoir |
| MATH 220 | Mathematics 5B, Mathematical Analysis II | MUS 180 | Music 34, Fresno Chorale |

2019-2020 Fresno City College Catalog

| MUS 180 | Music 39A, Baroque/Classical Opera |
| :---: | :---: |
| MUS 180 | Music 39B, Romantic and Modern Opera |
| MUS 180 | Music 40, Concert Band |
| MUS 180 | Music 41, Jazz Ensemble |
| MUS 180 | Music 46, Symphony Orchestra |
| MUS 180 | Music 47A, Jazz Combo: New Orleans, Swing and Bop |
| MUS 180 | Music 47B, Jazz Combo: Cool and Mainstream |
| MUS 180 | Music 47C, Jazz Combo: Modern and Fusion |
| MUS 180 | Music 47D, Jazz Combo: World Music |
| MUS 180 | Music 48, Latin Jazz Ensemble |
| MUS 180 | Music 53, Latin Jazz Workshop |
| MUS 180 | Music 54, Afro-Latin Ensemble |
| MUS 180 | Music 55, Afro-Caribbean Ensemble |
| MUS 180 | Music 60, Symphonic Choir |
| MUS 180 | Music 68, Symphonic Band |
| MUS 180 | Music 70, Contemporary Jazz Ensemble |
| MUS 180 | Music 71, Lab Jazz Ensemble |
| MUS 180 | Music 72, Jazz Composer's Orchestra |
| MUS 180 | Music 76, College Philharmonic Orchestra |
| MUS 180 | Music 90, Jazz Composers Workshop |
| MUS 180 | Music 91, Jazz Composers Ensemble |
| MUS 180 | Music 92, Vocal Jazz Ensemble |
| NUTR 110 | Food and Nutrition 40, Nutrition |
| NUTR 120 | Food and Nutrition 1, Principles of Food Preparation |
| PHIL 100 | Philosophy 1A or 1AH, Theories of Knowledge and Reality |
| PHIL 120 | Philosophy 1C or 1CH, Ethics |
| PHIL 140 | Philosophy 3B, Modern Philosophy |
| PHIL 210 | Philosophy 6, Symbolic Logic |
| PHS 102 | Allied Heath 1, Introduction to Public Health |
| PHYS 100S | Physics 2A and 2B, General Physics 1 and General Physics 2 |
| PHYS 105 | Physics 2A, General Physics 1 |


| PHYS 110 | Physics 2B, General Physics 2 |
| :---: | :---: |
| PHYS 140 | Natural Science 1A, Integrated Science: Physics and Chemistry |
| PHYS 200S | Physics 4A + Physics 4B + Physics 4C, Physics for Scientists and Engineers |
| PHYS 205 | Physics 4A, Physics for Scientists and Engineers |
| PHYS 210 | Physics 4B, Physics for Scientists and Engineers |
| PHYS 215 | Physics 4C, Physics for Scientists and Engineers |
| POLS 110 | Political Science 2 or $2 H$, American Government |
| POLS 120 | Political Science 3, Introduction to Political Theory and Thought |
| POLS 130 | Political Science 5, Comparative Government |
| POLS 140 | Political Science 24, International Relations |
| POLS 150 | Political Science 1, Modern Politics |
| PSY 110 | Psychology 2 or 2H, General Psychology |
| PSY 115 | Psychology 33, Personal and Social Adjustment |
| PSY 120 | Psychology 16, Abnormal Psychology |
| PSY 130 | Psychology 25, Human Sexuality |
| PSY 150 | Psychology 36, Biological Psychology |
| PSY 170 | Psychology 5, Social Psychology |
| PSY 180 | Psychology 38 or Child Development 38, Lifespan Development |
| PSY 200 | Psychology 45, Introduction to Research Methods in Psychology |
| SJS 110 | American Studies 10, American Pluralism: A Search for Common Ground in a Multicultural Society |
| SJS 110 | American Studies 11, Law and Democracy |
| SJS 120 | Women's Studies 10, Changing Roles of Women |
| SOCI 110 | Sociology 1 A or 1AH, Introduction to Sociology |


| SOCI115 | Sociology 1B, Global Social Problems |
| :---: | :---: |
| SOCI 130 | Sociology 32, Introduction to Marriage and Family |
| SOCI 150 | Sociology 2, American Minority Groups |
| SPAN100 | Spanish 1, Beginning Spanish |
| SPAN110 | Spanish 2, High-Beginning Spanish |
| SPAN 200 | Spanish 3, Intermediate Spanish |
| SPAN 210 | Spanish 4, High-Intermediate Spanish |
| SPAN 220 | Spanish 3NS, Intermediate Spanish for Spanish Speakers |
| SPAN 230 | Spanish 4NS, High-Intermediate Spanishfor Spanish Speakers |
| THTR 111 | Theatre Arts 30, Theatre Appreciation |
| THTR 112 | Theatre Arts 30, Theatre Appreciation |
| THTR 113 | Theatre Arts 31, Theatre History and Dramatic Literature I |
| THTR 114 | Theatre Arts 38, Script Analysis |
| THTR 151 | Theatre Arts 41, Beginning Acting |
| THTR 151 | Theatre Arts 42, Beginning Acting for Theatre Majors |
| THTR 152 | Theatre Arts 43, Intermediate Acting |
| THTR 171 | Theatre Arts 25, Stagecraft |
| THTR 173 | Theatre Arts 27B, Introduction to Lighting Design |
| THTR 174 | Theatre Arts 36, Costume Design |
| THTR 175 | Theatre Arts 28, Introduction to Stage Makeup |
| THTR 191 | Theatre Arts 40, Performance Practicum |
| THTR 192 | 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 oruniversities.

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 studentswork closely withtheir 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 areconsideredtransferstudents.

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 2019-2020Area A: English Language Communication and Critical Thinking
Nine semester units minimum with one course from $A 1, A 2$, and $A 3$ ("C" or better grade required in $A 1, A 2$, 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 $3 / 3 \mathrm{H}$
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 $B 4$ ("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 $1 \mathrm{~A}(\mathrm{~L}), 1 \mathrm{~B}(\mathrm{~L}), 3 \mathrm{~A}(\mathrm{~L}), 3 \mathrm{~B}(\mathrm{~L}), 8 \mathrm{~A}, 28 \mathrm{~A}, 28 \mathrm{~B}$
Geography 1(L), 7(L), 8(L)
Geology 1(L), 2, 4, 5, 7, 8, 12
Natural Science 1A(L)
Physical Science 11
Physics 2A(L), 2B(L), 4A(L), 4B(L), 4C(L)

- Area B2, Life Science

Anthropology 1
Biology 3(L), 4(L), 5(L), 6(L), 7(L), 11A/11AH(L),
$11 B(L), 14,20(L), 21 A(L), 21 B(L), 22(L), 31(L), 55$

- Area B3, Laboratory Activity

Anthropology 1 L
Chemistry 29A, 29B
Geography 1
Geology 2L

- Area B4, Mathematics/Quantitative

Reasoning
Computer Science 26
Decision Science 21, 23
Mathematics $3 \mathrm{~A}, 4 \mathrm{~A}, 4 \mathrm{~B}, 5 \mathrm{~A}, 5 \mathrm{~B}, 6,10 \mathrm{~A}, 10 \mathrm{~B}$,
11/11H, 21, 26, 42, 45
Psychology 42

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

- Area C1, Arts

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

- Area C2, Humanities

African-American Studies 17
American Sign Language 1, 2, 3, 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 10/10H, 11/11H, 42
Japanese 1, 2
Linguistics 10/10H
Philosophy 1A/1AH, 1B, 1C/1CH, 1D, 3A, 3B, 5
Political Science 3
Portuguese 1, 2
Spanish 1, 2, 2NS, 3, 3NS, 4, 4NS, 5, 6, 7, 9, 41, 42
Theatre Arts 32
Women's Studies 36
Area D: Social Sciences
Nine semester units minimum from at least two disciplines.

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

Child Development 30, 38. 39
Economics 25, 40/40H,50/50H
Geography 2, 4A, 4B, 20
Global Studies 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
Human Services 10
Journalism 1, 16
Political Science 1, 2/2H, 3, 5, 24
Psychology 2/2H, 38, 39
Sociology $1 \mathrm{~A} / 1 \mathrm{AH}, 1 \mathrm{~B}, 2,10,32$
Women's Studies 10, 22, 30, 47
Area E: Lifelong Learning and Self-
Development
Three semester units minimum. *Three units of physical education alone is insufficienttoful fIIAREAE.

Child Development 38, 39
Food and Nutrition 35, 40
Health Science 1
*Physical Education 3, 4, 4B, 5, 6, 7, 8, 9, 12, 12B, 13, 13B, 14, 15A, 15B, 15C, 17, 27, 29B, 29C, 30B, 30C, 31B, 31C, 32B, 33B, 33C, 34B, 34C, 35B, 36B, 36C,
37B, 37C, 38B, 38C, 39B, 39C, 40B, 40C, 41B, 41C,
42B, 42C, 43B, 43C, 44B, 44C, 45, 70, 71, 72
Psychology 2/2H, 25, 33, 38, 39
Total Minimum Units Required for Certification . 39

Notes: Courses listed in more than one area or sub-area may only be used one time.
The same course, e.g. CLS/DANCE 27, can be counted only once.
Some CSU campuses have restrictions on when courses in AREAS A and 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.

## 2019-2020 Fresno City College Catalog

## 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 page 47).

## California State University Transfer Course List (CSU)

The following courses are baccalaureate-level courses transferable to all California State University campuses. Their acceptance in meeting general education or major requirements will vary among the campuses. Consult the appropriate catalog, major sheet or with a counselor for specific information.
Note: A number of courses are cross-referenced-the same course is listed in more than one area, department or discipline—usually with the same course number. Credit can be earned only once for cross-referenced courses. See the individual course listings in the "Course Descriptions" section of the catalog.
Accounting 4A, 4B, 19, 51, 52, 53, 54A, 56, 57, 61, 70, 73
Aerospace Studies 1A, 1B, 2A, 2B, 3,5
African-American Studies $1,2,3,4,5,6,8,15$, 17, 34, 41
Allied Health 1, 2, 19, 20, 21
American Indian Studies 20, 31, 32, 34, 35
American Sign Language $1,2,3,4,5,6,7,8,20$, 21, 22
American Studies 10, 11
Anthropology $1,1 \mathrm{~L}, 2 / 2 \mathrm{H}, 3,4,8,12,13,15,16 \mathrm{~A}$, 16B, 24, 28, 30
Applied Technology 10, 11, 19, 21, 40
Architecture 10, 11, 12, 14, 15A, 15B, 20, 21, 22, $24,30,31,32,34,40,41 \mathrm{~A}, 42$
Armenian 1, 2, 3
Art $2,3,4,5 / 5 \mathrm{H}, 6 / 6 \mathrm{H}, 7,8,9,10,11,12 \mathrm{~A}, 12 \mathrm{~B}, 13$, $14,15,16,17,18,19,20,21,22 B, 23,24 A, 24 B$, 24C, 24D, 25, 25A, 27, 28, 29, 31, 32A, 32B, 36A, 38A, 40, 52, 55, 60, 70, 80
Asian-American Studies 1, 8, 10, 15, 20, 25, 30, 55 Astronomy 10
Automotive Technology 9, 10, 19, 51, 52, 53, 54, $55,56,57,58,58 \mathrm{~A}, 58 \mathrm{~B}, 58 \mathrm{C}, 61,62,63,64,65$, $66,67,68,68 \mathrm{~A}, 68 \mathrm{~B}, 68 \mathrm{C}$

Automotive Technology - General Motors ASEP 51, 52, 53, 54, 55, 56, 57
Biology 3, 4, 5, 6, 7, 11A/11AH, 11B, 14, 20, 21A, 21B, 22, 31, 46, 47, 55
Business Administration 5, 10, 10H, $18,19,20,24,25,27,28,30,31,33,34$, $35,38,40,43,44,48,49,50,51,52,58$
Business \& Technology $1,2,5,6,7,9,10,11$, $13,18,19,23,24,25,26,28,29,33,43$
Chemistry $1 \mathrm{~A}, 1 \mathrm{~B}, 3 \mathrm{~A}, 3 \mathrm{~B}, 8 \mathrm{~A}, 18 \mathrm{~L}, 20,28 \mathrm{~A}, 28 \mathrm{~B}, 29 \mathrm{~A}$, 29B
Chicano-Latino Studies 11, 12, 13, 14, 17A, 17B, 18, $20,21,22,24,27 \mathrm{~A}, 27 \mathrm{~B}, 28,29,30,33$
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 $1,2,4,8 / 8 \mathrm{H}, 12,20,25,26$
Computer Aided Drafting and Design 6A, 14,
16, 22, 24, 26A, 28, 32, 36A, 42
Computer Aided Manufacturing 5, 10, 15, 20, 26, 31
Computer Information Technology 12, 15, 17, 19, $20,21,23,24,26,28,31,40,45,48 \mathrm{~A}, 48 \mathrm{~B}, 50$, 54A, 54B, 55, 57, 58B, 58C, 58D, 58E, 58F, 60, $63,65,66,69,70,80,81,82,84,85,90,93,94,95$, 97, 99
Computer Science 1, 26, 40, 41, 45
Construction 14, 18, 50, 50A, 50B, 51, 52A, 52B, 53, 55, 56A, 56AL, 56B, 56BL, 60, 65
Counseling 43, 48, 53, 54
Criminology $1,3,4,5,6,7,8,9,11,12,13,15,16$, $18,19,20,21,23,24,25,36$
Dance $8,9,10 \mathrm{~A}, 10 \mathrm{~B}, 11,12 \mathrm{~A}, 12 \mathrm{~B}, 13 \mathrm{~A}, 13 \mathrm{~B}$, $14,15,16,17 \mathrm{~A}, 17 \mathrm{~B}, 18,20 \mathrm{~A}, 20 \mathrm{~B}, 21,22,25$, 26, 27A, 27B, 28, 28B, 30, 31, 32
Decision Science 21, 23
Dental Hygiene 1A, 1B, 1C, 1D, 2, 3A, 3B, 4, 5A, 5B, 5C, 6A, 6B, 7A, 7B, 8A, 8B, 9, 10, 11, 12, 13, 14
Developmental Services 50, 51, 52, 53, 54, 55
Drafting 12
Economics $25,40 / 40 \mathrm{H}, 50 / 50 \mathrm{H}$
Education 6, 7, 19, 19X, 30
Electrical Systems Technology 19, 50, 51, 52, 53, 54, 55A, 55B, 55C, 56A, 56B, 56C, 57A, 57B, 57С, 58, 59, 60, 61, 62, 63, 64, 80, 81, 82А, 82B, 83A, 83B, 84A, 96A, 96B, 96C, 96D
Engineering 1A, 2, 4, 5, 6, 8, 10, 11, 12
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
Fashion Merchandising 19, 26, 27, 28
Film 1, 2A, 2B, 3, 5, 6, 7

Fire Technology $1,2,3,4,5,8,9,14,23,24,25,26$, 27, 29, 30E, 50L
Food and Nutrition 1, 2, 35, 40, 41, 42, 43, 45
Food Service Management 11, 15, 19, 25, 35, 38
French 1, 2, 3
Geography $1,2,4 \mathrm{~A}, 4 \mathrm{~B}, 7,8,10,12,18,20,30$
Geology $1 / 1 \mathrm{H}, 2,2 \mathrm{~L}, 3,4,5,7,8,9,12$
German 1, 2
Global Studies 1, 2
Graphic Communications 14, 15, 16, 17, 20A, 20B, $22,23,24 \mathrm{~A}, 24 \mathrm{~B}, 25,27,28,30,31,32,34,39 \mathrm{~A}, 40 \mathrm{~A}$, 41, 47, 51, 52, 53
Health Information Technology 1, 2, 3, 4, 5, 6, 7, $8,9,10,11,12,14,15,16$
Health Science 1, 2, 3
Heating, Ventilation \& Air Conditioning 50, 51, 52, 53, 54, 56, 57
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, 11, 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
Japanese 1, 2
Journalism 1, 2, 3, 4, 6, 11A, 11B, 11C, 11D, $12,13,14,15,16,19$
Learning Assistance 1, 2A, 2B, 3
Library Skills 1
Library Technology 51, 52A, 52B, 54, 55, 56, 57, 61, 62, 63
Linguistics 10/10H, 11
Marketing 1, 10, 11, 12, 14, 17, 19, 21, 22
Mathematics $3 \mathrm{~A}, 4 \mathrm{~A}, 4 \mathrm{~B}, 5 \mathrm{~A}, 5 \mathrm{~B}, 6,7,10 \mathrm{~A}$, 10B, 11/11H, 21, 26, 42, 45
Medical Assisting 1, 2, 4, 5, 6A, 6B, 19
Military Science 1, 2, 11, 12, 50, 55, 60, 65
Music 1A, 1AP, 1B, 2A, 2B, 3, 4, 5, 6, 7A, 7B, 7C, 7D, $8,8 \mathrm{~B}, 8 \mathrm{C}, 9,10 \mathrm{~A}, 10 \mathrm{~B}, 12,13,15,16,17,18,20,21$, $22,24,25,26,27,28,29,30,34,35,39 \mathrm{~A}, 39 \mathrm{~B}$, 39C, 39D, 40, 41, 42A, 42B, 42C, 42D, 46, 47A, 47B, 47C, 47D, 48, 49, 53, 54, 55, 57, 59, 60, 63, 67, 68, 70, 71, 72, 74A, 74B, 74C, 74D, 76, 78, 90, 91, 92, 93
Natural Science 1 A
Nursing 19, 31, 32, 32A, 33, 33I, 35A, 35B, 41, 42, 42A, $45,46,51,52,52 A, 53,55,56,61,62,62 A, 65,66$
Paralegal 1, 2A, 2B, 3, 4, 5, 6A, 6B, 7, 8, 10, 11, 12, 13, $14,15,17,18,19,20$
Philosophy $1 \mathrm{~A} / 1 \mathrm{AH}, 1 \mathrm{~B}, 1 \mathrm{C} / 1 \mathrm{CH}, 1 \mathrm{D}, 2 / 2 \mathrm{H}, 3 \mathrm{~A}, 3 \mathrm{~B}, 5,6$

Photography $5,6,12,15,17,18,23,26$, 30, 32, 40, 45, 49, 57
Physical Education 3, 4, 4B, 5, 6, 7, 8, 9, 12, 12B, 13, 13B, 14, 15A, 15B, 15C, 17, 18A, 18B, 20, 23, 24, 26, 27, 28, 29B, 29C, 30B, 30C, 31B, 31C, 32B, 33B, 33C, 34B, 34C, 35B, 36B, 36C, 37B, 37C, 38B, 38C, 39B, 39С, 40B, 40С, 41B, 41C, 42B, 42C, 43B, 43C, 44B, 44C, 45, 62, 70, 71, 72
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 $1 \mathrm{~A}, 1 \mathrm{~B}, 1 \mathrm{C}, 1 \mathrm{D}, 2 \mathrm{~A}, 2 \mathrm{~B}$, $2 C, 2 D, 3,4 A, 4 B, 4 C, 5 A, 5 B, 5 C$
Real Estate 40, 41
Recreation 19, 20, 21, 23
Respiratory Care 16, 17, 18, 20, 21, 21B, 22, 23, 24, 25
Sociology 1A/1AH, 1B, 2, 5, 7, 10, 14, 31, 32
Spanish 1, 2, 2NS, 3, 3NS, 4, 4NS, 5, 6, 7, 8, 9, 41, 42
Special Studies 47
Theatre Arts 12, 15C, 23, 25, 27A, 27B, 28, 29A, 29B, 30, 31, 32, 35, 36, 38, 39A, 39B, 40, 41, 42, 43, 44A, 44B, 45, 46, 48A, 48B, 49
Welding $1,2 A, 2 B, 3 A, 3 B, 4 A, 4 B, 56$
Women's Studies $5,7,10,22,24,25,30,36,41,43$, 44, 47
WorkExperience 19
Note: No more than 8 units of work experience, including both vocational and general, are considered appropriate for transfer.

## TransfertoUniversityof California (UC)

## Transfer Requirements of the University of California (UC) <br> Students ineligible for admission to the University of California at the time of high school graduation because of low grades or a combination of low grades and a lack of required subjects must meet three criteria: (1) establishment of an overall GPA of 2.4, (2) completion of 60 transfer semester units and (3) presentation of appropriate college courses completed with a "C" grade or better in the "A-F" subjects not completed in high schools. Up to two units of credit may be waived if (1) and (2) are satisfied.

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

## UC Transfer Admission Guarantee (Guaranteed Admission)

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

## University of California Transfer Course List (UC)

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

Business Administration 10/10H, 18, 20, 30
Chemistry *1A, 1B, *3A, 3B, 8A, 18L, 20, 28A, 28B, 29A, 29B
*1A and $3 A$ combined: maximum credit, 1 course.
Chicano-Latino Studies 11, 12, 13, 14, 17A, $17 B, 18,20,21,22,24,27 A, 27 B, 28,29,30,33$
Child Development 30, 38, 39
Chinese 1, 2
Communication 1, 2, *4, 8, 12,*25
*4 and 25 combined: maximum credit, 1 course.
Computer Information Technology *12, *15, 40, 60, 63,66,70
*12 and 15 combined: maximum credit, 1 course.
Computer Science 1, 26, 40, 41, 45
Counseling 53
Criminology 1, 5, 6, 13
Dance *9, 10A, 10B, 11, 12A, 12B, 13A, 13B, 14, $15,16,17 \mathrm{~A}, 17 \mathrm{~B}, 18,20 \mathrm{~A}, 20 \mathrm{~B}, 21,22,27 \mathrm{~A}, 27 \mathrm{~B}$, 28, 28B, 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.
Developmental Services 50, 51, 52, 53, 54, 55
Economics $40 / 40 \mathrm{H}, 50 / 50 \mathrm{H}$
Education 30
Engineering $1 \mathrm{~A}, 2,4,5,6,8,10,12$
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
Film 1, 2A, 2B, 3, 5, 6
Food and Nutrition 35, 40
French 1, 2, 3
Geography *1, 2, 4A, 4B, *7, 8, 10, 12, 18, 20
${ }^{*} 1$ and 7 combined: maximum credit, 1 course.
Geology 1, 2, 2L, 3, 4, 5, 7, 8, *9, 12
* No credit for 9 if taken after 1, 2/2L, 3, 4, 5, 8 or ASTRO 10.


## German 1, 2

Global Studies 1, 2
Graphic Communications 15, 16, 24A, 27, 31, 34, 39A, 40A, 41, 47
Health Science 1, 2, 3
History $1 / 1 \mathrm{H}, 2 / 2 \mathrm{H}, 3,11,12 / 12 \mathrm{H}, 15,17,18,20,21$, $22,23,25,29,30,34$
Hmong 1, 2
Honors Studies \#1A, *1C
\#Variable topics; evaluation completed by individual campuses after admission.
${ }^{* 1} 1 \mathrm{C}$ must be taken concurrently with PHIL 1AH, HUMAN 10H, HUMAN 11H, HIST 1H, HIST 2H, ENGL 3H, ART 5H or ART 6 H for credit.


Human Services 10, 20
Humanities $10 / 10 \mathrm{H}, 11 / 11 \mathrm{H}, 42$
IndividualStudy \#49
\#Variable topics; evaluation completed by individual campuses after admission.
Japanese 1, 2
Journalism 1, 16
Linguistics $10,10 \mathrm{H}$
Mathematics 4B, 5A, 5B, 6, 7, *10A, *10B, ${ }^{\circ} 11$, 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, *50, *55, *60, *65
${ }^{*} A n y$ or all of these courses and Aerospace Studies $1 A, 1 B$,
$2 A, 2 B, 3$ combined: maximum credit, 8 units.
Music 1A, 1B, 2A, 2B, *3, 4, 5, 6, 7A, 7B, 7C, 7D, 8, $9,10 \mathrm{~A}, 10 \mathrm{~B}, 12,13,15,16,17,18,20,21,22,24,25$, $26,27,28,29,30,34,35,39 A, 39 B, 39 C, 39 D$, 40, 41, 42A, 42B, 42C, 42D, 46, 47A, 47B, 47C, 47D, 48, 49, 53, 54, 55, 57, 59, 60, 63, 68, 70, 71, 72, 74A, 74B, 74C, 74D, 76, 90, 91, 92
*No credit for 3 if taken after 1 A .
Natural Science 1A
Philosophy 1A/1AH, 1B, 1C/1CH, 1D, 2/2H, 5, 6
Photography 5, 6, 12, 15, 17, 18, 23, 57
Physical Education $+3-17,20,23$, * $24,26,+27$, $28,+29 B-42 B,+29 \mathrm{C}-44 \mathrm{C},+43 \mathrm{C},+45,62,+70,+71,+72$
*Any or all of these courses combined: maximum credit, 8 units.
+Any or all of these PE Activity courses combined; maximum credit, 8 units.
Physical Science *11
*No credit if taken after a college level course in Physics or Astronomy.
Physics *2A, *2B, *4A, *4B, *4C
*2A and $2 B$ and $4 A, 4 B, 4 C$ 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 $1 \mathrm{~A} / 1 \mathrm{AH}, 1 \mathrm{~B}, 2,5,7,10,14,32$
Spanish 1, \#2, \#2NS, *3, *3NS, +4, +4NS, 5, 6, $7,8,9,41,42$
\#2 and 2NS combined: maximum credit, 1 course
*3 and 3NS combined: maximum credit, 1 course
+4 and $4 N S$ combined: maximum credit, 1 course

## Special Studies \#47

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

Theatre Arts 12, 15C, 23, 25, 27A, 27B, 28, 29A, 29B, 30, 31, 32, 35, 36, 38, 39A, 39B, *41, *42, 43, 44A, 44B, 46
*41 and 42 combined: maximum credit, 1 course.
Women'sStudies $5,7,10,22,24,30,36,41,47$
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

CSU-Three courses required, one each from 1A, 1B, and 1 (nine semester units minimum);
UC-Two courses required, one each from Group 1A and $1 B$ (six semester units minimum).

## 1A English Composition

One course, three semester units. **English 1A/1AH, Reading and Composition. .4
1B Critical Thinking - English CompositionOne course, three semester units.
**English 3/3H, Critical Reading and Writing ......... 3
Philosophy 2, Critical Reasoning and Analytic Writing. ..... 3
Philosophy 2H, Honors Reasoning and Analytic ... Writing. .....  3
1C Oral Communication(CSU only: One course, three semester units)
Communication 1, Intro to Public Speaking ..... 3
**Communication 4, Persuasion .....  3
Communication 8, Group Communication ..... 3
**Communication 25, Argumentation .....  3
Area 2 - Mathematical Concepts andQuantitative ReasoningOne 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 5A, Mathematical Analysis । ..... 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 onefrom Humanities (nine semester units minimum).
3A Arts
African-American St 3, African-American Art....... 3 .....  3
African-American St 15, African-American Music. .....  3
American Indian St 35, American Indian Art .....  3
Asian American St 55, Introduction to Asian
Art. .....  3
Architecture 15A, History of Architecture I ..... 3
Architecture 15B, History of Architecture I .....  3
Art 2, Art Appreciation ..... 3
**Art 5/5H, Art History Ancient to Medieval ..... 3
**Art 6/6H, Art History Renaissance to Modern. ..... 3
Art 55, Introduction to Asian Art ..... 3
Art 60, Art of the Ancient Americas ..... 3
Chicano-Latino St 20, Chicano Art ..... 3
Chicano-Latino St 22, Art of the Ancient Americas ..... 3
Dance 30, Dance Appreciation ..... 3
Film 6, Film Genres .....  3
**Music 3, Music Fundamentals ..... 3
Music 12, Music Appreciation ..... 3
Music 13, History of Music ..... 3
Music 16, Jazz History and Appreciation ..... 3
Music 17, History of Rock ..... 3
Theatre Arts 30, Theatre Appreciation ..... 3
Theatre Arts 31, Theatre History and Dramatic Lit I .....  3
Theatre Arts 32, Theatre History and Dramatic Literature II. .....  3
3B Humanities
African-American St 17, Arrican-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's Literature ..... 3
English 42, Classic Myths ..... 3
English 44A, World Literature to the Renaissance ..... 3
English 44B, World Literature Since the Renaissance .....  3
English 45, Contemporary World Literature .....  3
English 46A, English Literature to 1800 ..... 3
English 46B, English Literature from 1800 to the Present .....  3
English 47, Introduction to Shakespeare. ..... 3
English 48A, Introduction to American Literature to1865 ..... 3
English 48B, Introduction to American Literature from 1865 to the Present. ..... 3
Film 1, Introduction to Film Studies ..... 3


The Associate Degree for Transferin 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.
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 Civilizationto 1648 ..... 3
**History $2 / 2 \mathrm{H}$, 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
Linguistics 10H, Honors Introduction to Language ..... 3
**Philosophy 1A/1AH, Theories of Knowledge and Reality ..... 3
Philosophy 1B, Social and Political Philosophy ..... 3
Philosophy 1C/1CH, Ethics ..... 3
Philosophy 1D, World Religions ..... 3
Philosophy 5, Philosophy of Religion ..... 3
Portuguese 2, High-Beginning Portuguese ..... 5
Spanish 2, High-Beginning Spanish ..... 5
Spanish 2NS, Preparatory Spanish for Native Speakers ..... 5
**Spanish 3, 4, Intermediate Spanish ..... 5-5
**Spanish 3NS, 4NS, Intermediate Spanish for Spanish Speakers ..... 5-5
Spanish 5, The Short Story: Mexico, Spain, and the U.S. ..... 4
Spanish6, The ShortStory:LatinAmerica ..... 4
Spanish 7, Advanced Spanish: Comp and Grammar ..... 4
Spanish 41, Introduction to Poetry in Spanish ..... 4
Spanish 42, Hispanic American Culture ..... 4
Women'sStudies 36, Women'sLiterature ..... 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
Anthropology 12, Visual Anthropology: Introduction
to Ethnographic Film ..... 3

4B Economics
**Economics 40/40H, Introduction to Microeconomics 3
**Economics 50/50H, Introduction to Macroeconomics ..... 3
4C Ethnic Studies
African-American St 1, Introduction to African American Studies ..... 3
African-American St 34, History of the American Civil Rights Movement ..... 3
American Indian St 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 10, Hmong Culture .....  3
Asian-American St 15, Introduction to Asian-Americans ..... 3
Asian-American St25, Asian American Sociallssues ..... 3
Asian-AmericanSt30, Asian-American Women .....  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
Women's Studies 30, Asian-American Women .....  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 GayStudies .....  3
4E Geography
Geography2,Cultural Geography .....  3
Geography 4A, 4B, World Geography ..... 3-3
Geography 20, Geography of California ..... 3
4F History
African-American St 4, Classical and Pre Colonial Africa ..... 3
African-American St 34, History of the American Civil Rights Movement. ..... 3
Chicano-Latino St 29, History of Mexico, Colonial to Contemporary Period ..... 3
History 3, History of Ancient Rome. ..... 3
History 11, History of the United States to 1877 .....  3
History $12 / 12 \mathrm{H}$, 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
Women's Studies 22, History of American Women ..... 3
Women's Studies 30, Asian-American Women .....  3
4G Interdisciplinary, Social \& Behavioral SciencesAmerican St 10, American Pluralism:A Search for Common Ground in aMulticultural Society.3
Chicano-Latino St 30, Migration and the Family: Social and Psychological Perspectives .....  3
Child Development 30, Child, Family, and Community .....  3
Child Development 39, Child Growth and Development .....  3
Global Studies 1, Introduction to Global Studies. .....  3
Global Studies 2, Global Issues .....  3
Journalism 1, Introduction to Mass Communication ..... 3
Psychology 39, Child Growth and Development ..... 3
4H Political Science, Government \& Legal Institutions
American St 11, Law and Democracy. .....  3
Political Science 1, Modern Politics .....  3
**Political Science 2/2H, American Government .....  3
Political Science 3, Introduction to Political Theory and Thought ..... 3
Political Science 5, Comparative Government .....  3
Political Science 24, International Relations ..... 3
41 PsychologyChild Development 38, LifespanDevelopment. 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 \& CriminologyHuman Services 10, Introduction to Aging
Studies. ..... 3
Sociology 1 A/1AH, Intro to Sociology .....  3
Sociology 2, American Minority Groups. ..... 3
Sociology 10, Introduction to Aging Studies ..... 3Area 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 $1 A(L), 1 B(L)$, GeneralChemistry5-5
**Chemistry $3 A(L)$, Intro General Chemistry. .....  4
Chemistry 8A, Elementary Organic Chemistry..... 3Chemistry 28A/29A(L), OrganicChemistry 13-2
Chemistry 28B/29B(L), Organic Chemistry II ..... 3-2
**Geography 1(L), Physical Geography .....  4
**Geography 7(L), Physical Geography - Earth Surface. .....  4
Geography 8(L), Physical Geography - Weather/Climate .....  4
Geology 1(L), Physical Geology .....  4
Geology 2, Historical Geology .....  3
Geology 4, Geology of California .....  3
Geology 5, Introduction to Oceanography ..... 3
Geology 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 ..... 3
**Biology 3(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 14, Conservation Biology .....  3
Biology 20(L), Human Anatomy ..... 4
Biology 21A(L), Human Anatomy and Physiology ..... 4
Biology $21 \mathrm{~B}(\mathrm{~L})$, Human Anatomy and Physiology II ..... 5
Biology 22(L), Human Physiology ..... 5
Biology 31(L), Microbiology. ..... 5
Biology 55, Introduction to the Biology of Humans ..... 3
5C Science Laboratory
Anthropology 1L, Biological Anthropology Lab. .....  1
Chemistry 29A, Organic Chemistry Lab I .....  2
Chemistry 29B, Organic Chemistry Lab II .....  2
**Geography 1, Physical Geography ..... 4
Geology 2L, Historical Geology Lab ..... 1
Area 6 - UC Requirement in Language Other than EnglishProficiency equivalent to two years of high school study in thesame language with "C" or better grades (at Fresno City Collegeone course required if not met by high school foreign language).
American Sign Language 1, Beginning American Sign 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 Spanish for Spanish Speakers .....  5
Spanish 7, Advanced Spanish: Composition and 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 (Al) graduation requirement to count in both Areas $3 B / 4$ 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 $\qquad$ .. 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.

## 2019-2020 Fresno City College Catalog

## The following information is taken from the University of Cali- <br> fornia's website at www. universityofcalifornia.edu.

## U.C. Berkeley <br> Colleges of Chemistry and Engineering

In general, IGETC is not appropriate.

## College of Environmental Design

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

## College of Letters and Science

Either IGETC or the college's requirements are acceptable.

## College of Natural Resources

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

## Haas School of Business

IGETC is not accepted.

## U.C. Davis

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

## U.C. Irvine

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

## U.C. Los Angeles

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

## U.C. Merced

## School of Engineering and School of Natural Sciences

IGETC is not recommended.

## School of Social Science, Humanities, and Arts

IGETC is recommended, and students are encouraged
to complete as much lower-division major preparation as possible prior to transfer.

## U.C. Riverside

## College of Humanities, Arts and Social Sciences

IGETC is recommended.

## College of Natural and Agricultural Sciences

 IGETC is not accepted.[^0]
## 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 transter 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.

# ADMIIISTRATIVEPOLICIES 

## Student Conduct Standards

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

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

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

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

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

## Student Assembly

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

## Exercise of Free Expression

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

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

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

This policy is not intended to limit the use of sectarian, partisan, or denominational materials for legitimate library and classroom use.

## Student Protests and Demonstrations

The students, faculty, and administration of the community college district are expected to respect the rights of the minority just as much as they respect those of the majority. Every individual, operating within the law, is guaranteed the basic freedom to participate in demonstrations or protests as long as they do not interfere with the primary focus of the college - education. Picketing, demonstrations, or other forms of protest are not to be carried on so as to interfere with instructional activities or the normal flow of student traffic in and out of buildings.

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

## Student Publications

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

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

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

## Computer/Network Equipment Use Policy

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

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

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

## Tobacco-Free Campus

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

## Drug Abuse Policy

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

## Academic Freedom

## General Principles

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

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

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

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

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

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

## Academic Dishonesty

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

## Cheating

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

## Plagiarism

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

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

## Authority and Disciplinary Actions

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

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

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

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

## Student Rights

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

## Removal from Class by Instructor

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

## Grievance Policy for Students

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

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

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

## Rights and Responsibilities

## Open Enrollment

It is the policy of this District that, unless specifically exempted by statute or regulation, every course, section, or class, reported for state aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets such prerequisites as may be established pursuant to Title 5 of the California Code of Regulations.

## Student Enrollment Responsibilities

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

## Parking Regulations

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

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

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

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

## Statement of Nondiscriminatory Policy and Obligations

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

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

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

The lack of English language skills will not be a barrier to admission and participation in the college's vocational education programs.

Inquiries regarding Federal laws and regulations concerning nondiscrimination in education or the District's compliance with those provisions may also be directed to:

Office for Civil Rights
U.S. Department of Education

221 Main Street, Suite 1020
San Francisco, CA 94105

## Declaración: Póliza de la NoDiscriminación 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-tawv, 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-tawv, 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-Iwm nyob hauv college tej programs thiab Iwm yam rau txhua tus, nrog rau kev kawm hauj Iwm 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:

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

Lub tsev kawm ntawv paub 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 Iwm 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. Directory information is defined in District AR 5040. Objection, if any, to the release of this information may be made known in writing by filing the proper form at the Admissions and Records Office. Such objection shall be in force until changed by the student.

## Sexual Harassment Policy

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

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

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

- a. Submission to the conduct is explicitly or implicitly made a term or a condition of an individual's employment, academic status, or progress.
- b. Submission to, or rejection of, the conduct by the individual is used as the basis of employment or academic decisions affecting the individual.
- c. The conduct has the purpose or effect of having negative impact upon the individual's work or academic performance, or of creating an intimidating, hostile, or offensive work or educational environment.
- d. Submission to, or rejection of, the conduct by the individual is used as the basis for any decision affecting the individual regarding benefits and services, honors, programs, or activities available at or through the educational institution.
Complaints of sexual harassment should be processed according to the terms of District Administrative Regulation 3435.

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

## Change of Address, Telephone Number

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

## Other Policies

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

## STUDENT SUPPORT SERVICES

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

## Bookstore

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

## Return and Refund Policy

1. When returning merchandise, students must present their original cash register receipt with the correct dollar amount along with a photo ID. No refund will be given without it. Students have 5 working days from the date on the receipt to return textbooks and 30 days for returnable non-textbook items.
2. All sales are final on scantrons, tradebooks/novels and study aids. Various electronics, software and access codes are non-refundable if opened. Access codes that are exposed are also non-refundable.
3. A full refund is only given when a class has been canceled by the College and textbook(s) returned are in the same condition as initially bought. In all other cases, there is a $10 \%$ handling/restocking charge.
4. Textbook condition: New and used textbooks must be returned in salable condition. Any books damaged by liquids are not returnable. New textbooks must be clean, free of all marks, creases and erasures. If not, the books will be considered "used" and may be refunded at the used price. Wrapped, loose-leaf textbooks, e-books, books with exposed or open access codes and boxed merchandise are non-refundable once opened. Used textbooks are sold "as is." Because these books have been used by other customers prior to sale, the Bookstore cannot guarantee their life expectancy.
5. The bookstore reserves the right to make the decision on the condition or saleability of all returned merchandise.
6. Refunds will be issued in the same manner as paid (if paid with a credit/debit card - refund will be made back to credit/debit card).
7. No refunds on textbooks will be given the last four weeks of instruction of any term which includes summer sessions.
The bookstore accepts cash, VISA, MasterCard, Discover Card and American Express. Textbooks can be ordered online at www.bookstore.fresnocitycollege.edu. Shipments can be picked up at the FCC bookstore or delivered to a stated address. For further information, call (559) 442-8261.

## CalWORKs

The CalWORKs office, located in the Applied Technology 200 building, is a joint venture between the college and the Fresno County Department of Social Services (DSS).
Both college and DSS personnel staff the center.
The program provides an array of services to those eligible to participate in the CalWORKs program. Some of the benefits may include:

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

If you are interested in the CalWORKs program or want to inquire about eligibility for CalWORKs benefits, call (559) 442-8286.


The Fresno City College Athletic Department offers 21 intercollegiate teams for both men and
women. The FCC Rams have a rich and successful history that includes numerous conference and regional titles along with state championships in several sports.

## Child Development Center

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

## College Relations

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

## Counseling Department

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

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

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

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

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.

## TransferCenter

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

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

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

## Dream Center

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

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

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

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

The student with a disability seeking admission to Fresno City College must meet the following levels of independence:

1. The ability to negotiate the campus facilities independently or with the assistance of an attendant (to be provided by the student);
2. The ability to take care of their personal needs independently or with assistance of a personal attendant; and
3. The possession of a stable level of health in order to benefit from a full semester's work.
Each student with a disability must sign an authorization at the time of registration which would allow Fresno City College, in the absence of a personal attendant, to seek emergency medical treatment and/or ambulance services in the event it is deemed necessary by Fresno City College. (All costs associated with such medical treatment/transportation are the sole responsibility of the student.)

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

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

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

## District Police

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

## Extended Opportunity Programs and Services (EOPS)

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

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

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

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

Two supplemental programs exist under the umbrella of EOPS: 1) Cooperative Agencies Resources for Education (CARE) provides additional support and assistance for EOPS students who are recipients of Temporary Assistance for Needy Families (TANF), and single head of household with children under 14 years; 2) The Cooperating Agencies Foster Youth Education Services (CAFYES) is designed to encourage the enrollment, retention, and transfer of current and former foster youth in California's Community Colleges.
EOPS is located in the Student Services Building, lower level, room ST-101. Call (559) 442-8231 for additional information.


## Financial Aid

## Financial Aid and Scholarships

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

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

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

Application forms and information concerning financial aid and scholarship programs are available in the
Financial Aid Office, room 201, Student Services Building.
Students must apply by March 2 of each year prior to the fall semester if they wish to be considered for the Cal Grant program. Those students applying for the fall semester will be given priority, if eligible, for other state and federal programs if their application is processed and received by the Financial Aid Office by the published priority deadline date. For more information, call (559) 442-8245.

## Coursework Repeatability

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

## Return of Federal Financial Aid Based Upon Total Withdrawal

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

## Financial Aid Satisfactory Progress

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

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

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

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

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

## Asistencia financiera

## Asistencia financiera y becas

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

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

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

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

Los estudiantes deben inscribirse antes del 2 de marzo de cada año antes del semestre de otoño si quieren ser tenidos en cuenta para el programa de la beca Cal Grant. A Ios estudiantes que presenten su solicitud para el 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 de la fecha publicada de prioridad. Para obtener más información, llame al (559) 442-8245.

## Repetición de un curso

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

## Devolución de la asistencia financiera federal luego del abandono total del curso

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

## Avance satisfactorio para la asistencia financiera

Para ser elegible para participar en los programas de asistencia financiera para estudiantes en virtud del Título IV otorgados por el Departamento de Educación de Ios EE.UU. y por State Center Community College District, Ios estudiantes deben mantener un avance academic satisfactorio en un programa orientado a conseguir un título oun 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 0 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 <br> 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 Iwm pub rau cov neeg kawm ntawv. Cov kev pab hauv qab no yog cov muaj pab rau cov tub ntxhais kawm ntawv uas muaj feem txais tau:

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

Kev muaj nuj nqi ntau thiab tsawg kuj yog nyob ntawm nqi vaj tse, nqi ntaub ntawv, nqi khiav mus los, thiab Iwm 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 ghia 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 Iwm lub xeev thiab Iwm 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 (559) 442-8245.

## Cov Hoob Uas Rov Oab 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 Iwm 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 pua tauj 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 Ohov 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), txhuatus neeg kawg ntawv yuav tsum kawm kom tau nyob rau ghov 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 Iwm hoob yog ntau tshaj 30 qhab nias lawm. Nws yuav tsum nkag mus koom nyob rau Tsev Qhia Ntawv Fresno City College ghov 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 200 muaj cai sau ntawv tuaj foob qhov kev txiav txim no tau. Pab neeg saib xyuas qhov kev foob (The Financial Aid Appeal Committee) 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).

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

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

Taher Food Services offers catering services for campus functions.

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

The Ram Pantry is a free food assistance service for college students enrolled at Fresno City College. The Ram Pantry believes that food insecurity should not be a barrier to success for students. The goal is to increase the graduation and course completion rate for our students.

Students can visit the Ram Pantry Monday-Friday from 10am-2pm, located downstairs in the Student Center. Students must be currently enrolled, provide their student ID number, and bring their own bag in order to access Ram Pantry Services.

A variety of food trucks are available on campus Monday through Thursday from 11:00 a.m. - 6:00 p.m. at three locations on campus to serve students, faculty and staff each semester.

## Health Services

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

Health services available to Fresno City College students include confidential health counseling, health education, screening tests, emergency first aid, assistance in obtaining medical care, limited immunizations and HIV and TB skin testing.

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

## Housing Information

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

## Learning Resources Center (LRC)

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

## Library

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

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

## Tutorial Services LI-134

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

## Writing and Reading Center (WRC)

The WRC assists students with any writing or reading assignment for any class at any stage in the development process. Our trained tutors provide a friendly, supportive atmosphere for all students. Students can drop-in or make an appointment. A limited number of computers are also available. The WRC is located on the Mezzanine for the Tutorial Center. Free printing is available for classroom assignments for which tutoring is provided. For more information, call (559) 442-4600, ext. 8188.

## Math Support Center

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

## Extending the Class (ETC)

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

## English Support Center

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

## Academic Computer Lab LI-118

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

## Career Employment Center LI-147

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

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

## Lost and Found

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

## Psychological Services

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

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

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

## Public Information

The Public Information Office provides on- and off-campus public relations, marketing and promotion for the college. All advertising, media relations and sports information are the responsibility of the Public Information Office. Brochures, class schedules, the college catalog, press releases, videos, sports programs, and the college web site are all produced by the Public Information Office.

The Public Information Office also reviews all publications produced by other Fresno City College campus offices prior to on- or off-campus printing.

## Photo and Videotape Policy

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

## Special Student Programs

## IDILE Program

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

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

## Puente Project

The Puente Project at Fresno City College provides students with writing or math instruction, sustained academic counseling, and mentoring by professionals from the community. Students participate in the program for three consecutive semesters. The program consists of two cohorts. The first cohort consists of English 1A, English 205, Counseling 43 and Chicano Latino Studies11 during
the first semester; English 3 and Counseling 54 during their second semester. The second cohort consists of Mathematics 3A, Mathamatics 205, and Counseling 43 during the first semester; Mathematics 4A and Counseling 54 during the second semester. Both cohorts will have continued counseling and program activities during the third semester. The course content of the Puente classes has a Chicano/Latino emphasis. Throughout the program, Puente students also maintain contact with their assigned Puente mentor.

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

## Resources for American Indian Needs (RAIN)

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

- Academic Counseling/Transfer Assistance
- Peer Group Support
- Academic Tutoring for Success in Learning
- Financial Aid Assistance/Scholarships
- Career Exploration
- American Indian Program Activities
- Field trips (college campus tours)

To be eligible for the RAIN Program students must meet general admission requirements as outlined by Fresno City College (FCC) or be a current matriculated FCC student, participate in all activities sponsored by the program, and have an interest in obtaining a certificate, degree, or transfer to a four-year university or institution. The program is open to all students who desire to contribute, explore, and gain an understanding of the American Indian culture. The RAIN Program is a three-semester academic cohort. The student will enroll into an English (1A), American Indian Studies (31, 32,34 , or 35 ) and Counseling (150) course along with other major/elective courses appropriate for their area of study. The following semester will be similar, focusing on the appropriate level of English and/or Mathematics, American Indian Studies (31, 32, 34 or 35 ) and Counseling (54). The third semester will provide counseling follow-up services along with other appropriate major/elective coursework for the student's area of study. The Resources for American Indian Needs (RAIN) learning community program is in alignment with the FCC Student Equity Plan, which enables accessibility and support services for all American Indian/Alaska Native students to further prevent disproportionate transfer, degree, and certificate completion. For an application or more information, please contact Alexandra Gonzales at (559) 4438564 or email at alexandra.gonzales@fresnocitycollege.edu.

## Strengthening Young Men by Academic Achievement (SYMBAA)

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

## USEAA Academic Program

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

Enrollment is open to all students who meet program eligibility and can adhere with program requirements. The program is comprised of counselors and faculty dedicated to help students excel and succeed. The office is located
in the Old Administration Building (OAB), 2nd floor room 272. For more information, please contact us at (559) 4428226, extension 8639 or Kami Thepphavong, Program Coordinator, at (559) 442-8226, extension 8608 or email: kami.thepphavong@fresnocitycollege.edu.

## TRIO Programs

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

## Student Support Services Program (SSSP)

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

## Upward Bound Program

The FCC Upward Bound program is an intensive pre-college enrichment program designed to help first generation, economically disadvantaged high-school students improve their academic performance, and prepare for college. The Iong 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. Mail should not be addressed to students in care of the college.

## STUDENT ACTIVITIES

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

## Associated Students

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

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

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


## Organization of New Clubs

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

## Social Activities

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

## Athletics

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

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

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


## Publications

## About Ourselves

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

## TheFCCReview

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

## TheRampage

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


#### Abstract

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

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


## Career \& Technology Center

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

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

## AUTOMOTIVE COLLISION REPAIR (ACRCTC)

## 371 FUNDAMENTALS OF WELDING TECHNOLOGY

 AND WORKING SHEET METAL2.78 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 BODYWORKTECHNOLOGY

2.78 lecture hours, 13.89 lab hours,
(300 total hours), (Repeats = 3), (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: None.
Collision repair introductions and careers. Includes estimating repair costs, vehicle construction and power tool technology, service specification and measurements, using body filler, doing hood, bumper, fender, lid, door, roof, and glass service. Looking at restraint system operation, passenger compartment, body/frame measurement, and unibody/frame realignment.

## 373 AUTOMOTIVEREFINISHINGTECHNOLOGY <br> 2.78 lecture hours, 13.89 lab hours, <br> (300 total hours), (Repeats = 3), (Pass/No Pass), <br> (Open Entry/Open Exit) <br> PREREQUISITE: None. <br> Compressed air technology, refinishing materials and fasteners, repairing plastics, refinishing equipment technology, vehicle surface preparation and masking, refinishing procedures, color matching and custom painting, and paint problems and final detailing

## AUTOMOTIVE MECHANICS (AMCTC)

## 371 ENGINE REPAIR

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

## 372 ENGINE PERFORMANCE

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

## 375 AUTOMOTIVE BRAKE SYSTEMS

1 lecture hour, 1.8 lab hours, (Repeats = 3), (Pass/ No Pass)

Diagnose, service, and repair, braking systems related to automotive vehicles.

## INDUSTRIAL TRAINING (ITCTC )

371 WAREHOUSE AND DISTRIBUTION CAREERS
2 lecture hours, 3 lab hours, ( 90 total hours),
(Repeats = 3), (Open Entry/Open Exit), (Formerly ITVTC 71)
COREQUISITE: Industrial Training CTC 372.
Forklift and electric pallet jack safety and operation skills necessary for employment, 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)
COREQUISITE: Industrial Training CTC 371.
Provides forklift operation and safety skills necessary for employment in warehouse environment. Warehouse inventory and processing procedures utilizing computer based related programs, mathematics and proper packaging techniques to industry standards.

## MAINTENANCE MECHANIC (mMcTc )

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

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

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

## MANUFACTURING MECHANIC

(MFGMCTC)

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

## 352A TRADE MATHEMATICS

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

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

352C JOB PREPARATION
1 lecture hour, (18 hours), (Pass/No Pass)
PREREQUISITE: None.
Preparing resumes, portfolios, and improving employ-ment-seeking skills.

## 352D TECHNICAL REPORT WRITING

1lecture hour, (18 hours), (Pass/No Pass)
PREREQUIIITE: 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/NoPass)
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) PREREQUIIITE: None.
Basic metallurgy and properties of metals, oxyacetylene welding and cutting processes, arc welding, and safety within the work environment.

## 354C ELECTRICAL FUNDAMENTALS

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

## DevelopmentalEducation Program

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

## Entrance into the Program

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

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

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

## Benefits of the Program

Developmental Education students enjoy the following benefits:

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


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

## Purpose

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

## Description

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

## Placement

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

## Fire Academy

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

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

## Honors Program

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

## Benefits

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

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


## Requirements for Consideration of Acceptance

Requirements for Acceptance for high school seniors:

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

Requirements for Acceptance for current college students who have completed at least 12 transfer-level college units:

- College G.P.A. of 3.30

Application requirements include:

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

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


## PoliceAcademy

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

- Advanced Technical Courses-classes designed for in-service personnel already employed by a public safety agency.
- Correctional Academy and Probation Core Courses-offered in conjunction with local agencies and is required to work as a correctional officer, probation officer, or juvenile counselor for a local agency.
- Dispatcher Academy-designed for those who have been hired as, or want to become a complaint/dispatcher for a public safety agency.
- Regular Basic Course-Intensive and Extended 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, (559) 2442638, at Fresno City College or the Aerospace Studies Department, (559) 278-2593, at California State University, Fresno for information on courses offered and class meeting times.

## VeteransServices

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 <br> 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 $\mathrm{E}-5$ with dependents at the location of the school.
- An annual books and supplies stipend of $\$ 1,000$ paid proportionately based on enrollment.
Veterans are required to go on-line to learn more about this program in order to make an informed choice.

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

## Progress and Attendance Policies

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

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

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

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

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

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

## Academic Limitations

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

## Work Experience (Cooperative) Education

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

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

## Types of Cooperative Work Experience

1. General work experience education is the supervised employment of students with the intent of assisting them to acquire desirable work habits, career awareness, and positive attitudes in jobs. The jobs held by students need not be related to their occupational goals or college program.
2. Occupational/vocational work experience education is the extension of occupational learning opportunities and career awareness for students through employment in the occupational fields for which their college programs or majors are designed.

## School Credit

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

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

## TransferCredits

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.

## Qualifcations

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

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

## The Enrollment Process

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

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

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

Note: Actual class offerings vary by semester.


## AREAS OF STUDY BY DIIIIION

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

Adult Correctional Officer Core
Basic Police Academy
Basic Supervisors
Juvenile Correctional Officer Core
Probation Core Course
Requalification Basic Course
Safety Dispatcher's Basic Course
Aerospace Studies
Applied Technology
Architecture
Basic Architectural Contract Docu-
ment
Basic Architectural Design
Basic Architectural Office Practice
Basic Architectural Skills 1
Basic Architectural Skills 2
Basic Digital Architecture
Automotive Collision Repair Technology
Auto Collision Repair CTC
Automotive Mechanics CTC
Automotive Technology
Alternative Fueled Vehicle

Hybrid Electric Vehicle
Auto Tech: GM ASEP
Chassis Technician
Chassis Technician I
Chassis Technician II
Emission Technician
Emission Technician I
Emission Technician II
Powertrain Technician
Powertrain Technician I
Powertrain Technician II
Computer Aided Drafting and Design
2D CAD Technician
3D CAD Technician
3D CAD/CAM
CAD Technician I
Computer Aided Manufacturing
Construction
Residential Construction Wiring
Drafting
Electrical Systems Technology
Advanced Photovoltaic Technician
Automation Control Technician
Biomedical Tech
CISCO Certification
Control Systems
Electrical Systems Technology
Facility Controls
Industrial Automation 1
Low Voltage
Network Security
Networking/Computer Technician
Wireless Networks
Fire Technology
Basic Fire Academy
Emergency Medical Technician I
Emergency Medical Technician I,
Refresher
Firefighter II
Paramedic
Graphic Communications
Digital Media Option
Digital Video Option
Graphic Communications
Graphic Design Option
Visual Communication
Web Design

Heating, Ventilation, \& Air
Conditioning
HVAC Technology I
HVAC Technology II
HVAC Technology III
HVAC Wireless Control I
Industrial Technology
Industrial Training, Warehouse and
Distribution Careers
Maintenance Mechanic CTC
Manufacturing Mechanic CTC
Photography
Commercial Photography
Digital Photography
Fine Art Photography
Photojournalism
Professional Photography
Welding Technology
Metal Fabrication Option
Multi-Process
Pipe and Structural Steel Certificate Option
Welding Design and Fabrication
BUSINESS DIVISION
Accounting
Computerized Accounting for the Workplace
Business Administration
21st Century Work Competencies
Entrepreneurial Ventures
Human Resources Management
Professional and Civic Behaviors
Retail Management
Business \& Technology
Business Office English
Business Office Math Fundamentals
Clerical Training
Computer Applications Software
Foundations for the Office Professional
Medical Office Assistant
Microsoft Office Foundations
Microsoft Word
Office Professional I
Office Professional - Executive
Assistant Emphasis


## ( AreasofStudyByDivision

|  | Areas ofStudy by Division |  |
| :---: | :---: | :---: |
| Office Professional - Legal Office Emphasis <br> Office Professional - Medical Office Emphasis <br> Business Management <br> Business Finance and Accounting <br> Business Finance and Investments <br> Human Relations and Communications <br> Human Resources and Relations <br> ManagementandSupervision <br> Personal Finance and Investments <br> Small Business Management <br> Computer Information Technology <br> Android Application Developer <br> Apple iOS Developer <br> Cyber Technician Specialist <br> Cybersecurity <br> Computer InformationSystems <br> Information Security I <br> Information Security II <br> Microcomputer Software Specialist <br> Microsoft Certified Specialist <br> Networking/Computer Technician <br> Preparation in Microsoft Office <br> SystemSupportSpecialist <br> Web Page Development Option <br> Web Developer <br> Decision Science <br> Marketing <br> Advertising <br> Fashion Merchandising <br> Personal Sales <br> Retailing <br> Paralegal <br> FINE, PERFORMING, AND <br> COMMUNICATIONARTSDIVISION <br> Art <br> Art Studio <br> Communication <br> Dance <br> Film <br> Journalism <br> Music <br> Theatre Arts <br> HUMANITIESDIVISION <br> English <br> Composition <br> Creative Writing <br> Critical Thinking <br> Literature <br> Reading | English for Multi-Lingual Students <br> (EMLS) <br> Vocational ESL <br> Foreign Languages <br> American Sign Language <br> Armenian <br> Chinese <br> French <br> German <br> Hmong <br> Japanese <br> Portuguese <br> Spanish <br> Humanities <br> Linguistics <br> Philosophy <br> MATHEMATICS, SCIENCE, <br> AND ENGINEERING <br> DIVISION <br> Astronomy <br> Biology <br> Botany <br> Chemistry <br> Computer Science <br> Engineering: Civil <br> Engineering: Computer Software <br> Engineering: Electrical <br> Engineering: Mechanical, Aerospace, andManufacturing <br> Environmental Studies <br> Geography <br> Geology <br> Mathematics <br> Natural Resources <br> Physical Science <br> Physics <br> SOCIAL SCIENCES DIVISION <br> African-American Studies <br> American Indian Studies <br> American Studies <br> Anthropology <br> Asian-American Studies <br> Chicano-Latino Studies <br> Child Development <br> Child Welfare <br> Early Childhood Education <br> Early Childhood Education for <br> Transfer <br> EarlyChildhoodParaprofessonal <br> Early Intervention <br> Early InterventionAssistant Family Child Care | Infant Toddler Specialist <br> Criminology <br> Administration of Justice for Transfer <br> Correctional Science Option <br> Forensic Evidence Option <br> Law Enforcement Option <br> Pre-Academy Training Option <br> Culinary Arts <br> Advanced <br> Basic <br> Intermediate <br> Cultural Studies <br> Dietetic Service Supervision <br> Economics <br> Economicsfor Transfer <br> Education <br> Education Paraprofessional <br> Elementary Teacher Education for Transfer <br> Special Education Assistant <br> Special Education Paraprofessional <br> Food Services <br> Food and Nutrition <br> Food Service Management <br> Global Studies <br> Global Studies for Transfer <br> History <br> Human Services <br> Alcohol and Drug Abuse Counseling Option <br> Elder Care Human Services <br> Pre-Social Work Option <br> Liberal Arts <br> Military Science <br> Political Science <br> Pre-Law in Interdisciplinary Studies <br> Psychology <br> Sociology <br> Women's Studies <br> OTHER <br> Adaptive Ornamental Horticulture Skills <br> Counseling <br> General Work Experience <br> Developmental Education Program <br> Developmental Services <br> Honors Studies <br> Individual Study <br> Laboratory Assistant <br> Library Skills <br> Library Technology <br> Special Studies <br> Supervised Tutoring |

Associate Degree and Certificate Programs

| PROGRAM | $\begin{aligned} & \text { MAJOR } \\ & \text { CODE } \end{aligned}$ | DEGREE/ CERTIFICATETYPE | DEPARTMENT | PAGE\# |
| :---: | :---: | :---: | :---: | :---: |
| Accounting | 2010 | AS, CA | Accounting | 128 |
| Accounting, Computerized, Accounting for the Workplace | 2056 | CA | Accounting | 129 |
| Adaptive Ornamental Horticulture Skills | 1060 | C | Developmental Services | 180 |
| Administration of Justice, Adult Correctional Officer Core | 8941 | C | Police Academy | 129 |
| Administration of Justice, Basic Police Academy | 8921 | CA | Police Academy | 129 |
| Administration of Justice, Juvenile Correctional OfficerCore | 8943 | C | Police Academy | 130 |
| Administration of Justice, Post Basic Supervisor | 8927 | C | Police Academy | 130 |
| Administration of Justice, Probation Core Course | 8942 | C | Police Academy | 130 |
| Administration of Justice, Public Safety Dispatcher | 8970 | C | Police Academy | 130 |
| Administration of Justice, Requalification-BasicCourse | 8925 | C | Police Academy | 131 |
| Administration of Justice, STC Basic Supervisor | 8926 | C | Police Academy | 131 |
| African-American Studies | 7640 | AA | Cultural Studies | 131 |
| Allied Health, Pre-Allied Health Registered Nursing Option | 4525 | AS | Allied Health | 131 |
| Allied Health, Public Health for Transfer | 8400 | AS | Allied Health | 111, 132 |
| American Indian Studies | $\begin{aligned} & 7680 \\ & 7681 \end{aligned}$ | AA, C | Cultural Studies | 132, 133 |
| AmericanSign Language Studies | 5505 | AA | Foreign Languages | 133 |
| Anthropology | 7100 | AA | Anthropology \& Economics | 134 |
| Anthropology for Transfer | 7150 | AA-T | Anthropology \& Economics | 112, 134 |
| Anthropology-Archaeology, Archaeological Technician | 7120 | CA | Anthropology \& Economics | 135 |
| Architecture | 6810 | AS, CA | Digital Design \& Manufacturing | 136 |
| Architecture, BasicArchitectural Contract Documents | 6811 | C | Digital Design \& Manufacturing | 137 |
| Architecture, Basic Architectural Design | 6812 | C | Digital Design \& Manufacturing | 137 |
| Architecture, BasicArchitectural Office Practice | 6813 | C | Digital Design \& Manufacturing | 137 |
| Architecture, Basic Architectural Skills 1 | 6814 | C | Digital Design \& Manufacturing | 137 |

AA-T Associate in Arts
for Transfer

AS-T AssociateinScience for Transfer

AA AssociateinArts

AS AssociateinScience
CA Certificate of Achievement

CC Certificate of Completion

C Certificate

88 Associate Degreeand Certificate Programs

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| PROGRAM | MAJOR <br> CODE | DEGREE/ <br> CERTIFICATE <br> TYPE | DEPARTMENT | PAGE\# |
| Architecture, Basic Architectural Skills 2 | 6815 | C | Digital Design \& Manufacturing | 138 |
| Architecture, Basic Digital Architecture | 6816 | C | Digital Design \& Manufacturing | 138 |
| Art | 5205 | AA | Art | 138 |
| Art, Studio Arts for Transfer | 5250 | AA-T | Art | 113,139 |
| Art, Studio Art | 5210 | CA | Art | 140 |
| AsianAmericanStudies | 7695 | AA | Cultural Studies | 140 |
| Automotive Collision Repair Technology | 8071, | AS, CA, C |  <br> Transportation | 141 |
| Automotive Technology | 8072 |  |  |  |

2019-2020 Fresno City College Catalog

| PROGRAM | MAJOR CODE | DEGREE/ CERTIFICATE TYPE | DEPARTMENT | PAGE \# |
| :---: | :---: | :---: | :---: | :---: |
| Business Administration, Entrepreneurial Ventures | 2041 | C | Business \& Technology | 148 |
| Business Administration, Human Resource Management Assistant | 2052 | C | Business \& Technology | 148 |
| Business Administration, Professional and Civic Behaviors | 2036 | C | Business \& Technology | 152 |
| Business Administration, Management | 2181 | AS, CA | Business \& Technology | 149 |
| Business Administration, Management, Business Finance and Accounting | 2031 | C | Business \& Technology | 150 |
| Business Administration, Management, Business Finance and Investments | 2271 | C | Business \& Technology | 150 |
| Business Administration, Management, Human Relations and Communications | 2510 | C | Business \& Technology | 151 |
| Business Administration, Management, Human Resource Management and Human Relations | 2520 | C | Business \& Technology | 151 |
| Business Administration, Management, Management and Supervision | 2182 | C | Business \& Technology | 151 |
| Business Administration, Management, Personal Finance and Investments | 2032 | C | Business \& Technology | 151 |
| Business Administration, Management, Small Business Management | 2030 | C | Business \& Technology | 152 |
| Business Administration, Management, Real Estate Course Qualification | 2192 | C | Business \& Technology | 152 |
| Business \& Technology, Business Office English | 2372 | C | Business \& Technology | 155 |
| Business \& Technology, Business Office Math Fundamentals | 2328 | C | Business \& Technology | 155 |
| Business \& Technology, Clerical Training | 247V | CC | Business \& Technology | 156 |
| Business \& Technology, Computer Applications Software | 2202 | C | Business \& Technology | 155 |
| Business \& Technology, Foundations for the Office Professional | 2326 | C | Business \& Technology | 156 |
| Business \& Technology, Medical Office Assistant | 2243 | CA | Business \& Technology | 156 |
| Business \& Technology, Microsoft Office Foundations | 2325 | C | Business \& Technology | 156 |
| Business \& Technology, Microsoft Word | 2323 | C | Business \& Technology | 156 |
| Business \& Technology, Office Professional I | 2062 | AS, CA | Business \& Technology | 152 |
| Business \& Technology, Office Professional - Executive Assistant Emphasis | 2215 | AS, CA | Business \& Technology | 153 |

\(\left.$$
\begin{array}{ll}\text { AA-T } \begin{array}{c}\text { Associate in Arts } \\
\text { for Transfer }\end{array}
$$ <br>
AS-T Associate inScience <br>

for Transfer\end{array}\right\}\)| AA | Associate in Arts |
| :--- | :--- |
| AS | AssociateinScience |
| CA | Certificate of <br> Achievement |
| CC | Certificate of <br> Completion |
| C | Certificate |


| PROGRAM | MAJOR CODE | DEGREE/ CERTIFICATE TYPE | DEPARTMENT | PAGE\# |
| :---: | :---: | :---: | :---: | :---: |
| Business \& Technology, Office Professional-Legal Office Emphasis | 2104 | AS.CA | Business \& Technology | 154 |
| Business \& Technology, Office Professional - Medical Office Emphasis | 2383 | AS, CA | Business \& Technology | 154 |
| Career \& Technology Center, Auto Collision Repair | 807V | CC | Career \& Technology Center | 100 |
| Career \& Technology Center, Automotive Mechanics | 811 V | CC | Career \& Technology Center | 100 |
| Career \& Technology Center, Industrial Training | 852 V | CC | Career \& Technology Center | 100 |
| Career\& Technology Center, Maintenance Mechanic | 806 V | CC | Career \& Technology Center | 100 |
| Career \& Technology Center, Manufacturing Mechanic | 8301 | CC | Career \& Technology Center | 100 |
| Chemistry | 6320 | CA | Chemistry | 157 |
| Chemistry, Certificate in | 6320 | C | Chemistry | 157 |
| Chicano-Latino Studies | 7661 | AA | Cultural Studies | 157 |
| Child Development | $\begin{aligned} & 5615, \\ & 5618 \end{aligned}$ | AS, CA | Child Development | 158, 160 |
| Child Development, Child Welfare | 5581 | CA | Child Development | 160 |
| Child Development, Early Childhood Education | 5616 | CA | Child Development | 159 |
| Child Development, Early Childhood EducationforTransfer | 5605 | AA-T | Child Development | 115, 159 |
| Child Development, Early Childhood Paraprofessional | 5912 | CA | Child Development | 160 |
| Child Development, Early Intervention | 5621 | AS | Child Development | 161 |
| Child Development, Early Intervention Assistant | 5617 | CA | Child Development | 161 |
| Child Development, Family Child Care | 5571 | CA | Child Development | 162 |
| Child Development, Infant and Toddler Specialist | 5619 | CA | Child Development | 162 |
| Communication for Transfer | 5432 | AA-T | Communication | 115, 163 |
| Communication Skills for Professionals | 5433 | C | Communitarian | 164 |
| Computer Aided Drafting and Design | 3051 | AS, CA | Digital Design \& Manufacturing | 164 |
| Computer Aided Drafting and Design, 2D CAD Technician | 3053 | C | Digital Design \& Manufacturing | 165 |
| Computer Aided Drafting and Design, 3D CAD Technician | 3054 | C | Digital Design \& Manufacturing | 165 |
| Computer Aided Drafting and Design, 3D CAD/CAM | 3055 | C | Digital Design \& Manufacturing | 166 |

Associate Degreeand Certificate Programs 91

| PROGRAM | MAJOR CODE | DEGREE/ CERTIFICATE TYPE | DEPARTMENT | PAGE\# |
| :---: | :---: | :---: | :---: | :---: |
| Computer Aided Drafting and Design, CAD Technician I | 3052 | C | Digital Design \& Manufacturing | 166 |
| Computer Aided Manufacturing | 8271 | AS, CA | Digital Design \& Manufacturing | 166 |
| Computer Information Technology, Android Application Developer | 2730 | C | Computer Information Technology \& Decision Science | 167 |
| Computer Information Technology, Apple iOS Developer | 2731 | C | Computer Information Technology \& Decision Science | 167 |
| Computer Information Technology, ComputerInformationSystems | 2701 | AS | Computer Information Technology \& Decision Science | 167 |
| Computer Information Technology, Cyber TechnicianSpecialist | 2751 | C | Computer Information Technology \& Decision Science | 167 |
| Computer Information Technology, Cybersecurity | 2750 | CA | Computer Information Technology \& Decision Science | 168 |
| Computer Information Technology, Information Security I | 2714 | C | Computer Information Technology \& Decision Science | 168 |
| Computer Information Technology, Information Security II | 2715 | C | Computer Information Technology \& Decision Science | 168 |
| Computer Information Technology, Microsoft Certified Specialist | 2724 | CA | Computer Information Technology \& Decision Science | 169 |
| Computer Information Technology, Microcomputer Software Specialist | 2705 | AS, CA | Computer Information Technology \& Decision Science | 169 |
| Computer Information Technology, Networking/Computer Technician | 2720 | AS, CA | Computer Information Technology \& Decision Science | 169 |
| Computer Information Technology, Preparation in Microsoft Office | 2710 | C | Computer Information Technology \& Decision Science | 170 |
| Computer Information Technology, System SupportSpecialist | 2723 | C | Computer Information Technology \& Decision Science | 170 |
| Computer Information Technology, Web Developer | 2742 | AS, CA | Computer Information Technology \& Decision Science | 170 |
| Computer Information Technology, Web Page Development | 2741 | C | Computer Information Technology \& Decision Science | 171 |
| Construction | 8091 | AS, CA | Digital Design \& Manufacturing | 171 |
| Construction, Residential Construction Wiring | 8092 | C | Digital Design \& Manufacturing | 172 |
| Criminology, Administration of Justice for Transfer | 7750 | AS-T | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 116, 172 |
| Criminology, Correctional Science Option | 7731 | AS, CA | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 173, 174 |
| Criminology, Criminology Option | 7700 | AS, CA | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 174, 175 |

## 92 Associate Degree and Certificate Programs

AA-T Associate in Arts for Transfer

AS-T Associate inScience for Transfer

AA Associate in Arts
AS AssociateinScience
CA Certificate of Achievement

CC Certificate of Completion

C Certificate

| PROGRAM | MAJOR CODE | DEGREE/ CERTIFICATE TYPE | DEPARTMENT | PAGE\# |
| :---: | :---: | :---: | :---: | :---: |
| Criminology, Forensic Evidence Option | 7732 | AS, CA | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 175, 176 |
| Criminology, Law Enforcement Option | 8872 | AS, CA | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 176 |
| Criminology, Pre-Academy Training Option | 8923 | CA | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 177 |
| Culinary Arts, Advanced | 5686 | C | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 178 |
| Culinary Arts, Basic | 5684 | C | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 178 |
| Culinary Arts, Intermediate | 5685 | C | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 178 |
| Dance | 5390 | AA | Theatre Arts | 178 |
| Dental Hygiene | 4580 | AS | Allied Health | 179 |
| Economicsfor Transfer | 2020 | AA-T | Anthropology \& Economics | 116, 181 |
| Education, Elementary Teacher Education forTransfer | 5920 | AA-T | Child Development | 117, 182 |
| Education, Paraprofessional | 5911 | CA | Child Development | 183 |
| Education, Special Education Assistant | 5982 | CA | Child Development | 183 |
| Education, Special Education Paraprofessional | 5913 | CA | Child Development | 183 |
| Electrical Systems Technology | 8171 | AS, CA | Energy, Controls \& Communication | 184 |
| Electrical Systems Technology, Advanced Photovoltaic Technician | 8186 | CA | Energy, Controls \& Communication | 184 |
| Electrical Systems Technology, Biomedical Tech | 6085 | CA | Energy, Controls \& Communication | 185 |
| Electrical Systems Technology, Cisco CCNA Preparation | 8174 | CA | Energy, Controls \& Communication | 185 |
| Electrical Systems Technology, Facility Controls | 8189 | CA | Energy, Controls \& Communication | 185 |
| Electrical Systems Technology, Industrial Automation 1 | 8188 | C | Energy, Controls \& Communication | 186 |
| ElectricalSystemsTechnology, Introduction to Industrial Controls | 8185 | C | Energy, Controls \& Communication | 186 |
| ElectricalSystemsTechnology, Low Voltage | 8187 | CA | Energy, Controls \& Communication | 186 |


| PROGRAM | $\begin{aligned} & \text { MAJOR } \\ & \text { CODE } \end{aligned}$ | DEGREE/ <br> CERTIFICATE <br> TYPE | DEPARTMENT | PAGE \# |
| :---: | :---: | :---: | :---: | :---: |
| Electrical Systems Technology, Networking/Computer Technician | 8172 | AS, CA | Energy, Controls \& Communication | 187 |
| Engineering: Civil | 3011 | AS, CA | Earth, Physical Science, \& Engineering | 188 |
| Engineering: Computer, Software | 3012 | AS, CA | Earth, Physical Science, \& Engineering | 188 |
| Engineering: Electrical | 3013 | AS, CA | Earth, Physical Science, \& Engineering | 189 |
| Engineering: Mechanical, Aerospace, and Manufacturing | 3014 | AS, CA | Earth, Physical Science, \& Engineering | 190 |
| English for Transfer | 5305 | AA-T | Letters | 118, 191 |
| Fire Technology | 883A | AS, CA | Fire Technology | 192, 193 |
| Fire Technology, Basic Fire Academy | 883B | CA | Fire Technology | 192 |
| Fire Technology, Emergency Medical Technician I | 8842 | C | Fire Technology | 194 |
| Fire Technology, Emergency Medical Technician I Refresher | 8843 | C | Fire Technology | 194 |
| Fire Technology, Firefighter II | 8835 | C | Fire Technology | 194 |
| Fire Technology, Prehospital Paramedic Care | 8845 | CA | Fire Technology | 194 |
| Food and Nutrition | 5682 | AS, CA | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 194, 195 |
| Food and Nutrition, Dietary Aide | 5750 | C | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 195 |
| Food and Nutrition, Dietetic Service Supervisor | 5681 | CA | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 195 |
| Food Service Management | 5691 | AS, CA | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 197 |
| Food Service Management, Child Nutrition | 5692 | CA | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 197 |
| Food and Nutrition, Nutrition and Dietetics for Transfer | 5683 | AS-T | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 123, 196 |
| Geology for Transfer | 6070 | AS-T | Earth, Physical Science \& Engineering | 119, 198 |
| Global Studies for Transfer | 7740 | AA | History, Political Science | 198 |
| Graphic Communications | 8332 | AS, CA | Visual Media Technology | 199 |
| Graphic Communications, Digital Media | 8508 | C | Visual Media Technology | 200 |



| PROGRAM | MAJOR <br> CODE | DEGREE/ <br> CERTIFICATE TYPE | DEPARTMENT | PAGE\# |
| :---: | :---: | :---: | :---: | :---: |
| GraphicCommunications, Digital Video | 8509 | C | Visual Media Technology | 200 |
| GraphicCommunications,GraphicDesign | 8507 | AA, CA | Visual Media Technology | 199 |
| GraphicCommunications,Visual Communications | 8510 | C | Visual Media Technology | 201 |
| GraphicCommunications, WebDesign | 8502 | CA | Visual Media Technology | 201 |
| Health InformationTechnology | 4621 | AS | AlliedHealth | 201 |
| Health Information Technology,Medical Coding | 4627 | CA | AlliedHealth | 202 |
| Heating, Ventilation, \& Air Conditioning, HVACTechnologyl | 8041 | CA | Energy, Controls \& Communication | 203 |
| Heating, Ventilation, \& Air Conditioning, HVACTechnology II | 8042 | CA | Energy, Controls \& Communication | 202 |
| Heating, Ventilation, \& Air Conditioning, HVACTechnology III | 8040 | AS | Energy, Controls \& Communication | 202 |
| Heating, Ventilation, \& Air Conditioning, HVACWireless Control I | 8043 | CA | Energy, Controls \& Communication | 203 |
| HighTechAdaptive | 7006 | C | Developmental Services | 180 |
| History for Transfer | 7380 | AA-T | History \& Political Science | 112, 203 |
| Honors | 5331 | C | Honors | 204 |
| Honors Program Commendation | 5332 | C | Honors | 205 |
| Human Services, Alcoholism and Drug AbuseCounseling Option | 7951 | AS,CA | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 205, 206 |
| HumanServices,ElderCareHuman Services | 7634 | CA | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 206 |
| HumanServices, Pre-SocialWorkOption | 7633 | AS,CA | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 207, 208 |
| Industrial Technology | 8992 | AS | Digital Design \& Manufacturing | 208 |
| Journalism | 5351 | AA | Communication Arts | 209 |
| Journalismfor Transfer | 5355 | AA-T | Communication Arts | 120, 209 |
| Kinesiology for Transfer | 4555 | AS-T | Physical Education | 121,210 |
| Law, Pre-Law in Interdisciplinary Studies | 8710 | AS | History \& Political Science | 212 |
| Liberal Arts, Emphasis in American Sign Language | 5101 | AA | Foreign Languages | 213 |
| Liberal Arts, Emphasis in Anthropologyl Criminology | 5106 | AA | Anthropology \& Economics | 213 |
| Liberal Arts, Emphasis in Anthropology/ Economics/Geography | 5107 | AA-T | Anthropology \& Economics | 214 |
| Liberal Arts, Emphasis in Cultural Studies | 5121 | AA | CulturalStudies | 214 |

## 2019-2020 FresnoCity College Catalog

| PROGRAM | MAJOR <br> CODE | DEGREE/ CERTIFICATE TYPE | DEPARTMENT | PAGE \# |
| :---: | :---: | :---: | :---: | :---: |
| Liberal Arts, Emphasis in Foreign Languages | 5134 | AA | Foreign Languages | 215 |
| Liberal Arts, Emphasis in History/Political Science | 5141 | AA | History \& Political Science | 216 |
| Liberal Arts, Emphasis in Social Sciences | 5176 | AA | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 216 |
| Liberal Arts, Emphasis in Spanish | 5183 | AA | Foreign Languages | 217 |
| Library Technology | 5171 | AS, CA | Learning Resource Center | 217 |
| Manufacturing Technician | 8061 | C | Career \& Technology Center | 218 |
| Marketing | 2110 | AS, CA | Business Administration, Fashion Merchandising, \& Marketing | 218, 219 |
| Marketing, Advertising | 2113 | C | Business Administration, Fashion Merchandising, \& Marketing | 219 |
| Marketing, Fashion Merchandising | 2152 | AS, CA, C | Business Administration, Fashion Merchandising, \& Marketing | 219, 220 |
| Marketing, Personal Sales | 2114 | C | Business Administration, Fashion Merchandising, \& Marketing | 221 |
| Marketing, Retailing | 2116 | C | Business Administration, Fashion Merchandising, \& Marketing | 221 |
| Marketing, Retail Management | 2055 | AS, CA | Business Administration, Fashion Merchandising, \& Marketing | 220 |
| Mathematics for Transfer | 6250 | AS-T | Mathematics | 122, 221 |
| Medical Assistant, Clinician | $\begin{aligned} & \hline 2120, \\ & 2121 \end{aligned}$ | AS, CA | Allied Health | 222 |
| Music for Transfer | 5805 | AA-T | Music | 122, 223 |
| Music, Brass Performance | 5811 | C | Music | 225 |
| Music, Commercial Music | 5850 | AS, CA | Music | 228, 229 |
| Music, Guitar | 5830 | AA | Music | 224 |
| Music, Guitar Performance | 5831 | C | Music | 225 |
| Music, Instrumental | 5810 | AA | Music | 223 |
| Music, Jazz Performance | 5812 | C | Music | 226 |
| Music, Percussion Performance | 5813 | C | Music | 226 |
| Music, Piano | 5840 | AA | Music | 225 |
| Music, Piano Performance | 5841 | C | Music | 227 |
| Music, String Performance | 5814 | C | Music | 227 |
| Music Theory | 5860 | C | Music | 226 |
| Music, Vocal | 5820 | AA | Music | 224 |
| Music, Vocal Performance | 5821 | C | Music | 227 |
| Music, Woodwind Performance | 5815 | C | Music | 228 |

96 Associate Degree and Certificate Programs

AA-T Associate in Arts for Transfer

AS-T Associate in Science for Transfer

AA Associate in Arts
AS AssociateinScience
CA Certificate of Achievement

CC Certificate of Completion

C Certificate

| PROGRAM | MAJOR CODE | DEGREE/ <br> CERTIFICATE <br> TYPE | DEPARTMENT | PAGE\# |
| :---: | :---: | :---: | :---: | :---: |
| Nursing, Registered | 4520 | AS | Nursing | 230 |
| Paralegal | 2550 | AS, CA | Paralegal \& Real Estate | 232 |
| Philosophy for Transfer | 5341 | AA-T | Letters | 123, 232 |
| Photography, Commercial Photography | 5222 | CA | Visual Media Technology | 234 |
| Photography, Digital Photography | 5223 | CA | Visual Media Technology | 234 |
| Photography, Fine Art Photography | 5224 | CA | Visual Media Technology | 234 |
| Photography, Photojournalism | 5225 | CA | Visual Media Technology | 234 |
| Photography, Professional | 5221 | AS, CA | Visual Media Technology | 233 |
| Physics for Transfer | 6335 | AS-T | Earth, Physical Science, \& Engineering | 124, 234 |
| Political Science for Transfer | 7450 | AA-T | History \& Political Science | 124, 235 |
| Psychology | 7501 | AA | Psychology | 235 |
| Psychology for Transfer | 7550 | AA-T | Psychology | 125,236 |
| Radiologic Technology | 4570 | AS | Allied Health | 237 |
| Recreation Leadership | 4300 | AA | Physical Education | 238 |
| Respiratory Care Practitioner | 4610 | AS | Allied Health | 239 |
| School to Work, Clerical | 7004 | C | Developmental Services | 180 |
| School to Work, Workability | 7005 | C | Developmental Services | 181 |
| SignLanguage Interpreting Preparation Program | 5101 | CA | Foreign Languages | 213 |
| Sociology for Transfer | 7600 | AA-T | Criminology, Human Services, Sociology, Food \& Nutrition \& Food Services Management | 125, 240 |
| Spanish | 5510 | AA | Foreign Languages | 241 |
| Spanish for Transfer | 5550 | AA-T | Foreign Languages | 126, 241 |
| Sports Medicine | 4330 | AS | Physical Education | 237 |
| Theatre Arts | 5440 | AA | Theatre Arts | 242 |
| Theatre Artsfor Transfer | 5445 | AA-T | Theatre Arts | 127, 242 |
| Theatre Arts, Design/Technical Theatre Studies | 5482 | AA | Theatre Arts | 243 |
| Welding Technology, Metal Fabrication Option | 8371 | AS, CA | Advanced Fabrication \& Transportation | 243, 244 |
| Welding Technology, Pipe and Structural Steel Certification Option | 8372 | AS, CA | Advanced Fabrication \& Transportation | 244, 245 |
| Welding Technology, Welding Design and Fabrication | 8374 | CA | Advanced Fabrication \& Transportation | 245 |
| Welding Technology, Welding Multi-Process | 8373 | CA | Advanced Fabrication \& Transportation | 246 |
| Women's Studies | 7610 | AA | Cultural Studies | 246 |

## 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
- Autism Technician

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

## Health Care Career Programs

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

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

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

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

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

Allied Health, Physical Education and Athletics Division<br>Lorraine Smith<br>Dean of Instruction<br>Division Office:<br>Health Sciences Building, HS-1<br>Phone: (559) 244-2604<br>Fax: (559) 499-6047<br>Division E-mail:<br>hs@fresnocitycollege.edu

## Applied Technology Division

## Applied Technology

 DivisionBecky Barabe
Dean of Instruction Division Office: Applied Technology, T-100 Phone: (559) 442-8273
Fax: (559) 498-8350
Division E-mail: at@fresnocitycollege.edu

## Career \& Technology

Center and Workforce

## Development

Becky Barabe
Dean of Instruction
2930 E. Annadale Avenue
Fresno, CA
Phone: (559) 265-5700
Division E-mail: wfd@ 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 heating, ventilation, \& air conditioning (HVAC), architecture, automotive collision repair technology, automotive technology, General Motors Technology GM ASEP/MOPAR, Cisco, computer aided drafting and design, computer aided manufacturing, construction, electrical systems technology, graphic communications, networking/computer technician, photography, and welding/metal fabrication.

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

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

## Associate in Science Degree

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

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

Associate in science degree requirements can be found under degree requirements on page 36.

## Certificate of Achievement

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

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

## Certificates

A certificate will be awarded to students who have completed the designated subjects in the training program with a minimum "C" grade.

## Work Experience Education

Through the cooperation of Fresno City College, industry and the community, students may work toward graduation while employed in trade, industrial or diversified occupations.

These courses are numbered 19. College credit is granted for the internship and/or work experience (paid and unpaid). Inquire through your instructor or see an Applied Technology division counselor.

## Career \& Technology Center and Workforce Development

Located off Fresno City College's main campus, the Career \& Technology Center offers a learning environment for practical hands-on education. Year-round registration is in effect for a variety of noncredit, open-entry classes. Counseling and job placement services are available. CTC is located at 2930 E. Annadale Avenue, Fresno. For a complete listing of classes, call (559) 265-5700.

## Courses and Programs

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

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

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

## Satisfactory Progress Standards

## Satisfactory Progress

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

## Placement on Progress Probation

A student will be placed on progress probation if:

1. The student's absences total 30 hours in Automotive Collision Repair, Engine Performance, Maintenance Mechanic: 20 hours in Engine Repair, 10 hours in Industrial Training OR
2. The student fails to maintain a "C" average between monthly progress reports.

## Removal from Progress Probation

A student put on progress probation because of excessive absence ( 30 accumulated hours) will remain on progress probation until completion of the program. Those students on academic probation (below a "C" average) shall be removed from progress probation if they improve their overall grade to a "C" average by the end of the next monthly report.

## Program Dismissal

A student who has been placed on progress probation shall be subject to dismissal if:

1. Their accumulated absence hours total 60 in Automotive Collision Repair, Engine Perfor- mance, Maintenance Mechanic; 40 in Engine Repair; 17 in Industrial Training OR
2. Their monthly grade remains below "C" for two consecutive months.

Readmission Following Progress Dismissal
A student who has been dismissed because of progress probation must petition for readmission.

Following the first dismissal, under District stan- dards, a student will not be admitted to school until one cycle of the class has elapsed. If a student fails to complete the course following their initial dismissal, the student shall be dismissed for two cycles of the course. If the student fails to complete the course after the second dismissal, they shall be dismissed again. The third dismissal shall be considered permanent.

Veterans are required to complete the course/pro- gram for full benefit payment.

## Certificate of Achievement

A certificate of achievement will be awarded to students who have completed the designated subjects in the program major.
Courses required for each certificate program are generally offered each semester but are subject to cancellation or change. Students are advised to seek assistance from their counselors and/or faculty advisors in planning their certificate program.

## Certificates

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

## Administration of Justice

1. Adult Correctional Officer Core (AJ 280) (Major \#8941)
2. Juvenile Correctional Officer Core (AJ 286)(Major \#8943)
3. Post Basic Supervisor (AJ 276) (Major \#8924)
4. Probation Core Course (AJ 285) (Major \#8942)
5. Public Safety Dispatcher (AJ 278) (Major \#8970)
6. STC Basic Supervisor (AJ 276A) (Major \#8926)

Fire Technology

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

## Certificates of Completion

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

| (Major \#807V) | Hours |
| :--- | :--- |
| Automotive Collision Repair 371, <br> Fundamentals of Welding Technology <br> and Working Sheet Metal | 300 |
| Automobile Collision Repair 372,Body <br> Work Technology | 300 |
| Automotive Collision Repair 373, Auto- <br> motive 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 |
| :--- | :--- |
| Industrial Training 371, Warehouse and <br> Distribution Careers | 90 |
| Industrial Training 372, Warehouse and <br> Distribution Careers | 90 |
| Program Total | 180 |

## Maintenance Mechanic

| (Major \#806V) | Hours |
| :--- | :--- |
| Maint Mech 370, Weld/Machine Shop | 300 |
| Maint Mech 371, Hydraulics/ <br> Pneumatics | 300 |
| Maint Mech 372, Electrical Fund | 300 |
| Program Total | 900 |

Manufacturing Mechanic

| (Major \#8301) | Hours |
| :--- | :--- |
| MFG Mechanic 351, Intro to <br> Manufacturing | 9 |
| MFG Mechanic 352A, Trade <br> Mathematics | 18 |
| MFG Mechanic 352B, Programmable <br> Controllers | 18 |
| MFG Mechanic 352C, Job Preparation | 18 |
| MFG Mechanic 352D, Technical Report <br> Writing | 18 |
| MFG Mechanic 353A, Fluid Power <br> Fundamentals | 9 |
| MFG Mechanic 353B, Pneumatic <br> Fundamentals | 18 |
| MFG Mechanic 353C, Hydraulic Fun- <br> damentals | 18 |
| MFG Mechanic 354A, Power <br> Transmission | 9 |
| MFG Mechanic 354B, Welding Funda- <br> mentals | 45 |
| MFG Mechanic 354C, Electrical Funda- <br> mentals | 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 the student's own use): California Penal Code and Vehicle Code, an approved firearm, ammunition and leather gear, notebook, paper, pens, pencils, uniform, physical training shorts, tee-shirts, tennis shoes, white socks, sweatshirt, sweatpants, black socks, black shoes, and lunches. All Basic Police Academy students will also be responsible for payment of driving and range fees.

| FEE | COST |
| :--- | :--- |
| Basic Academy Range fee | $\$ 120.00^{\star}$ |
| Basic Academy Driving fee | $\$ 200.00^{\star}$ |
| P.C. 832 Range fee | $\$ 45.00^{\star}$ |
| Basic Academy, Module I | $\$ 45.00^{\star}$ |
| Basic Academy, Module I Driving <br> fee | $\$ 200.00^{\star}$ |
| Basic Academy, Module II Range fee | $\$ 60.00^{\star}$ |
| Basic Academy, Module III Range <br> fee | $\$ 45.00^{\star}$ |
| Basic Academy, Module III Driving <br> fee | $\$ 50.00^{\star}$ |

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

## Business Division

## Business Division

Timothy Woods
Dean of Instruction Division Office:
Business Building, BE-110
Phone: (559) 442-8222
Fax: (559) 265-5719
Division E-mail:
be@fresnocitycollege.edu

The Business Division at Fresno City College is composed of five departments: Accounting, Business Administration, Business \& Technology, Computer Information Technology/Decision Sciences, and Paralegal. Each department offers multiple degree and certificate programs to meet the educational needs of our students. In addition to traditional, semester length classes, we offer a 25-month evening program for working adults to achieve an associate in arts in Business Administration, and a number of short-term certificate programs.

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

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

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

## Classroom to Worksite Collaboration

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

## Employment Experience

Full-time faculty work with students to secure part-time cooperative work experience as part of their program.

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

## The Future

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

## Associate in Arts Degree

The associate in arts degree is offered primarily for transfer students in the area of business administration. Associate degree requirements are listed on page 36.

## Associate in Science Degree

The associate in science degree programs, as listed in the following pages, show the designated course requirements and the departmental recommendations for elective courses. These electives are supportive and carry a strong recommendation. Associate degree requirements are listed on page 36.

## Certificate of Achievement

For a listing of certificate of achievement programs see page 86.

## Certificates

Certificate programs are listed below.

## Business Administration

1. 21st Century Work Competencies (BA 10, 33) (Major \#2035)
2. Business Finance and Accounting (ACCTG 4A, 4B; BA 35) (Major \#2031)
3. Business Finance and Investments (BA 34, 35) (Major \#2271)
4. Entrepreneurial Ventures (BA 10, 24, 27, 30, 51, 52) (Major \#2041)
5. Human Relations and Communications (BA/BT 5, BA 33) (Major \#2510)
6. Human Resource Management Assistant (BA 31, 33, BT 9/BT 25/CIT 20) (Major \#2052)
7. Human Resource Management and Human Relations (BA 31, 33) (Major \#2520)
8. Management and Supervision (BA 40, 43) (Major \#2182)
9. Personal Finance and Investments (BA 30, 34) (Major \#2032)
10. Professional and Civic Behaviors (BA 101, 102, 103, 104) (Major \#2036)
11. Small Business Management (BA 38, 51) (Major \#2030)
12. Real Estate Course Qualification (ACCTG 4A/BA18, RE 40, 41) (Major \#2192)

## Business and Technology

1. Business Office English (BT 5, 13, 112) (Major \#2372)
2. Business Office Math Fundamentals (BT 104, 115) (Major \#2328)
3. Clerical Training (BT 370A, 370B) (Major \#247V)
4. Computer Applications Software (BT $9,10,33,106$ ) (Major \#2202)
5. Foundations for the Office Professional (BT 28, 106, 115, 116, 121, 127, 134) (Major \#2326)
6. Microsoft Office Foundations (BT $24 / 9,28,126 / 9,127$, 130/9) (Major \#2325)
7. Microsoft Word (BT 28, 29) (Major \#2323)

Computer Information Technology

1. Android Application Developer (CIT $15,63,65$ ) (Major \#2730)
2. Apple iOS Developer (CIT 69, 70) (Major \#2731)
3. Cyber Technician Specialist (CIT 48A, 48B) (Major \#2751)
4. Information Security I (CIT $40,57,58 \mathrm{~B}, 58 \mathrm{C}$ ) (Major \#2714)
5. Information Security II (CIT 50, 58D, 58E, 58F) (Major \#2715)
6. Preparation in Microsoft Office (BT 28, 29, 127; CIT 20, 23, 24, 26) (Major \#2710)
7. System Support Specialist (CIT 40, 45, 48B; 60) (Major \#2723)
8. Web Page Development (CIT 82, 85, 93) (Major \#2741)

## Marketing

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

## Co-Curricular Activities

As an integral part of the instructional program, the Business Division supports three co-curricular groups. The effort is represented by groups such as the Paralegal Student Organization (Paralegal majors), the Collegiate Entrepreneurs Organization (CEO) and the CIT Zero Computer Technology Club. Students have the opportunity to participate in ser-vice-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.

## Fine, Performing, and

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

## 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.

## Humanities Division

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

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

## Departments

## Composition and Reading

This department offers English 1A (Reading and Com- position) and English 1AH (Honors Reading and Composition), along with support classes to help students develop their writing and reading skills. These include English 205 (Accelerated Reading and Composition skills), which is taken concurrently with English 1A; English 105 (Grammar and Punctuation); English 126A (Academic Reading Efficiency); and English 300 (Academic Learning and Literacy Skills). English 1 A is a general education course that is required for graduation.

## Foreign Language

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

## Letters

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

## Linguistics/English for Multi-Lingual Students

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

## Philosophy

In its courses and programs, the department emphasizes skills associated with careful, deliberative, and reflective thinking. We offer courses in critical thinking, ethics, metaphysics and epistemology, social and political philosophy, the history of philosophy, world religions, and logic.

## Associate in Arts Degrees

## English

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

## Philosophy

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

## Spanish

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

## Certificate of Achievement

## Sign Language Interpreting Preparation

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

## Humanities Division

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

## Math, Science and Engineering Division

## 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 <br> Math, Science and <br> Engineering Building <br> (559) 442-4600, ext. 8215

## Physical Sciences

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

The Math, Science and Engineering Division includes classes in the areas of study in Astronomy, Biology, Chemistry, Computer Science, Engineering, Geography, Geology, Mathematics, Natural Science, Physics, and Physical Science. The Math, Science and Engineering Division offers courses for fulfilling requirements in its own programs as well as programs offered by other divisions. Many of the courses are for students in transfer programs. These include courses, which fulfill lower division requirements for majors as well as courses taken for general education. The offering prepares students for continued study at four-year colleges and universities.

Pre-professional lower division curricula are available with majors in such fields as biology, biotechnology, chemistry, dentistry, engineering, forestry, geology, horticulture, mathematics, nursing, medicine, veterinary medicine, physics, pharmacy, and physical therapy. Honors classes are available as well.

Special classes in biology, chemistry, mathematics, and physical science are offered for students who need to develop skills in these subjects before taking more advanced courses.

The Division offers courses that satisfy the requirements of the Liberal Studies major at CSU, Fresno. The courses provide content in physical sciences (Natural Science 1A), biology (Biology 3), and geology (Geology 9).

Students interested in the sciences can participate in the Fresno City College Science and Engineering Club. Activities include seminars, numerous field experiences, as well as social outings. Students emphasizing medicine or veterinary medicine can participate in Fresno City College's Pre-Health Society.

The faculty encourages students to participate in numerous research and community activities from laboratory research to field studies. Students have participated in various summer internship programs throughout California and abroad; such as, NASA, Lawrence-Berkeley Laboratories, Forrest Service, California State Mining and Mineral Museum, and Sierra Foothills Conservancy.

## Biology

The Biology Department is housed in the Science Building at the southeast corner of the campus. There is an excellent greenhouse and natural History Museum available for tours or student use. With both the Sierra Nevada crest and the Pacific coast nearby there are numerous field trip opportunities that give the students an opportunity that is not available at many other institutions.

## Chemistry

The Chemistry Department is dedicated to its goal of preparing students for a career in Chemistry and for continuing education at a four-year college or university. The department consists of ten full-time faculty plus adjuncts. The department offers a wide selection of courses that could lead to Bachelor of Science degrees in programs such as Chemistry, Chemical Engineering, Chiropractic, Medicine, Pharmacy, Biotechnology, and Biochemistry. The Chemistry department is housed in the Math, Science and Engineering Building on the Southeast side of campus.

The Chemistry Department is very proud of its individual, specialized research spaces; laboratories and classrooms; instrument labs; both PC and Mac computer facilities and equipment; audio-visual and multi-media equipment; modern instruments such as FTIR and UV-Visible spectrometers, Atomic Absorption Spectrophotometer, H-1 and C-13 FT-NMR spectrometer, and Gas Chromatograph/Mass Spectrometer.

Math, Science and Engineering Web Site Addresses
Division
http://fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/index.html

## Biology, Chemistry, and Mathematics

http://fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/biology.html http://fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/chemistry.html http://fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/mathematics.html

Sciences: Engineering, Geology, and Physics
http://fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/engineering.html http://fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/geology.html http://fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/physics.html

## Mathematics and Computer Science

The Mathematics Department is a service department by fulfilling Fresno City College's math graduation requirements for the AA and AS degrees, and courses for a graduation requirement for the various BA degrees offered at four-year institutions. The department provides courses for other Divisions of the college as well as for the Mathematics, Science and Engineering transfer student.

The Mathematics department program offers courses in basic arithmetic skills, as well as prerequisite courses for science, engineering, and business courses. In addition, the department offers courses for students who intend to major in mathematics at a university.

The Computer Science program at Fresno City College, which parallels the first two 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 5 A and 5B. Additional computer programming courses should be taken as necessary to expand the student's programming background.

Computer Science courses include Introduction to Programming Concepts and Methodologies (CSCI 1), Discrete Mathematics for Computer Science (CSCI 26), Programming Concepts and Methodology I (CSCI 40), Programming Concepts and Methodology II (CSCl
41), and Computer Architecture and Organization (CSCI 45).

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

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

Mathematics, physics, chemistry, and introductory engineering courses such as circuit analysis, surveying, and statics make up the bulk of the engineering classes. The classes are designed so there is a smooth transfer to the candidate's chosen college or university.

## Geology

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

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

## Physics

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


## Social Sciences Division

Social Sciences Division
M.E. Mericle, Ph.D.,

Dean of Instruction Division Office:
Social Sciences Building,
S0-123
Phone: (559) 442-8210
Fax: (559) 443-8750
Division E-mail:
soc@fresnocitycollege.edu

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

- Anthropology and Economics including:

Archaeology

- Cultural and Women's Studies including:

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

- History and Political Science
- Child Development and Education
- Psychology
- Criminology,

Human Services,
Sociology, including:
Culinary Arts Food and Nutrition Food Service
Management
Courses offered satisfy transfer and associate degree general education requirements.

## Career Training

The Social Sciences Division also offers career training in:

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

Students may select a training program leading to a certificate, a certificate of achievement or an associate in science degree. Certificate programs require occupational courses only and vary between 6 and 40 units of 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.


## 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
- American Studies
- American Indian Studies
- Applied Technology
- Architecture
- Asian-American Studies
- Automotive Collision Repair Technology
- Automotive Technology General Motors ASEP
- Business \& Technology
- Computer Aided Drafting and Design
- Computer Aided Manufacturing
- Construction
- Cultural Studies
- Dental Hygiene
- Drafting
- Electrical Systems Technology
- Fire Technology
- Graphic Communications
- Health Information Technology
- Heating, Ventilation, and Air Conditioning
- Marketing
- Military Science
- Networking/Computer Technician
- Paralegal
- Police Academy
- Real Estate
- Radiologic Technology
- Respiratory Care


## Career \& Technology Center

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

- Auto Collision Repair
- Engine Performance
- Engine Repair
- Industrial Training/Warehouse Distribution
- Maintenance Mechanic
- Manufacturing Mechanic

For additional information, write or call the Center.

Career \& Technology Center<br>2930 East Annadale Avenue, Fresno, CA 93725<br>(559) 265-5760

## Reedley College

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

- Aeronautics
- Agri-Business
- AnimalScience
- DentalAssisting
- Forest/ParkT echnology
- GeneralAgriculture
- LandscapeHorticulture
- MechanizedAgriculture
- NaturalResources
- 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 <br> 30277 Avenue 12, Madera, CA 93638 <br> (559) 675-4800

## Oakhurst Community College Center

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

Oakhurst Community College Center
40241 Highway 41, Building Site G,
Oakhurst, CA 93644
(559) 683-3940

## Clovis Community College

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

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

# ASSOCIATE DEGREES FOR TRANSFER 



Associate Degree

for Transfer
A Degree with a Guarantee."


#### Abstract

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses. Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units. To view the most current list of Fresno City College Associate Degrees for Transfer and to find out which CSU campuses accept each degree, please go to http://adegreewithaguarantee.com. Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.


## ALLIED HEALTH

## PUBLIC HEALTH FOR TRANSFER - MAJOR \#8400

The Associate in Science in Public Health for Transfer is designed for students who plan to complete a bachelor's degree in Health Science at a CSU or UC campus. An Associate in Science in Public Health focuses on competencies that include knowledge of public health models, health risk assessments, health screenings, health promotion programming, surveillance of disease outbreaks and injury prevention strategies for a community. The public health field includes disciplines such as patient health navigator, health education outreach, epidemiology, biostatistics, health services, environmental health, behavioral health, and occupational health. The Public Health Associate in Science for Transfer provides preparedness in these job related career paths. To earn the Associate in Science in Public Health for transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 33 semester units within the major. Students must maintain a minimum 2.0 GPA , including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Demonstrate the ability to comprehend and apply the multi-dimensional approach of public health sciences.
2. Identify proactive factors for disease prevention and risk factors for disease and disability.
3. Demonstrate and apply behavior-changing techniques to maximize health and wellness.
4. Demonstrate the concepts of research, program planning and evaluation strategies.

REQUIRED COURSES Units
AHLTH 1 Introduction to Public Health ............................. 3
BIOL 5 Human Biology ............................................ 4
BIOL 20 Human Anatomy, and
BIOL 22 Human Physiology, or
BIOL 21A Human Anatomy \& Physiology I, and
BIOL 21B Human Anatomy \& Physiology II.................... 9
CHEM 3A Introduction to General Chemistry...................... 4
HLTH 1 Contemporary Health Issue............................... 3
MATH 11 Elementary Statistics ...................................... 4
PSY 2 General Psychology .......................................... 3

Select a Minimum of 3 Units from the Following: Units
ECON 40 Introduction to Microeconomics
ECON 50 Introduction to Macroeconomics......................... 3
FN 40 Nutrition................................................................
HLTH 2 First Aid and Safety......................................... 3
PSY 25 Human Sexuality ............................................... 3
Total 33

## 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 DEGREE

## Student Learning Outcomes:

1. Demonstrate an understanding of anthropological approaches to the study of humanity: cross-cultural comparison and cultural relativity, holism, and evolutionary theory, and the uses of each.
2. Describe the breadth of anthropology and be able to characterize anthropology's distinctive methodological approaches with respect to the different subdisciplines.
3. Demonstrate understanding of human cultural diversity and biological variation through time.

REQUIRED CORE COURSES (3 courses or 9 units minimum)
ANTHRO 1

ANTHRO 2/2H | Biological Anthropology.................................... 3 |
| :--- |
| Cultural Anthropology, or |
| Honors Cultural Anthropology ........................... 3 |

Select 3-8 units from the following courses or any courses not used in the section above: Units
BIOL $20 \quad$ Human Anatomy 4

GEOL 1 Physical Geology ............................................... 4
GEOL 9 Introduction to Earth Science .............................. 4
$\begin{array}{cc}\text { PSY/MATH } 42 \text { Statistics for the Behavioral Sciences, or } \\ \text { MATH } 11 & \text { Elementary Statistics.................................... } 4\end{array}$
Select 3-4 units from the following courses or any course not used in the sections above: Units
AFRAM 1 Introduction to African American Studies 3
AMIND 31 American Indian Culture..................................... 3
AMST 10 American Pluralism: A Search for Common
Ground in a Multicultural Society. 3
$\begin{array}{ll}\text { ANTHRO } 12 \text { Visual Anthropology: Introduction to } \\ & \text { Ethnographic Film........................................ } 3\end{array}$
ANTHRO 15 Laboratory Methods in Archaeology..................... 4
ANTHRO 16A Field Archaeology I ............................................ 2
ANTHRO 16B Field Archaeology II ........................................... 2
ANTHRO 24 Doing Archaeology: Hands-On!........................ 1.5
ANTHRO/CLS 28 Ancient Mexico ................................................. 3
ASAMER 15 Introduction to Asian-Americans......................... 3
ASL 5 Deaf Culture ....................................................... 3
CLS 11 Introduction to Chicano-Latino Studies................ 3
JOURN 16 Race, Gender, and the Media................................ 3
WSTS 10 Changing Roles of Women.................................. 3

## ART

## STUDIO ARTS FOR TRANSFER - MAJOR \#5250

An Associate in Arts in Studio Arts for Transfer is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. An Associate in Arts in Studio Arts for Transfer is a great way to develop critical and creative problem solving skills, enhance an ability to analyze complex visual information, and improve communication skills. These 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 DEGREE

## Student Learning Outcomes:

1. Apply knowledge of art fundamentals in order to identify, formulate, and resolve basic art and design problems.
2. Understand and use a variety of media and processes to accomplish artistic goals.
3. Demonstrate an ability to critique and analyze artwork visually, orally and in writing.
4. Understand the impact of art making in a global and societal context.

REOUIRED CORE (12 Units) Units
*ART 3 Two-Dimensional Design ................................... 3
*ART 4 Three-Dimensional Design................................. 3
ART 6/6H Art History Renaissance to Modern, or
Honors Art History Renaissance to Modern ..... 3
*ART $7 \quad$ Beginning Drawing............................................ 3
LIST A: Select One (3 units) Units
ART 5/5H Art History Ancient to Medieval, or Honors Art History Ancient to Medieval ........... 3
ART 55 Introduction to Asian Art .................................... 3
ART 60 Art of the Ancient Americas ................................ 3

## LIST B: Select three courses (9 units)

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

ART 9
ART 13
ART 19
ART 29
ART14
ART 24A
ART 24B
ART 24C
ART 24D
ART 10
ART 20
ART 11
ART 15
ART 21
ART 12A
ART 12B

ART 22B
ART 32A

Beginning Painting: Oil/Acrylic, or Beginning Watercolor Painting, or Intermediate Painting: Oil/Acrylic, or Advanced Painting: Oil/Acrylic. 3
Beginning Printmaking, or Intaglio Printmaking, or Lithograph Printmaking, or Relief Printmaking, or Screenprinting 3
Beginning Ceramics, or Intermediate Ceramics 3

Beginning Sculpture, or
Ceramic Sculpture, or Intermediate Sculpture ... 3
Craft Workshop: Living Traditions, or Intermediate Craft Workshop: Living Traditions, or

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

## BIOLOGY FOR TRANSFER

- MAJOR \#6082

The goal of the Associate in Science in Biology for Transfer program at Fresno City College is to prepare students to seamlessly transfer into a CSU baccalaureate program in Biology. The Associate in Science in Biology for Transfer program at Fresno City College may also prepare students to transfer into a UC baccalaureate program in Biology. An Associate in Science in Biology for Transfer is comprised of the core set of introductory Biology and Mathematics courses that assist a student to develop critical thinking and analytical reasoning skills and establish conceptual frameworks for understanding biological phenomena. To earn the Associate in Science in Biology for Transfer, students must complete 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following: (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements. (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district. (2) Obtainment of a minimum grade point average of 2.0." ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Evaluate scientific literature and apply the scientific method to obtain and interpret data.
2. Understand the function of organic molecules in biological systems and relate organelle structure to cellular function.
3. Understand the structure and function of genetic material and apply the principles of genetics as they relate to organisms.
4. Understand the biodiversity of life on earth based on modern classification systems.
5. Understand the ecological relationships between organisms and the environment, and the impact of human activity on ecological systems.
6. Understand the scientific evidence for evolution and explain the mechanisms leading to evolutionary change over time.

| REQUIRED CORE | Units |
| :---: | :---: |
| BIOL 11A/11AH | Biology for Science Majors I, or Honors Biology for Science Majors I $\qquad$ |
| CHEMISTRY \& N | ATH REQUIREMENTS Units |
| CHEM 1A | General Chemistry, and |
| CHEM 1B | General Chemistry and Qualitative |
|  | Analysis. ............................................... 10 |
| MATH 5A | Mathematical Analysis I ................................ 5 |
| SELECT ONE SEQ | QUENCE: Units |
| BIOL 11B | Biology for Science Majors II, or...................... 5 |
| BIOL 4 | Principles of Zoology, and |
| BIOL 6 | Principles of Botany ................................. 10 |
| SELECT ONE SEQ | QUENCE: Units |
| PHYS 2A | General Physics 1, and |
| PHYS 2B | General Physics 2, or. ................................ 8 |
| PHYS 4A | Physics for Scientists and Engineers, and |
| PHYS 4B | Physics for Scientists and Engineers .............. 8 |

## BUSINESS ADMINISTRATION FOR <br> TRANSFER - major \#2049

Business is an exciting major for students with a variety of interests and career goals including options in entrepreneurship, marketing, business law, management, computer information systems, accounting, and finance. The Associate in Science in Business Administration for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Science in Business Administration degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 27 semester units within the major. Students must maintain a minimum 2.0 GPA , including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students must consult with a counselor when planning to complete the degree for additional information on university admission and transfer requirements. In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Business Administration for Transfer degree.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Apply knowledge of major business functions (accounting, quantitative, law, computer, and business concepts) and its methodologies and ethical applications in common business situations.
2. Apply professional behaviors in both business and personal situations.
REQUIRED CORE Units
ACCTG 4A Financial Accounting.......................................... 4
ACCTG 4B Managerial Accounting ...................................... 4
BA 18 Business and the Legal Environment................... 4
CIT 15 Computer Concepts ........................................... 3
*ECON 40/40H $\begin{gathered}\text { Introduction to Microeconomics, or } \\ \text { Honors Introduction to Microeconomics.......... } 3\end{gathered}$
$\begin{array}{cc}\text { *ECON 50/50H } & \begin{array}{l}\text { Introduction to Macroeconomics, or } \\ \text { Honors Introduction to Macroeconomics......... } 3\end{array}\end{array}$
Choose 2 of the following: Units
BA 10/10H $\quad$ Introduction to Business, or
Honors Introduction to Business...................... 3
*DS $21 \quad$ Finite Mathematics............................................. 3
*DS 23 Business Statistics ............................................. 3
*May be used to fulfill General Education requirements.

## CHILD DEVELOPMENT

## EARLY CHILDHOOD EDUCATION FOR TRANSFER

 - MAJOR \#5605Majoring 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.
REOUIRED COURSES

Units

CHDEV $1 \quad$ Principles and Practices of Teaching Young
CHDEV 3 Introduction to Curriculum.................................. 3
CHDEV $6 \quad$ Health, Safety and Nutrition in Early Childhood Education. .. 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.

REOUIRED 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 - MAJOR \#7750

Administration of justice is the study of the causes, consequences, and control of crime. The program leading to the Associate in Science in the Administration of Justice for Transfer [AS-T] is designed to acquaint students with the principles and practices of criminal justice systems in America. The curriculum allows for the development of depth in one of the subject's subsystems (law enforcement, juvenile, courts, or corrections), and also gain familiarity with the basics of all areas. It is both academic and professional in that it is an interdisciplinary attempt to relate intellectual issues and practitioner perspectives to the challenge of crime in a free society. It provides the information necessary for employment with a related agency and/or transfer to a college or university. Those completing the AS-T in Administration of Justice will be able to transfer to the California State University System, and be prepared to study in Administration of Justice, Law Enforcement, Correctional Administration, Social Science, and Pre-Law. Upon completion students will be prepared to pursue a BA/BS in Criminal Justice. To earn the transfer degree students must complete a minimum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18-20 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Reflect critically on developments in criminal justice policy and the relationship of those policies to the wider political and social environment.
2. Compare and evaluate diverse and competing arguments in disciplinary (justice system) and interdisciplinary contexts.
3. Demonstrate knowledge of the history, structure and processes of law enforcement, the judicial system, the correctional system, and juvenile justice system.
4. Define and utilize key terms, concepts, and theories in the criminal justice system.
5. Interpret, assess, and compare competing types of evidence and data.
6. Effectively communicate orally and in writing the results of their analysis and conclusions.

REQUIRED CORE 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

## ECONOMICS FOR TRANSFER

## - MAJOR \#2020

The Associate in Arts in Economics for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. This degree will acquaint students with the fundamentals of economic thinking and the principle concepts and theories of macroeconomics and microeconomics. Additionally, the degree will offer students the math and statistics preparation required for upper division coursework in economics. To earn the Associate in Arts in Economics for Transfer students must complete at least 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements, and at least 18 units within the major. Students must maintain a minimum 2.0 GPA, including grades of $C$ or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor for more information on transfer requirements and university admission.

## $\overline{\text { ASSOCIATE IN ARTS DEGREE }}$ <br> Student Learning Outcomes:

1. Understand and apply basic economic methodology to describe, analyze and explain human behavior and societal challenges.
2. Apply principle microeconomic and macroeconomic concepts, theories and models to describe, analyze and explain relevant economic issues.
REQUIRED COURSES
Units
ECON 40/40H Introduction to Microeconomics, or Honors Introduction to Microeconomics. .. 3
ECON 50/50H Introduction to Macroeconomics, or Honors Introduction to Macroeconomics.. . 3
MATH 5A Elementary Statistics ..................................... 5
MATH 42 Statistics for the Behavioral Sciences, or
MATH 11 Elementary Statistics, or
DS 23 Business Statistics.....................................-4
Choose two of the following courses:.................................Units
ACCTG $4 A \quad$ Financial Accounting...................................... 4
ACCTG 4B Managerial Accounting ................................... 4
MATH 5B Mathematical Analysis II .................................. 4
MATH 6 Mathematical Analysis III ................................ 4
MATH 21 Finite Mathematics........................................ 3
MATH 26 Elementary Linear Algebra................................ 3
Total 20-23

## EDUCATION

## ELEMENTARY TEACHER EDUCATION FOR <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.

ASSOCIATETN ARIS DEGREE
Student Learning Outcomes:
 toditueabitisitylat the elementary school level.

 scthaatdeveland physiology.
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
CHDEV 39 Introduction to Life Science.............................. 4
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 Composition4

ENGL 1B 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 Ancient to Medieval, or Honors Art History Ancient to Medieval ........... 3
ART 6/6H Art History Renaissance to Modern, or Honors Art History Renaissance to Modern ...3

MUS 12 Music Appreciation ............................................ 3
TA 30 Theatre Appreciation ..................................................


## 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 | Introduction to the Study of Literature .................. 3 |  |
| ENGL 3/3H | Critical Reading and Writing, or <br> Honors Critical Reading and Writing................ 3 |  |

MAJOR COURSE OPTIONS - Section A
Select one of the course sequences ( 6 units total) from the following list:
ENGL 44A World Literature to the Renaissance, and
ENGL 44B World Literature since the Renaissance, or
ENGL 46A English Literature to 1800, and
ENGL 46B English Literature from 1800 to the Present, or
ENGL 48A Introduction to American Literature to 1865, and
ENGL 48B Introduction to American Literature 1865 to the Present 3
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 1865......... 3
ENGL 48B Introduction to American Literature
1865 to the Present. 3
LING 10 Introduction to Language ................................... 3
SECTION C Units
ENGL 12 The Bible as Literature........................................ 3
ENGL 15D Creative Writing: Creative Nonfiction ................... 3
ENGL/WSTS 36 Women's Literature............................................ 3
ENGL 40 Themes in Literature.......................................... 3
ENGL 47 Introduction to Shakespeare................................ 3

## 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 UnitsCHEM 1A General Chemistry5
CHEM 1B General Chemistry and Qualitative Analysis ..... 5
GEOL 1 Physical Geology ..... 4
GEOL 2 Historical Geology. ..... 3
GEOL 2L Historical Geoology Lab ..... 1
MATH 5A Mathematical Analysis I ..... 5
MATH 5B Mathematical Analysis II ..... 4
Notes:
Additional recommended courses (not part of degree)
Physics 4A and Physics 4B (8 units) or (see requirements of 4 year institution)
Physics 2A and Physics 2B (8 units)
Biology 3 (4 units)
Geology 3 (1-2 units)

## GLOBAL STUDIES

## GLOBAL STUDIES FOR TRANSFER - MAJOR \#7740

The Associate in Arts in Global Studies for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus, to include Global Studies, Global Politics, International Relations, International Studies and Comparative Government. This degree will acquaint students with the interdisciplinary field of global studies and introduce students to various global issues with a focus on the analysis of causes and solutions. To earn the Associate in Arts in Global Studies for Transfer students must complete at least 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements, and at least 18 units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor for more information on transfer requirements and university admission.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Explain the various meanings of globalization and identify regional differences.
2. Explain recurring and emerging global issues from a historical and interdisciplinary perspective.
3. Critically evaluate the effectiveness of national, regional and international efforts to solve problems associated with global issues.
REOUIRED CORE Units
GLST 1 Introduction to Global Studies.............................. 3
GLST 2 Global ISsues .................................................... 3
List A: Select five courses from at least four of the following areas.
Area 1: Culture and Society Units
ANTHRO 2 Cultural Anthropology........................................ 3
HIST 23 World History II, since 1500................................ 3
Area 2: Geography Units
GEOG 1 Physical Geography ........................................... 4
GEOG 2 Cultural Geography ........................................... 3
GEOG 4A World Geography, and
GEOG 4B World Geography ........................................... 6
Area 3: Economics Units
ECON 40/40H Introduction to Microeconomics, or Honors Introduction to Microeconomics.......... 3
ECON 50/50H Introduction to Macroeconomics, or Honors Introduction to Macroeconomics ......... 3


## HISTORY FOR TRANSFER - MAJOR $\neq 7380$

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.


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
$\begin{array}{ll}\text { HIST 1/1H } \quad \text { Western Civilization to 1648, or } \\ & \text { Honors Western Civilization to 1648................ } 3\end{array}$
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


## 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): |
| :--- | :--- |
| JOURN 1 | Introduction to Mass Communication ................... 3 |
| JOURN 3 | Newswriting .................................................... 3 |

## KINESIOLOGY FOR TRANSFER

## - MAJOR \#4555

An Associate in Arts in Kinesiology for Transfer is designed for students who plan to complete a bachelor's degree in Kinesiology at a CSU or UC campus. An Associate in Arts in Kinesiology prepares students to pursue studies in fields such as kinesiology/physical education credential programs, exercise science, athletic training/sports medicine, and sports administration. To earn the Associate in Arts in Kinesiology for Transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 22-23 semester units within the major. Students must maintain a minimum 2.0 GPA , including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

ASSOCIATE IN ARTS DEGREE
Student Learning Outcomes:

1. Recognize and evaluate the importance of a healthy and physically active lifestyle.
2. Identify the major systems of the human body as they relate to movement and activity by explaining and applying the principles of anatomy and physiology.
REQUIRED CORE COURSES: 15 units Units
BIOL 20 Human Anatomy, and
BIOL 22 Human Physiology, or
BIOL 21A Human Anatomy \& Physiology I, and
BIOL 21B Human Anatomy \& Physiology II
HLTH 2 First Aid and Safety....................................... 3
PE 62 Introduction to Kinesiology .............................. 3
Total
15

## REQUIRED CORE COURSES: 3 units

Select a minimum of 3 different courses from the following for a total of 3 or more units. Units
PE 3 Archery.................................................... 1
PE 4 Badminton................................................ 1
PE 5 Basketball .................................................... 1
PE 7 Golf ...................................................... 1
PE 12 Swimming ................................................... 1
PE 13 Tennis....................................................... 1
PE 14 Volleyball................................................... 1
PE 15A Weight Training (Women) ............................. 1
PE 15B Weight Training (Men) ................................. 1
PE $15 C \quad$ Weight Training (Coed)................................ 1
PE 17 Hatha Yoga .............................................. 1
ELECTIVES: 4 units
Select a minimum of 1 course from the following for a total of 4 or more units. Units
CHEM 1A General Chemistry......................................... 5
DS 23 Business Statistics ............................................ 3
MATH 11 Elementary Statistics ..................................... 4
PHYS 2A General Physics 1 ......................................... 4

## MATHEMATICS FOR TRANSFER

\author{

- 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.

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 11H Honors 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 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 26 Intermediate/Advanced Voice ...................................... 1
MUS 29 Intermediate/Advanced Guitar ............................. 1
MUS 42A Intermediate/Advanced Brass (Brass Choir) ......... 1
MUS 42B Intermediate/Advanced Woodwinds
(Woodwind Choir).............................................. 1
Intermediate/Advanced Strings (String Orchestra) .1
MUS 42D Intermediate/Advanced Percussion (Percussion Ensemble) 1

For the Large Ensemble requirement, all music majors select four units from the following: Units
MUS $30 \quad$ College Choir. .1

MUS 34 Fresno Chorale.................................................. 1
MUS 40 Concert Band ................................................... 1
MUS 41 Jazz Ensemble................................................... 1
MUS 46 Symphony Orchestra......................................... 1
MUS 60 Symphonic Choir ............................................. 1
MUS 68 Symphonic Band............................................... 1
MUS 70 Contemporary Jazz Ensemble............................. 1
MUS 71 Lab Jazz Ensemble ............................................. 1
MUS 76 College Philharmonic Orchestra.......................... 1

## NUTRITION AND DIETETICS FOR <br> TRANSFER - MAJoR *5683

The Associate in Science in Nutrition and Dietetics for Transfer is designed for students who plan to transfer to a CSU campus to complete a bachelor's degree in nutrition and dietetics. To earn the Associates in Science in Nutrition and Dietetics for Transfer degree, students must complete 60 units that are eligible for transfer to the California State University, including both of the following: the Intersegmental General Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements and a minimum of 18 semester units in a major or an area of emphasis, as determined by the community college district. Obtainment of a minimum grade point average of 2.0. ADTs also require that students must earn a $C$ or better in all courses required for the major or area of emphasis. For more information on CSU admission and transfer requirements consult with a counselor. Upon completion of the Associates in Science in Nutrition and Dietetics for Transfer the students will be able to demonstrate knowledge of the relationship of nutrients and lifestyle factors and the associated risk of chronic disease. Students will demonstrate knowledge of physiological processes such as digestion, absorption, transport and metabolism of nutrients. Students will recognize and separate scientifically supported information from misinformation. Students will identify ways in which social factors influence food related choices, practices, and beliefs.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Demonstrate knowledge of the relationship of nutrients and lifestyle factors and the associated risk of chronic disease.
2. Demonstrate knowledge of physiological processes such as digestion, absorption, transport and metabolism of nutrients.
3. Recognize and separate scientifically supported information from misinformation.
4. Identify ways in which social factors influence food related choices, practices and beliefs.

REQUIRED CORE COURSES Units
BIOL 31 Microbiology..................................................... 5
CHEM 1A General Chemistry, and
CHEM 1B General Chemistry and Qualitative Analysis .10
FN 40 Nutrition............................................................ 3
PSY 2 General Psychology 3
List A: Select at least two courses from the list below:
BIOL $20 \quad$ Human Anatomy.............................................. 4
BIOL 21A Human Anatomy \& Physiology I, and
BIOL 21B Human Anatomy \& Physiology II.
Human Physiology............................................. 5
Organic Chemistry I, and Organic Chemistry Laboratory I 5
CHEM 28A
CHEM 29B
MATH 11
MATH/PSY 42
DS 23
Elementary Statistics, or
Statistics for the Behavioral Sciences, or Business Statistics. .3-4
List B: Select one course:
FN 1 Principles of Food Preparation............................ 3

## 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 |  |
| :---: | :---: |
| PHIL 1A/1AH | Theories of Knowledge and Reality, or Honors Theories of Knowledge and Reality...... 3 |
| PHIL 1 C | Ethics ......................................................... 3 |
| PHIL 6 | Symbolic Logic ............................................ 3 |
| Select three of the following courses |  |
| (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 $\qquad$ |
| HUMAN 10/10H | Classical Humanities, or Honors Classical Humanities. $\qquad$ |
| HUMAN 11/11H | Modern Humanities, or Honors Modern Humanities. $\qquad$ |
| PHIL 1B | Social and Political Philosophy........................ 3 |
| PHIL 1D | World Religions ............................................ 3 |
| PHIL 2/2H | Critical Reasoning and Analytic Writing, or Honors Critical Reasoning and Analytic Writing. $\qquad$ 3 |
| PHIL 5 | Philosophy of Religion.................................. 3 |
|  | Total 18 |

## PHYSICS FOR TRANSFER - major \#6335

An Associate in Science in Physics for Transfer is designed for students who plan to complete a bachelor's degree in Physics at a CSU or UC campus. An Associate in Science in Physics for Transfer is comprised of the core set of introductory Physics and Mathematics courses that assist a student to develop critical thinking and analytical reasoning skills and establish conceptual frameworks for understanding physical phenomena. To earn the Associate in Science in Physics for Transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA , including grades of $C$ or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Given a set of initial conditions, apply problem solving techniques to develop a mathematical model which describes the physical characteristics of a given system. Identify known and unknown quantities, derive appropriate equations, and analyze the results.
2. Given a physical system, identify the core concepts and physical laws that apply. Describe the system in terms of the core concepts and physical laws. Select appropriate conceptual model(s) and justify their application.
3. In the laboratory setting, demonstrate safe laboratory practices.
4. In the laboratory setting, determine the relationship between the physical quantities of a system. Develop mathematical models and use analytical and graphical means to predict the subsequent behavior of the system.

| CORE COURSES | 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. 3

LIST A: Select three of the following: Units
$\begin{array}{ll}\text { MATH/PSY } 42 & \text { Statistics for the Behavioral Sciences, or } \\ \text { MATH } 11 & \text { Elementary Statistics................................ } 4\end{array}$
POLSCl 1 Modern Politics.................................................... 3
POLSCl 3 Introduction to Political Theory and Thought........ 3
POLSCl 5 Comparative Government.................................. 3
POLSCl 24 International Relations........................................ 3
LIST B: Select two of the following: Units
BA 20 Law and the Legal System............................... 3
$\begin{array}{ll}\text { ECON } 40 & \text { Introduction to Microeconomics, or } \\ \text { ECON } 50 & \text { Introduction to Macroeconomics ................... } 3\end{array}$
POLSCI 13 Legal and Judicial Reasoning............................. 3
SOC 1B Critical Thinking about Social Problems ............. 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 2/2H General Psychology, or $\begin{aligned} & \text { Honors General Psychology......................... } 3\end{aligned}$
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 ............................................ 4
PSY 5 Social Psychology......................................... 3
Choose one of the following courses:
NOTE: Psychology 5 can be taken in this section only if it was not taken as part of the previous sections 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 |
| $\quad$ MATH 11 | Elementary Statistics...................................... 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 $10 \quad$ American Pluralism: A Search for Common |  |
| :--- | :--- |
|  | Ground in a Multicultural Society......................... 3 |

$\begin{array}{ll}\text { ANTHRO 2/2H } & \text { Cultural Anthropology, or } \\ \text { Honors Cultural Anthropology ........................ } 3\end{array}$
HS 20 Introduction to Social Welfare .............................. 3
SOC 2 American Minority Groups .................................. 3
SOC/WSTS 5 Sociology of Rape .............................................. 3
SOC/WSTS 7 Domestic Violence: Abuse within the Family........ 3
SOC/HS 10 Introduction to Aging Studies.............................. 3
$\begin{array}{ll}\text { SOC/CLS } 14 & \begin{array}{l}\text { Sociology of the Mexican American } \\ \text { Community ............................................................ } 3\end{array}\end{array}$
SOC $31 \quad$ The Child in Society: A Social Problems
Approach.......................................................... 3
WSTS $10 \quad$ Changing 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 21-24 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. The local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admissions and transfer requirements.

## ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

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

| REQUIRED CORE COURSES | Units |
| :--- | :--- | ---: |
| SPAN 1 | Beginning Spanish................................................................................................................. 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 $7 \quad$ Advanced Spanish: Composition and
Grammar .4
SPAN $8 \quad$ Advanced Spanish Conversation.......................... 4
SPAN 9 Spanish Business and Culture ............................ 4
SPAN 41 Introduction to Poetry in Spanish........................ 4
SPAN 42 Hispanic American Culture.................................. 4
Total 21-24
Notes:

1. Students entering the Spanish program at Spanish 2 or higher are required to complete the specified unit requirements of the degree. Students must consult with the Foreign Language Department Chair for approval of course substitutions.
2. Some of the above courses may have prerequisite. See the catalog or schedule of classes.
3. The Associate Degree requires completion of the major (21-24 units) with a "C" or better in each course plus the completion of the General Education (either CSU-GE Breadth or IGETC) for a total of 60 semester units with a 2.0 or better GPA.
4. Two of the following courses may be challenged according to Foreign Language Department policy: Spanish 1, 2.

## 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 ............ 3
TA 40
Performance Practicum, or
Technical Theatre Practicum 3
TA 41
Beginning Acting, or
Beginning Acting for Theatre Majors 3

## Elective Courses: Select 9 Units from the following Courses:

Units
Note: TA 40 can be taken in this section only if they were not taken as part of the core.
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 <br> Units

*ACCTG 4A Financial Accounting.......................................... 4
*ACCTG 4B Managerial Accounting ...................................... 4
ACCTG 19 Work Experience (Cooperative), Occupational...... 1
*ACCTG 51 Intermediate Accounting..................................... 3
*ACCTG 52 Cost Accounting ................................................. 3
$\begin{array}{cc}\text { ACCTG 70 } & \text { QuickBooks Fundamentals, or } \\ \text { ACCTG } 73 & \text { Sage } 100 \text { Fundamentals................................. } 3\end{array}$
$\begin{array}{ll}\text { BA 10/10H } & \text { Introduction to Business, or } \\ \text { Honors Introduction to Business...................... } 3\end{array}$
CIT 15 Computer Concepts ........................................... 3
$\begin{array}{cr}\text { CIT } 23 & \text { Spreadsheet Fundamentals, or } \\ \text { BT } 24 & \text { Beginning Excel ..........................................1-2 }\end{array}$
Total 25-26
Select 3 of the following courses: (ACCTG 70 and ACCTG 73 can only be used if not taken above) Units
*ACCTG 53 Tax Accounting.................................................. 3
*ACCTG 54A Principles of Auditing......................................... 3
*ACCTG 56 Payroll Accounting ..... 3
*ACCTG 57 Governmental Accounting ..... 3
*ACCTG 61 Forensics Accounting. ..... 3
ACCTG 70 QuickBooks Fundamentals ..... 3
ACCTG 73 Sage 100 Fundamentals ..... 3
*The advanced accounting courses noted above may also be used to satisty the uniteligibility requirement that must be met before a person can take the CPA Exam. Manystudents take these courses to satisfy that CPA exam requirement as well as to satisfy theAS degree requirements.
Note: Associate degree requirements are listed on page 35.

## ACCOUNTING - MAJoR \#2010

The Accounting Certificate of Achievement qualifies the student for entry-level accounting positions in business, government, industry, and financial institutions.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

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

REOUIRED COURSES Units
*ACCTG 4A Financial Accounting.......................................... 4
*ACCTG 4B Managerial Accounting ...................................... 4
ACCTG 19 Work Experience (Cooperative), Occupational...... 1
*ACCTG 51 Intermediate Accounting..................................... 3
*ACCTG 52 Cost Accounting ................................................ 3
ACCTG $70 \quad$ QuickBooks Fundamentals, or
ACCTG 73 Sage 100 Fundamentals.3

BA 10/10H Introduction to Business, or
Honors Introduction to Business..................... 3
Computer Concepts ............................................ 3
Spreadsheet Fundamentals, or
Beginning Excel
1-2

Select 3 of the following courses: (ACCTG 70 and ACCTG 73 can
only be used if not taken above) Units
*ACCTG 53 Tax Accounting.................................................. 3
*ACCTG 54A Principles of Auditing......................................... 3
*ACCTG 56 Payroll Accounting............................................. 3
*ACCTG 57 Governmental Accounting ................................... 3
*ACCTG 61 Forensics Accounting......................................... 3
ACCTG 70 QuickBooks Fundamentals.................................. 3
ACCTG 73 Sage 100 Fundamentals ..................................... 3
*The advanced accounting courses noted above may also be used to satisfy the unit eligibility requirement that must be met before a person can take the CPA Exam. Many students take these courses to satisfy that CPA exam requirement as well as to satisfy the Certificate of Achievement requirements.

## COMPUTERIZED ACCOUNTING FOR THE

WORKPLACE - Formerly computerized accounting

## - MAJOR \#2056

The Computerized Accounting for the Workplace Certificate of Achievement is designed for entry-level employment as an account clerk using various software packages and the latest in business technology to perform various accounting functions.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

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

## REQUIRED COURSES <br> Units

ACCTG 4A Financial Accounting.......................................... 4
ACCTG 19 Work Experience (Cooperative), Occupational...... 3
ACCTG 56 Payroll Accounting............................................ 3
ACCTG 70 QuickBooks Fundamentals.................................. 3
ACCTG 73 Sage 100 Fundamentals ..................................... 3
CIT 23 Spreadsheet Fundamentals, or
BT 24 Beginning Excel 1-2

ADMINISTRATION OF JUSTICE

## ADULT CORRECTIONAL OFFICER CORE <br> - MAJOR \#8941 <br> 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. <br> 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 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.
4. Applicants must attend an interview and orientation, and will be notified regarding their acceptance.

## Accepted applicants must:

1. Possess a valid California Driver's License and provide a DMV printout of their driving record.
2. Provide a Department of Justice clearance for firearms possession.
3. Provide proof of a physical examination including an Electrocardiogram with a physician's approval for applicant to participate in all aspects of academy training.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Demonstrate knowledge of California laws pertaining to arrest authority of a peace officer and a citizen covered under Penal Code sections 836 and 837.
2. Compare and contrast the constitutional issues involved in detentions, arrest and interrogations.
3. Demonstrate physical competency in psychomotor skills in handling police weaponry in a safe manner.
4. Demonstrate the ability to communicate effectively and professionally through written, oral and electronic media.
5. Identify the California laws that pertain to the enforcement and procedural aspects of law enforcement, recognizing the violations an officer is likely to encounter and describe the legal obligations in enforcing those laws.
6. Identify the process to confine and care for adult or juvenile prisoners in such a manner as to provide the necessary confinement and to protect the prisoner's rights and welfare.

## REQUIRED COURSES Units

AJ 270A Basic Police Academy - Part 1....................... 17.5
AJ 270B Basic Police Academy - Part 2........................ 20.5
Total 38
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

## 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

## POST BASIC SUPERVISOR

- FORMERLY BASIC SUPERVISOR - MAJOR \#8927

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

Student Learning Outcomes:

1. Satisfies all the required mandated training for California Peace Officers Standards and Training (POST) to become a supervisor.
2. Identify methodologies of supervision related to the law enforcement profession.
REQUIRED COURSE Units
AJ 276 POST Basic Supervisor Course........................ 4.5
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:
3. Identify the responsibilities of a County Probation Officer for the State of California.
4. 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.

| REOUIRED 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

## STC BASIC SUPERVISOR - MAJOR \# 8926

Designed for the student needing to complete the California Standards and Training for Corrections (STC) required 80-hour course to become a supervisor for a California public safety agency.

## CERTIFICATE

## Student Learning Outcomes:

1. Satisfies the 80 -hour requirement of Minimum Jail Standards Title 15, Section 181 to become a probation or corrections supervisor.
2. Identify methodologies of supervision related to the probation and corrections professions.
```
REQUIRED COURSE Units
AJ 276A STC Basic Supervisor Course4.5
```


## AFRICAN-AMERICAN STUDIES

- MAJOR \#7640

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

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Evaluate and analyze the historical and cultural contributions made by African-Americans to the economic, social and political systems of the United States.
2. Evaluate and assess the historic roles of Africa and African people throughout the world.
3. Analyze and evaluate contemporary social, political, and economic issues of the African-American community.
4. Demonstrate academic success and positive community involvement.
Total Units Required.. 18
REQUIRED CORE COURSES: Select 12 units Units AFRAM 1 Introduction to African American Studies ............. 3
AFRAM 2 African American Cultural Adaptation .................. 3
AFRAM 3 African-American Art.......................................... 3
AFRAM 15 African American Music ...................................... 3
COURSE OPTIONS: Select at least 6 units Units
AFRAM 4 Classical and Pre Colonial Africa ......................... 3
AFRAM 5 The African Diaspora of the Americas................... 3
AFRAM 6 African Cultures and Languages.......................... 3
AFRAM 8 African-American Creative Workshop................... 3
$\begin{array}{ll}\text { AFRAM/HIST } 34 & \begin{array}{l}\text { History of the American Civil Rights } \\ \\ \text { Movement.......................................................... } 3\end{array}\end{array}$
AFRAM/WSTS 41 The African-American Women's Studies............... 3
AMST 10 American Pluralism: A Search for Common Ground in a Multicultural Society. 3
Notes: An associate in arts degree will be awarded to any candidate who successfully completes 60 units. The 60 units must include associate degree requirements and at least 18 units of course work as listed above.

## ALLIED HEALTH

## PRE-ALLIED HEALTH REGISTERED NURSING OPTION - MAJOR \#4525

The Pre-Allied Health degree offers an interdisciplinary approach of study for students seeking to enter the profession of health care in a variety of ways. The degree will allow students to pursue a rigorous course of study before selecting an area of concentration to match their career and study interests. With emphasis on basic science, cultural competency in health care, the degree offered will prepare students to excel in a wide range of health care fields. Students completing the degree will be prepared to enter programs for careers in Dental Hygiene, Health Information Technology, Medical Assisting, Radiologic Technology, Registered Nursing or Respiratory Care.

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Articulate career options and the necessary educational pathway for health professions.
2. Express knowledge of current scientific and social issues affecting health care systems.
3. The student will be prepared to enter the Registered Nursing Program.

| REQUIRED COURSES |  | Units |
| :---: | :---: | :---: |
| AHLTH 100 | Introduction to Health Careers... |  |
| BIOL 20 | Human Anatomy, and |  |
| BIOL 22 | Human Physiology, or |  |
| BIOL 21A | Human Anatomy \& Physiology I, and |  |
| BIOL 21B | Human Anatomy \& Physiology II |  |
| CHEM 3A | Introduction to General Chemistry.. |  |
| ENGL 1A/1AH | Reading and Comprehension, or Honors Reading and Comprehensi |  |
| MATH 103 | Foundations of Algebra |  |
| REGISTERED NURSING PROGRAM PREREOUISITES |  | Units |
| ANTHRO $2 / 2 \mathrm{H}$ SOC 1A/1AH | Cultural Anthropology, or Honors Cultural Anthropology, or |  |
|  | Introduction to Sociology, or Honors Introduction to Sociology . |  |
| BIOL 31 | Microbiology. |  |
| PSY 2/2H | General Psychology, or Honors General Psychology. |  |
| Select Three (3) Units from the Following |  | Units |
| HIT 10 | Medical Terminology. |  |
|  | Total | 38 |



Associate Degree
for Transfer
A Degrex with a Glainutas:

## PUBLIC HEALTH FOR TRANSFER - mAJoR \#8400

The Associate in Science in Public Health for Transfer is designed for students who plan to complete a bachelor's degree in Health Science at a CSU or UC campus. An Associate in Science in Public Health focuses on competencies that include knowledge of public health models, health risk assessments, health screenings, health promotion programming, surveillance of disease outbreaks and injury prevention strategies for a community. The public health field includes disciplines such as patient health navigator, health education outreach, epidemiology, biostatistics, health services, environmental health, behavioral health, and occupational health. The Public Health Associate in Science for Transfer provides preparedness in these job related career paths. To earn the Associate in Science in Public Health for transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 33 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

ASSOCIATE IN SCIENCE DEGREE
Student Learning Outcomes:

1. Demonstrate the ability to comprehend and apply the multidimensional approach of public health sciences.
2. Identify proactive factors for disease prevention and risk factors for disease and disability.
3. Demonstrate and apply behavior-changing techniques to maximize health and wellness.
4. Demonstrate the concepts of research, program planning and evaluation strategies.
REOUIRED COURSES Units
AHLTH 1 Introduction to Public Health............................... 3
BIOL 5 Human Biology ................................................. 4
BIOL 20 Human Anatomy, and
BIOL 22 Human Physiology, or
BIOL 21A Human Anatomy \& Physiology I, and
BIOL 21B Human Anatomy \& Physiology II ..................... 9
CHEM 3A Introduction to General Chemistry....................... 4
HLTH 1 Contemporary Health Issues ............................... 3
MATH 11 Elementary Statistics ......................................... 4
PSY 2 General Psychology ........................................... 3
Select a Minimum of 3 Units from the Following ........................ Units
AHLTH 2 Health and Social Justice .................................... 3
ECON 40 Introduction to Microeconomics ............................ 3
ECON 50 Introduction to Macroeconomics......................... 3
FN 40 Nutrition.......................................................... 3
HLTH 2 First Aid and Safety ............................................ 3
PSY $25 \quad$ Human Sexuality ................................................ 3
Total 33

## AMERICAN INDIAN STUDIES - MAJOR \#7680

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

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

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Identify and describe cultural differences and similarities among the American Indian and Alaskan Native societies of North America.
2. Describe and analyze the material, political, spiritual, and environmental contributions made by American Indian societies to the world
3. Identify the inappropriate uses of racial stereotypes about Indians and analyze how they have been used to advance special interests.
4. Explain historically the effects of colonization and imperialism on American Indian tribes.
5. Identify the major issues of the 20th and 21st century for American Indians, with an example on current events.
6. Evaluate the arts of diverse peoples through an expanded awareness and appreciation of North American arts.

REQUIRED CORE COURSES 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 African Diaspora of the Americas................... 3
AMIND 20 Native Peoples of California ................................. 3
$\begin{array}{ll}\text { AMST } 10 & \text { American Pluralism: A Search for Common } \\ & \text { Ground in a Multicultural Society......................... } 3\end{array}$
ANTHRO/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.
2. Associate degree requirements are listed on page 35 of this catalog. General Education requirements for transfer certification are on page 47.

## AMERICAN INDIAN STUDIES - MAJOR \#7681

Fresno City College is located in an area that is rich in the history and contemporary cultures of American Indians. California has the highest American-Indian population in the United States, and has several Indigenous communities in our immediate area. The Certificate in American Indian Studies exists to serve Indian and non-Indian students who will be working for local tribes communities, tribal organizations, in any service field, academic or social institution servicing American Indians. To earn the certificate the student must complete 12 units of required basic core courses.

## CERTIFICATE

Student Learning Outcomes:

1. Identify and describe cultural differences and similarities among the American Indian and Alaskan Native societies of North America.
2. Describe and analyze the material, political, spiritual, and environmental contributions made by American Indian societies to the world.
3. Identify the inappropriate uses of racial stereotypes about Indians and analyze how they have been used to advance special interests.
4. Identify the major issues of the 20th and 21st century for American Indians, with an example on current events.

## REQUIRED CORE COURSES 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

## 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 7 | Deaf History ................................................ 3 |
| ASL 8 | American Sign Language <br> Literature/Folklore. $\qquad$ 3 |
| ELECTIVE COURSE (3 Units) |  |
| ASL 20 | Introduction to Interpreting.............................. 3 |
| CHDEV 30 | Child, Family and Community.......................... 3 |
| LING 10/10H | Introduction to Language, or Honors Introduction to Language. $\qquad$ 3 |
|  | Total 31 |

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

## ANTHROPOLOGY - MAJoR $\# 7100$

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

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

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

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

| REQUIRED C | OURSES (9 units minimum) | Units |
| :---: | :---: | :---: |
| ANTHRO 1 | Biological Anthropology. |  |
| ANTHRO 2/2H | Cultural Anthropology, or Honors Cultural Anthropology .... |  |
| ANTHRO 4 | Introduction to Archaeology |  |
| ELECTIVES: 9 u | its minimum | Units |
| AFRAM 1 | Introduction to African American Studies. | .... 3 |
| AMIND 20 | Native Peoples of California |  |
| AMIND 31 | American Indian Culture. |  |
| AMST 10 | American Pluralism: A Search for Common Ground in a Multicultural Society. |  |
| ANTHRO 1L | Biological Anthropology Laboratory....... | ... 1 |


| *ANTHRO 3 | Archaeology \& World Prehistory...................... 3 |
| :---: | :---: |
| ANTHRO 8 | Language and Culture, or Introduction to Language .. 3 |
| LING 10 |  |
| ANTHRO 12 | Visual Anthropology: Introduction to |
|  | Ethnographic Film......................................... 3 |
| ANTHRO 13 | Anthropology of Magic, Witchcraft, and |
|  | Religion...................................................... 3 |
| ANTHRO 15 | Laboratory Methods in Archaeology.................. 4 |
| ANTHRO 16A | Field Archaeology I ....................................... 2 |
| ANTHRO 16B | Field Archaeology II ...................................... 2 |
| ANTHRO 24 | Doing Archaeology: Hands-On!...................... 1.5 |
| ANTHRO/CLS 28 | Ancient Mexico ............................................ 3 |
| ANTHRO 30 | Topics in Anthropology ............................... 1-3 |
| ASAMER 15 | Introduction to Asian-Americans ...................... 3 |
| ASL 5 | Deaf Culture ................................................ 3 |
| CLS 11 | Introduction to Chicano-Latino Studies.............. 3 |
| JOURN 16 | Race, Gender and the Media............................ 3 |
| MATH 11 | Elementary Statistics, or |
| MATH/PSY 42 | Statistics for the Behavioral Sciences.............. 4 |
| WSTS 10 | Changing Roles of Women.............................. 3 |
| *Anthro 3 may be required by University of California campuses for transfer in Anthropology. |  |



Associate Degree
for Transfer
A Dezace with a Gamantan

## ANTHROPOLOGY FOR TRANSFER - MAJoR \#7150

Anthropology is a program designed to acquaint students with human diversity through a broad approach to the study of people including the prehistoric, biological, and cultural perspectives. Because of its wide coverage, anthropology provides a versatile background that serves as a solid foundation for careers in many fields and vocations. The Associate in Arts in Anthropology for Transfer degree is designed for students who plan to complete a bachelor's degree in Anthropology at a CSU campus. The Associate in Arts in Anthropology for Transfer degree requires (1) The completion of 60 semester units that are eligible for transfer to the California State University, including both of the following: (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
(B) A minimum of 18 semester units in the Anthropology major. (2) Obtainment of a minimum grade point average of 2.0 and the grade of C or better in all courses required for the major. Students are strongly encouraged to meet with a counselor about transfer requirements (IGETC/ CSU) early in their program. Anthropology students should also meet with anthropology faculty about course/program offerings as soon as possible once the major has been declared in order to complete the program in a timely manner.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Demonstrate an understanding of anthropological approaches to the study of humanity: cross-cultural comparison and cultural relativity, holism, and evolutionary theory, and the uses of each.
2. Describe the breadth of anthropology and be able to characterize anthropology's distinctive methodological approaches with respect to the different subdisciplines.
3. Demonstrate understanding of human cultural diversity and biological variation through time.
REQUIRED CORE COURSES (3 courses or 9 units minimum)
Units

| ANTHRO 1 | Biological Anthropology |
| :---: | :---: |
| ANTHRO 2/2H | Cultural Anthropology, or <br> Honors Cultural Anthropology $\qquad$ |
| ANTHRO 4 | Introduction to Archaeology ............................ 3 |
| Select 3-4 unit | from the following: Units |
| ANTHRO 1 L | Biological Anthropology Laboratory.................. 1 |
| ANTHRO 3 | Archaeology and World Prehistory.................... 3 |
| ANTHRO 8 <br> LING 10 | Language and Culture, or Introduction to Language .3 |
| ANTHRO 13 | Anthropology of Magic, Witchcraft, and Religion $\qquad$ |

Select 3-8 units from following courses or any courses not used
in the section above: Units
BIOL 20 Human Anatomy................................................. 4
GEOL 1 Physical Geology .............................................. 4
GEOL 9 Introduction to Earth Science .............................. 4
PSY/MATH 42 Statistics for the Behavioral Sciences, or
MATH $11 \quad$ Elementary Statistics.................................. 4
Select 3-4 units from the following courses or any course not
used in the sections above: Units
AFRAM 1 Introduction to African American Studies .............. 3
AMIND 31 American Indian Culture........................................... 3
AMST $10 \quad$ American Pluralism: A Search for Common Ground in a Multicultural Society. 3
$\begin{array}{ll}\text { ANTHRO } 12 \quad \text { Visual Anthropology: Introduction to } \\ & \text { Ethnographic Film............................................ } 3\end{array}$
ANTHRO 15 Laboratory Methods in Archaeology..................... 4
ANTHRO 16A Field Archaeology I ........................................... 2
ANTHRO 16B Field Archaeology II ........................................... 2
ANTHRO 24 Doing Archaeology: Hands-On!........................ 1.5
ANTHRO/CLS 28 Ancient Mexico ................................................. 3
ASAMER 15 Introduction to Asian-Americans ......................... 3
ASL 5 Deaf Culture ...................................................... 3
CLS 11 Introduction to Chicano-Latino Studies................ 3
JOURN 16 Race, Gender and the Media................................ 3
WSTS $10 \quad$ Changing Roles of Women................................. 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.
REOUIRED CORE COURSES: (15 units minimum) Units
ANTHRO 1 Biological Anthropology...................................... 3
$\begin{array}{ll}\text { ANTHRO 2/2H } & \begin{array}{l}\text { Cultural Anthropology, or } \\ \text { Honors Cultural Anthropology ......................... } 3\end{array}\end{array}$
ANTHRO 4 Introduction to Archaeology ................................ 3
ANTHRO 15 Laboratory Methods in Archaeology..................... 4
ANTHRO 16A Field Archaeology I ............................................ 2
ELECTIVES (3 units minimum) Units
Students must complete a minimum of three units from the following list of electives. Other courses may be substituted based on the student's area of focus with faculty approval.
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/CLS 28 Ancient Mexico ................................................. 3
ANTHRO 30 Topics in Anthropology ...................................1-4
GEOG 10 Introduction to GIS............................................. 3
*GEOL 1 Physical Geology ............................................... 4
HIST 3 History of Ancient Rome..................................... 3
HIST 18 History of Ancient Greece................................... 3
HIST 30 California History .............................................. 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 |  |
| :---: | :---: |
| 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 |
|  | Total 10 |
| First Year - Spring Semester |  |
| 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 | Architectural Design and Visualization III......... 3 |
| ARCH 31 | Building Codes ......................................... 3 |
| ARCH 32 | Statics and Strength of Materials .................. 3 |
| ARCH 34 | Digital Rendering ...................................... 3 |
|  | Total 12 |

Second Year - Spring Semester Units
ARCH $40 \quad$ Architectural Design and Visualization IV......... 3

ARCH 41A Office Practices ............................................. 3
ARCH 42 Timber and Steel Structures............................ 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 35 of the catalog, upon application, will be awarded the associate in science degree.

## ARCHITECTURE - MAJOR \#6810

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

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

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

| First Year - Fall Semester |  |
| :---: | :---: |
| 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 |
|  | Total 10 |
| First Year - Spring Semester |  |
| 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 | Architectural Design and Visualization III......... 3 |
| ARCH 31 | Building Codes ......................................... 3 |
| ARCH 32 | Statics and Strength of Materials ................... 3 |
| ARCH 34 | Digital Rendering ....................................... 3 |
|  | Total 12 |


| Second Year - Spring Semester | Units |
| :--- | :--- |
| ARCH 40 | Architectural Design and Visualization IV......... 3 |

ARCH 41A Office Practices ...................................................... 3
ARCH 42 Timber and Steel Structures............................ 3
Total
Note: Students qualify for the certificate of achievement upon completion of the major requirements listed above.

## BASIC ARCHITECTURAL CONTRACT DOCUMENTS - MAJOR \#6811

This curriculum is designed to provide beginning knowledge and skills to individuals in the areas of architectural contract documents, accessibility and engineering principles.

## CERTIFICATE

## Student Learning Outcomes:

1. Demonstrate through drawing the technical elements of light, wood-frame construction.
2. Apply the correct accessibility regulations to a given project.
3. Calculate actual and allowable stresses.

REQUIRED COURSES 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.
3. Design and complete an educational portfolio.
REOUIRED 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 $40 \quad$ Architectural Design and Visualization IV............. 3 Total 12

BASIC ARCHITECTURAL OFFICE PRACTICE - MAJOR \#6813

This curriculum is designed to provide beginning knowledge and skills to individuals in the area of architectural practice.

## CERTIFICATE

Student Learning Outcomes:

1. Compare different careers in architecture and related fields.
2. Compare and contrast the compatibility of different materials, their applications, cost and availability.
3. Analyze buildings for specific, detailed compliance with building codes.
4. Compare, contrast, and write different types of construction specifications.
REQUIRED COURSES
Units
ARCH 11 Introduction to Architecture and Environmental
Design..
.. 2
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 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
ARCH 11 Introduction to Architecture and Environmental Design2

ARCH 12 Architectural Practice I....................................... 3
ARCH 14 Digital Tools for Architects .................................. 2

## 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 $20 \quad$ Architectural Design and Visualization II ..... 3
ARCH 21 Materials of Construction ..... 3
ARCH 22 Architectural Practice II ..... 3
ARCH $24 \quad$ Building Information Modeling ..... 3

## 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

## 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 Ancient to Medieval, or Honors Art History Ancient to Medieval ........... 3
ART 6/6H Art History Renaissance to Modern, or Honors Art History Renaissance to Modern ..... 3
*ART $7 \quad$ Beginning Drawing, or ART 8 Beginning Figure Drawing and Anatomy.......... 3
Select a Minimum of 12 Units: (May take ART 7 or 8 if not taken in the core) Units
ART 2 Art Appreciation ................................................ 3
ART $7 \quad$ Beginning Drawing............................................ 3
ART 8 Beginning Figure Drawing and Anatomy .............. 3
ART 10 Beginning Ceramics........................................... 3
ART 11 Beginning Sculpture........................................... 3
ART 12A Craft Workshop: Living Traditions........................ 3
ART 12B Intermediate Craft Workshop: Living Traditions3

ART 13 Beginning Watercolor Painting............................ 3
ART 14 Beginning Printmaking....................................... 3
ART 15 Ceramic Sculpture............................................. 3
ART 16 Life Painting..................................................... 3
ART 17 Intermediate Drawing ......................................... 3
ART 18 Intermediate Figure Drawing and Anatomy ........... 3
ART 19 Intermediate Painting: Oil/Acrylic........................ 3
ART 20 Intermediate Ceramics........................................ 3
ART 21 Intermediate Sculpture ....................................... 3
ART 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.


Associate Degree
for Transfer
A Degne with a Gianantas:-

## STUDIO ARTS FOR TRANSFER - MAJOR \#5550

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.................................. 3
ART 6/6H Art History Renaissance to Modern, or Honors Art History Renaissance to Modern ..... 3
*ART 7 Beginning Drawing............................................. 3
LIST A: Select One (3 units) Units
ART 5/5H $\quad$ Art History Ancient to Medieval, or
Honors Art History Ancient to Medieval ........... 3
ART 55 Introduction to Asian Art .................................... 3
ART 60 Art of the Ancient Americas................................. 3
LIST B: Select three courses (9 units)
Select one course from three of the following areas (Drawing,
Painting, Printmaking, Ceramics, Sculpture, or Applied Drawing)

## Units

ART 8
ART 17
Beginning Figure Drawing and Anatomy, or Intermediate Drawing, or Intermediate Figure Drawing and Anatomy. .3
ART 9
ART 13
ART 19
ART 29
ART14
ART 24A
ART 24B
Beginning Painting: Oil/Acrylic, or
Beginning Watercolor Painting, or Intermediate Painting: Oil/Acrylic, or Advanced Painting: Oil/Acrylic. 3

ART 24C
ART 24D
ART 10
ART 20
ART 11
ART 15
ART 21
Beginning Printmaking, or Intaglio Printmaking, or
Lithograph Printmaking, or
Relief Printmaking, or Screenprinting 3
Beginning Ceramics, or Intermediate Ceramics .................................... 3
Beginning Sculpture, or Ceramic Sculpture, or Intermediate Sculpture 3
ART 12A
ART 12B
Craft Workshop: Living Traditions, or Intermediate Craft Workshop: Living Traditions, or
ART 22B $\quad$ Craft Workshop: Concepts in Fibers, or
ART 32A Beginning Jewelry and Metalsmithing . 3
*ART 3, ART 4, and ART 7 should be taken before the other courses in the major.

## STUDIO ART - formerly three-dimensional art

- MAJOR \#5210

Offers the student a fundamental understanding of art and studio practices by completing 18 art units. Students will build a comprehensive portfolio that reflects their media of choice.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Apply knowledge of art fundamentals In order to identify, formulate, and resolve basic art and design problems.
2. Understand and use a variety of media and processes to accomplish artistic goals.
3. Demonstrate an ability to critique and analyze artwork visually, orally, or in writing.

## REQUIRED CORE <br> UNITS

*ART 3 Two-Dimensional Design.................................... 3
*ART 4 Three-Dimensional Design.............................. 3
*ART 7 Beginning Drawing........................................ 3
LIST A (9 units): Units
ART 8 Beginning Figure Drawing and Anatomy ............. 3
ART 9 Beginning Painting: Oil/Acrylic......................... 3
ART 10 Beginning Ceramics........................................... 3
ART 11 Beginning Sculpture...................................... 3
ART 12A Craft Workshop: Living Traditions..................... 3
$\begin{array}{ll}\text { ART 12B } & \text { Intermediate Craft Workshop: Living } \\ \text { Traditions................................................. } \\ & \text { In }\end{array}$
ART 13 Beginning Watercolor Painting............................ 3
ART 14 Beginning Printmaking....................................... 3
ART 15 Ceramic Sculpture........................................ 3
ART 16 Life Painting................................................. 3
ART 17 Intermediate Drawing ...................................... 3
ART 18 Intermediate Figure Drawing and Anatomy........... 3
ART 20 Intermediate Ceramics................................... 3
ART 21 Intermediate Sculpture ...................................... 3
ART 22B Craft Workshop: Concepts in Fibers................... 3
ART 23 Intermediate Watercolor Painting ....................... 3
ART 24A Intaglio Printmaking....................................... 3
ART 24B Lithograph Printmaking................................ 3
ART 24C Relief Printmaking........................................ 3
ART 24D Screenprinting............................................. 3
ART 25 Mural Painting ............................................. 3
ART 27 Advanced Drawing ............................................. 3
ART 28 Advanced Figure Drawing and Anatomy.............. 3
ART 29 Advanced Painting: Oil/Acrylic......................... 3
ART 31 Advanced Sculpture ........................................... 3
ART 32A Beginning Jewerry and Metalsmithing.................. 3
ART 32B Intermediate Jewelry and Metalsmithing .............. 3
ART 36A Intermediate Wheel Throwing........................... 3
ART 38A Intermediate Hand-Building ............................... 3
*ART 3, ART 4, and ART 7 should be taken before other courses in the major.

## ASIAN AMERICAN STUDIES

## ASIAN AMERICAN STUDIES - MAJOR \#7695

From an historical perspective, Asians have played major roles in Fresno from the early Chinese settlers who built a Chinatown to the Japanese Americans who were confined to an assembly center at the Fresno fairground to the Hmong refugees who fled from the aftermath of the Vietnam War to create the largest Hmong American community in the state of California. The structure and purpose of the Asian American Studies associate degree is twofold: one is to enhance the skills of students to successfully transfer and complete a baccalaureate degree, second is to provide knowledge and understanding of the Asian American as an individual and as a member of the Asian American community.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Identify and describe major historical experiences of Asians and Asian Americans.
2. Examine the cultural practices and evaluate how culture has evolved for the Asian American community.
3. Explore the identity dilemma for Asian Americans of the various generations from recent immigrants to the assimilated and acculturated Asian American family.
4. Evaluate the issues that have confronted Asians in the past as well as those relevant in a contemporary setting.
REQUIRED CORE COURSES UNITS
ASMAER 1 Indo-Chinese Americans .................................. 3
ASAMER 8 Chinese Culture.............................................. 3
ASAMER 15 Introduction to Asian-Americans ...................... 3
ASAMER 25 Asian American Social Issues........................... 3
ASAMER 55 Introduction to Asian Art.................................. 3

COURSE OPTIONS (6 units) ................................................Units
AMST 10 American Pluralism: A Search for Common Ground in a Multicultural Society ..................... 3
ASAMER 10 Hmong Culture ................................................ 3
ASAMER 20 Asian American Literature................................. 3
ASAMER 30 Asian-American Women .................................. 3
CHIN 1 Beginning Chinese .......................................... 5
CHIN $2 \quad$ High-Beginning Chinese ................................. 5
HMONG 1 Beginning Hmong........................................... 5
HMONG 2 High-Beginning Hmong................................... 5
JAPAN 1 Beginning Japanese......................................... 5
JAPAN $2 \quad$ High-Beginning Japanese................................ 5


## AUTOMOTIVE COLLISION REPAIR TECHNOLOGY -

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

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes

1. Straighten and fill damaged sheet metal.
2. Mix and apply body fillers, puttys and plastic repair systems.
3. Remove and reattach body panels and align.

| 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 ........................................... 9 |  |

AT 10 Technical Computer Applications ......................... 3
AT 21 Occupational Safety and Health........................... 2
AT 40 Preparing for Employment Opportunities ............. 3
WELD 2A Introduction to Welding Technology..................... 6
Total 32
Recommended Electives: ACRT 155; AUTOT 19, 54

* 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

## ALTERNATIVE FUELED VEHICLE (AFV)

- MAJOR \#8078

Satisfactory completion of this curriculum prepares the student for employment as a Alternative Fueled Vehicle (AFV) service technician.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Students will create a diagnostic path for the Alternative Fueled Vehicle powertrain system to industry standards.
2. Students will recommend an appropriate repair procedure for a given vehicle Alternative Fueled Vehicle (AFV) powertrain system to industry standards.
REQUIRED CORE COURSES UNITS
AUTOT 9 Automotive Essentials.......................................... 3
AUTOT 19 Work Experience (Cooperative), Occupational ....... 2
AUTOT/ATGM 52 Automotive Electrical Systems.............................. 4
AUTOT/ATGM 53 Engine Performance............................................. 4
$\begin{array}{ll}\text { AUTOT/ATGM } 57 & \text { Automotive Heating, Ventilation, Air } \\ & \text { Conditioning, and Advanced Electronics } .\end{array}$
$\begin{array}{ll}\text { AUTOT/ATGM } 57 & \text { Automotive Heating, Ventilation, Air } \\ & \text { Conditioning, and Advanced Electronics } .\end{array}$ . .4
AUTOT 171AIntroduction to Alternative FueledVehicles (AFVs) 2
AUTOT 171B Service and Maintenance to Alternative Fueled Vehicles (AFVs). .....  2
AUTOT 171C Diagnosis and Repair to Alternative Fueled Vehicles (AFVs) .....  2
Total ..... 23
AUTOMOTIVE TECHNOLOGY - major \#8051

Satisfactory completion of this curriculum prepares the student for entry-level employment as a skilled technician in the automotive service and repair industry. Students will perform actual service and repair procedures in the automotive laboratory. This curriculum has been certified by the National Automotive Technicians Education Foundation (NATEF).

## ASSOCIATE IN SCIENCE DEGREE AND <br> 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.
REOUIRED COURSES UnitsAUTOT 9 Automotive Essentials ........................................ 3
AUTOT 19 Work Experience (Cooperative), Occupational.... 10
AUTOT $51 \quad$ Principles of Engine Theory and Service ..... 4
AUTOT 52 Automotive Electrical Systems ..... 4
AUTOT 53 Engine Performance ..... 4
AUTOT 54 Suspension, Steering, and Wheel Alignment. ..... 4
AUTOT 55 Power Trains: Transmissions/Transaxles, Differentials, and Driveaxles ..... 6
AUTOT 56 Automotive Braking Systems. ..... 4
AUTOT 57 Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics. ..... 4
AUTOT 161A Level 1 - Engine and Emission Control Fundamentals. ..... 3
AUTOT 161B Level 2 - Smog Check Procedures Training. ..... 1.5
WELD 1 Exploring Welding/Metals ..... 3
ELECTIVES (4 units) ..... Units
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
AUTOT 58C Individualized Skills Training (IST) Power Train Systems Laboratory ..... 1
Total ..... 57.5
RECOMMENDED SEQUENCE
First Year - First Semester ..... Units
AT 10 Technical Computer Applications. ..... 3
AUTOT $9 \quad$ Automotive Essentials ..... 3
WELD 1 Exploring Welding/Metals ..... 3
First Year - Second Semester ..... Units
AUTOT 52 Automotive Electrical Systems ..... 4
AUTOT 53 Engine Performance ..... 4
First Year - Third Semester ..... Units
AUTOT 19 Work Experience (Cooperative), Occupational...... 3
AUTOT 51 Principles of Engine Theory and Service ..... 4
Second Year - First Semester ..... Units
AUTOT 19 Work Experience (Cooperative), Occupational.. .....  3
AUTOT 54 Suspension, Steering, and Wheel Alignment. .....  4
AUTOT 56 Automotive Braking Systems. ..... 4
AUTOT 58 Individualized Skills Training (IST) Chassis System I Laboratory ..... 1
AUTOT 58A Individualized Skills Training (IST) Chassis System II Laboratory. .....  1
Second Year - Second Semester ..... Units
AUTOT 19 Work Experience (Cooperative), Occupational ..... 2
AUTOT 55 Power Trains: Transmissions/Transaxles, Differentials, and Driveaxles ..... 6
AUTOT 57 Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics ..... 4
AUTOT 161A Level 1 - Engine and Emission Control Fundamentals ..... 3
AUTOT 161B Level 2 - Smog Check Procedures Training ..... 1.5
Second Year - Third Semester ..... Units
AUTOT 19 Work Experience (Cooperative), Occupational ..... 2AUTOT 58B Individualized Skills Training (IST)Engine/Propulsion Systems Laboratory ................ 1AUTOT 58C Individualized Skills Training (IST)Power Train Systems Laboratory.1
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.

## 2019-2020 Fresno City College Catalog

Completion of the following courses and 3 units of work
experience: Units
AUTOT 19 Work Experience (Cooperative), Occupational ..... 3
AUTOT 282A Suspension and Wheel Alignment ..... 3
AUTOT 282B Automotive Braking Systems. ..... 3
AUTOT 283B Electrical Systems ..... 3
AUTOT 284 Automotive Air Conditioning. .....  3
Total ..... 15
CHASSIS TECHNICIAN I - MAJoR \#8056ASatisfactory completion of this curriculum prepares the student foremployment as an automotive chassis service technician level I.
CERTIFICATE
Student Learning Outcomes

1. Create a diagnostic path appropriate for a given system to industrystandards.
2. Recommend an appropriate repair strategy for a given system toindustry standards.
REQUIRED COURSES ..... Units
AUTOT 19 Work Experience (Cooperative), Occupational. ..... 2
AUTOT/ATGM 54 Suspension, Steering, and Wheel Alignment ..... 4
AUTOT/ATGM 56 Automotive Braking Systems. ..... 4
Total ..... 10
CHASSIS TECHNICIAN II - MAJOR \#8056BSatisfactory completion of this curriculum prepares the student foremployment as an automotive chassis service technician level II.

## CERTIFICATE

## Student Learning Outcomes:

1. Create a diagnostic path appropriate for a given system to industry standards.
2. Recommend an appropriate repair strategy for a given system to industry standards.
REQUIRED COURSES ..... Units
AUTOT 19 Work Experience (Cooperative), Occupational...... 2AUTOT/ATGM 52 Automotive Electrical Systems4
AUTOT/ATGM 57 Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics ..... 4
Total ..... 10
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.
REOUIRED COURSES Units
$\begin{array}{ll}\text { AUTOT 161A } & \text { Level } 1 \text { - Engine and Emission Control } \\ & \text { Fundamentals........................................................... }\end{array}$
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
Total 13.5

## EMISSION TECHNICIAN I - MAJOR \#8057A

Satisfactory completion of this curriculum prepares the student for employment as an emission service technician level I.
CERTIFICATE
Student Learning Outcomes:

1. Create a diagnostic path appropriate for a given system to industry standards.
2. Recommend an appropriate repair strategy for a given system to industry standards.
REQUIRED COURSES Units
AUTOT/ATGM 52 Automotive Electrical Systems ............................ 4
AUTOT/ATGM 53 Engine Performance ........................................... 4
AUTOT 261 BAR Specified Diagnosis and Repair Training ...... 3 Total 11

EMISSION TECHNICIAN II - MAJoR \#8057B
Satisfactory completion of this curriculum prepares the student for employment as an emission service technician level II.

## CERTIFICATE

Student Learning Outcomes:

1. 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
Level 2 - Smog Check Procedures Training...... 1.5
Total $\quad 6.5$

## HYBRID ELECTRIC VEHICLE (HEV) - MAJOR \#8079

Satisfactory completion of this curriculum prepares the student for employment as a hybrid service technician.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Students will create a diagnostic path for the hybrid electric vehicle (HEV) to industry standards.
2. Students will recommend an appropriate repair procedure for a given vehicle's hybrid electric vehicle system to industry standards..
REQUIRED COURSES ..... Units
AUTOT 9 Automotive Essentials. ..... 3
AUTOT 19 Work Experience (Cooperative), Occupational. ..... 2
AUTOT/ATGM 52 Automotive Electrical Systems ..... 4
AUTOT/ATGM 53 Engine Performance ..... 4
AUTOT/ATGM 57 Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics ..... 4
AUTOT 170A Introduction to Hybrid Electric Vehicles (HEVs) ... 2AUTOT 170B Service and Maintenance to Hybrid ElectricVehicles (HEVs) 2
AUTOT 170C Diagnosis and Repair to Hybrid Electric Vehicles (HEVs) ..... 2
Total ..... 23

## POWERTRAIN TECHNICIAN - MAJor \#8055

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

## CERTIFICATE

Student Learning Outcomes:

1. 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 - MAJoR \#8058A

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

## CERTIFICATE

## Student Learning Outcomes:

1. Create a diagnostic path for a given system to industry standards.
2. Recommend an appropriate repair strategy for a given system to industry standards.

## 2019-2020 Fresno City College Catalog

REQUIRED COURSESAUTOT 19 Work Experience (Cooperative),Occupational2
AUTOT/ATGM 51 Principles of Engine Theory and Service. ..... 4
AUTOT/ATGM 53 Engine Performance ..... 4
Total ..... 10

## POWERTRAIN TECHNICIAN II - MAJOR \#8058B

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

## CERTIFICATE

Student Learning Outcomes:

1. Create a diagnostic path for a given system to industry standards.
2. Recommend an appropriate repair strategy for a given system to industry standards.
REOUIRED COURSES Units
$\begin{array}{ll}\text { AUTOT } 19 & \text { Work Experience (Cooperative), } \\ & \text { Occupational .................................................. } 2\end{array}$
AUTOT/ATGM 52 Automotive Electrical Systems ............................ 4
$\begin{array}{ll}\text { AUTOT/ATGM } 55 & \text { Power Trains: Transmissions/Transaxles, } \\ & \text { Differentials, and Driveaxles.............................. } 6\end{array}$
Total 12

## GENERAL MOTORS ASEP PROGRAM

- MAJOR \#805G

The General Motors Automotive Service Educational Program (GM ASEP) is a two-year associate degree program. GM ASEP incorporates the most advanced automotive technical training with a strong academic foundation in math, English, electronics, analytical and technical skills. The student earns a solid education combined with invaluable work experience for hands-on learning.

The National Institute of Automotive Service Excellent (ASE) Education Foundation and General Motors Corporation certify this curriculum.

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Create a diagnostic path appropriate for a given system to industry standards.
2. Demonstrate the appropriate repair procedure for a given system to industry standards.
REOUIRED COURSES Units
AT 10 Technical Computer Applications ......................... 3
ATGM 51 Principles of Engine Theory and Service.............. 4
ATGM 52 Automotive Electrical Systems ............................ 4
ATGM 53 Engine Performance ........................................... 4
ATGM 54 Suspension, Steering, and Wheel Alignment........ 4
ATGM $55 \quad$ Power Trains: Transmissions/Transaxles, Differentials, and Driveaxles. 6

ATGM 56 Automotive Braking Systems.............................. 4


BIOLOGY - formeriy life sclence 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 3 Introduction to Life Science................................. 4
BIOL 4 Principles of Zoology ......................................... 5
BIOL 5 Human Biology ................................................. 4
BIOL 6 Principles of Botany .......................................... 5
BIOL 7 Field Biology.................................................... 5
BIOL 11A/11AH Biology for Science Majors I, or Honors Biology for Science Majors I 5

BIOL 11B Biology for Science Majors II.............................. 5
BIOL 14 Conservation Biology......................................... 3
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..................................................... 5
BIOL 46 Elementary Horticulture................................... 3.5
BIOL 55 Introduction to the Biology of Humans................. 3
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 ........................................... 4
GEOG 7 Physical Geography: Earth's Surface ................... 4
GEOG 8 Physical Geography: Weather and Climate........... 4
GEOLOGY
GEOL 1 Physical Geology .............................................. 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


Associate Degree
for Transfer
A Degrew with a Galanutos.

## BIOLOGY FOR TRANSFER - MAJOR \#6082

The goal of the Associate in Science in Biology for Transfer program at Fresno City College is to prepare students to seamlessly transfer into a CSU baccalaureate program in Biology. The Associate in Science in Biology for Transfer program at Fresno City College may also prepare students to transfer into a UC baccalaureate program in Biology. An Associate in Science in Biology for Transfer is comprised of the core set of introductory Biology and Mathematics courses that assist a student to develop critical thinking and analytical reasoning skills and establish conceptual frameworks for understanding biological phenomena. To earn the Associate in Science in Biology for Transfer, students must complete 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following: (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements. (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district. (2) Obtainment of a minimum grade point average of 2.0." ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Evaluate scientific literature and apply the scientific method to obtain and interpret data.
2. Understand the function of organic molecules in biological systems and relate organelle structure to cellular function.
3. Understand the structure and function of genetic material and apply the principles of genetics as they relate to organisms.
4. Understand the biodiversity of life on earth based on modern classification systems.
5. Understand the ecological relationships between organisms and the environment, and the impact of human activity on ecological systems.
6. Understand the scientific evidence for evolution and explain the mechanisms leading to evolutionary change over time.
REQUIRED CORE

| BIOL 11A/11AH |
| :--- | | Biology for Science Majors I, or |
| :--- |
| Honors Biology for Science Majors I ............ 5 |


| CHEMISTRY \& MATH REQUIREMENTS | Units |  |
| :--- | :---: | :--- |
| CHEM 1A | General Chemistry, and |  |
| CHEM 1B | General Chemistry and Qualitative |  |
|  | Analysis. ................................................... 10 |  |

MATH 5A Mathematical Analysis I..................................... 5
SELECT ONE SEQUENCE: Units
BIOL 11B Biology for Science Majors II, or......................... 5

| BIOL 4 | Principles of Zoology, and |
| :--- | :--- |
| BIOL 6 | Principles of Botany................................... 10 |

SELECT ONE SEQUENCE: Units
PHYS 2A General Physics 1, and
PHYS 2B General Physics 2, or................................... 8
PHYS 4A Physics for Scientists and Engineers, and
PHYS 4B Physics for Scientists and Engineers ............... 8

## FIELD BIOLOGIST - MAJOR \#6083

The Field Biologist Certificate is a program designed to provide students with education and training in various aspects of field biology in preparation for 1) entry level employment in the environmental consulting field or government agencies 2) entry level field research assistant and 3) continuing education in biology. A certificated field biologist may work in the field doing plant and animals surveys, threatened and endangered species surveys, sensitive habitat delineation, biological construction monitoring or scientific data collection, all under the direction of qualified professional biologists. Students planning for a career in biology in most cases will need to earn at least a Bachelor's Degree. Therefore, biology students are strongly encouraged to meet with a counselor about transfer requirements (IGETC/CSU certification) early in their program. Biology students should also meet with biology faculty about course/ program offerings as soon as possible in order to complete the program in a timely manner.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Apply field sampling techniques that qualitatively and quantitatively measure and describe the role of a living organism in its environment.
2. Identify major habitat types and ecological phenomena in the field.
3. Describe the natural history of select plants, animals, and fungi of California.
4. Correctly use various plant and animal taxonomic keys.

## REQUIRED CORE COURSES UNITS

BIOL 7 Field Biology ...................................................... 5
BIOL 11A/11AH Biology for Science Majors I, or Honors Biology for Science Majors I ............... 5
SELECT ONE SEQUENCE: UNITS
BIOL 11B Biology for Science Majors II, or......................... 5
BIOL 4 Principles of Zoology, and
BIOL 6 Principles of Botany..................................... 10
ELECTIVES: UNITS
Students that take the sequence BIOL 4,6 , and 7 must complete a minimum of 2 units. The alternative sequence of BIOL 11B and 7 must take 7 units. Electives may be taken in any sequence. GEOL 1 is highly recommended. (2-7 units)
ANTHRO 16A Field Archaeology I

GEOG 1 Physical Geography ..... 4

GEOG 10

Introduction to GIS
.3

GEOL 1 Physical Geology ............................................... 4
GEOL 3 Geology Field Studies .....................................1-2
GEOL 4 Geology of California ......................................... 3

## 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 Units
$\begin{array}{ll}* * B A ~ 10 / 10 H \quad & \text { Introduction to Business, or } \\ \text { Honors Introduction to Business...................... } 3\end{array}$
*CIT 15 Computer Concepts ........................................... 3
*DS $21 \quad$ Finite Mathematics............................................. 3
Total $\quad 9$
First Year - Second Semester Units
*BA 18 Business and the Legal Environment.................... 4
*DS 23 Business Statistics .............................................. 3
Total 7

Second Year - First Semester Units
*ACCTG 4A Financial Accounting......................................... 4
****BA 20 Law and the Legal System.................................. 3
*ECON 50/50H Introduction to Macroeconomics, or Honors Introduction to Macroeconomic........... 3
Total 10

Second Year - Second Semester Units
*ACCTG 4B Managerial Accounting ...................................... 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 35.

## BUSINESS ADMINISTRATION FOR TRANSFER - MAJOR \#2049

Business is an exciting major for students with a variety of interests and career goals including options in entrepreneurship, marketing, business law, management, computer information systems, accounting, and finance. The Associate in Science in Business Administration for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Science in Business Administration degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 27 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major.

Local graduation requirements are not required for the transfer degree. Students must consult with a counselor when planning to complete the degree for additional information on university admission and transfer requirements. In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Business Administration for Transfer degree.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Apply knowledge of major business functions (accounting, quantitative, law, computer, and business concepts) and its methodologies and ethical applications in common business situations.
2. Apply professional behaviors in both business and personal situations.
$\begin{array}{lr}\text { REQUIRED CORE } & \text { Units } \\ \text { ACCTG 4A } & 4\end{array}$
ACCTG 4A Financial Accounting.......................................... 4
ACCTG 4B Managerial Accounting ...................................... 4
BA 18 Business and the Legal Environment.................... 4
CIT 15 Computer Concepts ........................................... 3
*ECON 40/40H Introduction to Microeconomics, or Honors Introduction to Microeconomics.......... 3
*ECON 50/50H $\begin{gathered}\text { Introduction to Macroeconomics, or } \\ \text { Honors Introduction to Macroeconomics......... } 3\end{gathered}$
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 ............................................ 3
*May be used to fulfill General Education requirements.

## 21ST CENTURY WORK COMPETENCIES

- MAJOR \#2035

A step incentive certificate signifying proficiency in basic knowledge and skills related to human relations and general business concepts required for success in today's competitive economy.

## CERTIFICATE

## Student Learning Outcomes:

1. Demonstrate an understanding and application of human relations and professional workplace behaviors.
2. Identify, assess and critically evaluate basic business theory, functions, and skills required to manage effectively in a complex global environment.

## COURSES Units

BA 10 Introduction to Business ..................................... 3
BA 33 Human Relations in the Workplace...................... 3

## ENTREPRENEURIAL VENTURES - MAJor \#2041

This certificate is designed to provide visual artists, musicians, artisans, engineers, technologists and other non-business majors and other skilled individuals with the necessary knowledge to launch a business and/or market their creations. These courses are focused on the start-up phases of a business.

## CERTIFICATE

## Student Learning Outcomes:

1. Complete a business plan.
2. Appropriate business theory relating to the functions of operations, management, marketing, accounting, technology and finance.
3. Demonstrate basic workplace written, verbal, non-verbal communication, negotiation, and soft skills required for the workplace.
REQUIRED COURSES Units
BA 10 Introduction to Business ..................................... 3
BA 51 Business Planning and New Venture Launch .... 1.5
BA 52 Introduction to Entrepreneurship......................... 3

## ELECTIVE COURSES

Select 1 course from the following Units
BA 24 Negotiations................................................... 1.5
BA 27 Entrepreneurship Startup Lab.......................... 1-3
BA 30 Personal Finance............................................... 3
Total 8.5-10.5

## HUMAN RESOURCE MANAGEMENT ASSISTANT - MAJOR \#2052 <br> 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......................... 3 |
| BA 33 | Human Relations in the Workplace.................... 3 |
| BT 9 | Computer Applications I, or |
| BT 25 | Microsoft Office, or |
| CIT 20 | Microsoft Office ......................................3-4 |
|  | Total 9-10 |

## 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 | COURSES Units |
| :---: | :---: |
| ACCTG 4A | Financial Accounting, or |
| BT 131 | Applied Accounting...............................3.5-4 |
| BA/BT 5 | Workplace Communication ............................. 3 |
| BA 10/10H | Introduction to Business, or Honors Introduction to Business. $\qquad$ |
| BA 18 | Business and the Legal Environment................. 4 |
| BA 30 | Personal Finance........................................... 3 |
| BA 31 | Human Resource Management......................... 3 |
| BA 33 | Human Relations in the Workplace.................... 3 |
| *BA 40 | Supervision and Leadership, or |
| BA 43 | Principles of Management ........................... 3 |
| CIT 15 | Computer Concepts ....................................... 3 |
| MKTG 10 | Principles of Marketing .................................. 3 |
|  | Total 31.5-32 |

ELECTIVES: Select 6 Units Units
**ACCTG 4A Financial Accounting.......................................... 4
BA 28 E-Law \& Ethics.................................................. 3
BA 34 Fundamentals of Investing .................................. 3
BA $35 \quad$ Financial Management for Entrepreneurs and Small Business. 3
BA 38 Operation of the Small Business .......................... 3
*BA 40 Supervision and Leadership............................... 3
*BA 43 Principles of Management.................................. 3
BA 52 Introduction to Entrepreneurship......................... 3
**BT 131 Applied Accounting......................................... 3.5
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 or BA 43 may be taken as a required course. The other class option may be taken as an elective course.
**Either ACCTG 4A or BT 131 may be taken as a required course. The other class option may be taken as an elective course.
Note: Associate degree requirements are listed on page 35.
BUSINESS ADMINISTRATION, MANAGEMENT

- MAJOR \#2181

A certificate of achievement in Business Administration may be awarded for the successful completion of 20 units. The 20 units must include the required core courses plus any of the elective courses listed below.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Appropriately apply the management functions of planning, organizing, leading and controlling.
2. Read and interpret basic financial statements.
3. Assist in the formulation and implementation of a corporate strategy.
4. Demonstrate proficiency in soft skills required for workplace success including teambuilding, conflict management, communication, and professional behavior.
5. Utilize basic workplace written, verbal, and nonverbal communication skills required to the workplace, including the proper use of appropriate technologies, written reports, and formal presentations.

| REQUIRED CORE COURSES |  |
| :---: | :---: |
| BA/BT 5 | Workplace Communication ............................. 3 |
| BA 10/10H | Introduction to Business, or Honors Introduction to Business. $\qquad$ |
| BA 33 | Human Relations in the Workplace................... 3 |
| *BA 40 | Supervision and Leadership, or |
| BA 43 | Principles of Management .......................... 3 |
|  | Total 12 |
| ELECTIVES: Select 8 Units |  |
| ACCTG 4A | Financial Accounting.................................. 4 |
| BA 18 | Business \& the Legal Environment.................. 4 |
| BA 20 | Law \& the Legal System................................ 3 |
| BA 28 | E-Law \& Ethics........................................ 3 |
| BA 30 | Personal Finance....................................... 3 |
| BA 31 | Human Resource Management....................... 3 |
| BA 34 | Fundamentals of Investing ............................. 3 |
| BA 35 | Financial Management for Entrepreneurs and Small Business............................................ 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 or BA 43 may be taken as a required course. The other class option may be taken as an elective course. |  |

## BUSINESS FINANCE AND ACCOUNTING

- MAJOR \#2031

A step incentive for those seeking an entry level position in accounting or finance.
CERTIFICATE

## Student Learning Outcomes:

1. Ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
2. Assist in the implementation of a corporate strategy as applied to finance and accounting issues including capital budgeting and working capital management.
3. Demonstration of appropriate skill sets with respect to technologies, written reports, and formal presentations involving finance and accounting applications.
4. Ability to identify and discriminate between different financial markets, institutions and products and determine appropriateness to short-term and long-term accounting and finance objectives.
REQUIRED COURSES Units
ACCTG 4A Financial Accounting...................................... 4
ACCTG 4B Managerial Accounting .................................. 4
BA $35 \quad$ Financial Management for Entrepreneurs and Small Business. 3

BUSINESS FINANCE AND INVESTMENTS

- MAJOR \#2271

A step incentive for those seeking an entry level position in banking or finance.

## CERTIFICATE

Student Learning Outcomes:

1. Ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
2. Assist in the implementation of a corporate strategy as applied to finance and investment issues including capital budgeting and working capital management.
3. Demonstrate skill proficiency in appropriate technologies, written reports, and formal presentations with respect to finance and investments.
4. Ability to identify and discriminate between different financial markets, institutions and products and determine appropriateness to market participants and short-term and long-term financial management and investment objectives.
REQUIRED COURSES
Units
BA 34 Fundamentals of Investing ................................. 3
BA $35 \quad$ Financial Management for Entrepreneurs and Small Business.

## HUMAN RELATIONS AND COMMUNICATIONS

- MAJOR \#2510

A step incentive certificate signifying proficiency in workplace human relations and communications.

## CERTIFICATE

## Student Learning Outcomes:

1. Demonstrate effective communication skills through speaking, writing, and other common forms of business communication including the appropriate use of communication devices.
2. Describe how to make personal responsibility for professional and effective workplace relationships.
3. Describe and identify goal-setting theories and its influence on workplace performance.
REQUIRED COURSES
Units
BA/BT 5 Workplace Communication
BA 33 Human Relations in the Workplace.3

## HUMAN RESOURCE MANAGEMENT AND <br> 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.
REOUIRED COURSES Units
BA $31 \quad$ Human Resources Management .3
BA 33 Human Relations in the Workplace...................... 3

## MANAGEMENT AND SUPERVISION

- MAJOR \#2182

A step incentive certificate signifying proficiency in basic knowledge and skills required for a general management position. Awarded for the successful completion of courses listed with a minimum grade of "C" in each required course.

## CERTIFICATE

Student Learning Outcomes:

1. Identify key functions, skills, and competitive goals of effective managers.
2. Demonstrate the appropriate application of State and Federal HR laws to business situations.
3. Define and describe common operational issues and appropriate supervisory responses to these issues.
4. Define and describe strategic and tactical issues and appropriate managerial responses to these issues.
5. Take personal responsibility for professional and effective workplace relationships.
6. Demonstrate effective communication skills through speaking, writing, and other common forms of business communication.
REQUIRED COURSES Units
BA 40 Supervision and Leadership............................... 3
BA 43 Principles of Management.................................. 3

## PERSONAL FINANCE AND INVESTMENTS

- MAJOR \#2032

A step incentive demonstrating a basic understanding of personal finance and investments.

## CERTIFICATE

## Student Learning Outcomes:

1. Ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
2. Ability to identify and discriminate between different financial markets, institutions and products and determine appropriateness to market.
3. Ability to describe the impact of exogenous factor inputs such as monetary and fiscal policy and changes in interest rates on financial management.
4. Ability to describe the basic principles of credit, insurance, large asset investments, saving and investing for the future, career development strategies, goal setting with respect to achievement of personal and lifelong financial objectives and business objectives.
REQUIRED COURSES Units
BA 30 Personal Finance............................................... 3
BA $34 \quad$ Fundamentals of Investing .................................. 3

## PROFESSIONAL AND CIVIC BEHAVIORS

- MAJOR \#2036

Professional workplace behaviors/career preparation integrating life skills, mindsets, and work skills resulting in productive workplace relationships and civic engagement.

## CERTIFICATE

## Student Learning Outcomes:

1. Demonstrate an understanding and application of productive workplace relationships and the importance of civic engagement.
2. Complete career and civic plans which reflect key concepts related to productive workplace relationships and civic engagement.

## REQUIRED COURSES <br> Units

BA 101 Basic Professional and Civic Behaviors ........... 0.25
BA 102 Intermediate Professional and Civic
$\qquad$
BA 103 Advanced Professional and Civic Behaviors 0.25

BA $104 \quad$ Applied Professional and Civic Behaviors0.25

## REAL ESTATE COURSE QUALIFICATION

- MAJOR \#2192

Successful completion of these three courses qualify an individual to sit for the Real Estate Salesperson examination and meets the requirements of the Department of Consumer Affairs - Bureau of Real Estate.

## CERTIFICATE

## Student Learning Outcomes:

1. Understand and apply the Realtor Code of Ethics and Regulations of the Department of Real Estate.
2. Explain how to locate appropriate financing for buyers of real property; and how to work with appraisers, in addition to understanding basic accounting, financial statements and transactions and interpreting financial statements.
3. Understand key components of commercial transactions, contracts, purchase agreements and laws that relate to those transactions.

## REQUIRED COURSES <br> Units

RE 40 Real Estate Principles ......................................... 3
RE 41 Real Estate Practice ........................................... 3
ACCTG 4A Financial Accounting, or
BA 18 Business and the Legal Environment $\qquad$

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.
REOUIRED COURSES Units
BA 38 Operation of the Small Business .......................... 3
BA $51 \quad$ Business Planning and New Venture Launch. 1.5

## BUSINESS \& TECHNOLOGY PROGRAM

## OFFICE PROFESSIONALI

- 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.


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........................ 4
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 29

OFFICE PROFESSIONAL - EXECUTIVE ASSISTANT EMPHASIS - FORMERLY OFFICE PROFESSIONAL II AND ADMINISTRATIVE ASSISTANT EMPHASIS - MAJOR \#2215

Training is designed to provide advanced skills for employment in a variety of professional environments. Additional general education units are required for the AS degree. Students may earn more than one certificate in addition to the Associate in Science degree and are required to earn grades of " $C$ " or better in all courses.

## ASSOCIATE IN SCIENCE

## Student Learning Outcomes:

1. Use technology applications and software effectively in a professional setting.
2. Proofread documents and correct errors in punctuation, grammar, capitalization, number expression, and spelling.
3. Type at least 40 gross words per minute with $97 \%$ accuracy.
4. Achieve a satisfactory evaluation in a work experience setting.

REQUIRED CORE COURSES Units
BT 1 Computer Document Processing I........................ 4
BT 9 Computer Applications I...................................... 4
BT 19 Work Experience (Cooperative), Occupational...... 2
BT 23 Job Search and Workplace Skills
3
BT 112 Business English............................................... 3
EMPHASIS AREA COURSES Units
BT 2 Computer Document Processing II....................... 3
BT 6 Records Management......................................... 3
BT 10 Computer Applications II.................................... 4
BT $33 \quad \begin{aligned} & \text { Social Media and Emerging } \\ & \text { Technologies in the Workplace............................ } 3\end{aligned}$
BT 122 Typing Skillbuilding ....................................... 0.5
Total 29.5
RECOMMENDED SEQUENCE Units
First Semester Units
BT 1 Computer Document Processing I....................... 4
BT 9 Computer Applications I..................................... 4
BT 33 Social Media and Emerging Technologies
BT 112 Business English............................................... 3
Second Semester Units
BT 2 Computer Document Processing II...................... 3
BT 6 Records Management......................................... 3
BT 10 Computer Applications II................................... 4
BT 19 Work Experience (Cooperative), Occupational...... 2
BT 23 Job Search and Workplace Skills ........................ 3
BT 122 Typing Skillbuilding ........................................ 0.5

## OFFICE PROFESSIONAL - EXECUTIVE ASSISTANT EMPHASIS - FORMERLY OFFICE PROFESSIONAL II AND ADMINISTRATIVE ASSISTANT EMPHASIS - MAJOR \#2215

Training is designed to provide advanced skills for employment in a variety of professional office environments. Students may earn more than one certificate and are required to earn grades of "C" or better in all courses

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Use technology applications and software in a professional setting.
2. Proofread documents and correct errors in punctuation, grammar, capitalization, number expression, and spelling.
3. Type at least 40 gross words per minute with $97 \%$ accuracy.
4. Achieve a satisfactory evaluation in a work experience setting.

REQUIRED CORE COURSES Units
BT 1 Computer Document Processing I........................ 4
BT 9 Computer Applications I..................................... 4
BT 19 Work Experience (Cooperative), Occupational...... 2
BT 23 Job Search and Workplace Skills ......................... 3
BT 112 Business English................................................ 3
BT 115 Refresher Math................................................. 3
EMPHASIS AREA COURSES Units
BT 2 Computer Document Processing II....................... 3
BT 6 Records Management....................................... 3
BT $10 \quad$ Computer Applications II................................... 4
BT $33 \quad$ Social Media and Emerging Technologies in the Workplace .. 3
BT 122 Typing Skillbuilding ........................................ 0.5
Total 32.5

## OFFICE PROFESSIONAL - LEGAL OFFICE <br> EMPHASIS - formerly legal administrative ASSISTANT EMPHASIS AND LEGAL OFFICE PROFESSIONAL MAJOR \#2104

Training is designed to prepare students for employment in a legal office environment. Students may earn more than one certificate in addition to the Associate in Science degree and are required to earn grades of "C" or better in the Office Professional I and emphasis courses.

## ASSOCIATE IN SCIENCE

Student Learning Outcomes:

1. Use technology applications, office equipment, and software effectively in a professional setting.
2. Describe the basic organizational structure, operational principles and administrative processes associated with the law office environment.
3. Achieve a satisfactory evaluation in a work experience setting.


## OFFICE PROFESSIONAL - LEGAL OFFICE <br> EMPHASIS - FORMERLY LEGAL ADMIIISTRATIVE

ASSISTANT EMPHASIS AND LEGAL OFFICE PROFESSIONAL - MAJOR \#2104

Training is designed to prepare students for employment in a legal office environment. Students may earn more than one certificate and are required to earn grades of "C" or better in all courses.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Use technology applications, office equipment, and software effectively in a professional setting.
2. Describe the basic organizational structure, operational principles and administrative processes associated with the law office environment.
3. Achieve a satisfactory evaluation in a work experience setting.
REQUIRED CORE COURSES Units

BT 1 Computer Document Processing I...................... 4
BT 9 Computer Applications I.................................... 4
BT 23 Job Search and Workplace Skills .......................... 3
BT 112 Business English................................................ 3
BT 115 Refresher Math.................................................. 3
REOUIRED EMPHASIS COURSES Units
BT 140/PLEGAL 156 Legal Document Processing................................ 3
PLEGAL 7 Law Offices Practices .......................................... 3
PLEGAL 14 Law Office Computing........................................ 3 Total 28

## OFFICE PROFESSIONAL - MEDICAL OFFICE

EMPHASIS - FORMERLY medical office professional AND MEDICAL ADMINISTRATIVE ASSISTANT EMPHASIS -
MAJOR \#2383
Training is designed to prepare students for employment in a medical office environment. Students may earn more than one certificate in addition to the Associate in Science degree and are required to earn grades of " $C$ " or better in the Office Professional I and emphasis courses.

## ASSOCIATE IN SCIENCE

## Student Learning Outcomes:

1. Use technology applications, office equipment, and software effectively in a professional setting.
2. Perform medical administrative duties.
3. Achieve a satisfactory evaluation in a work experience setting.
REQUIRED CORE COURSES Units

BT 1 Computer Document Processing I....................... 4
BT 9 Computer Applications I..................................... 4
BT 19 Work Experience (Cooperative), Occupational...... 2
BT 23 Job Search and Workplace Skills ........................ 3
BT 112 Business English............................................... 3
BT 115 Refresher Math.................................................. 3
REOUIRED EMPHASIS COURSES Units
BT 143 Medical Office Vocabulary.................................. 1
BT 144 Medical Administrative Assistant ..................... 2.5
BT 147 Medical Management Software ........................... 2
BT 148 Medical Insurance and Billing Concepts ........... 2.5
Total 27
OFFICE PROFESSIONAL - MEDICAL OFFICE EMPHASIS - FORMERLY MEDICAL OFFICE PROFESSIONAL
AND MEDICAL ADMINISTRATIVE ASSISTANT EMPHASIS -

## MAJOR \#2383

Training is designed to prepare students for employment in a medical office environment. Students may earn more than one certificate and are required to earn grades of "C" or better all courses.
CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Use technology applications, office equipment, and software effectively in a professional setting.
2. Perform medical administrative duties.
3. Achieve a satisfactory evaluation in a work experience setting.

| REQUIRED CORE | COURSES Units |
| :---: | :---: |
| BT 1 | Computer Document Processing I..................... 4 |
| BT 9 | Computer Applications I................................. 4 |
| BT 19 | Work Experience (Cooperative), Occupational...... 2 |
| BT 23 | Job Search and Workplace Skills ...................... 3 |
| BT 112 | Business English.......................................... 3 |
| BT 115 | Refresher Math............................................. 3 |
| REQUIRED EMPHASIS COURSES U |  |
| BT 143 | Medical Office Vocabulary.............................. 1 |
| BT 144 | Medical Administrative Assistant ................... 2.5 |
| BT 147 | Medical Management Software ......................... 2 |
| BT 148 | Medical Insurance and Billing Concepts ......... 2.5 |
|  | Total 27 |

## BUSINESS OFFICE ENGLISH - MAJoR \#2372

This certificate is designed to improve English grammar, speaking, writing, and presentation skills needed in the office.

## CERTIFICATE

Student Learning Outcomes:

1. Use correct English grammar to communicate effectively when speaking, writing, and presenting in business settings.
2. Identify problems and revise business communication to improve meaning, tone, and clarity.
REOUIRED COURSES Units
BT 5 Workplace Communication ................................. 3
BT 13 Applied Business Correspondence...................... 2
BT 112 Business English............................................... 3
Total 8

## BUSINESS OFFICE MATH FUNDAMENTALS

- MAJOR \#2328

This certificate is designed to improve computational and critical thinking skills needed in the office.
CERTIFICATE

## Student Learning Outcome:

1. Apply fundamental mathematics computation skills to solve business-related problems with or without a ten-key calculator.
REQUIRED COURSES Units
BT 104 Ten-Key Calculations ......................................... 2
BT 115 Refresher Math.................................................. 3
Total 5

## COMPUTER APPLICATIONS SOFTWARE

- MAJOR \#2202

This certificate option prepares students for computer applications certification. Students are required to earn grades of "C" or better.

## CERTIFICATE

Student Learning Outcome:

1. Demonstrate proficiency in office applications software. COURSES Units
BT 9 Computer Applications I..................................... 4
BT 10 Computer Applications II.................................... 4
BT 33 Social Media and Emerging Technologies in the
Workplace ......................................................... 3
Computer Keyboarding ................................... 1.5
Total $\quad 12.5$

## FOUNDATIONS FOR THE OFFICE PROFESSIONAL

- MAJOR \#2326

The Foundations for the Office Professional will allow students to gain fundamental skills needed to work as an Office Professional.

## CERTIFICATE

## Student Learning Outcomes:

1. Type 20 words per minute.
2. Exhibit positive interpersonal skills.
3. Use professional terminology in verbal and written communication.

## REQUIRED COURSES Units

BT 28 Microsoft Word I............................................ 1.5
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
Total $\quad 11.5$

## MEDICAL OFFICE ASSISTANT <br> - 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....................... 4

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 $19 \quad$ 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

MICROSOFT OFFICE FOUNDATIONS - mAJoR \#2325
This certificate will allow students to gain fundamental skills needed to work in an office setting; geared toward students returning to school with limited skills. The certificate could be completed in one semester.
CERTIFICATE

## Student Learning Outcome:

1. Given a business scenario, select and use appropriate application programs(s) from Microsoft Office to create a solution addressing the scenario.

| COURSES |  | Units |
| :--- | :--- | :--- |
| BT 24 | Beginning Excel, or |  |
| BT 9 | Computer Applications I .............................1-4 |  |

BT 28 Microsoft Word I............................................ 1.5
BT 126 Automated Business Records, or
BT 9 Computer Applications I ..............................1-4
BT 127 Microsoft Outlook and E-Mail ............................. 1
BT $130 \quad$ Beginning PowerPoint, or
BT 9
Computer Applications I

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 <br> Units

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

## 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 |

## CHEMISTRY - MAJOR \#6320

Chemistry is often called the "central science" since it draws from mathematics and physics and forms a necessary background for quality control programs in industry and agriculture, and criminal evidence analysis in forensics. To earn the Certificate in Chemistry, students must complete a minimum of $39-45$ required semester units of program required classes. Students must maintain a minimum 2.0 GPA , including grades of C or higher in the courses taken to fulfill the certificate. This is not a transfer degree program. Students should consult with a counselor when planning to complete the certificate for more information. After earning a chemistry certificate, students will have the knowledge and skills required to enter the workforce as a chemical technician. These will include laboratory skills (bench-top and instrument operation), computational skills, and communication skills. There are currently no other similar programs within the State Center Community College District. There are not any enrollment limitations. The prerequisite courses vary for each individual class. For the first semester, these include MATH 103, and eligibility for CHEM 1A and ENGL 1A.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. As a result of the program, students will demonstrate laboratory skills to be successful in subsequent courses and/or on the job.
2. As a result of the program, students will master concept and content to be successful in subsequent courses and/or on the job.
3. As a result of the program, students will master computational skills to be successful in subsequent courses and/or on the job.
4. As a result of the program, students will effectively communicate the results of chemistry laboratory investigations.
REQUIRED COURSES ..... Units
CHEM 1A General Chemistry. ..... 5
CHEM 1B General Chemistry and Qualitative Analysis ..... 5
CHEM 8A Elementary Organic Chemistry, or
CHEM 28A Organic Chemistry I ..... 3
CHEM 18L Elementary Organic Chemistry Lab .....  2
CHEM 20 Practical Quantitative Analysis ..... 5
CHEM 1001 Chemical Laboratory Internship ..... 2-6
ENGL 1A Reading and Composition .....  4
MATH 11 Elementary Statistics ..... 4
Total ..... 30-34
ELECTIVES: Select a minimum of 3 courses ..... Units
BA 5 Workplace Communication, or
BA 33 Human Relations in the Workplace .....  3
BA 18 Business and the Legal Environment. ..... 4
BIOL 6 Principles of Botany ..... 5
IOL Field Biology, or
Elementary Horticulture ..... 4-5
BIOL 46
Records Management. .....  3
BT 6
Job Search and Workplace Skills3

COMM 1
COMM 8
COMM 12
COMM 2
CRIM 3
GEOL 4

Introduction to Public Speaking, or Group Communication, or Fundamentals of Oral Interpretation 3
Interpersonal Communication ..... 3

CERTIFICATE IN CHEMISTRY - major \#6320
Chemistry is often called the "central science" since it draws from mathematics and physics and forms a necessary background for quality control programs in industry and agriculture, and criminal evidence analysis in forensics. After earning a chemistry certificate, students will have the knowledge and skills required to enter the workforce as a chemical technician. These will include laboratory skills (bench-top and instrument operation), computational skills, and communication skills. CERTIFICATE
Student Learning Outcome:

1. As a result of the program, students will demonstrate laboratory skills to be successful in subsequent courses and/or on the job.
2. As a result of the program, students will master concept and content to be successful in subsequent courses and/or on the job.
3. As a result of the program, students will master computational skills to be successful in subsequent courses and/or on the job..
4. As a result of the program, students will effectively communicate the results of chemistry laboratory investigations.
REQUIRED COURSES: ..... Units
CHEM 18L Elementary Organic Chemistry Lab ..... 2
CHEM $20 \quad$ Practical Quantitative Analysis ..... 5
CHEM 100 Chemical Laboratory Internship ..... 2
RECOMMENDED SEQUENCE
First Term ..... UNITS
CHEM 18L Elementary Organic Chemistry Lab ..... 2
Second Term ..... UNITS
CHEM 20 Practical Quantitative Analysis .....  5
CHEM 1001 Chemical Laboratory Internship ..... 2
CHICANO-LATINO STUDIES

- FORMERLY CULTURAL STUDIES, LA RAZA - MAJOR \#7661

This program is designed to focus on Mexican-American history, heritage, and culture. Chicano-Latino Studies offers a broad interdisciplinary approach to the study of society and culture. The curriculum provides students with the strong academic background helpful to those planning careers in law, health, education, social work, business, and industry. Chicano-Latino Studies provides the knowledge and skills necessary to help students understand, communicate, and appreciate the rich cultural diversity in American society through the study of the Mexican-American and broader Latino community.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Students will demonstrate critical thinking and problem solving skills across disciplines as they relate to the Chicano-Latino community.
2. Students will demonstrate competency in oral, written, and research skills.
3. Students will demonstrate an understanding of, and an ability to critically analyze and interpret, cultural expressions of Chicanos and Latinos.
4. Students will acquire a comprehensive knowledge and understanding of Chicano-Latino history, culture, arts, and socio-political issues.
5. Students will demonstrate a commitment to active citizenship, and develop leadership skills and an understanding of social justice principles and their application in order to promote positive social change in the Chicano-Latino community and the broader society.


CLS/SOC 14 Sociology of the Mexican American Community.. 3
CLS 17A Beginning Mexican Folk Dance........................ 3.5
CLS 18 Latin Jazz Ensemble ........................................... 2
CLS 20 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
CLS/HIST 29 History of Mexico, Colonial to Contemporary Period .. 3
$\begin{array}{ll}\text { CLS } 30 & \begin{array}{l}\text { Migration and the Family: Social and } \\ \text { Psychological Perspectives................................ } 3\end{array}\end{array}$
CLS 33 Community Involvement: Service Learning .......... 3
Recommended Electives: Students are encouraged to include Spanish classes as part of their college program.
Note: An associate in arts degree will be awarded to the candidate who successfully completes a total of 60 units. The 60 units must include associate degree requirements and 20 units of course work as listed above. Associate degree requirements are listed in the Graduation Requirements section of this catalog. General Education requirements for transfer certification are listed in the Transfer Requirements section of this catalog.

## CHILD DEVELOPMENT

## CHILD DEVELOPMENT - MAJor \#5615

The Associate in Science degree in Child Development is designed to prepare students to work with young children in a variety of early care and education settings. Completion of the requirements for the Associate in Science degree will fulfill the requirements to obtain the California Child Development Permit at the Teacher level which qualifies the student to work in a State of California funded child development center or preschool.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

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

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 $9 \quad$ Music, Movement and Drama for Young Children.

| 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 17A | Infant and Toddler Practicum........................... 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. $\qquad$ |
| 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 $6 \quad$ Health, Safety and Nutrition in Early Childhood Education. 3
CHDEV 15 Diversity and Culture in Early Childhood Education Programs3
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 Descre with a Ganantac:

## 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.

| REOUIRED COURSES |  |
| :---: | :---: |
| CHDEV 1 | Principles and Practices of Teaching Young |
|  | Children... |
| CHDEV 3 | Introduction to Curriculum. |
| CHDEV 6 | Heath, Safety and Nutrition in Early Chi |
|  | Education.. |
| CHDEV 15 | Diversity and Culture in Early Childhood |
|  | Education Programs.... |
| CHDEV 20 | Observation and Assessment |
| CHDEV 30 | Child, Family and Community |
| CHDEV 37A | Early Childhood Practicum.. |
| CHDEV 39 | Child Growth and Development. |
|  | Total |
| CHILD DEV | OPMENT - FORMERLY ASSOCIATE |
| TEACHER - M | JOR \#5618 |

The Certificate of Achievement in Child Development is designed to
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
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
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
$\begin{array}{ll}\text { CHDEV } 1 & \text { Principles and Practices of Teaching Young } \\ & \text { Children ........................................................ } 3\end{array}$
CHDEV 3 Introduction to Curriculum.................................. 3
CHDEV 19 Work Experience (Cooperative), Occupational...... 3
CHDEV 30 Child, Family and Community ............................. 3
CHDEV 39 Child Growth and Development........................... 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.

Units .. 3
3CHDEV 30 Cind Faily and Comsity
3
CHDEV 37A Early Childhood Practicum. ..... 3CHDEV 39 Child Growth and Development324
TEACHER - MAJOR \#5618
$\qquad$

## EARLY CHILDHOOD PARAPROFESSIONAL

- MAJOR \#5912

The Early Childhood Paraprofessional Certificate of Achievement prepares students to work as paraprofessionals in preschool through grade 12 (K-12) school settings. Completing the certificate satisfies the federal No Child Left Behind requirements for employment in a school

$$
\begin{aligned}
& \text { fed } \\
& \text { dis }
\end{aligned}
$$ districts and is the foundation for the Associate degrees for Transfer in Elementary Education or Early Childhood Education.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Demonstrate introductory subject matter competency required for working in preschool to grade 12 school settings.
2. Demonstrate knowledge of social, cultural, environmental, and aesthetic perspectives necessary for working in preschool to grade 12 classrooms.
3. Discuss historical influences and current trends in education, as well as teaching strategies and approaches appropriate for students of diverse, needs, abilities and backgrounds.
Required 48 units from the following: UNITS
BIOL 3 Introduction to Life Science................................. 4
CHDEV $1 \quad$ Principles and Practices of Teaching Young Children .. 3
CHDEV 3 Introduction to Curriculum.................................. 3
$\begin{array}{ll}\text { CHDEV/EDUC } 19 & \text { Work Experience (Cooperative), } \\ & \text { Occupational ................................................... } 2\end{array}$
CHDEV 30 Child, Family and Community............................. 3
CHDEV 38 Lifespan Development........................................ 3
CHDEV 39 Child Growth and Development........................... 3
COMM 1 Introduction to Public Speaking ........................... 3
EDUC 30 Introduction to Teaching..................................... 3

| ENGL 125 | Writing Skills for College ................................ 4 |
| :---: | :---: |
| GEOG 4A | World Geography, or |
| GEOG 4B | World Geography ..................................... 3 |
| HIST 11 | History of the Unites States to 1877 ................... 3 |
| LING 11 | Introduction to Language for Educators.............. 3 |
| MATH 201 | Elementary Algebra ....................................... 5 |

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

## EARLY INTERVENTION - FORMERLY EARLY

INTERVENTION ASSISTANT - MAJOR \#5621
The Associate in Science degree in Early Intervention is designed to prepare students to work with infants, toddlers and young children with disabilities and other special needs in early intervention settings and inclusive early care and education settings. A student who completes the certificate is qualified to work at the Early Intervention Assistant I level of the California Early Start Personnel Model.

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

## EARLY INTERVENTION ASSISTANT <br> - 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 |
| CHDEV 6 | Health, Safety and Nutrition in Early |
|  | Childhood Education...................................... 3 |



## INFANT AND TODDLER SPECIALIST - MAJOR \#5619

The Certificate of Achievement in Infant and Toddler Specialist is designed to prepare students to work with children ages 0-3 in a variety of early care and education settings. Completion of the Certificate fulfills the child development coursework requirement for the California Child Development Permit at the Teacher level.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Demonstrate knowledge of the needs, the characteristics and multiple influences on development of children birth to age three.
2. Design, implement and evaluate environments and activities that support positive developmental outcomes for young children.
3. Apply effective guidance and interaction strategies that support children's social and emotional development.
4. Apply ethical standards and professional behaviors that promote partnerships between programs, teachers, families and their communities.

REQUIRED COURSES 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 $6 \quad$ Health, Safety and Nutrition in Early Childhood Education 3
CHDEV 17A Infant and Toddler Practicum............................... 3
CHDEV 17B Advanced Infant and Toddler Development........... 3
CHDEV 20 Observation and Assessment ............................... 3
CHDEV 30 Child, Family and Community............................. 3
CHDEV 39 Child Growth and Development........................... 3
Suggested sequence of courses:
First Semester Units

CHDEV 1 Principles and Practices of Teaching Young
CHDEV 3 Introduction to Curriculum.................................. 3
CHDEV 6 Health, Safety and Nutrition in Early
CHDEV 39 Child Growth and Development........................... 3
Second Semester Units
CHDEV 17A Infant and Toddler Practicum............................... 3
CHDEV 20 Observation and Assessment .............................. 3
Third Semester Units
CHDEV 17B Advanced Infant and Toddler Development........... 3
CHDEV 30 Child, Family and Community............................. 3
Total 24

Qualifications to Teach in Early Care and Education Programs

## Privately Operated Center Based Programs

Candidates may meet the California State Department of Social Service requirements by completion of 12 units of Child Development 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 has completed Child Care Health and Safety Training must be on the premises of a child development center at all times. Child Development 6 fulfills this requirement.

The college transcript provides the documentation necessary for the individual's academic qualifications to teach in the privately operated center based program.

Publicly Funded Early Care and Education Centers
The California Commission on Teacher Credentials issues the Child Development Permit which is required for employment in children's centers and preschools that receive funding from the State of California. Each level of the Child Development Permit Matrix requires specific coursework to be completed with a grade of "C" or better and work experience in an early care and education program (birth to eight years.) Work experience requirements are noted at each level.
The applicant files a completed application verifying the following information to the California Commission of Teacher Credentials. Further information on the application process, including sources of funding to pay for the application fee, may be obtained from the Child Development Department.

## Associate Teacher level: 12 units

(Experience: 50 days of $3+$ hours per day within 2 years of application)

Child Development 39
Child Development 30
Child Development 3
plus 3 additional units of child development coursework

## Teacher level: 40 units

(Experience: 175 days of $3+$ hours per day within 4 years of application)

Completion of the Associate Teacher level (above) plus 12 additional units in Child Development and 16 units of general education including one course that meets FCC graduation requirements from each of the following areas:

English
Math or Science
Social Sciences
Humanities

* Alternative qualifications: an AS degree in Child Development which includes one supervised field experience course. No work experience required


## *Master Teacher level:

(Experience: 350 days of experience within 4 years, including 100 days of supervising adults)

Complete the Teacher level requirements listed above, plus:
Child Development 45
6 units of specialized course work in Child Development
(A list of Fresno City College specializations may be obtained from the Child Development Department)
*Site Supervisor level:
(Experience: 350 days of $3+$ hours per day within 4 years, including at least 100 days supervising adults)

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

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

* Alternative qualifications for Master Teacher and Site Supervisor levels:

BA degree or higher with 12 units of child development
Plus a supervised field work experience course (Child Development 37A or 37B; Child Development 17A)

## Family Child Care

A family child care provider is an individual who is licensed to care for up to six children in his/her home. State law requires that the family child care provider must complete 15 hours of child health and safety. This requirement is satisfied by Child Development 6, Child Care, Health and Safety, 3 units. There are currently no additional educational requirements for family child care providers, however, the Child Development Department recommends completion of the Family Child Care Certificate Program.

## Elementary School Teaching Credential

Students wishing to teach in an elementary school must take the Liberal Studies (Credential) major.

Please note that most child development classes listed above do not count toward the Liberal Studies (Credential) major.

This material has been prepared as carefully as possible. Fresno City College does not assume responsibility for inaccuracies or changes in the information contained herein after the date of publication.

Associate Degree for Transfer
A Degres with a Guanantes:

## 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 andprinciples.
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
COMMUNICATION SKILLS FOR PROFESSIONALS

- MAJOR \#5433
The Communication Skills for Professionals Certificate program isdesigned to enable students to achieve recognition of development insuch areas as public speaking, group problem solving and communi-cation, leadership, persuasion and healthy interpersonal relationshipsin the workplace. In these courses, students will learn how to sharpencommunication skills as well as deal with difficult situations with a flex-ible, genuine and self-confident approach. Students will also learn howto create persuasive messages based on a sound theoretical foundationand apply influence strategies to gain commitment from others and fostercollaboration. The certificate can be completed either in traditional face-to-face classes or online hybrid courses.
CERTIFICATE
Student Learning Outcomes:1. Using the workplace as a context, students will construct effectivemessages that gain commitment from others and foster collabo-ration.

2. Respond appropriately and genuinely to messages within theworkplace.
REQUIRED COURSES ..... Units
COMM 1 Introduction to Public Speaking ..... 3
COMM 2 Interpersonal Communication ..... 3
COMM 4 Persuasion ..... 3
COMM 8 Group Communication ..... 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. |  |
| CADD 14 | 2D CAD I. | 3 |
| CADD 16 | 3D Solid Modeling I. | 3 |
| DRAFT 12 | Drafting Practices. | 3 |
|  | Total | 12 |
| First Year - 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.. | 3 |
| CADD 36A | 3D Solid Modeling III. | 3 |
|  | Total | 6 |
| Second Year - Second Semester |  | Units |
| CADD 42 | Mechanical Drawing III. | 3 |
|  | Total | 3 |
| Note: Students plan degree require | nning to receive the AS degree must meet the ass irements on page 35. | in science |

## COMPUTER AIDED DRAFTING AND DESIGN FORMERLY DRAFTING - MAJOR \#3051

This certificate is designed for individuals seeking a career in drafting/CAD. The drafting field serves a number of vocations, professions, and industries. The courses and training are designed along practical lines as required by industry so that students, upon completion of their training, are better qualified to obtain employment in drafting/CAD or related occupations.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. In an applied setting, given instructions, demonstrations, media presentations and hands-on projects the student will be able to create a portfolio representing their abilities to industry standards as determined by the instructor.
2. In an applied setting, given instructions, demonstrations, media presentations and hands-on projects the student will be able to create a presentation model from a solid model assembly using various CAD systems to industry standards as determined by the instructor.
First Year - First Semester 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
First Year - 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......................................... 3
CADD 36A 3D Solid Modeling III......................................... 3
Total 6
Second Year - 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 2D drafting/CAD.

CERTIFICATE
Student Learning Outcomes:

1. Use orthographic projection methods to sketch the three standard views of objects.
2. Modify geometry on existing CAD drawings.
3. Create and modify symbols (blocks) in a drawing.

First Year - First Semester Units
AT 10 Technical Computer Applications ......................... 3
CADD 14 2D CAD I.......................................................... 3
DRAFT 12 Drafting Practices .............................................. 3
$\begin{array}{lrr} & \text { Total } & 9 \\ \text { First Year - Second Semester } & & \text { Units }\end{array}$
CADD 24 2D CAD II.......................................................... 3
Total 3

## 3D CAD TECHNICIAN - MAJOR \#3054

This certificate is designed for individuals seeking employment in drafting/CAD that utilizes 3D solid modeling. The courses and training are designed to meet the requirements of many industries so that students, upon completion of their certificate, are better qualified to obtain employment in occupations requiring 3D drafting/CAD.

## CERTIFICATE

Student Learning Outcomes:

1. Create advanced drawings with dimensions and annotations of 3D solid models and assemblies.
2. Create advanced assemblies with components created in the context of an assembly and sub-assemblies.
REQUIRED COURSES Units
AT 10 Technical Computer Applications ......................... 3
CADD 16 3D Solid Modeling I........................................... 3
CADD 26A 3D Solid Modeling II.......................................... 3
DRAFT 12 Drafting Practices ............................................... 3
Total 12
RECOMMENDED SEQUENCE Units
First Year - First Semester Units
AT 10 Technical Computer Applications ......................... 3
CADD 16 3D Solid Modeling I......................................... 3
DRAFT 12 Drafting Practices............................................... 3
First Year - Second Semester Units
CADD 26A 3D Solid Modeling II.......................................... 3

## 3D CAD/CAM - MAJOR \#3055

This certificate is designed for individuals seeking employment in 3D CAD/CAM that utilizes 3D solid modeling and CNC machining. The courses and training are designed to meet the requirements of the manufacturing industry so that students, upon completion of their certificate, are better qualified to obtain employment in occupations requiring 3D CAD/CAM.

## CERTIFICATE

## Student Learning Outcomes:

1. Create advanced drawings with dimensions and annotations of 3D solid models and assemblies.
2. Operate a CNC machine in a laboratory environment.

## REQUIRED COURSES Units

CADD 16 3D Solid Modeling I...................................... 3
CADD 26A 3D Solid Modeling II...................................... 3
CAM 5 CNC Operation \& Maintenance for Machinist... 2.5
CAM 10 CNC Mill Programming \& Operation I................ 4
DRAFT 12 Drafting Practices......................................... 3
Total 15.5
RECOMMENDED SEQUENCE
First Year - First Semester ............................................................
CADD 16 3D Solid Modeling I........................................ 3
$\begin{array}{ll}\text { CAM } 5 & \text { CNC Operation \& Maintenance for } \\ & \text { Machinist ................................................................. }\end{array}$
DRAFT 12 Drafting Practices............................................ 3
First Year - Second Semester Units
CADD 26A 3D Solid Modeling II........................................... 3
CAM 10 CNC Mill Programming \& Operation I ................. 4
CAD TECHNICIAN I - MAJOR \#3052
These courses provide students with the basic skills and knowledge of dratting 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 2 D sketches with dimensions and geometric relations used to create features.
REQUIRED COURSES Units
CADD 14 2D CAD I..............................................................
CADD 16 3D Solid Modeling I........................................ 3
DRAFT 12 Dratting Practices............................................ 3
Total 9

## COMPUTER AIDED MANUFACTURING

- FORMERLY MANUFACTURING TECHNOLOGY \& MACHINIST
- MAJOR \#8271

The CAM Program is designed for students who have a strong interest in becoming a CAD/CAM/CNC Machinist \& Operator. Core courses ensure students with a knowledgeable foundation to operate and setup computer numerical control machines using our Computer Aided Manufacturing laboratory. MasterCAM and Fusion 360 CAD/CAM software are the designing softwares used to create 3D Designs for the generation of G and M codes for CNC machined parts. The Required Courses are intendant to start a career as a highly skilled CNC Setup person, a CNC Operator, and a CNC Programmer.
ASSOCIATE IN SCIENCE DEGREE
Student Learning Outcomes:

1. Demonstrate the ability to interpret and apply computer software commands for creating mechanical drawings for the process of machining accurate parts.
2. Setup and operate Computer Numerical Control Machines.
3. Analyze and apply shop safety. REQUIRED COURSES Units
AT 10 Technical Computer Applications ......................... 3
AT 40 Preparing for Employment Opportunities ............. 3
AT 140 Introduction to Machine Shop............................. 3
CAM $5 \quad$ CNC Operation \& Maintenance for
Machinist....................................................... 2.5
CAM 10 CNC Mill Programming \& Operation I ............... 4
CAM 15 CNC Programming for Machinist ..................... 2.5
CAM 20 CNC Mill/Programming \& Operation II............... 4
CAM 26 Lathe Programming and Operation II.................... 3
CAM 31
Multi-Axis Milling \& Programming. ..... 3

Total

## COMPUTER AIDED MANUFACTURING

- MAJOR \#8271

The CAM Certificate of Achievement Program is designed for students who have a strong interest in becoming a CAD/CAM/CNC Machinist \& Operator. Core courses ensure students with a knowledgeable foundation in 3D part designing with Mastercam and Fusion 360 CAD/CAM software for the purpose of Tool Programming. The Required Courses are intendant to start a career as a highly skilled CNC Setup person, a CNC Operator, and a CNC Programmer.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Demonstrate the ability to interpret and apply computer software commands for creating mechanical drawings for the process of machining accurate parts.
2. Setup and operate Computer Numerical Control Machines.
3. Analyze and apply shop safety.

| REQUIRED COURSES |  | Units |
| :---: | :---: | :---: |
| CAM 5 | CNC Operation \& Maintenance for Machinist |  |
| CAM 10 | CNC Mill Programming \& Operation I |  |
| CAM 15 | CNC Programming for Machinist. | 2.5 |
| CAM 20 | CNC Mill/Programming \& Operation |  |
| CAM 26 | Lathe Programming and Operation II |  |
| CAM 31 | Multi-Axis Milling \& Programming.. |  |
|  | Total | 19 |
| COMPUTER INFORMATION TECHNOLOGY |  |  |
| - FORMERLY INFORMATION SYSTEMS |  |  |
| COMPUTER INFORMATION SYSTEMS - MAJOR \#2701 |  |  |
| This program provides a strong academic preparation in Information Systems and Computer Science. The courses give students the fundamentals in operating systems, information security, networking, current programming languages and development platforms. This major will prepare students for transfer as an Information Systems major to universities as well as entry-level employment. |  |  |
| ASSOCIATE 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 |
| CIT 15 | Computer Concepts |  |
| CIT 45 | Data Communications. |  |
| CIT 48B | A+ and Security Principles | .... 3 |
| DS 23 | Business Statistics. | ..... 3 |
| Select One of the Following: |  | Units |
| CIT 60 | Beginning Visual Basic |  |
| CIT 63 | Beginning Java Programming | 4 |
| CIT 66 | Beginning C++ Programming. | 4 |
| CIT 70 | Beginning Swift Programming | 4 |
| CIT 93 | JavaScript | 4 |
| Select Two of the Following: |  | Units |
| BA 28 | E-Law and Ethics.. |  |
| CIT 28 | Client/Server Databases |  |
| CIT 40 | Computer Operating Systems. |  |
| CIT 50 | Fundamentals of Networking. |  |
| CIT 58C | Security+ Fundamentals. |  |
| CIT 58F | Ethical Hacking |  |
| CIT 65 | Android Programming Applications. |  |
| CIT 69 | iOS Programming Applications........ | . 4 |
|  | Total | 22-24 |- FORMERIY INFORMATION SYSTEMS- MAJOR \#2701

This program provides a strong academic preparation in Information Systems and Computer Science. The courses give students the fundamentals in operating systems, information security, networking, current programming languages and development platforms. This major will prepare students for transfer as an Information Systems major to universities as well as entry-level employment.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcome:

solution using a programming language.
Reaured counde3IT4B ARCOS3Select One of the Following:Units
Cir 60 Begining Vistal Basic4
4Select Two of the Following:Units
3CIT 40 Computer Operating Systems4
CITs0 Suntas or Nowing3
CIT 58F Ethical Hacking ..... 3CIT 69 iOS Programming Applications4
Total ..... 22-24

Note: Requires additional general education units for AS degree.

## ANDROID APPLICATION DEVELOPER

- MAJOR \#2730

Designed to assist students who would like to develop mobile applications for Android devices.
CERTIFICATE
Student Learning Outcome:

1. Given a business programming scenario, create an interactive mobile application as a solution to the scenario. Students will use Android programming software to design, code, debug and deploy an object-oriented program.
REQUIRED CORES
Units
CIT 15 Computer Concepts .............................................. 3
CIT 63 Beginning Java Programming ........................... 4
CIT 65 Android Programming Applications
Total 11

## APPLE IOS DEVELOPER - MAJOR \#2731

Designed to assist students who would like to develop mobile applications for Apple devices.
CERTIIICATE

## Student Learning Outcome

1. Given a business programming scenario, create an interactive mobile application as a solution to the scenario. Students will use iOS programming software to design, code, debug and deploy an object-oriented program.
REQUIRED COURSES ..... Units
CIT 69 iOS Programming Applications. ..... 4
CIT 70 Beginning Swift Programming ..... 4
Total ..... 8
CYBER TECHNICIAN SPECIALIST - mAJor \#2751

This option is designed to meet the training needs for qualified entry-level hardware/software and basic security personnel.

## CERTIFICATE

Student Learning Outcome:

1. Prepare students for an entry level position in the IT/Cybersecurity field.
REQUIRED COURSES Units
CIT 48A IT+ Fundamentals............................................... 3
CIT 48B A+ and Security Principles ............................... 3
Total 6

CYBERSECURITY - MAJOR \#2750
The California Community College's Information Technology Cyber Security Certificate Collaborative Program is a fully online, zero textbook cost program designed to prepare students for entry level cyber security positions across industry and government and also prepare students to sit for nationally recognized certification exams from Cisco and CompTIA.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Create and implement security policies for an organization.
2. Configure computer and networks to protect information from exfiltration.

| REQUIRED COURSES |  | Units |
| :---: | :---: | :---: |
| CIT 40 | Computer Operating Systems...... | .... 4 |
| CIT 45 | Data Communications.. | 3 |
| CIT 48A | IT+ Fundamentals. | . 3 |
| CIT 48B | A+ and Security Principles. |  |
| CIT 54A | Network Security .. | .... 3 |
| CIT 54B | Cybersecurity Operations |  |
| CIT 58C | Security+ Fundamentals. | .... 3 |
| EST 62 | Routing \& Switching Essentials . | .... 3 |
|  | Total | 25 |

RECOMMENDED SEQUENCE
Semester 1 Units
CIT 40 Computer Operating Systems.............................. 4
CIT 45 Data Communications........................................ 3
CIT 48A IT+ Fundamentals.............................................. 3
CIT 48B A+ and Security Principles ................................. 3
Semester 2 Units
CIT 54A Network Security ............................................... 3
CIT 54B Cybersecurity Operations ................................... 3
CIT 58C Security+ Fundamentals..................................... 3
EST 62 Routing \& Switching Essentials ........................... 3

## INFORMATION SECURITY I - MAJOR \#2714

Designed to meet the training needs for qualified entry-level computer network security professionals. It is also designed to help prepare students for industry standard security certifications like CompTIA Security+, CyberSecurity Information Systems Security Professional (CISSP) and others.
CERTIFICATE

## Student Learning Outcomes:

1. Given a business scenario, assess and control risk, create a blueprint for security, control network remote access, and manage e-mail and website security.
REQUIRED COURSES Units
CIT 40 Computer Operating Systems ..... 4
CIT 57 Wireless Network Security ..... 3
CIT 58B Computer Forensics. ..... 3
CIT 58C Security+ Fundamentals ..... 3
Total ..... 13
RECOMMENDED SEQUENCE
Semester 1 ..... Units
CIT 40 Computer Operating Systems .....  4
CIT 58C Security+ Fundamentals .....  3
Semester 2 ..... Units
CIT 57 Wireless Network Security. ..... 3
CIT 58B Computer Forensics ..... 3
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 stu-dents for industry standard security certifications like CompTIA Security+,Security Certified Professional (SCP), and others.
CERTIFICATE
Student Learning Outcomes:
2. Given a business scenario, perform a security risk analysis, designa security policy, choose and configure a firewall, and set up avirtual private network (VPN).
3. 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 Penetration Testing ..... 3
CIT 58F Ethical Hacking ..... 3RECOMMENDED SEQUENCE
Semester 1 ..... Units
CIT 50 Fundamentals of Networking ..... 4
CIT 58F Ethical Hacking ..... 3
Semester 2 ..... Units
CIT 58D Network Defense and Countermeasures ..... 3
CIT 58E Penetration Testing ..... 3

## MICROSOFT CERTIFIED SPECIALIST - FORMERLY

## MCTC NETWORKING - MAJOR \#2724

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

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Students will be able to describe the 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 28 Client/Server Databases ...................................... 3
CIT $50 \quad$ Fundamentals of Networking............................... 4
CIT 55 Database Security............................................... 3
CIT 60 Beginning Visual Basic ...................................... 4
Total 14
RECOMMENDED SEQUENCE
Semester 1 Units
CIT 50 Fundamentals of Networking............................... 4
CIT 60 Beginning Visual Basic ...................................... 4
Semester 2 Units
CIT 28
Client/Server Databases ..................................... 3
CIT 55 Database Security................................................ 3

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 ........................................................ 1.5
CIT 23 Spreadsheet Fundamentals ................................. 2
CIT 26 Database Fundamentals ..................................... 2
CIT 161 Microsoft Windows Skills .................................... 1
Total $\quad 9.5$
SECOND YEAR Units
CIT 20 Microsoft Office.................................................. 3
CIT 28 Client/Server Databases ...................................... 3
CIT 40 Computer Operating Systems.............................. 4
CIT $50 \quad$ Fundamentals of Networking................................ 4
Total 14
NETWORKING/COMPUTER TECHNICIAN

- MAJOR \#2720

This option is designed to meet the training needs for qualified entry-level microcomputer and networking technicians.
ASSOCIATE IN SCIENCE DEGREE AND

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
3. Define and apply digital numbering systems.
4. Explain how networks are interconnected and understand how operating system software affects the hardware.
5. Install and configure the network server operating system software, and manage servers, users, and resources with a server manager utility, and monitor network system performance.

| REQUIRED CORE | COURSES 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 and Repair......................... 3 |
| EST 61 | Networking Fundamentals............................... 3 |
| EST 62 | Routing \& Switching Essentials ........................ 3 |
| RECOMMENDED SEQUENCE |  |
| First Semester | Units |
| CIT 15 | Computer Concepts ....................................... 3 |
| CIT 45 | Data Communications .................................... 3 |
| EST 55A | Digital Concepts........................................... 3 |
| EST 60 | A+ PC Maintenance and Repair........................ 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 |

Note: Requires additional general education units for AS degree.

## PREPARATION IN MICROSOFT OFFICE

- MAJOR \#2710

Designed for the nontransfer student leading to employment as a microcomputer software specialist or similar computer specialist. Completing the program with the college graduation requirements leads to an AS degree; without the graduation requirements, student is eligible for a certificate of achievement.

## CERTIIICATE

## Student Learning Outcomes:

1. Given a business scenario, select and use an appropriate application program to create a solution addressing the scenario.
2. Given a Microsoft Office related software problem, troubleshoot, identify, research, and provide assistance to users.
First Semester Units
BT 28 Microsoft Word I............................................ 1.5
BT 29 Microsoft Word II ............................................... 1.5
BT 127 Microsoft Outlook and E-Mail ............................. 1
CIT 20 Microsoft Office................................................. 3
Total

Second Semester
CIT 23
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 entry-level systems support personnel.

## CERTIFICATE

Student Learning Outcome:

1. Given a software or hardware problem, configure, troubleshoot, and repair the computer.
Suggested sequence of courses:

| Fall Semester |  | Units |
| :---: | :---: | :---: |
| CIT 40 | Computer Operating Systems. |  |
| CIT 45 | Data Communication.. | 3 |
|  | Total | 7 |
| Spring Semester |  | Units |
| CIT 48B | A+ and Security Principles ....... | ..... 3 |
| CIT 60 | Beginning Visual Basic ............. | ....... 4 |
|  | Total | 7 |

## WEB DEVELOPER <br> - FORMERLY WEBMASTER - MAJOR \#2742

This option is designed to prepare students for work in the computer industry as Web Developers. Completing the program with the college graduation requirements leads to an AS degree; without the graduation requirements, student is eligible for a certificate of achievement.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcome:

1. Given a business scenario create an interactive client-side and/or server-side, data driven website using appropriate tools to create a solution addressing the scenario.

## REQUIRED COURSES Units

CIT 82 Introduction to Web Development. ....................... 3
CIT 85 HTML and CSS ...................................................... 3
CIT 90 Beginning Go Language Programming ................ 4
CIT 93 JavaScript ........................................................ 4

| Choose | Following Units |
| :---: | :---: |
| CIT 28 | Client/Server Databases .............................. 3 |
| CIT 63 | Beginning Java Programming ......................... 4 |
| CIT 84 | Web Development Frameworks ........................ 4 |
| CIT 90 | Beginning Go Language Programming .............. 4 |
| CIT 94 | Node.js................................................ 4 |
| CIT 97 | Web Development with the Go Programming Language |
| CIT 99 | Introduction to Machine Learning ...................... 4 |
|  | Total 21-22 |

## WEB DEVELOPER - FORMERLY WEBMASTER <br> - MAJOR \#2742

This option is designed to prepare students for work in the computer industry as Web Developers. Completing the program with the college graduation requirements leads to an AS degree; without the graduation requirements, student is eligible for a certificate of achievement.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcome:

1. Given a business scenario create an interactive client-side and/or server-side, data driven website using appropriate tools to create a solution addressing the scenario.
REQUIRED COURSES Units
CIT 82 Introduction to Web Development...................... 3
CIT 85 HTML and CSS ........................................... 3
CIT 90 Beginning Go Language Programming ............... 4
CIT 93 JavaScript..................................................... 4
Choose Two of the Following Units
CIT 28 Client/Server Databases ........................................ 3
CIT 63 Beginning Java Programming .......................... 4
CIT 84 Web Development Frameworks .......................... 4
CIT 94 Node.js.................................................................
CIT 97 Web Development with the Go Programming..
Language .......................................................... 4
CIT 99 Introduction to Machine Learning ....................... 4 Total 21-22

## WEB PAGE DEVELOPMENT - MAJOR \#2741

This certificate option is designed to assist students who would like to develop web pages.

## CERTIFICATE

## Student Learning Outcome:

1. Given a business scenario create interactive web pages to create a solution addressing the scenario.
REQUIRED COURSES ..... Units
CIT 82 Introduction to Web Development ..... 3
CIT 85 HTML and CSS ..... 3
CIT 93 JavaScript ..... 4

## CONSTRUCTION - MAJOR \#8091

The construction curriculum is designed to provide students with hands-on training strengthened with technical information that will prepare them for entry into the construction industry or for their own personal construction projects. Specialty courses are available in Plumbing and Electrical to give students a greater depth of knowledge in construction.
ASSOCIATE IN SCIENCE DEGREE
Student Learning Outcomes:

1. Construct foundation forms for a slab on grade.
2. Correctly install vinyl windows in a newly framed residence.
3. Correctly install and finish drywall.
4. Install pre-hung doors.
5. Lay out and square a building foundation.
6. Install roof sheathing.

First Year - First Semester Units
ARCH 12 Architectural Practice I...................................... 3
CONS 50 Basic Residential Construction.......................... 4
$\begin{array}{ll}\text { CONS } 51 \text { Residential Construction: Foundations and } \\ & \text { Framing .......................................................... }\end{array}$
First Year - Second Semester Units
ARCH 21 Materials of Construction................................... 3
AT 21 Occupational Safety and Health.......................... 2
CONS $53 \begin{aligned} & \text { Residential Construction: Exterior and } \\ & \text { Interior Finish.... }\end{aligned}$
Second Year - First Semester Units
ARCH 22 Architectural Practice II ..................................... 3
CONS 55 Roof Framing Systems ................................ 2.5
CONS 56A Residential Plumbing 1, and
CONS 56AL Residential Wiring 1, or
CONS 175A Residential Wiring 1, and CONS 175AL Residential Wiring Lab $1 \quad 3.5-4.5$
Second Year - Second Semester Units
CONS 56B Residential Plumbing 2, and

| CONS 56BL | Residential Plumbing Lab 2, or |
| :--- | :--- |
| CONS 175B | Residential Wiring 2, and |
| CONS 175BL | Residential Wiring Lab 2......................3.5-4.5 |

Total 42.5-44.5
Note: Students qualify for the certificate of achievement upon completion of the major requirements listed above. In addition, those completing the associate degree requirements on page 35 of the catalog, upon application, will be awarded the associate in science degree.

## CONSTRUCTION - MAJOR \#8091

The construction curriculum is designed to provide students with hands-on training strengthened with technical information that will prepare them for entry into the construction industry or for their own personal construction projects. Specialty courses are available in Plumbing and Electrical to give students a greater depth of knowledge in construction.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Install roof sheathing.
2. Construct foundation forms for a slab on grade.
3. Correctly install vinyl windows in a newly framed residence.
4. Correctly install and finish drywall.
5. Install pre-hung doors.
6. Lay out and square a building foundation.
7. Rough wire a residential building to trade practices and code requirements.
8. Install finish electrical apparatus.

First Year - First Semester Units
ARCH 12 Architectural Practice I....................................... 3
CONS 50 Basic Residential Construction............................ 4
$\begin{array}{ll}\text { CONS } 51 \text { Residential Construction: Foundations } \\ & \text { and Framing................................................. } 9\end{array}$
First Year - Second Semester Units
ARCH 21 Materials of Construction................................... 3
AT 21 Occupational Safety and Health........................... 2
$\begin{array}{ll}\text { CONS } 53 & \text { Residential Construction: Exterior and } \\ & \text { Interior Finish................................................... } 9\end{array}$
Second Year - First Semester Units
AT 130 Industrial Mathematics....................................... 3
AT 131 Technical Report Writing ..................................... 3
CONS 55 Roof Framing Systems .................................... 2.5
CONS 56A Residential Plumbing 1, and
CONS 56AL Residential Plumbing Lab 1, or
CONS 175A Residential Wiring 1, and
CONS 175AL Residential Wiring Lab 1.........................3.5-4.5

| Second Year | Second Semester | Units |
| :---: | :---: | :---: |
| CONS 56B | Residential Plumbing 2, and |  |
| CONS 56BL | Residential Plumbing Lab 2, or |  |
| CONS 175B | Residential Wiring 2, and |  |
| CONS 175BL | Residential Wiring Lab 2....................... 3.5-4.5 |  |

Total 45.5-47.5

## RESIDENTIAL CONSTRUCTION WIRING

- MAJOR \#8092

The construction curriculum is designed to provide students with technical and hands-on training in residential wiring including introduction to the National Electrical Code.

## CERTIFICATE

## Student Learning Outcomes:

1. Rough wire a residential building to trade practices and code requirements.
2. Interpret the NEC as it pertains to residential wiring and apply those requirements.
3. Install finish electrical apparatus.

First Year - First Semester Units
CONS 175A Residential Wiring 1........................................... 4
CONS 175AL Residential Wiring Lab 1.................................. 0.5
First Year - Second Semester Units
CONS 175B Residential Wiring 2........................................... 4
CONS 175BL Residential Wiring Lab 2 ................................. 0.5
Total

## CRIMINOLOGY

- FORMERLY ADMINISTRATION OF JUSTICE


Associate Degree
for Transfer
A Dekne with a Glainantes.

## ADMINISTRATION OF JUSTICE FOR TRANSFER - MAJOR \#7750

Administration of justice is the study of the causes, consequences, and control of crime. The program leading to the Associate in Science in the Administration of Justice for Transfer [AS-T] is designed to acquaint students with the principles and practices of criminal justice systems in America. The curriculum allows for the development of depth in one of the subject's subsystems (law enforcement, juvenile, courts, or corrections), and also gain familiarity with the basics of all areas. It is both academic and professional in that it is an interdisciplinary attempt to relate intellectual issues and practitioner perspectives to the challenge of crime in a free society. It provides the information necessary for employment with a related agency and/or transfer to a college or university. Those completing the AS-T in Administration of Justice will be able to transfer to the California State University System, and be prepared to study in Administration of Justice, Law Enforcement, Correctional Administration, Social Science, and Pre-Law. Upon completion students will be prepared to pursue a BA/BS in Criminal Justice. To earn the transfer degree students must complete a minimum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18-20 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Reflect critically on developments in criminal justice policy and the relationship of those policies to the wider political and social environment.
2. Compare and evaluate diverse and competing arguments in disciplinary (justice system) and interdisciplinary contexts.
3. Demonstrate knowledge of the history, structure and processes of law enforcement, the judicial system, the correctional system, and juvenile justice system.
4. Define and utilize key terms, concepts, and theories in the criminal justice system.
5. Interpret, assess, and compare competing types of evidence and data.
6. Effectively communicate orally and in writing the results of their analysis and conclusions.
REOUIRED 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 $9 \quad$ 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

## 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 $4 \quad$ Principles \& Procedures of the Justice System 3
CRIM 6 Concepts of Criminal Law ................................... 3
CRIM 12 Criminal Justice Communications ....................... 3
+CRIM 13 The Constitution and Your Individual Rights ........ 3
CRIM 20 Introduction to Corrections ................................. 3 Total 15
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 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
+HMONG Any level ........................................................... 5
HS $24 \quad$ Fundamentals of Interviewing and
Counseling
3
PSY 2/2H General Psychology, or
Honors General Psychology............................ 3
PSY 16 Abnormal Psychology ........................................ 3
+SPANISH Any level ........................................................4-5
WSTS $10 \quad$ 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 .
+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.
$\begin{array}{ll}\text { REQUIRED CORE COURSES } & \text { Units } \\ \text { CRIM } 4 & \text { Principles \& Procedures of the Justice } \\ & \text { System.............................................................. } 3\end{array}$
CRIM 6 Concept of Criminal Law.................................... 3
CRIM 12 Criminal Justice Communications ...................... 3
CRIM 13 The Constitution and Your Individual Rights ........ 3
CRIM 20 Introduction to Corrections ................................. 3
Total 15
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 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
Hmong Any Level .......................................................... 5
HS $24 \quad$ Fundamentals of Interviewing and Counseling. .. 3
PSY 2/2H General Psychology, or
Honors General Psychology............................ 3
PSY 16 Abnormal Psychology ........................................ 3
Spanish Any Level ......................................................4-5
WSTS 10 Changing Roles of Women................................. 3
*Choose from AFRAM 1, 2, or 4; AMIND 31, 32, or 34; ASAMER 1 or 15; or CLS 11, $12,13,14,24,28,29$, or 30 .
STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:
Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1,6,7,12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and 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.


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.


PSY 2/2H
SOC 1A/1AH Introduction to Sociology, or

## General Psychology, or

 Honors General Psychology. 3 Honors Introduction to Sociology 3
## SOC 2 <br> American Minority Groups <br> 3

WSTS 10 Changing Roles of Women.................................. 3
STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:
Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1,6,7,12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

## 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
ANTHRO 1L Biological Anthropology Laboratory.................... 1
BIOL 11A/11AH Biology for Science Majors I, or
Honors Biology for Science Majors I ............... 5
CADD 14 2D CAD I......................................................... 3
CHEM 1A General Chemistry.............................................. 5
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

| Course Op | Select 6 Units | Units |
| :---: | :---: | :---: |
| BIOL 11B | Biology for Science Majors II |  |
| CRIM 18 | Criminal Personalities. |  |
| PHOTO 5 | Introduction to Photography. | 3 |
| PSY 2/2H | General Psychology, or Honors General Psychology | 3 |
| PSY 16 | Abnormal Psychology . | 3 |

Note: An associate in science degree will be awarded to any candidate who successfully complete a minimum of 60 units. The 60 units must include associate degree requirements and 39 units of course work listed above.
STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:
Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1,6,7,12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

## FORENSIC EVIDENCE OPTION - MAJOR \#7732

Designed to provide specialized education for those students desiring a career as crime scene investigators, evidence technicians, or forensic evidence technicians. This certificate of achievement is also designed to provide those students who are pursuing careers in law enforcement the opportunity to broaden their knowledge and appreciation for the value that forensic evidence plays in the role of solving crime. This certificate of achievement will also serve as a primer for those students who wish to pursue a higher level of education in forensics at the university level. This Forensic Evidence Certificate of Achievement program is approved by the International Association for Identification (IAI).

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Make an assessment of a crime scene and organize a systematic search for evidence.
2. Collect and process evidence, including analysis and comparison of evidence.
3. Reconstruct a crime scene and prepare evidence for presentation in a judicial proceeding.
$\begin{array}{llr}\text { REQUIRED CORE COURSES } & \text { Units } \\ \text { ANTHRO } 1 & \text { Biological Anthropology } & 3\end{array}$
ANTHRO 1 Biological Anthropology..................................... 3
ANTHRO 1L Biological Anthropology Laboratory..................... 1
BIOL 11A/11AH Biology for Science Majors I, or Honors Biology for Science Majors I .............. 5
CADD 14 2D CAD I.......................................................... 3
CHEM 1A General Chemistry............................................. 5
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 33
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.
REOUIRED CORE COURSES Units
CRIM 1 Introduction to Criminology ................................ 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 12 Criminal Justice Communications ....................... 3
CRIM 15 Introduction to Police Ethics ............................... 3
Total 22
Course Options: Select 9 Units Units
*AFRAM 1 Introduction to African American Studies, or
*AFRAM 4 Classical and Pre Colonial Africa..................... 3
*AMIND 31 American Indian Culture, or
*AMIND $34 \quad$ The American Indian in Contemporary Society 3
*CLS 11 Introduction to Chicano-Latino Studies, or
*SOC/CLS 14 Sociology of the Mexican American Community 3

CRIM 3 Legal Aspects of Evidence.................................. 3
CRIM 11 Juvenile Delinquency ......................................... 3
CRIM 13 The Constitution and Your Individual Rights ........ 3
*PSY 2/2H General Psychology, or Honors General Psychology............................ 3
$\begin{array}{ll}\text { *SOC 1A/1AH } & \begin{array}{l}\text { Introduction to Sociology, or } \\ \text { Honors Introduction to Sociology ................... } 3\end{array}\end{array}$
*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.


CRIM 13 The Constitution and Your Individual Rights ....... 3
PSY 2/2H General Psychology, or Honors General Psychology............................ 3
Introduction to Sociology, or Honors Introduction to Sociology .................... 3
American Minority Groups .................................. 3
Changing Roles of Women................................. 3
WSTS $10 \quad$ Changing Roles of Women. 3

STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:
Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

## 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 $4 \quad$ Principles and Procedures of the Justice System3

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.
REOUIRED COURSES ..... Units
FN 1 Principles of Food Preparation. ..... 3
FSM $35 \quad$ 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
Total ..... 7.5
ADVANCED CULINARY ARTS - major \#5686This certificate is designed to prepare students for entry level man-agement positions in food service.
CERTIFICATE
Student Learning Outcomes:1. Use specification standards to purchase food and nonfood items.
4. Apply different management theories and styles of leadership inthe management of a food service establishment.
5. 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. ..... 3FSM 25
Food \& Beverage Purchase \& Control ..... 2
Total ..... 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
$\begin{array}{ll}\text { DANCE 10B } & \text { Pre-Intermediate Modern Dance, or } \\ \text { DANCE 12B } & \text { Beginning Ballet Part 2, or } \\ \text { DANCE 13A } & \text { Intermediate Ballet Technique ...................1-1.5 }\end{array}$
DANCE 20A $\quad \begin{aligned} & \text { Beginning Modern Dance } \\ & \text { Composition................................................. } 3\end{aligned}$
DANCE 28 Intermediate Modern Dance Technique ............. 1.5
DANCE 30 Dance Appreciation ............................................ 3
Select two of the 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........................... 3 |
| TA 41 | Beginning Acting, or |
| TA 42 | Beginning Acting for Theatre Majors................ 3 |

Note: Courses used to satisty 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, Foundations of Algebra, or another more advanced math course; Chemistry 3A, Introduction to General Chemistry; Chemistry 3B, Organic and Biological Chemistry; Biology 31, Microbiology; Food and Nutrition 40, Nutrition; Communication 1 or 2, Introduction to Speaking or Interpersonal Communication; Psychology 2, General Psychology; and Sociology 1A, Introduction to Sociology (or equivalents to these courses) with grades of "C" or better.
5. Have completed an Academic Summary Form for the Dental Hygiene Program.
6. Have no physical impairment that would preclude the performance of all dental hygiene duties.
7. Be in good physical and mental health.

## ACADEMIC REQUIREMENTS

All program entry requirement courses listed above must be completed with a grade of " $C$ " or better. In order to be eligible to take the California State Dental Hygiene Board examination, all other courses leading to the associate degree must also be completed with a grade of "C" or better.

Students in the dental hygiene program must earn a " $C$ " grade or better (or a "Credit" grade when applicable) in all dental hygiene courses. Less than a " C " or a "Credit" grade in any dental hygiene course requires that the course be repeated before continuing with the major. Courses must be repeated in their entirety. Courses may be repeated once only.

Safe professional practice is necessary for retention of students in the program. If a student demonstrates that he/she is unsuited to the profession or is not progressing satisfactorily, based on the professional judgment of the faculty, he/she may be asked to withdraw from the program.

## BACKGROUND CHECK

Upon entry into the program, students may be required to obtain a background check.
CHANGE OF NAME, ADDRESS, AND/OR TELEPHONE NUMBER
Applicants and dental hygiene students must keep the Dental Hygiene Office informed of any change in name, address, and/or telephone number. Failure of applicants to inform the Dental Hygiene Office of this vital information may result in loss of entry into the program. Dental hygiene students must have working e-mail addresses.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Complete the National Board Dental Hygiene Examination with a score of 75th percentile or better.
2. Pass clinical licensing examinations.

## FIRST YEAR

First Semester Units
DH 1 A Oral Biology ...................................................... 2
DH 3 Preclinical Dental Hygiene Tech .......................... 4
DH 4 Oral Radiography ............................................... 4
DH 10 Head \& Neck Anatomy ....................................... 2
Total 12
Second Semester Units
DH 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

## SECOND YEAR

| First Semester | Units |
| :---: | :---: |
| DH 1 C | Periodontology. |
| DH 5B | Clinical Dental Hygiene II............................... 5 |
| DH 6B | Pharmacology .............................................. 3 |
| DH 7A | Community Dental Health I ............................. 2 |
| DH 13 | Seminar Topics II, Advanced Instrumentation....... 1 |
|  | Total 13 |
| Second Semes | Units |
| DH 1D | Applied Periodontics ..................................... 1 |
| DH3B | 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 applica subject to catalog or counselor | on requirements, program requirements and selection criteria are ange. Students will enter the selection pool based on the current atalog supplement. Contact a Fresno City College health career ery semester for current information. |

## DEVELOPMENTAL SERVICES

## ADAPTIVE ORNAMENTAL HORTICULTURE SKILLS

- MAJOR \#1060

The adaptive ornamental horticulture skills program is designed to provide students with disabilities both educational and vocational opportunities. A certificate will not only validate participation in the program, but it will also enhance the opportunities to secure gainful employment.

## CERTIFICATE

## Student Learning Outcomes.

1. Discuss potential employment opportunities based on their educational and horticultural skills.
FIRST YEAR
First Semester
Units
DEVSER 262
Group Interaction for Students with Disabilities 2

DEVSER 275 Horticulture Skills I ........................................... 2
Total 4
Second Semester
DEVSER 262 Group Interaction for Students with Disabilities2
DEVSER 276 Horticulture Skills II ..... 2

## HIGH TECH ADAPTIVE PROGRAM - MAJOR \#7006

High Tech Computer certificate program is designed to provide students with the educational and vocational opportunities and will also enhance prospects for gainful employment by developing computer skills using Adaptive Technology.
CERTIFICATE
Student Learning Outcomes:

1. Describe potential employment opportunities based on their educational and vocational experience.
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 Grammar and Sentence Writing........................ 2.5
MATH 277 Arithmetic for the Learning Disabled ................... 2
Total 15

## 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 $262 \quad$ Group Interaction for Students with

DEVSER 272 Consumer Skills ............................................ 2
DEVSER 273 Independent Living Skills for DSPS students2

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 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.

## CERTIIICATE

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 $250 \quad$ Workability Assess and Career
DEVSER $251 \quad$ Workability Portfolio and Interview Development................................................
DEVSER $252 \quad$ Workability Strategies and Communication Skills........................................................... 3
DEVSER $260 \quad$ Workability Job Search .................................... 3
DEVSER $262 \quad$ Group Interaction for Students with
DEVSER $264 \quad \begin{aligned} & \text { Transition to College for Student } \\ & \text { w/Disabilities .......................................... } 1\end{aligned}$
DEVSER 272 Consumer Skills ............................................ 2
DEVSER 273 Independent Living Skills............................... 2
DEVSER 275 Horticultural Skills I....................................... 2
DEVSER $276 \quad$ 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.

DRAFTING - SEE COMPUTER AIDED DRAFTING AND design education
ECONOMICS


Associate Degree
for Transfer
A Dezne with a hainatos:

## ECONOMICS FOR TRANSFER - MAJOR \#2020

The Associate in Arts in Economics for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. This degree will acquaint students with the fundamentals of economic thinking and the principle concepts and theories of macroeconomics and microeconomics. Additionally, the degree will offer students the math and statistics preparation required for upper division coursework in economics. To earn the Associate in Arts in Economics for Transfer students must complete at least 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements, and at least 18 units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor for more information on transfer requirements and university admission.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Understand and apply basic economic methodology to describe, analyze and explain human behavior and societal challenges.
2. Apply principle microeconomic and macroeconomic concepts, theories and models to describe, analyze and explain relevant economic issues
REQUIRED COURSES Units

ECON 40/40H | Introduction to Microeconomics, or |
| :---: |
| Honors Introduction to Microeconomics.......... 3 |

ECON 50/50H $\begin{gathered}\text { Introduction to Macroeconomics, or } \\ \text { Honors Introduction to Macroeconomics......... } 3\end{gathered}$
MATH 5A Elementary Statistics .......................................... 5
MATH 42 Statistics for the Behavioral Sciences, or
MATH $11 \quad$ Elementary Statistics, or
DS 23 Business Statistics...

| Choose two of the following courses: |  | Units |
| :---: | :---: | :---: |
| ACCTG 4A | Financial Accounting. | 4 |
| ACCTG 4B | Managerial Accounting | 4 |
| MATH 5B | Mathematical Analysis II | 4 |
| MATH 6 | Mathematical Analysis III | 4 |
| MATH 21 | Finite Mathematics | 3 |
| MATH 26 | Elementary Linear Algebra. | 3 |
|  | Total | 20-23 |

## EDUCATION



Associate Degree
for Transfer
A Degres with a Charantac:

## 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. 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

REOUIRED 47 UNITS OF CORE COURSES Units
BIOL 3 Introduction to Life Science................................. 4
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 ..................... 4 |
| ENGL 1B | Introduction to the Study of Literature ................ 3 |
| GEOG 4A | World Geography ................................................................................................................................. 3 |
| GEOG 4B | World Geography ............................................................................ 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 Ancient to Medieval, or Honors Art History Ancient to Medieval ........... 3
ART 6/6H Art History Renaissance to Modern, or Honors Art History Renaissance to Modern ..... 3
MUS 12 Music Appreciation ........................................... 3
TA 30 Theatre Appreciation .......................................... 3
LIST C: Select 2 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 Computer Literacy, or Computer Concepts ....................................... 3
Cultural Geography ............................................ 3
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 18773

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
TA 12 Fundamentals of Oral Interpretation ..... 3
TA 41 Beginning Acting. ..... 3
Changing Roles of Women. ..... 3

EDUCATION PARAPROFESSIONAL - FORMERLY
TEACHER AIDE: GENERAL - MAJOR \#5911
The Education Paraprofessional Certificate of Achievement prepares students to work as paraprofessionals in kindergarten through grade 12 (K-12) school settings. Completing the certificate satisfies the federal No Child Left Behind requirements for employment in a school 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 49 units from the following: Units
ART 2 Art Appreciation, or
MUS 12 Music Appreciation, or TA 30

Theatre Appreciation. 3

BIOL 3 Introduction to Life Science................................ 4
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 Writing Skills for College .................................... 4
$\begin{array}{ll}\text { GEOG 4A } & \text { World Geography, or } \\ \text { GEOG 4B } & \text { World Geography ........................................... } 3\end{array}$
HIST 11 History of the United States to 1877..................... 3
LING 11 Introduction to Language for Educators................ 3
MATH 201 Elementary Algebra ............................................ 5
Total 45
Notes: No Child Left Behind legislation requires paraprofessionals to complete 48 units of college coursework or to pass an employer-administered exam.

## SPECIAL EDUCATION ASSISTANT - MAJOR *5982

The Special Education Assistant Certificate of Achievement prepares students to work as paraprofessionals in special education classrooms in kindergarten through grade 12 (K-12) school settings. This Certificate is the foundation for the Special Education Paraprofessional Certificate and the Associate degree for Transfer in Elementary Education.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Demonstrate introductory subject matter competency required for working in special education classrooms in kindergarten to grade 12 settings.
2. Demonstrate knowledge of social, cultural, environmental, and aesthetic perspectives necessary for working in special education classrooms in kindergarten to grade 12.
3. Discuss historical influences and current trends in education, as well as teaching strategies and approaches appropriate for students of diverse, needs, abilities and backgrounds.
REOUIRED COURSES Units
EDUC 6 Introduction to Special Education........................ 3
EDUC 7 Exceptional Learners .......................................... 3
EDUC 19 Work Experience (Cooperative), Occupational. 3
EDUC 30 Survey of American Education............................. 3
ENGL $125 \quad$ Writing Skills for College, or
ENGL 1A/1AH Reading and Composition, or Honors Reading and Composition .................. . 4 Total 16

## SPECIAL EDUCATION PARAPROFESSIONAL - MAJOR \#5913

The Special Education Paraprofessional Certificate of Achievement prepares students to work as paraprofessionals in special education classrooms in kindergarten through grade 12 (K-12) school settings. Completing the certificate satisfies the federal No Child Left Behind requirements for employment in a school 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 special education classrooms in kindergarten to grade 12 settings.
2. Demonstrate knowledge of social, cultural, environmental, and aesthetic perspectives necessary for working in special education classrooms in kindergarten to grade 12.
3. Discuss historical influences and current trends in education, as well as teaching strategies and approaches appropriate for students of diverse, needs, abilities and backgrounds.

## PROGRAM REQUIREMENTS

Required 49 units from the following: Units
BIOL 3 Introduction to Life Science............................... 4
CHDEV 30 Child, Family and Community.......................... 3
CHDEV 38 Lifespan Development..................................... 3
CHDEV 39 Child Growth and Development......................... 3
COMM 1 Introduction to Public Speaking ......................... 3
EDUC 6 Introduction to Special Education...................... 3
EDUC 7 Exceptional Learners ...................................... 3
EDUC 19 Work Experience (Cooperative), $\begin{aligned} & \text { Occupational .................................................. } 2\end{aligned}$
EDUC 30 Survey of American Education............................. 3
ENGL 125 Writing Skills for College.................................. 4
GEOG 4A/4B World Geography ......................................... 3
HIST 11 History of the United States to 1877 ..................... 3
LING 11 Introduction to Language for Educators................ 3
MATH 201 Elementary Algebra ...................................... 5

## 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 <br> CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Define and apply various numbering systems (i.e. Binary, hexadecimal and Octal).
2. Develop a motor logic control solution using the defined parameters given.
3. Demonstrate a comprehension of the basic operation of communication systems for digital signals.
4. Design and configure a control application using a PLC and PLC software.
5. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.

## REQUIRED COURSES <br> Units

AT 10 Technical Computer Applications......................... 3
AT 40 Preparing for Employment Opportunities ............. 3
EST 51 Direct Current Fund of Electronics ....................... 3
EST 52 Alternating Current Fundamentals....................... 3
EST 53 Lab Safety Practices ........................................... 2
EST 54 Integrated Devices............................................. 3
EST 96D National Electrical Code-Electrical Safety ............. 3 Total 20

Select a minimum of thirty-eight (38) additional units from the following list: Units
EST 50 Introduction to Electronics .................................. 3
EST 55A Digital Concepts................................................ 3
EST 55B Facility Automation ............................................ 3
EST 55C SCADA Systems................................................ 2
EST 56A Wiring Methods ................................................ 3
EST 56B Motor Controls................................................... 3
EST 56C Industrial Electronics.......................................... 3
EST 57A Analog Communications.................................... 3
EST 57B Digital Communications..................................... 3
EST 57C Voice and Data Cabling ...................................... 3
EST 58 Programmable Logic Controllers ........................ 3
EST 59 Instrumentation Systems.................................... 3
EST 60 A+ PC Maintenance and Repair........................... 3
EST 80 Introduction to PhotovoItaics .............................. 3
EST $81 \quad$ Photovoltaic Systems......................................... 3
EST 82A Introduction to Robotics................................... 3.5
EST 82B Robotic Applications ........................................ 3.5
No more than three (3) units of the following courses:
EST 96A National Electrical Code Part 1............................ 3
EST 96B National Electrical Code Part 2........................... 3
EST 96C National Electrical Code Part 3............................ 3

## ADVANCED PHOTOVOLTAIC TECHNICIAN

- MAJOR \#8186

The courses in the advanced photovoltaic technician certificate prepare the student for employment in the photovoltaic industry for auditors, site surveyors, designers, and other advanced positions.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Given a customer's electrical usage, plan, design, document, and install various photovoltaic systems with all required hardware and electrical equipment to NEC and local/state requirements.
REQUIRED COURSES Units
EST 51 Direct Current Fund of Electronics ....................... 3
EST 52 Alternating Current Fundamentals...................... 3
EST 53 Lab Safety Practices ........................................... 2
EST 54 Integrated Devices.............................................. 3
EST 56A Wiring Methods ................................................ 3
EST $81 \quad$ Photovoltaic Systems......................................... 3
EST 96D National Electrical Code-Electrical Safety ............. 3 Total 20

## BIOMEDICAL TECH - MAJOR \#6085

The biomedical technology program trains students to troubleshoot and repair electronics based biomedical instruments and equipment. Course topics highlight three (3) primary fields of study: Electronic Fundamentals, Human Anatomy and biomedical instrumentation. Students study electronics at the component level and human biological processes as building blocks for understanding biomedical instrumentation function, operation and troubleshooting.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Distinguish and list various medical imaging technologies.
2. Set up standard electrical measurement tools and differentiate the uses for calibration and troubleshooting of medical equipment.
3. Categorize biopotentials and electrodes as they relate to basic human anatomy and physiology systems.
4. Associate the applicable regulation with the regulating organizations.
5. Evaluate the data from basic preventive maintenance tests on the following equipment: multi-parameter physiological monitor, electrocardiogram (ECG) machine, blood pressure monitor, defibrillator, pulse oximeter, infusion pump, and electrosurgical unit.
FIRST YEAR - First Semester Units
AT 10 Technical Computer Applications ......................... 3
EST 51 Direct Current Fund of Electronics ....................... 3
EST 53 Lab Safety Practices ........................................... 2
EST 55A Digital Concepts................................................ 3
FIRST YEAR - Second Semester Units
EST 52 Alternating Current Fundamentals........................ 3
EST 57A Analog Communications.................................... 3
EST 60 A+ PC Maintenance and Repair........................... 3
EST 61 Networking Fundamentals.................................. 3
SECOND YEAR - First Semester Units
EST 54 Integrated Devices............................................. 3
EST 57B Digital Communications..................................... 3
EST 57C Voice and Data Cabling...................................... 3
EST 82A Introduction to Robotics................................... 3.5
SECOND YEAR - Second Semester Units
AT 40 Preparing for Employment Opportunities ............. 3
BIOL 5 Human Biology ................................................. 4
EST 84A Introduction to Biomedical Electronics ................. 3
Total 45.5

FACILITY CONTROLS - FORMERLY FACLITY CONTROL technician and automation control technician MAJOR \#8189

Training is designed to prepare the student for employment as a building automation technician.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Develop and implement a strategy utilizing HVAC controls.
2. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.
3. Design and implement a security strategy utilizing door access controls.
ELECTRICITY FUNDAMENTALS 2 CORE COURSES Units
EST 51 Direct Current Fund of Electronics ...................... 3
EST 52 Alternating Current Fundamentals...................... 3
EST 53 Lab Safety Practices ........................................... 2
EST 54 Integrated Devices.............................................. 3
EST 56A Wiring Methods ................................................ 3
EST 96A National Electrical Code Part 1, or
EST 96B National Electrical Code Part 2, or
EST 96C National Electrical Code Part 3........................ 3
EST 96D National Electrical Code-Electrical Safety ............. 3
FACILITY CONTROLS REOUIRED COURSES Units
EST 55A Digital Concepts................................................ 3
EST 55B Facility Automation ........................................... 3
EST 57C Voice and Data Cabling....................................... 3
EST 59 Instrumentation Systems.................................... 3
HVAC 57 HVAC Digital Control Principles.......................... 2
HVAC 150 Wireless HVAC Controls ......................................... 2
Total 36

## CISCO CCNA PREPARATION - MAJOR \#8174

This option is to prepare students for the CISCO Certified Entry Networking Technician (CCENT) and/or CISCO Certified Network Associate (CCNA) and the CompTIA Net+ certification exams.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for either static and/or dynamic IP routing for a given scenario.
3. Configure a switch for implementing the VLAN protocols.
4. Construct a WAN network utilizing the requested protocol over multiple routers and WAN service providers.

| REQUIRED COURSES | Units |
| :--- | :--- |
| EST 61 | Networking Fundamentals....................... 3 |

EST 62 Routing \& Switching Essentials .............................. 3
EST 63 Scaling Networks .............................................. 3
EST 64 Advanced Networking and Management............... 3
And the following courses in any sequence:
EST 57C Voice and Data Cabling................................... 3
EST 60 A+ PC Maintenance and Repair........................ 3
Total 18
LOW VOLTAGE - FORMERLY COMMUNICATION
TECHNICIAN AND COMMUNICATIONS TECHNOLOGY

- MAJOR \#8187

Training is designed to prepare the student for employment as a communication technician.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Design and implement various communication strategies that use radios to allow industrial controllers to communicate and share data.
2. Construct and analyze electronic circuits relating to digital to analog converters, analog to digital converters and time division multiplexing.
3. Design and implement a network topology for a solution to a proposed communication problem.
ELECTRICITY FUNDAMENTALS 2 CORE COURSES Units
EST 51 Direct Current Fundamentals of Electronics ......... 3
EST 52 Alternating Current Fundamentals...................... 3
EST 53 Lab Safety Practices ........................................ 2
EST 54 Integrated Devices............................................ 3
EST 56A Wiring Methods ........................................... 3
EST 96A National Electrical Code Part 1, or
EST 96B National Electrical Code Part 2, or
EST 96C National Electrical Code Part 3...................... 3
EST 96D National Electrical Code-Electrical Safety............. 3
LOW VOLTAGE REQUIRED COURSES Units
EST 57A Analog Communications................................ 3
EST 57B Digital Communications..................................... 3
EST 57C Voice and Data Cabling................................... 3
HVAC 57 HVAC Digital Control Principles........................ 2
HVAC 150 Wireless HVAC Controls .................................. 2
Total 33

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

Training in this specialized field is designed to prepare the student for employment as a control and instrument technician.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Define and apply formulas (Ohm's and Kirchhoff's Laws) for electrical circuit solutions.
2. Contrast the different parts of a Supervisory Control and Data Acquisition System (SCADA).
3. Understand the purpose, functions, and operations of a PLC.
4. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.
REQUIRED COURSES Units
EST 51 Direct Current Fund of Electronics ..................... 3
EST 55C SCADA Systems.................................................. 2
EST 56B Motor Controls.................................................. 3
EST 57C Voice and Data Cabling.................................... 3
EST 58 Programmable Logic Controllers ....................... 3
EST 59 Instrumentation Systems.................................. 3
Total 17

## INTRODUCTION TO INDUSTRIAL CONTROLS

- MAJOR \#8185

This option is to prepare students for the Industrial Controls Certificate. By completing this option, a student will have the training that emphasizes industrial control systems.

## CERTIFICATE

Student Learning Outcomes:

1. Define and apply digital numbering systems (i.e. Binary, Hexadecimal and Octal).
2. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.
3. Write programs in ladder logic, load and troubleshoot the programs, and operate the system.
REQUIRED CORE COURSES Units
EST 50 Introduction to Electronics, or............................. 3
MMCTC 372 Electrical Fundamentals ................................. 0
EST 55A Digital Concepts................................................ 3
EST 56B Motor Controls.................................................. 3
EST 58 Programmable Logic Controllers ........................ 3
EST 59 Instrumentation Systems ..................................... 3

## NETWORKING/COMPUTER TECHNICIAN

- MAJOR \#8172

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

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
3. Define and apply digital numbering systems.
4. Explain how networks are interconnected and understand how operating system software affects the hardware.
5. Install and configure the network server operating system software, and manage servers, users, and resources with a server manager utility, and monitor network system performance.

| REQUIRED | 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 and Repair ........................ 3 |
| EST 61 | Networking Fundamentals.............................. 3 |
| EST 62 | Routing \& Switching Essentials ........................ 3 |
|  | Total 34 |

SUGGESTED SEQUENCE OF COURSES:

| First Semester |  |
| :--- | ---: |
| CIT 15 | Computer Concepts ..................................... 3 |

${ }^{* *}$ CIT 45 Data Communications........................................ 3
EST 55A Digital Concepts................................................ 3
EST 60 A+ PC Maintenance and Repair........................... 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

NETWORKING/COMPUTER TECHNICIAN

- MAJOR \#8172

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

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
3. Define and apply digital numbering systems.
4. Explain how networks are interconnected and understand how operating system software affects the hardware.
5. Install and configure the network server operating system software, and manage servers, users, and resources with a server manager utility, and monitor network system performance.

| REQUIRED | 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 and Repair ........................ 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 and Repair........................... 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

[^1]
## ENGINEERING

## ENGINEERING: CIVIL - MAJoR \#3011

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

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
5. An ability to function effectively as a member or leader on a technical team.

| REQUIRED CORE COURSES |  | Units |
| :---: | :---: | :---: |
| ENGR 5 | Programming and Problem Solving in |  |
|  | MATLAB .................... |  |
| ENGR 10 | Introduction to Engineering. |  |
| MATH 5A | Mathematical Analysis I | 5 |
| MATH 5B | Mathematical Analysis II | 4 |
| MATH 6 | Mathematical Analysis III | 4 |
| PHYS 4A | Physics for Scientists and Engineers. | 4 |
| PHYS 4B | Physics for Scientists and Engineers.. |  |
| Civil Track: Select a | a minimum of 4 courses | Units |
| CHEM 1A | General Chemistry. | 5 |
| ENGR 1A | Elementary Plane Surveying 1 | 4 |
| ENGR 2 | Graphics. | 4 |
| ENGR 4 | Engineering Materials |  |
| ENGR 8 | Statics . | .... 3 |
| MATH 7 | Introduction to Differential Equations | ..... 4 |
| PHYS 4C | Physics for Scientists and Engineers.. |  |
|  | Total | 40-43 |

## ENGINEERING: CIVIL - MAJor \#3011

This certificate of achievement is designed as basic coursework necessary for pursuing a career in the field of civil engineering.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
5. An ability to function effectively as a member or leader on a technical team.
REQUIRED CORE COURSES Units
ENGR $5 \quad$ Programming and Problem Solving in
ENGR 10 Introduction to Engineering................................ 2
MATH 5A Mathematical Analysis I .................................... 5
MATH 5B Mathematical Analysis II ..................................... 4
MATH $6 \quad$ Mathematical Analysis III ................................... 4
PHYS 4A Physics for Scientists and Engineers.................... 4
PHYS 4B Physics for Scientists and Engineers.................... 4
Civil Track: Select a minimum of 4 courses Units
CHEM 1A General Chemistry............................................. 5
ENGR 1A Elementary Plane Surveying 1............................. 4
ENGR 2 Graphics............................................................ 4
ENGR 4 Engineering Materials ......................................... 3
ENGR 8 Statics ............................................................... 3
MATH 7 Introduction to Differential Equations ................... 4
PHYS 4C Physics for Scientists and Engineers.................... 4
Total $\quad 40-43$

## ENGINEERING: COMPUTER, SOFTWARE <br> - MAJOR \#3012

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

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
5. An ability to function effectively as a member or leader on a technical team.
REQUIRED CORE COURSES Units
ENGR 5 Programming and Problem Solving in $\quad$ MATLAB.................................................. 3
ENGR 10 Introduction to Engineering............................. 2
MATH 5A Mathematical Analysis I................................. 5
MATH 5B Mathematical Analysis II................................. 4
MATH 6 Mathematical Analysis III ................................... 4
PHYS 4A Physics for Scientists and Engineers.................... 4
PHYS 4B Physics for Scientists and Engineers................... 4
Computer, Sottware Track:
Select a minimum of 4 courses Units
CSCI 40 Programming Concepts \& Methodology I............ 4
CSCI 41 Programming Concepts \& Methodology II........... 4
ENGR 6 Circuits with Lab ............................................ 4
ENGR 12 Digital Logic Design...................................... 4
MATH 7 Introduction to Differential Equations .................. 4
PHYS 4C Physics for Scientists and Engineers.................. 4
Total 42

## ENGINEERING: COMPUTER, SOFTWARE

- MAJOR \#3012

This certificate of achievement is designed as basic coursework necessary for pursuing a career in the field of computer and software engineering.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes
5. An ability to function effectively as a member or leader on a technical team.

REQUIRED CORE COURSES Units
ENGR 5 Programming and Problem Solving in $\quad$ MATLAB................................................. 3
ENGR 10 Introduction to Engineering.............................. 2
MATH 5A Mathematical Analysis I................................... 5
MATH 5B Mathematical Analysis II .................................. 4
MATH 6 Mathematical Analysis III .................................. 4
PHYS 4A Physics for Scientists and Engineers.................. 4
PHYS 4B Physics for Scientists and Engineers.................. 4
Computer, Software Track:
Select a minimum of 4 courses Units
CSCI 40 Programming Concepts \& Methodology I............ 4
CSCI 41 Programming Concepts \& Methodology II........... 4
ENGR 6 Circuits with Lab .......................................... 4
ENGR 12 Digital Logic Design...................................... 4
MATH 7 Introduction to Differential Equations................. 4
PHYS 4C Physics for Scientists and Engineers................... 4
Total 42

## ENGINEERING: ELECTRICAL - MAJOR \#3013

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

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
5. An ability to function effectively as a member or leader on a technical team.
REQUIRED CORE COURSES Units
ENGR 5 Programming and Problem Solving in $\quad$ MATLAB................................................... 3
ENGR 10 Introduction to Engineering............................... 2
MATH 5A Mathematical Analysis I.................................. 5
MATH 5B Mathematical Analysis II................................. 4
MATH 6 Mathematical Analysis III ................................ 4
PHYS 4A Physics for Scientists and Engineers.................. 4
PHYS 4B Physics for Scientists and Engineers.................. 4


## ENGINEERING: ELECTRICAL - MAJoR \#3013

This certificate of achievement is designed as basic coursework necessary for pursuing a career in the field of electrical engineering.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
5. An ability to function effectively as a member or leader on a technical team.
REQUIRED CORE COURSES Units

| ENGR 5 | Programming and Problem Solving in |
| :--- | :--- |
|  | MATLAB................................................... 3 |

ENGR 10 Introduction to Engineering............................. 2
MATH 5A Mathematical Analysis I................................. 5
MATH 5B Mathematical Analysis II................................. 4
MATH 6 Mathematical Analysis III ............................... 4
PHYS 4A Physics for Scientists and Engineers.................. 4
PHYS 4B Physics for Scientists and Engineers.................... 4
Electrical Track: Select a minimum of 4 courses Units
CHEM 1A General Chemistry........................................ 5
$\begin{array}{ll}\text { CSCI } 40 & \text { Programming Concepts \& Methodology I, or } \\ \text { MATH } 7 & \text { Introduction to Differential Equations............ } 4\end{array}$
ENGR 6 Circuits with Lab .......................................... 4
ENGR 12 Digital Logic Design....................................... 4
PHYS 4C Physics for Scientists and Engineers.................. 4 Total 42-43

## ENGINEERING: MECHANICAL, AEROSPACE, AND MANUFACTURING - MAJOR \#3014

This degree program is designed as basic coursework necessary for pursuing a career in the field of mechanical, aerospace, or manufacturing engineering. Students will be prepared for engineering internship opportunities and transferring into four-year engineering programs.

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
5. An ability to function effectively as a member or leader on a technical team.
REOUIRED CORE COURSES Units
ENGR 5 Programming and Problem Solving in $\quad$ MATLAB.........................................................
ENGR 10 Introduction to Engineering.............................. 2
MATH 5A Mathematical Analysis I................................... 5
MATH 5B Mathematical Analysis II ................................. 4
MATH 6 Mathematical Analysis III ................................ 4
PHYS 4A Physics for Scientists and Engineers.................. 4
PHYS 4B Physics for Scientists and Engineers.................. 4
Mechanical, Aerospace, and Manufacturing Track:
Select a minimum of 4 courses Units
CHEM 1A General Chemistry................................................ 5
ENGR 2 Graphics.................................................................
ENGR 4 Engineering Materials ....................................... 3
ENGR 6 Circuits with Lab............................................... 4
ENGR 8 Statics ................................................................. 3
ENGR 11 Manufacturing Processes.................................. 3
MATH 7 Introduction to Differential Equations ................... 4
PHYS 4C Physics for Scientists and Engineers................... 4

ENGINEERING: MECHANICAL, AEROSPACE, AND MANUFACTURING - MAJOR \#3014

This certificate of achievement is designed as basic coursework necessary for pursuing a career in the field of mechanical, aerospace, and manufacturing engineering.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline..
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
5. An ability to function effectively as a member or leader on a technical team.
REQUIRED CORE COURSES ..... Units
ENGR $5 \quad$ Programming and Problem Solving in MATLAB ..... 3
ENGR 10 Introduction to Engineering ..... 2
MATH 5A Mathematical Analysis I ..... 5
MATH 5B Mathematical Analysis II ..... 4
MATH $6 \quad$ Mathematical Analysis III ..... 4
PHYS 4A Physics for Scientists and Engineers. ..... 4
PHYS 4B Physics for Scientists and Engineers. ..... 4
Mechanical, Aerospace, and Manufacturing Track:
Select a minimum of 4 courses Units
CHEM 1A General Chemistry ..... 5
ENGR 2 Graphics ..... 4
ENGR 4 Engineering Materials ..... 3
ENGR 6 Circuits with Lab ..... 4
ENGR 8 Statics ..... 3
ENGR 11 Manufacturing Processes ..... 3
MATH 7 Introduction to Differential Equations ..... 4
PHYS 4C Physics for Scientists and Engineers. ..... 4
Total ..... 39-43

## ENGLISH FOR TRANSFER - MAJOR \#5305

The Associate in Arts in English for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. A degree in English is considered a rigorous, complementary education for careers in the legal field, editing, interpreting, translation, and teaching at the K-12 and college levels. To earn the Associate in Arts in English for Transfer degree, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Read and critically evaluate college-level material from various sources through analysis and synthesis of information.
2. Write appropriately documented argumentative essays and research papers to deal with the ideas by definition, evaluation, interpretation, and persuasion.
3. Analyze and respond in writing to a variety of literature, including short fiction, poetry, drama, novels, and other genres, concerning thematic, rhetorical, and symbolic elements.
4. Write about and analyze the various literary elements such as plot, characterization, setting, voice, meter and tragedy in selected works.
5. Demonstrate an understanding of the importance of the assigned works to various time periods and cultures, and to literary tradition.
MAJOR CORE
English $1 \mathrm{~A} / 1 \mathrm{AH}$ is a prerequisite to major core courses; it also meets writing/reading competency and general education area D1.
MAJOR CORE Units
ENGL 1B Introduction to the Study of Literature .................. 3
ENGL 3 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 1865, and
ENGL 48B Introduction to American Literature 1865 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

$$
1865
$$3

ENGL 48B Introduction to American Literature
1865 to the Present ..... 3
LING 10 Introduction to Language ..... 3
SECTION C ..... Units
ENGL 12 The Bible as Literature ..... 3
ENGL 15D Creative Writing: Creative Nonfiction ..... 3
ENGL/WSTS 36 Women's Literature ..... 3
ENGL $40 \quad$ Themes in Literature. ..... 3
ENGL 47 Introduction to Shakespeare ..... 3

## FASHION MERCHANDISING MARKETING/ HOME ECONOMICS

- SEE MARKETING


## FIRE TECHNOLOGY

## BASIC FIRE ACADEMY - mAJoR \#883B

The Basic Fire Academy program offers curriculum to prepare students
with the knowledge and skills necessary to become a State of California
Certified Firefighter 1. Employment opportunities are found in various
branches of government and the private sector.
The academy is offered in two different formats; an intensive 40 hours
per week program or an extended 24 hours per week night program.

## CERTIFICATE OF ACHIEVEMENT

## PROGRAM REQUIREMENTS

To qualify for the program, applicants must:

- A. Be 18 years of age or have a high school diploma or G.E.D.
- B. Applicant with prior college work must be on good academic and progress standing on all college work attempted.
- C. Have successfully completed minimum of Public Safety First Aid and CPR (CA Health and Safety Code 1797.182).
- D. Possess a valid California driver's license.
- E. Provide proof of a clear physical examination including an electrocardiogram printout (EKG).
- F. Contact the Fire Academy Coordinator.

Student Learning Outcomes:

1. Demonstrate specific skills, knowledge and abilities in routine and emergency firefighting operations.
2. Manipulate, inspect, and maintain firefighting and rescue equipment.
3. Display the personal and professional attitude and discipline necessary for employment in the firefighting profession.

| REQUIRED COURSES | 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 Units
AT 10 Technical Computer Applications ......................... 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 Foundations of Algebra, or.................................. 5
AT 130 Industrial Mathematics................................3-5
PHYSC 11 Introductory Physical Science ............................. 3
COURSE OPTIONS: Select 12 Units Units
FIRET $8 \quad$ 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
$\begin{array}{ll}\star * \text { FIRET } 135 & \text { Emergency Medical Technician- } \\ & \text { Paramedic - Field Internship ............................ } 8.5\end{array}$ Total 39-41
Suggested sequence of courses:
FIRST YEAR
First Semester Units
MATH 103 Foundations of Algebra ...................................... 5
PHYSC 11 Introductory Physical Science .............................. 3
Second Semester Units
FIRET 1 Fire Protection Organization............................... 3
FIRET 2 Fire Prevention Technology ................................ 3
FIRET 5 Fire Behavior and Combustion............................ 3

## SECOND YEAR

First Semester Units
AT 10 Technical Computer Applications ......................... 3
$\begin{array}{ll}\text { FIRET } 14 & \text { Principles of Fire \& Emergency } \\ & \text { Services Safety \& Survival ................................. } 3\end{array}$
Second Semester Units
FIRET 3 Fire Protection Equipment and Systems............... 3
FIRET 4 Building Construction for Fire Protection............. 3

* FIRET 130A carries a value of up to 13 units; however, only 6 units can be applied to the associate in science degree.
** FIRET 135 is the final course of three courses required to successfully complete the Paramedic program.
Note: The associate degree additionally requires completion of the requirements listed in the Graduation Requirements section of this catalog.

FIRE TECHNOLOGY - MAJOR \#883A
This program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service careers. The curriculum serves as an in-service program as well as a pre-employment program for students seeking employment or advancement in the profession of fire fighting and fire technology.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Given a typical type of fire department, describe the organizational structure and all of the staff functions within it.
2. Given a specific function of the fire service, describe the purpose of a paid and volunteer firefighter.
REOUIRED CORE COURSES Units
AT 10 Technical Computer Applications ........................ 3
AT 130 Industrial Mathematics, or.................................. 3
MATH 103 Foundations of Algebra...............................3-5
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
$\begin{array}{ll}\text { FIRET } 14 & \text { Principles of Fire \& Emergency } \\ & \text { Services Safety \& Survival ................................ } 3\end{array}$
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

Total $39-41$
Suggested sequence of courses:
FIRST YEAR
First Semester Units
AT 130 Industrial Mathematics....................................... 3
PHYSC 11 Introductory Physical Science ............................. 3
Second Semester Units
FIRET 1 Fire Protection Organization................................ 3
FIRET 2 Fire Prevention Technology ................................. 3
FIRET 5 Fire Behavior and Combustion............................ 3
Options ......................................................................... 6
SECOND YEAR
First Semester Units
AT 10 Technical Computer Applications ........................ 3
FIRET $14 \quad$ Principles of Fire \& Emergency Service Safety \& Survival.3

Second Semester Units
FIRET 3 Fire Protection Equipment and Systems............... 3
FIRET 4 Building Construction for Fire Protection............. 3

* FIRET 130A carries a value of up to 13 units; however, only 6 units can be applied to the certificate of achievement.
** FIRET 135 is the final course of three courses required to successfully complete the Paramedic program.
Note: $\quad$ The certificate of achievement requires completion of the major (27 units) and 12 units of recommended course options with a GPA of 2.0 or better.

FIREFIGHTER II - MAJOR \#8835
Provides the skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications. The five overarching themes of the California State Fire Fighter II curriculum are: general knowledge germane to the profession, fire department communications, fireground operations, rescue operations, and prevention, preparedness, and maintenance.

## CERTIIICATE

## Student Learning Outcome:

1. Identify proper equipment necessary to mitigate incident presented during a scenario simulation.
2. Initiate proper communication process during routine and emergency situations.
3. Perform proper rescue techniques removing victims in emergency simulations.
REOUIRED COURSES Units
FIRET 222A Firefighter II Part A........................................ 2
FIRET 2२2B Firefighter II Part B........................................ 3
Total 5

## EMERGENCY MEDICAL TECHNICIAN 1

- MAJOR \#8842

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

## CERTIFICATE

Student Learning Outcome:

1. Be eligible to take the National Registered Emergency Medical Technical (NREMT)/California State certification examination.
REQUIRED COURSE Units
FIRET 131 Emergency Medical Technician I...................... 9.5

## EMERGENCY MEDICAL TECHNICIAN 1 <br> REFRESHER - MAJOR \#8843

Designed for the student needing to complete the "continuing education" (CE) requirements necessary to maintain their EMT-B certification status.

## CERTIFICATE

## Student Learning Outcome:

1. Upon successful completion of the program the student will have satisfied all the required, Continuing Education (CE) hours for Emergency Medial Technician-B recertification.
REOUIRED COURSE Units
FIRET 261 Emergency Medical Technician I Refresher . $\qquad$ .. 1

## 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 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. 8.5

Total 44

## FOOD AND NUTRITION - MAJoß *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), <br> Occupational $\qquad$ 1-4 |
| FSM 35 | Food Services, Sanitation, Safety and Equipment. .. 2 |
|  | Total 19-22 |
| ELECTIVES: Selec | ct 18 Units Units |
| BIOL 11A/11AH | Biology for Science Majors I, or Honors Biology for Science Majors I $\qquad$ |
| BIOL 22 | Human Physiology ........................................ 5 |
| BIOL 31 | Microbiology.............................................. 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 35. General Education requirements for transfer certification are on page 47. |  |

## 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), <br> Occupational. $\qquad$ 1-4 |
| :---: | :---: |
| FSM 35 | Food Services, Sanitation, Safety and Equipment. $\qquad$ |
|  | Total 19-22 |
| ELECTIVES: Sele | ect 18 Units Units |
| BIOL 11A/11AH | Biology for Science Majors I, or Honors Biology for Science Majors I. $\qquad$ 5 |
| BIOL 22 | Human Physiology...................................... 5 |
| BIOL 31 | Microbiology....................................... 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 O 1. Identify the | Dutcomes: auses of fo |

1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. With the guidance of a registered dietitian, ensure that the nutritional needs of the clients of a health care facility will be met.
REQUIRED COURSES Units
FN $40 \quad$ Nutrition..................................................................
FN 45 Therapeutic Diets ........................................... 3
FSM $19 \quad$ Work Experience (Cooperative), Occupational 1
FSM $35 \quad$ Food Services, Sanitation, Safety and Equipment.2
Total 9

## DIETARY SERVICE SUPERVISOR - MAJOR \#5681

The certificate of achievement prepares students for employment in a food service department within health care facilities such as hospitals, skilled nursing, assisted living or adult day care centers. This program meets the California Department of Public Health requirements for certification/approval.

Course grades are earned through the development of competencies needed for successful employment as a Dietary Service Supervisor.

Consult with a member of the Food and Nutrition program staff before scheduling courses in the program. The student will be registered in the program and a program of study, including appropriate field experience, will be planned.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcome:

1. The students will be able to apply the state and federal regulations that govern the operation of a food service department in a long term health care facility.
REOUIRED 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 $35 \quad$ Food Services, Sanitation, Safety and
Equipment.................................................. 2
FSM 38 Quantity Food Preparation................................ 3 Total $\quad 19$

* One unit of FSM 19 can either be 75 hours paid or 60 hours volunteer. Two units of FSM 19 must be 120 hours volunteer.
Articulation of the Dietetics and Food Administration Major with CSUF

Fresno City College students planning to transfer to California State University, Fresno, into a Dietetics or Food Services major approved by the American Dietetics Association should take the following lower division courses before transferring to CSU, Fresno.

| COURSES |  |
| :--- | :--- |
| *BIOL 20 | Human Anatomy......................................... 4 |

BIOL 22 Human Physiology..................................... 5
BIOL 31 Microbiology.............................................. 5
CHEM 3A Introductory General Chemistry ........................ 4
CHEM 8A Elementary Organic Chemistry........................... 3
FN 40 Nutrition.................................................... 3
FN 1 Principles of Food Preparation.......................... 3
FSM 35 Food Services, Sanitation, Safety and $\quad$ Equipment.............................................. 2
MATH 11 Elementary Statistics....................................... 4
PSY 2/2H General Psychology, or $\begin{aligned} & \text { Honors General Psychology........................... } 3\end{aligned}$

* Prerequisite to required course(s).


## NUTRITION AND DIETETICS FOR TRANSFER <br> - MAJOR \#5683

The Associate in Science in Nutrition and Dietetics for Transfer is designed for students who plan to transfer to a CSU campus to complete a bachelor's degree in nutrition and dietetics. To earn the Associates in Science in Nutrition and Dietetics for Transfer degree, students must complete 60 units that are eligible for transfer to the California State University, including both of the following: the Intersegmental General Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements and a minimum of 18 semester units in a major or an area of emphasis, as determined by the community college district. Obtainment of a minimum grade point average of 2.0 . ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. For more information on CSU admission and transfer requirements consult with a counselor. Upon completion of the Associates in Science in Nutrition and Dietetics for Transfer the students will be able to demonstrate knowledge of the relationship of nutrients and lifestyle factors and the associated risk of chronic disease. Students will demonstrate knowledge of physiological processes such as digestion, absorption, transport and metabolism of nutrients. Students will recognize and separate scientifically supported information from misinformation. Students will identify ways in which social factors influence food related choices, practices, and beliefs.

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Demonstrate knowledge of the relationship of nutrients and lifestyle factors and the associated risk of chronic disease.
2. Demonstrate knowledge of physiological processes such as digestion, absorption, transport and metabolism of nutrients.
3. Recognize and separate scientifically supported information from misinformation.
4. Identify ways in which social factors influence food related choices, practices and beliefs.
REQUIRED CORE COURSES Units
BIOL 31 Microbiology........................................................
CHEM 1A General Chemistry, and
CHEM 1B General Chemistry and Qualitative Analysis... 10
FN 40 Nutrition..................................................................
PSY 2 General Psychology ...................................... 3
List A: Select at least two courses from the list below:
BIOL $20 \quad$ Human Anatomy............................................ 4
BIOL 21A Human Anatomy \& Physiology I, and
BIOL 21B Human Anatomy \& Physiology II

| BIOL 22 | Human Physiology............................................. 5 |
| :--- | :--- |
| CHEM 28A | Organic Chemistry I, and |
| CHEM 29B | Organic Chemistry Laboratory I ....................... 5 |
| MATH 11 | Elementary Statistics, or |
| MATH/PSY 42 | Statistics for the Behavioral Sciences, or |
| DS 23 | Business Statistics....................................3-4 |

## List B: Select one course:

FN 1 Principles of Food Preparation............................ 3

## 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.

## REOUIRED CORE COURSES Units

ACCTG 4A Financial Accounting, or
BT $131 \quad$ Applied Accounting..................................3.5-4
BA 18 Business and the Legal Environment.................... 4
CIT 15 Computer Concepts ............................................ 3
ECON 40/40H $\begin{gathered}\text { Introduction to Microeconomics, or } \\ \text { Honors Introduction to Microeconomics.......... } 3\end{gathered}$
FN 1 Principles of Food Preparation............................ 3
$\begin{array}{cc}\text { FN } 35 & \text { Nutrition and Health, or } \\ \text { FN } 40 & \text { Nutrition....................................................... } 3\end{array}$
FSM 11 Food Service Supervision .................................. 2
FSM 15 Food Production Management........................... 2
FSM $19 \quad$ Work Experience (Cooperative),
Occupational1-4
FSM $25 \quad$ Food and Beverage Purchasing and Control ..... 2
FSM $35 \quad$ Food Services, Sanitation, Safety and Equipment ..... 2
FSM 38 Quantity Food Preparation ..... 3
MKTG 10 Principles of Marketing ..... 3
Total 34.5-35
Note: The Food Service Management major consists of 34.5 -35 units as indicated above.
Students must complete the Food Service Management major and associate
degree requirements are listed on page 35. General Education requirements for
transfer certification are on page 47.

FOOD SERVICE MANAGEMENT - MAJOR \#5691
This certificate of achievement is designed to prepare students for employment in Food Service Management.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. Evaluate the nutritional content of foods and menus.
3. Choose record keeping methods to monitor the fiscal viability of a food service establishment.
REQUIRED CORE COURSES Units
ACCTG 4A 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
FN 40
FSM 11
Nutrition and Health, or
Nutrition.
3
Food Service Supervision ................................... 2
FSM 15 Food Production Management........................... 2
FSM 19
FSM 25
Work Experience (Cooperative),
Occupational1-4
Food and Beverage Purchasing and Control ..... 2

FSM 38
MKTG 10

FSM 35

Food Services, Sanitation, Safety and
Equipment. ..... 2
Quantity Food Preparation .....  3
Principles of Marketing ..... 3

## 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
CIT 15 Computer Concepts ........................................... 3
FN 1 Principles of Food Preparation............................ 3
FN 35 Nutrition and Health ........................................... 3
FSM $35 \quad$ Food Services, Sanitation, Safety and
Equipment.2
FSM 162 Menu Planning for Child Nutrition .....  3


Complete 14 units of required core courses. Select an additional 10 units from the elective courses for the certificate of achievement.

MATH 5B Mathematical Analysis II $\qquad$ 4

## Notes:

Additional recommended courses (not part of degree)
Physics 4A and Physics 4B (8 units)
or (see requirements of 4 year institution)
Physics 2A and Physics $2 B$ (8 units)
Biology 3 (3.5 units)
Geology 3 (1-2 units)
Geology 11 (1-2 units)

GLOBAL STUDIES

Associate Degree
for Transfer
A Degrax with a Chainanter:

## 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 | Physical Geology .......................................... 4 |
| GEOL 2 | Historical Geology........................................ 3 |
| GEOL 2 L | Historical Geology Lab................................... 1 |
| MATH 5A | Mathematical Analysis I ................................. 5 |

## GLOBAL STUDIES FOR TRANSFER - MAJor \#7740

The Associate in Arts in Global Studies for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus, to include Global Studies, Global Politics, International Relations, International Studies and Comparative Government. This degree will acquaint students with the interdisciplinary field of global studies and introduce students to various global issues with a focus on the analysis of causes and solutions. To earn the Associate in Arts in Global Studies for Transfer students must complete at least 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements, and at least 18 units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor for more information on transfer requirements and university admission.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Explain the various meanings of globalization and identify regional differences.
2. Explain recurring and emerging global issues from a historical and interdisciplinary perspective.
3. Critically evaluate the effectiveness of national, regional and international efforts to solve problems associated with global issues.
REQUIRED CORE COURSES Units
GLST 1 Introduction to Global Studies............................. 3
GLST 2 Global Issues .................................................... 3
List A: Select five courses from at least four of the following areas.
Area 1: Culture and Society Units
ANTHRO 2 Cultural Anthropology........................................ 3
HIST 23 World History II, since 1500................................ 3

| Area 2: Geography | Units |
| :---: | :---: |
| GEOG 1 | Physical Geography ...................................... 4 |
| GEOG 2 | Cultural Geography ....................................... 3 |
| $\begin{aligned} & \text { GEOG 4A } \\ & \text { GEOG 4B } \end{aligned}$ | World Geography, and <br> World Geography. $\qquad$ |
| Area 3: Economics | Units |
| ECON 40/40H | Introduction to Microeconomics, or Honors Introduction to Microeconomics ........... 3 |
| ECON 50/50H | Introduction to Macroeconomics, or Honors Introduction to Macroeconomics $\qquad$ |
| Area 4: Politics | Units |
| POLSCI 5 | Comparative Government................................ 3 |
| POLSCI 24 | International Relations.................................... 3 |
| Area 5: Humanities | Units |
| ENGL 44A | World Literature to the Renaissance ................... 3 |
| ENGL 44B | World Literature since the Renaissance.............. 3 |
| FRENCH 3 SPAN 3 | Intermediate French, or <br> Intermediate Spanish |
|  | Total 21-24 |
| GRAPHIC COMMUNICATIONS |  |
| - MAJOR \#8332 | NTING TECHNOLOGY AND REPROGRAPHICS |
| This program is geared for the student considering employment in graphic communications production. Successful completion provides an entry-level skill set and general understanding of production techniques ranging from computerized layout through output in print, digital video, Internet publishing, and digital media products. |  |
| ASSOCIATE IN SCIENCE DEGREE AND |  |
| CERTIFICATE OF ACHIEVEMENT |  |
| Student Learning Outcome: |  |
| 1. Demonstrate competency in communication techniques and visual design theory through the use of application specific software and hardware. |  |
| REQUIRED CORE COURSES Units |  |
| AT 40 | Preparing for Employment Opportunities ............ 3 |
| GRC 15 | Web Page Design .......................................... 4 |
| GRC 17 | Adobe Illustrator........................................... 3 |
| GRC 20A | Intro to Applied Graphics - Adobe Tools............. 3 |
| GRC 20B | Intro to Applied Graphics - Media ..................... 3 |
| GRC 22 | Digital Media............................................... 3 |
| $\begin{aligned} & \text { GRC 24A } \\ & \text { GRC 24B } \end{aligned}$ | Intro 2-D Animation with Adobe Animate, or Intro 2-D Animation - Harmony Software ......... 3 |
| GRC 27 | Digital Video Production ................................ 3 |
| GRC 30 | Adobe InDesign/Professional Publishing............ 3 |
| GRC 31 | Intermediate Photoshop ................................. 3 |
| GRC 41 | Visual Communications ................................. 3 |


| ELECTIVES (6 UNIT | UNITS): UNITS |
| :---: | :---: |
| GRC 14 A | Adobe Acrobat Professional ............................ 3 |
| GRC 16 | Web Design Techniques ................................. 4 |
| GRC 25 C | CMS Web Design......................................... 3 |
| GRC $32 \quad \mathrm{~V}$ | Video Techniques .......................................... 3 |
| GRC 34 In | Introduction to 3-D Animation.......................... 3 |
| GRC 39A In | Introduction to Graphic Design ......................... 3 |
| GRC 40A In | Intermediate Graphic Design ............................ 3 |
| GRC 51 S | Storyboarding .............................................. 1 |
| GRC 52 A | Adobe Lightroom .......................................... 3 |
| GRC 53 A | Adobe After Effects ........................................ 3 |
| PHOTO 6 D | Digital Imaging Fundamentals.......................... 3 |
| PHOTO 12 B | Beginning Photoshop.................................... 3 |
|  | Total 40 |
| RECOMMENDED SE | SEQUENCE |
| First Year - First Se | Semester Units |
| AT $40 \quad \mathrm{P}$ | Preparing for Employment Opportunities ............ 3 |
| GRC 20A In | Intro to Applied Graphics - Adobe Tools ............ 3 |
| GRC 41 V | Visual Communications .................................. 3 |
| Elective Course |  |
| First Year - Second | ond Semester Units |
| GRC 15 W | Web Page Design .......................................... 4 |
| GRC 17 A | Adobe Illustrator........................................... 3 |
| GRC 20B In | Intro to Applied Graphics - Media ..................... 3 |
| GRC 22 D | Digital Media............................................... 3 |
| Second Year - First | First Semester Units |
| GRC 27 D | Digital Video Production ............................... 3 |
| GRC 31 In | Intermediate Photoshop ................................. 3 |
| Elective Course . |  |
| Second Year - Secon | econd Semester ...........................................Units |
| $\begin{aligned} & \text { GRC 24A } \\ & \text { GRC 24B } \end{aligned}$ | Intro 2-D Animation with Adobe Animate, or Intro 2-D Animation - Harmony Software $\qquad$ |
| GRC 30 A | Adobe InDesign/Professional Publishing............ 3 |

## GRAPHIC DESIGN - FORMERLY GRAPHIC DESIGN OPTION

- MAJOR \#8507

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

## ASSOCIATE IN ARTS DEGREE AND

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcome

1. Demonstrate competency in communication techniques and visual design theory through the use of application specific software and hardware.

| REQUIRED CORE COURSES |  | Units |
| :---: | :---: | :---: |
| ART 7 | Beginning Drawing. |  |
| AT 40 | Preparing for Employment Opportunities |  |
| BA 38 | Operation of the Small Business, or |  |
| BA 52 | Introduction to Entrepreneurship, or |  |
| MKTG 10 | Principles of Marketing, or |  |
| MKTG 11 | Selling and Sales Management, or |  |
| MKTG 21 | Digital Marketing |  |
| GRC 14 | Adobe Acrobat Professional |  |
| GRC 15 | Web Page Design |  |
| GRC 17 | Adobe Illustrator. |  |
| GRC 20A | Intro to Applied Graphics - Adobe Tools | ... 3 |
| GRC 20B | Intro to Applied Graphics -Media |  |
| GRC 30 | Adobe InDesign/Professional Publishing |  |
| GRC 31 | Intermediate Photoshop |  |
| GRC 39A | Introduction to Graphic Design . |  |
| GRC 40A | Intermediate Graphic Design . |  |
| RECOMMENDED E | ELECTIVES (6 UNITS): | UNITS |
| GRC 16 | Web Design Techniques |  |
| GRC 22 | Digital Media. |  |
| GRC 23 | Video Editing - Adobe Premiere Pro |  |
| GRC 25 | CMS Web Design. |  |
| GRC 32 | Video Techniques. |  |
| GRC 34 | Introduction to 3-D Animation. |  |
| GRC 51 | Storyboarding. |  |
| GRC 52 | Adobe Lightroom |  |
| GRC 53 | Adobe After Effects |  |
| PHOTO 6 | Digital Imaging Fundamentals. |  |
| PHOTO 12 | Beginning Photoshop..... |  |
|  | Total | 43 |
| RECOMMENDED SEQUENCE |  |  |
| First Year - First Semester |  | Units |
| ART 7 | Beginning Drawing. |  |
| AT 40 | Preparing for Employment Opportunities | ...... 3 |
| GRC 17 | Adobe Illustrator. | .. 3 |
| GRC 20A | Intro to Applied Graphics - Adobe Tools |  |
| First Year - Second Semester |  | Units |
| GRC 15 | Web Page Design. | ...... 4 |
| GRC 30 | Adobe InDesign/Professional Publishing | ....... 3 |
| GRC 31 | Intermediate Photoshop . | .... 3 |
| GRC 39A | Introduction to Graphic Design |  |
| Second Year - First Semester |  | Units |
| GRC 14 | Adobe Acrobat Professional | ...... 3 |
| GRC 20B | Intro to Applied Graphics - Media ... | ...... 3 |
| GRC 40A | Intermediate Graphic Design .. |  |
| Second Year - Second Semester |  | Units |
| BA 38 | Operation of the Small Business, or |  |
| BA 52 | Introduction to Entrepreneurship, or |  |
| MKTG 10 | Principles of Marketing, or |  |

MKTG 11 Selling and Sales Management, orMKTG 21 Digital Marketing .......................................... 3
GRC Elective ..... 3
GRC Elective ..... 3
DIGITAL VIDEO - FORMERLY DIGITAL VIDEO OPTION

- MAJOR \#8509This certificate prepares the student for entry level work in digitalvideo production.
CERTIFICATE
Student Learning Outcomes:

1. Successfully operate a digital video camera to capture footage in a variety of lighting conditions.
2. Capture audio using a digital recorder and compile it with existing audio tracks while maintaining synchronization.
REQUIRED COURSES ..... Units
GRC 23 Video Editing - Adobe Premiere Pro ..... 3
GRC 27 Digital Video Production ..... 3
GRC 32 Video Techniques ..... 3
GRC 51 Storyboarding. ..... 1
GRC 53 Adobe After Effects ..... 3
Total ..... 13
DIGITAL MEDIA - FORMERLY DIGITAL MEDIA OPTION AND MULTIMEDIA OPTION - MAJOR \#8508
This certificate provides evidence of knowledge in the preparation ofimages and audio for multimedia output.
CERTIFICATE
Student Learning Outcome:1. Demonstrate competency in communication techniques and visualdesign theory through the use of application specific software andhardware.
REQUIRED COURSES ..... Units
GRC 22 Digital Media. ..... 3
GRC 24A Intro 2-D Animation with Adobe Animate, or
GRC 24B Intro 2-D Animation - Harmony Software. .....  3
GRC 34 Introduction to 3-D Animation. ..... 3
GRC 41 Visual Communications ..... 3
GRC 51 Storyboarding ..... 1
GRC 53 Adobe After Effects .....  3

## VISUAL COMMUNICATIONS - MAJOR \#8510

This certificate provides evidence of skill development for entry level employment in the preparation of media for visual communication.

## CERTIFICATE

## Student Learning Outcome:

1. Demonstrate competency in visual communication techniques and visual design theory through the use of application specific software and hardware.


## WEB DESIGN - MAJOR \#8502

This certificate of achievement is evidence of knowledge of the preparation of graphics and web sites for the Internet. Through the creation and capture of images, creation of animation, and layout/design of pages, the student gains insight into graphic industry standards.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:

1. Demonstrate competency in communication techniques and visual design theory through the use of application specific software and hardware.
COURSES Units
GRC 15
Web Page Design
.4
GRC 16 Web Design Techniques ...................................... 4
GRC 24A
GRC 24B
Intro 2-D Animation with Adobe Animate, or Intro 2-D Animation - Harmony Software ......... 3
GRC 25 CSM Web Design.............................................. 3
GRC 41
Visual Communications .3
Total 17

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 $5 \quad$ Human Biology ................................................. 4
CIT 15 Computer Concepts ........................................... 3
HIT 1 Introduction to Health Information Management .3
HIT 10 Medical Terminology.......................................... 3
Total 13
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 $8 \quad \begin{aligned} & \text { Health Information Management and } \\ & \\ & \text { Supervision.................................................. } 3\end{aligned}$
HIT 11 CPT Coding ....................................................... 3
HIT 16 Healthcare Reimbursement................................... 2
Total 12
Notes:

1. The associate degree requires the completion of additional units and requirements listed with a 2.0 or better GPA.
2. BIOL 20 and 22 may be substituted for BIOL 5 .
3. In addition to all major associate degree requirements, students must take a 3 -unit elective of their choice. Recommended areas are accounting, business computer application software, finance, management, professional writing, and statistics.
4. Academic credit earned in accredited institutions of higher education or AHIMA approved schools of Health Information Technology for comparable courses will be accepted for transfer. Equivalency will be determined on the basis of catalog description, course outline, content comparison, and hour distribution. Credit by examination, when acceptable, may be required when equivalency cannot be determined.

## 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 <br> *BIOL 5 | Human Biology ............................................... 4 |
| :--- | :--- | ---: |
| HIT 1 | Introduction to Health Information |

## Note:

* BIOL 20 and 22 may be substituted for BIOL 5 .


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

## HVAC TECHNOLOGY III

- FORMERLY AIR CONDITIONING - MAJOR \#8040

Students who successfully complete the HVAC Technology III program have been equipped with advanced level HVAC (Heating, Ventilation, and Air Conditioning) skill sets, complimented by study in metal fabrication, computers, communication, digital control systems, and general education. The curriculum incorporates laboratory and classroom assignments that develop a fundamental understanding of HVAC technology. Students also develop advanced hands-on HVAC skills that prepare them for a technical career with advancement potential in the HVAC industry - e.g., brazing, cooling and heating "tune-ups", electrical and refrigerant circuit diagnosis, air distribution design and diagnosis, EPA Section 608 refrigerant handling, welding, wireless HVAC controls, and communication.

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Demonstration of advanced HVAC skills through the achievement of applicable industry certification(s).
REQUIRED COURSES Units

HVAC 50 HVAC Introduction ............................................. 2
HVAC 51 HVAC Comfort Systems .................................. 6.5
HVAC 52 HVAC System Components.............................. 6.5
HVAC 53 HVAC Troubleshooting.................................... 6.5
HVAC $54 \quad$ HVAC System Processes................................. 6.5
HVAC 56 HVAC System Installation................................... 2
HVAC 57 HVAC Digital Control Principles.......................... 2
HVAC 150 Wireless HVAC Controls .................................... 2
Total 34

## HVAC TECHNOLOGY II

- FORMERLY AIR CONDITIONING - MAJOR \#8042

Students who successfully complete the HVAC Technology II program have been equipped with intermediate-level HVAC (Heating, Ventilation, and Air Conditioning) skill sets, complimented by study in metal fabrication, computers, communication, and digital control systems. The curriculum incorporates laboratory and classroom assignments that develop a fundamental understanding of HVAC technology. Students also develop advanced hands-on HVAC skills that prepare them for a technical career in the HVAC industry-e.g., brazing, cooling and heating "tune-ups", electrical and refrigerant circuit diagnosis, air distribution design and diagnosis, EPA Section 608 refrigerant handling, welding, and wireless HVAC controls.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Demonstration of advanced HVAC skills through the achievement of applicable industry certification(s).
REQUIRED COURSES Units
HVAC $50 \quad$ HVAC Introduction ............................................. 2
HVAC 51 HVAC Comfort Systems ................................... 6.5
HVAC 52 HVAC System Components.............................. 6.5
HVAC 53 HVAC Comfort Troubleshooting ....................... 6.5
HVAC 54 HVAC System Processes.................................. 6.5
HVAC 56 HVAC System Installation................................... 2
HVAC 57 HVAC Digital Control Principles.......................... 2
HVAC 150 Wireless HVAC Controls ..................................... 2 Total 34

HVAC TECHNOLOGY I - FORMERLY AIR CONDITIONING, COMMERCIAL AIR CONDITIONING, HEATING, AND DUCT
SYSTEMS - MAJOR \#8041
Students who successfully complete the HVAC Technology I program are equipped with entry level HVAC (Heating, Ventilation, and Air Conditioning) skill sets. The curriculum incorporates laboratory and classroom assignments that develop a fundamental understanding of HVAC technology. Students also develop hands-on HVAC skills that prepare them for a technical career in the HVAC industry-e.g., brazing, cooling and heating "tune-ups", electrical and refrigerant circuit diagnosis, air distribution diagnosis, design and construction, and EPA Section 608 refrigerant handling.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Demonstration of entry-level HVAC skills through the achievement of applicable industry certification.
REQUIRED COURSES Units
HVAC $50 \quad$ HVAC Introduction ............................................. 2
HVAC 51 HVAC Comfort Systems ................................... 6.5
HVAC $52 \quad$ HVAC System Components.............................. 6.5
HVAC 53 HVAC Comfort Troubleshooting ....................... 6.5
HVAC 54 HVAC System Processes................................. 6.5
HVAC 56 HVAC System Installation................................... 2
Total 30
HVAC WIRELESS CONTROL I - FORmERLY AIR
CONDITIONING, DIGITAL AIR CONDITIONING CONTROLS

- MAJOR \#8043

Digital controls are perhaps the most important component of a modern HVAC system. They refine occupant comfort while communicating
with other networked electro-mechanical building systems for optimum efficiency. The successful HVAC Wireless Control certificate holder has mastered basic direct digital control principles, and has practiced their knowledge in the study, programming and commissioning of wireless communicating control systems.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Identify the appropriate application for binary and/or analog, inputs and outputs.
2. Program and commission a wireless thermostatic control.
3. Configure and manage a network of wireless communicating thermostats.
REQUIRED COURSES Units
AT 10 Technical Computer Applications ......................... 3
HVAC 54 HVAC System Processes................................. 6.5
HVAC 57 HVAC Digital Control Principles.......................... 2
HVAC 150 Wireless HVAC Controls ..................................... 2
Total $\quad 13.5$

Associate Degree
for Transfer
A Descres with a Guanantas:

## HISTORY FOR TRANSFER - MAJJoR $\# 380$

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 <br> HIST 11 History of the United States to 1877..................... 3 <br> HIST 12 History of the United States since 1877................ 3

LIST A - Select one of the following: Units
HIST 1/1H Western Civilization to 1648, or
Honors Western Civilization to 1648................ 3
HIST 20 World History I, to 1600...................................... 3
LIST B - Select one of the following: Units
HIST 2/2H Western Civilization since 1648, or Honors Western Civilization since 1648 .......... 3
HIST 23 World History II, since 1500................................ 3
LIST C - Select one of the following: Units
HIST 17 History of the Muslim World to 1405 ................... 3
HIST 20 World History I, to 1600...................................... 3
HIST/WSTS 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

## HONORS PROGRAM

## LEON S. PETERS HONORS PROGRAM

- MAJOR \#5331


## CERTIFICATE

A Leon S. Peter Certificate in Honors will be awarded to Honors students who successfully complete a minimum of 15 credits of Honors courses including one colloquium unit with an overall GPA of 3.2 or better.

Student Learning Outcomes:
Because this is a comprehensive general education program, students who complete the Honors Certificate program will be able to:

1. Demonstrate an understanding and appreciation of social, political, and economic institutions within a historical perspective.
2. Express an understanding of the relationship between science and other human activities.
3. Articulate an understanding of the relationships between the arts, the humanities and themselves.
4. Write clear, logically organized essays using expository and argumentative modes and applying conventions of documentation when appropriate.
5. Apply logical reasoning to make decisions, solve problems, explain conclusions, and evaluate evidence.
FIRST SEMESTER REQUIRED COURSE UNITS
*ENGL 1AH Honors Reading and Composition ...................... 4

* (Students who have completed ENGL 1A or equivalent should choose 15 units from elective courses.)
ELECTIVE COURSES: Select 11 units with at Least One
Colloquium Unit
Course Units
ANTHRO 2H Honors Cultural Anthropology ............................. 3
ART 5H Honors Art History Ancient to Medieval ............... 3
ART 6H Honors Art History Renaissance to Modern.......... 3
BIOL 11AH Honors Biology for Science Majors 1.................. 5
COMM 8H Honors Group Communication ........................... 3
ECON 40H Honors Introduction to Microeconomics.............. 3
ECON 50H Honors Introduction to Macroeconomics ............ 3
ENGL 3H Honors Critical Reading \& Writing....................... 3
HIST 12H Honors History of the United States since
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
MATH 11H Honors Elementary Statistics............................... 4
PHIL 1AH Honors Theories of Knowledge and Reality .......... 3
PHIL 1CH Honors Ethics............................................................. 3
PHIL 2H Honors Critical Reasoning and Analytic
Writing ............................................................. 3
POLSCI 2H Honors American Government ............................ 3
PSY 2H Honors General Psychology................................ 3
SOC 1AH Honors Introduction to Sociology ........................ 3


## HONORS PROGRAM COMMENDATION

- MAJOR \#5332

A Leon S. Peters Commendation Certificate in Honors will be awarded to Honors students who successfully complete a minimum of 9 units of Honors courses, including 1 colloquium unit, with an overall GPA of 3.2 or better.

## CERTIFICATE

## Student Learning Outcomes:

1. Demonstrate an understanding and appreciation of social, political, and economic institutions within a historical perspective.
2. Express an understanding of the relationship between science and other human activities.
3. Articulate an understanding of the relationships between the arts, the humanities and themselves.
4. Write clear, logically organized essays using expository and argumentative modes and applying conventions of documentation when appropriate.
5. Apply logical reasoning to make decisions, solve problems, explain conclusions, and evaluate evidence.

ELECTIVE COURSES: Select a minimum of 8 units Units
ANTHRO 2H Honors Cultural Anthropology ............................. 3
ART 5H Honors Art History Ancient to Medieval ............... 3
ART 6H Honors Art History Renaissance to Modern.......... 3
BIOL 11AH Honors Biology for Science Majors 1.................. 5
COMM 8H Honors Group Communication ........................... 3
ECON 40H Honors Introduction to Microeconomics, or
ECON 50H Honors Introduction to Macroeconomics......... 3
ENGL 1AH
ENGL 1BH
Honors Reading and Composition, or
Honors Introduction to the Study of Literature. .. 3

ENGL 3H Honors Critical Reading \& Writing, or.................. 3
PHIL 2H Honors Critical Reasoning and Analytic Writing. .3

HIST 12H $\begin{aligned} & \text { Honors History of the United States } \\ & \text { since } 1877\end{aligned}$
MATH 11H Honors Elementary Statistics............................... 4
$\begin{array}{ll}\text { PHIL 1AH } & \text { Honors Theories of Knowledge and } \\ & \text { Reality ............................................................ } 3\end{array}$
PHIL 1CH Honors Ethics.................................................... 3
POLSCI 2H Honors American Government ............................ 3
PSY 2H Honors General Psychology................................ 3
SOC 1AH Honors Introduction to Sociology ........................ 3
COLLOQUIA: Select a minimum of 1 unit Units
HONORS 1A Honors Science Colloquium ............................... 1
HONORS 1C Honors Humanities Colloquium.......................... 1
HONORS 1 H 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 Growth2

HS 19B Work Experience (Cooperative), Occupational ..... 6
HS 20 Introduction to Social Welfare .............................. 3
HS $24 \quad$ Fund of Interviewing and Counseling................... 3
HS $40 \quad$ 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
Total 29
COURSE OPTIONS: Select 7 Units Units
AFRAM $1 \quad$ Introduction to African American Studies, or
AMIND $34 \quad$ American Indian in Contemporary Society, or
CLS/SOC 14 Sociology of the Mexican American
Community3
CHDEV 5 Parent Education. ..... 3
CHDEV/PSY 12 Child Abuse ..... 3
HS/WSTS 25 Assertiveness Training ..... 2

PSY 2/2H

PSY 5
PSY 16

HS 42
HS 43

HS 44

| 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 AS degree will be awarded to any Alcohol and Drug Abuse Counseling Certificate candidate who successfully completes a total of 60 units. The 60 units must include associate degree requirements and 36 units of course work in the major as listed above. |  |
| 2. Associate d ments for tra | e requirements are listed on page 35. General Education requireer certification are on page 47. |

## ALCOHOLISM AND DRUG ABUSE COUNSELING

OPTION - MAJOR \#7951
This certificate is designed for students interested in working in the field of chemical dependency. Completion of the total certificate of achievement will broaden a candidate's understanding and assist in preparation needed to enter the field.

This certificate is accredited by the California Association for Alcohol/ Drug Educators (CAADE) and recognized by the other three certifying organizations in California.

The Alcoholism and Drug Abuse Counseling Certificate program offers course work leading to a certificate of achievement.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Upon completion, the student will be eligible to take the State of California approved test to become an Alcohol and Other Drug Counselor.
2. Students will take and successfully complete the State of California approved written exam from one of the 4 certifying organizations.
REQUIRED CORE COURSES Units
HS/SOC 10 Introduction to Aging Studies............................ 3
HS 18 Alcohol and Drug Abuse Counseling: $\quad$ 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 $40 \quad$ Alcohol and Drug Abuse Counseling: Law and Ethics, Prevention, Education, Outreach and Referral. 3 333

HS 42
HS 43
HS 44
CHDEV 5 Parent Education3
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 $25 \quad$ Human Sexuality ................................................ 3
PSY 33 Personal and Social Adjustment.......................... 3
SOC 1A/1AH Introduction to Sociology, or Honors Introduction to Sociology, or
SOC $160 \quad$ 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 $10 \quad$ Changing Roles of Women................................. 3

## ELDER CARE HUMAN SERVICES - MAJOR \#7634

The Certificate of Achievement in Elder Care Human Services is designed to prepare students for entry level work in social services settings with adults, aged 65 years and older or, with additional completed general education course work, to transfer as a junior to a baccalaureate degree program in Social Work. This Certificate is for a person who has a strong desire to provide human services to older adults. These introductory courses will give the student a good fundamental working knowledge of the social services system addressing the needs of older adults.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Apply Systems Theory, the Strengths Perspective, and National Association of Social Workers Code of Ethics to determine the intertwined needs of an elder client and construct a case plan.
2. Illustrate the importance of culture in the functioning of and service provision to an elder client.
3. Analyze challenges encountered by elder care human services providers, including Internal and External barriers.
4. Identify and distinguish social services, health care, legal, and financial services providers available to the elderly.

## 2019-2020 Fresno City College Catalog

| REQUIRED COURSES Units |  |
| :---: | :---: |
| HS 10 | Introduction to Aging Studies........................... 3 |
| HS 11 | Elder Care Human Services............................. 3 |
| HS 19A | Work Experience (Cooperative), <br> Occupational $\qquad$ |
| HS 20 | Introduction to Social Welfare ........................... 3 |
| HS 24 | Fundamentals of Interviewing and Counseling..... 3 |
| HS 44 | Drug Use: Physical and Psychological Effects...... 3 |
|  | Total 18 |

## 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.
REOUIRED CORE COURSES Units
CIT 12 Computer Literacy, or......................................... 3
AT 10 Technical Computer Applications, or
BT $1 \quad$ Computer Document Processing I, or
CIT 15
Computer Concepts
3-4
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 Group and Community Social Services................ 3 Total $\quad 18-19$
COURSE OPTIONS: Select 12 Units Units
AFRAM 1 Introduction to African American Studies ............. 3
AFRAM 2 African American Cultural Adaptation................... 3
AMIND 31 American Indian Culture..................................... 3
AMIND $34 \quad$ The American Indian in Contemporary
Society3

AMST 10

ANTHRO 2/2H

ASL 1
CHDEV 5
CHDEV 30
SOC 31

CHDEV/PSY 38
CHDEV/PSY39
CLS 11
CLS 13
COMM 1
COMM 4
COMM 8
COMM 25
PHIL 6
ECON 25
ECON 40/40H
ECON 50/50H
FN 35
FN/WSTS 43
HMONG 1
HS/WSTS 25
HS 44
PHIL 1A
PHIL 1C
SOC 1A/1AH

SOC/WSTS 5 Sociology of Rape 3SOC/WSTS 7 Domestic Violence: Abuse Within the Family.3

SOC 32

Introduction to Marriage and Family ..... 3

SPAN 1

Beginning Spanish ..... 5
WSTS 10 Changing Roles of Women ..... 3

Note: An associate in science degree will be awarded on the successful completion of 60 units. See page 35 for associate degree requirements. General education requirements for transfer certification are on page 47.

For career options, consult with Human Services staff.

## PRE-SOCIAL WORK OPTION - FORMERLY SOCIAL WORK OPTION - MAJOR \#7633

This certificate of achievement is designed to prepare students for entry-level employment in a social service setting or with additional general 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.

The certificate of achievement offers course work leading to a certificate of achievement in Human Services: Pre-Social Work Option. Students must take the required courses listed in the Core (see below), and select 12 units from the list of options.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Demonstrate a fundamental working knowledge of the social services system.
2. Be prepared for entry-level employment in a social service setting.
3. Understand who are the underrepresented within our society and what might be appropriate interventions to assist them.
4. Apply the multiple perspectives of a broad liberal arts foundation to their analysis of social problems.
REQUIRED CORE COURSES Units
CIT 12 Computer Literacy, or.................................... 3

| AT 10 | Technical Computer Applications, or |
| :--- | :--- |
| BT 1 | Computer Document Processing I, or |
| CIT 15 | Computer Concepts..............................3-4 |

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 $\quad$ Counseling................................................
HS 30 Group and Community Social Services............... 3 Total 18-19
COURSE OPTIONS: Select 12 Units Units
AFRAM 1 Introduction to African American Studies ............. 3
AFRAM 2 African American Cultural Adaptation................. 3
AMIND 31 American Indian Culture.................................... 3
AMIND 34 The American Indian in Contemporary
AMST 10 American Pluralism: A Search for Common Ground in a Multicultural Society .. 3
ANTHRO 2/2H Cultural Anthropology, or Honors Cultural Anthropology

ASAMER 25 Asian American Social Issues

Beginning American Sign Language 4
CHDEV 5
SOC 31
CHDEV/PSY 38 ..... 3
CHDEV/PSY39 Child Growth and Development.CLS 11Introduction to Chicano-Latino Studies3
CLS 13 Politics and the Chicano-Latino Community. ..... 3
COMM 1COMM 4COMM 8
COMM 25
PHIL 6
ECON 25ECON 40/40HECON 50/50HFN 35
FN/WSTS 43HMONG 1 Beginning Hmong
HS/WSTS 25 Assertiveness Training ..... 2
HS 44 Drug Use: Physical and Psychological Effects. ..... 3SOC 1A/1AH
Introduction to Sociology, or Honors Introduction to Sociology ..... 3
SOC/WSTS 5 Sociology of Rape. ..... 3
SOC/WSTS 7 Domestic Violence: Abuse within the Family. .....  3
SOC 32 Introduction to Marriage and Family ..... 3
SPAN 1 ..... 5WSTS $10 \quad$ Changing Roles of Women.
For career options, consult with Human Services staff.
INDUSTRIAL TECHNOLOGY

- FORMERLY INDUSTRIAL ARTS AND TECHNOLOGY
-- MAJOR \#8992
This degree is designed for students that have a desire to learn aboutthe different subject areas within the Applied Technology Division. Astudent could also transfer to a four year university and earn a Bachelorof Science degree in Industrial Technology.
ASSOCIATE IN SCIENCE DEGREE
Student Learning Outcomes:

1. Create 3 D solid models using various extrusion methods.
2. Create and modify files using Microsoft Office programs.
REQUIRED COURSES ..... Units
AT 10 Technical Computer Applications ..... 3
AT 11 Basic Electricity ..... 3
CADD 16 3D Solid Modeling I ..... 3
Exploring Welding/Metals ..... 3

## 2019-2020 Fresno City College Catalog

| RECOMMENDED ELECTIVES (6 UNITS MINIMUM) |  |
| :---: | :---: |
| AUTOT 9 | Automotive Essentials .................................... 3 |
| CADD 14 | 2D CAD I.................................................... 3 |
| CAM 5 | CNC Operation \& Maintenance for |
|  | Machinist .................................................. 2.5 |
| CAM 10 | CNS Mill Programming \& Operation I................ 4 |
| DRAFT 12 | Drafting Practices .......................................... 3 |
| EST 51 | Direct Current Fundamentals of Electronics ........ 3 |
| EST 52 | Alternating Current Fundamentals..................... 3 |
| EST 53 | Lab Safety Practices ....................................... 2 |
| EST 54 | Integrated Devices ......................................... 3 |
| EST 55A | Digital Concepts........................................... 3 |
| EST 56B | Motor Controls............................................. 3 |
| EST 58 | Programmable Logic Controllers ...................... 3 |
| EST 59 | Instrumentation Systems................................ 3 |
| EST 60 | A+ PC Maintenance and Repair........................ 3 |
| EST 61 | Networking Fundamentals.............................. 3 |
| EST 62 | Routing \& Switching Essentials ....................... 3 |
| WELD 2A | Introduction to Welding Technology.................. 6 |CADD 14CAM 5CNC Operation \& Maintenance forMachinist2.5DRAFT 12 Drafting Practices3EST 52 Alternating Current Fundamentals3EST 54 La Sar3

EST 55ACors3
EST 58Instrumentation Systems3
EST 60Networking Fundamentals3WEID 2AIntroduction to Welding Technology6

## 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 REQUIREMENT (Select six units or two courses):
JOURN 4 Writing for the College Newspaper....................... 3
JOURN $6 \quad$ Magazine Production ......................................... 3
JOURN 11A Beginning Media Writing Practicum..................... 3
JOURN 11B Intermediate Media Writing Practicum ................. 3
JOURN 11C Advanced Media Writing Practicum ..................... 3
JOURN 11D Editorial Leadership ........................................... 3
JOURN 12 Online Newspaper Staff...................................... 3
Complete a total of twelve (12) units from the courses listed
below:
Units
ART 5 Art History Ancient to Medieval........................... 3
GRC 41 Visual Communications ..................................... 3
JOURN 2 Interpreting Current Events.................................. 3
JOURN 13 Advanced Reporting and Writing.......................... 3
JOURN 14 Multimedia Reporting......................................... 3
JOURN 15 Basic Editing for Journalists................................ 3
JOURN 19 Work Experience ............................................1-8
PHIL 1 C Ethics ............................................................... 3
PHOTO 30 Editorial Photography......................................... 3


Associate Degree
for Transfer
A Dekne with a Gaiawnton

## 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 Demonstrate the uses of photography, graphics and multimedia tools In media productions.
3. Report, write and edit news stories for multimedia and meet journalistic deadlines.

| CORE COURSES | (3 courses or 9 units): | Units |
| :--- | :--- | ---: |
| JOURN 1 | Introduction to Mass Communication .................... 3 |  |
| JOURN 3 | Newswriting ............................................. 3 |  |

KINESIOLOGY

## KINESIOLOGY - MAJOR \#4555

Kinesiology studies the function and performance of the human body though the sciences of anatomy, physiology, biomechanics, and psychology. With a diverse curriculum, students can choose from courses such as anatomy and physiology, health and wellness, nutrition, sports psychology, athletic training, and coaching. Students will be presented with both theoretical and practical applications of the science of kinesiology, as it pertains to exercise, sport, and physical activity. Coursework in this field is intended to improve students' knowledge about health, fitness, and lifetime wellness as they relate to personal and community well-being. A degree in kinesiology has become a valuable asset in pursuing relevant and rewarding professional careers.

## ASSOCIATE IN SCIENCE DEGREE <br> Student Learning Outcomes:

1. After completion of this program, the student will have the basic knowledge of the general foundation of kinesiology.
2. This course of study provides the student a background to pursue a career in the field of kinesiology.
REQUIRED COURSES Units
HLTH 1 Contemporary Health Issues ............................... 3
HLTH 2 First Aid and Safety ........................................... 3
PE 62 Introduction to Kinesiology ................................. 3
Select a minimum of 6 units from the following courses Units
BIOL 5 Human Biology ................................................. 4
BIOL 20 Human Anatomy, or
BIOL 21A Human Anatomy \& Physiology I...................... 4
BIOL 22 Human Physiology, or
BIOL 21B
Human Anatomy \& Physiology II ..................... 5
Nutrition and Health .......................................... 3
Sports Nutrition................................................. 2
Athletic Training ................................................ 4
Lifeguard Training .............................................. 3
Sports Officiating .............................................. 2
Sports Psychology ............................................. 3
Foundations of Coaching ................................... 3
Fitness/Wellness Activities: Minimum of one course (1 unit)

## Units

DANCE 9 Dance Conditioning ........................................... 1
DANCE 10A Beginning Modern Dance Technique.................... 1
PE 6
PE 8
PE 9
PE 15A Weight Training (Women)................................... 1
PE 15B Weight Training (Men)........................................ 1
PE 15C Weight Training (Coed) ...................................... 1
PE 17 Hatha Yoga........................................................ 1
PE 27 High-Intensity Cardio Interval Training................. 1
PE 29 C Off-Season Conditioning for Badminton .............. 1
PE 30C Off-Season Conditioning for Baseball .................. 1
PE 31C Off-Season Conditioning for Basketball ............... 1
PE 33C Off-Season Conditioning for Football................... 1
PE 34C Off-Season Conditioning for Golf........................ 1
PE 36C Off-Season Conditioning for Soccer..................... 1
PE 37C Off-Season Conditioning for Softball ................... 1
PE 38C Off-Season Conditioning for Tennis ..................... 1
PE 39C Off-Season Conditioning for Track and Field........ 1
PE 40C Off-Season Conditioning for Volleyball................ 1
PE 41C Off-Season Conditioning for Wrestling ............... 1
PE 42C Off-Season Conditioning for Water Polo .............. 1

| PE 43C | Off-Season Conditioning for Swimmi |  |
| :---: | :---: | :---: |
|  |  |  |
| PE 45 | Performance Training and Conditioning |  |
|  | Techniques for Intercollegiate Athletic |  |
| PE 70 | Fitness Aerobics. |  |
| PE 72 | Spinning for Fitness. |  |
| Individua//Dual Sports: Minimum one course (1-3 units) |  | Units |
| PE 3 | Archery.. |  |
| PE 4 | Badminton. |  |
| PE 7 | Golf |  |
| PE 12 | Swimming |  |
| PE 13 | Tennis |  |
| PE 13B | Intermediate Tennis.. |  |
| PE 29B | Competitive Badminton. |  |
| PE 32B | Competitive Cross Country .. |  |
| PE 34B | Competitive Golf.. |  |
| PE 38B | Competitive Tennis. |  |
| PE 39B | Competitive Track and Field. |  |
| PE 41B | Competitive Wrestling. |  |
| PE 43B | Competitive Swimming \& Diving |  |
| Team Sports: Minimum one course (1-3 units) |  | Units |
| PE 5 | Basketball. |  |
| PE 14 | Volleyball. |  |
| PE 30B | Competitive Baseball. |  |
| PE 31B | Competitive Basketball. |  |
| PE 33B | Competitive Football. |  |
| PE 35B | Cheer and Stunt |  |
| PE 36B | Competitive Soccer |  |
| PE 37B | Competitive Softball. |  |
| PE 40B | Competitive Volleyball |  |
| PE 42B | Competitive Water Polo.. |  |
| PE 71 | Soccer... |  |
|  | Total | 18-26 |
|  | Associate Degree for Transfer A Devre with a Chanantas |  |
| KINESIOLOGY FOR TRANSFER - MAJOR \#4555 |  |  |
| An Associate in Arts in Kinesiology for Transfer is designed for students who plan to complete a bachelor's degree in Kinesiology at a CSU or UC campus. An Associate in Arts in Kinesiology prepares students to pursue studies in fields such as kinesiology/physical education credential programs, exercise science, athletic training/sports medicine, and sports administration. To earn the Associate in Arts in Kinesiology for Transfer, students must complete a maximum of 60 required semester units of |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and $22-23$ semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Recognize and evaluate the importance of a healthy and physically active lifestyle.
2. Identify the major systems of the human body as they relate to movement and activity by explaining and applying the principles of anatomy and physiology.
REQUIRED CORE COURSES: 15 units
Units
BIOL 20 Human Anatomy, and
BIOL 22 Human Physiology, or
BIOL 21A Human Anatomy \& Physiology I, and
BIOL21B Human Anatomy \& Physiology II.................... 9
HLTH 2 First Aid and Safety........................................ 3
PE 62 Introduction to Kinesiology .............................. 3
REQUIRED CORE COURSES: 3 units Units
Select a minimum of 3 different courses from the following for a
total of 3 or more units. Units
PE 3 Archery..................................................... 1
PE 4 Badminton................................................... 1
PE 5 Basketball.............................................................. 1
PE 7 Golf ............................................................ 1
PE 12 Swimming.............................................................
PE 13 Tennis.......................................................... 1
PE 14 Volleyball.................................................... 1
PE 15A Weight Training (Women)................................ 1
PE 15B Weight Training (Men)................................... 1
PE 15C Weight Training (Coed) .................................. 1
PE 17 Hatha Yoga ................................................ 1
ELECTIVES: 4 units Units
Select a minimum of 1 course from the following for a total of 4 or
more units. Units
CHEM 1A General Chemistry......................................... 5
DS 23 Business Statistics ......................................... 3
MATH 11 Elementary Statistics ...................................... 4
PHYS 2A General Physics 1 ......................................... 4
Total 22-23

## LAW

## PRE-LAW IN INTERDISCIPLINARY STUDIES

- MAJOR \#8710

The Interdisciplinary Pre-Law degree is designed to provide students with the background and skills necessary to succeed in pre-law programs at 4 -year institutions, and law schools. Students in this program will develop the reading comprehension, written communication, research, and critical reasoning skills that will help them excel in the legal field. In addition, students will gain an understanding and appreciation of historical, social, political and economic issues related to law. The courses in the program fit the general education requirements for the Associate's Degree, as well as California State University and University of California transfer. Students enrolled in the pathway to law school program are encouraged to pursue the Interdisciplinary Pre-Law degree.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Demonstrate independent and critical thinking regarding important topics in law.
2. Conduct research and effectively write about historical, social, political and economic issues related to law.

## REOUIRED CORE COURSES Units

AMST 11 Law and Democracy ........................................... 3
BA 18 Business and the Legal Environment.................... 4
COMM 4 Persuasion....................................................... 3
CRIM 6 Concepts of Criminal Law .................................. 3
ENGL 1 A Reading and Composition................................... 4
HIST $12 \quad$ History of the United States since 1877................ 3
MATH 42 Statistics for the Behavioral Sciences................... 4
PHIL 1B Social and Political Philosophy........................... 3
PHIL 1C Ethics ................................................................ 3
PHIL 2 Critical Reasoning and Analytic Writing ............... 3
PHIL 6 Symbolic Logic ................................................. 3
POLSCI 2 American Government........................................ 3
POLSCI 13 Legal and Judicial Reasoning.............................. 3
Select two courses: Units
HIST 21 United States Civil War ...................................... 3
HIST/WSTS 22 History of American Women................................ 3
HIST 25 History of Religion in the United States............... 3
HIST/AFRAM $34 \begin{aligned} & \text { History of the American Civil Rights } \\ & \\ & \text { Movement................................................... } 3\end{aligned}$
Recommended for GE pattern: Units
AFRAM 3 African-American Art.......................................... 3
ANTHRO 1 Biological Anthropology................................. 3
GEOG 7 Physical Geography: Earth's Surface ................... 4
LITEC 61 Information and Computer Literacy ...................... 3
PSY 2 General Psychology ........................................ 3
Physical Education Courses. ..... 2
Suggested sequence of courses:
First Semester (Fall) ..... Units
CRIM $6 \quad$ Concepts of Criminal Law ..... 3
ENGL 1A Reading and Composition ..... 4
HIST $12 \quad$ History of the United States since 1877 ..... 3
LITEC 61 Information and Computer Literacy ..... 3
Physical Education Course ..... 1
Second Semester (Spring) ..... Units
BA 18 Business and the Legal Environment .....  .4
COMM $4 \quad$ Persuasion ..... 3
HIST 21 United States Civil War, or
HIST/WSTS 22 History of American Women ..... 3
PHIL $2 \quad$ Critical Reasoning and Analytic Writing ..... 3
PSY 2 General Psychology ..... 3
Third Semester (Fall) ..... Units
HIST 25 History of Religion in the United States, orHIST/AFRAM 34 History of the American Civil Rights
Movement ..... 3
MATH 42 Statistics for the Behavioral Sciences. ..... 4
PHIL 1C Ethics ..... 3
PHIL 6 Symbolic Logic ..... 3
POLSCI 13 Legal and Judicial Reasoning. ..... 3
Physical Education Course ..... 1
Fourth Semester (Spring) ..... Units
AFRAM 3 African-American Art ..... 3
AMST 11 Law and Democracy ..... 3
ANTHRO 1 Biological Anthropology ..... 3
GEOG 7 Physical Geography: Earth's Surface ..... 4
PHIL 1B Social and Political Philosophy. ..... 3
PHIL 2 Critical Reasoning and Analytic Writing ..... 3
Total ..... 66
LIBERAL ARTS

## ASSOCIATE OF ARTS LIBERAL ARTS DEGREE WITH AREAS OF EMPHASIS

The associate in arts (A.A.) degree in Liberal Arts Degree is designed for students who wish a broad knowledge of liberal arts and sciences plus additional coursework in an "Area of Emphasis". The associate in arts in Liberal Arts Degree would be an ideal choice for those students planning on transferring to the California State University or University of California as the student can satisfy their general education requirements, plus focus on transferable course work that relates to majors at CSU or UC.

Choose either Option I or II or III for the General Education Pattern related to your educational goal.

Complete the required number of units in one "Area of Emphasis" from those outlined below.

For ALL OPTIONS: complete the necessary Fresno City College graduation requirements.

All classes listed below transfer to CSU. Refer to www.ASSIST.org for transfer details or see a counselor for additional details.

ASSOCIATE IN ARTS DEGREE: Students selecting this option must complete all of the required courses for Fresno City College AA/AS General Education Pattern. This option may not adequately prepare the student for transfer to a 4-year institution.

CSU/GE: Students intending to transfer to a CSU should complete this option. Students selecting this option must complete all of the required courses for CSU GE Certification.

IGETC: Students who intend to transfer to a UC should complete this option. Students selecting this option must complete all of the required courses for IGETC Certification.
AREAS OF EMPHASIS:
Choose one of the following "Area of Emphasis":
American Sign Language
Anthropology/Criminology
Anthropology/Economics/Geography
Asian Languages
Cultural Studies
Foreign Languages
History/Political Science
Romance Languages
Social Sciences
Sociology
Spanish
Complete the minimum number of units required in the "Area of Emphasis".

For All Options: complete the necessary Fresno City College Graduation and Competency requirements.

Electives may be necessary to total 60 degree applicable units required for the associate degree.

## LIBERAL ARTS WITH AN EMPHASIS IN AMERICAN SIGN LANGUAGE - MAJOR \#5101

This program is designed to acquaint students with ASL and with an understanding of the culture and history of the people who use the Language.

It will also encourage them to appreciate the complexities of the multicultural society in which they live. Students will acquire the necessary sign language skills to succeed in everyday life experiences, vocational programs, and university transfer courses.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Students will acquire and demonstrate signing, skills at the in-termediate-advanced level of the target language consistent with national standards for foreign language education.
2. Students will show evidence of the acquisition and application of grammatical structures when using American Sign Language.
3. Students will acquire and demonstrate skills necessary to analyze, compare and contrast cultures and practices between Deaf and hearing cultures.
4. Students will demonstrate familiarity with technologies allowing them to access sources in the following areas: current news from the target language, bibliographical and other sources related to coursework, contemporary culture sources, and interactive communication sites.
Minimum of 22 units from the following: 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 7 Deaf History ...................................................... 3
ASL 8 American Sign Language/Literature ..................... 3 Total 18
*Note:
5. Two of the following courses may be challenged according to Foreign Language Department policy: ASL 1, 2.
6. An associate in arts degree in Liberal Arts with an emphasis in American Sign Language will be awarded to students who successfully complete a total of 60 units, which include the associate degree requirements and a minimum of 18 units of core course work listed above. Students seeking an associate degree may apply for an evaluation after they have completed $30-40$ units and are within one year of graduation.

## LIBERAL ARTS DEGREE WITH AN EMPHASIS IN ANTHROPOLOGY/CRIMINOLOGY

## - MAJOR \#5106

This program is designed to provide students with a foundation in the social science disciplines related to forensic investigation. The program offers students an introduction to the intersection between the study of humans and their physical remains and the legal contexts of such analyses. This area of emphasis will be an ideal choice for students planning to transfer to the California State University or University of California as students can satisfy their general education requirements, plus focus on transferable course work that relates to majors at the specific college/ university of his/her choice. With this emphasis students could major in either of the two disciplines at their transfer institution. *Students are encouraged to review the lower division requirements at their planned transfer institution as a major in anthropology with a forensics emphasis may require courses in other disciplines such as mathematics, chemistry and biology.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

Upon completion of the Associates in Arts with an Emphasis in Criminology/Anthropology students will:

1. Be academically prepared to transfer to a four-year college.
2. Have a basic level of knowledge of the process of identification and classification of skeletonized human remains.
3. Have basic skills in criminal investigation and crime scene processing.
4. Have developed skills in critical thinking.

Select 19 Units from the following sections:
$\begin{array}{llr}\text { Required Course: } & & \text { Units } \\ \text { ANTHRO } 1 & \text { Biological Anthropology ... } & 3\end{array}$
ANTHRO 1 Biological Anthropology ................................. 3
Select six units from the following Anthropology courses:
*ANTHRO 1L Biological Anthropology Laboratory.................... 1
ANTHRO 2/2H Cultural Anthropology, or Honors Cultural Anthropology ..................... 3
ANTHRO 4 Introduction to Archaeology............................ 3
ANTHRO 15 Laboratory Methods in Archaeology ................ 4
ANTHRO 16A Field Archaeology I........................................ 2
ANTHRO 16B Field Archaeology II ....................................... 2
ANTHRO 24 Doing Archaeology: Hands-On! ................... 1.5
Required Criminology Courses:
CRIM 1 Introduction to Criminology............................ 3
CRIM 8 Criminal Investigation..................................... 4
CRIM 9 Crime Scene Forensic Evidence....................... 3
Total 10
*Highly recommended for students wanting to pursue forensic anthropology.

## LIBERAL ARTS DEGREE WITH AN EMPHASIS IN ANTHROPOLOGY/ECONOMICS/GEOGRAPHY

- MAJOR \#5107

This program is designed to acquaint students with the diversity of human culture, the environments in which cultures exist, the patterns of resource use that they practice, and the effects of modern economic practices and globalization on the peoples of the world. This area of emphasis will be an ideal choice for students planning to transfer to the 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 $20 \quad$ Native Peoples of California ................................ 3
ANTHRO 1 Biological Anthropology...................................... 3
ANTHRO 2/2H Cultural Anthropology, or Honors Cultural Anthropology ........................ 3
ANTHRO 3 Archaeology and World Prehistory, or
ANTHRO 4 Introduction to Archaeology............................ 3
ANTHRO 8 Language and Culture ........................................ 3
ANTHRO 13 Anthropology of Magic, Witchcraft, and Religion.. .3
ANTHRO/CLS 28 Ancient Mexico .................................................. 3
ECON 40/40H Introduction to Microeconomics, or Honors Introduction to Microeconomics.......... 3
ECON 50/50H $\begin{gathered}\text { Introduction to Macroeconomics, or } \\ \text { Honors Introduction to Macroeconomics......... } 3\end{gathered}$
GEOG 2 Cultural Geography ............................................ 3
GEOG 4A World Geography .............................................. 3
GEOG 4B World Geography .............................................. 3
GEOG 20 Geography in California ..................................... 3

## LIBERAL ARTS DEGREE WITH AN EMPHASIS IN CULTURAL STUDIES - MAJOR \#5121

This program is designed to acquaint students with the diversity of cultures, particularly within American society. The program offers a broad foundation for the study of cultures as well as classes specific to various ethnic cultures within the United States.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

Upon completion of the Associates in Arts with an Emphasis in Cultural Studies students will:

1. Be academically prepared to transfer to a four-year college.
2. Be prepared to enter the workforce and society with a cultural awareness that facilitates consideration of different cultures and cultural norms.
3. Have an understanding of the rich cultural diversity of the United States.
4. Have developed skills in critical thinking.

18 units from any of the following (but no more than 6 units from each discipline) Units AFRAM 1 Introduction to African American Studies ............. 3
AFRAM 2 African American Cultural Adaptation................. 3
AFRAM 4 Classical and Pre Colonial Africa....................... 3
AFRAM 5 The Arrican Diaspora of the Americas................. 3
AFRAM 6 African Cultures and Languages........................ 3
AFRAMMSTS 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
ANTHRO 2/2H Cultural Anthropology, or $\begin{aligned} & \text { Honors Cultural Anthropology ...................... } 3\end{aligned}$
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
ASAMERWSTS 30 Asian-American Women................................... 3
AMST 10 American Pluralism: A Search for Common
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 $\begin{aligned} & \text { Community .............................................. } 3\end{aligned}$
CLS/WSTS 24 La Chicana and Latina................................... 3

CLS $30 \quad \begin{aligned} & \text { Migration and the Family: Social and } \\ & \text { Psychological Perspectives............................ } 3\end{aligned}$
CHDEV 15 Diversity and Culture in Early Childanood $\quad$ Education Programs................................... 3
GEOG 2 Cultural Geography ....................................... 3
GEOG 4A World Geography .......................................... 3
GEOG 4B World Geography .......................................... 3
GEOG 20 Geography in California ..................................... 3
POLSCl 24 International Relations................................... 3
SOC 1B Critical Thinking about Social Problems .............. 3
SOC 2 American Minority Groups................................ 3
WSTS 10 Changing Roles of Women.............................. 3
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 $2 \quad$ 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 2NS Preparatory Spanish for Native Speakers.............. 5
SPAN 3 Intermediate Spanish.......................................... 5
SPAN 3NS Spanish for Spanish Speakers............................. 5
SPAN $4 \quad$ High-Intermediate Spanish................................. 5
SPAN 4NS Spanish for Spanish Speakers............................. 5
SPAN 5 The Short Story: Mexico, Spain, and the U.S. ...... 4
SPAN 6 The Short Story: Latin America........................... 4
SPAN 7 Advanced Spanish: Composition and Grammar ... 4
SPAN 8 Advanced Spanish Conversation......................... 4
SPAN 9 Spanish Business and Culture ............................ 4
SPAN 41 Introduction to Poetry in Spanish........................ 4
SPAN 42 Hispanic American Culture................................. 4
Total 20

## LIBERAL ARTS DEGREE WITH AN EMPHASIS IN 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 12/12H History of the United States since 1877, or Honors History of the United States since 1877 3
HIST 15 History of the British Isles ......................................... 3
HIST 17 History of the Muslim World to 1405 ................... 3
HIST 18 History of Ancient Greece.................................... 3
HIST 20 World History I, to 1600..................................... 3
HIST 21 United States Civil War ...................................... 3
HIST 22/WSTS 22 History of American Women...................................... 3
HIST 23 World History II, since 1500................................ 3
HIST 25 History of Religion in the United States................. 3
HIST/CLS 29
History of Mexico, Colonial to Contemporary Period 3
HIST $30 \quad$ California History ..... 3
HIST 34/AFRAM 34 History of the American Civil Rights Movement ..... 3
POLSCI 1 Modern Politics. ..... 3
POLSCl 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 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): Units
AFRAM 1 Introduction to African American Studies ............. 3
AFRAM 3 African-American Art.......................................... 3
AMIND 31 American Indian Culture....................................................................
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 Ground in a Multicultural Society........................ 3
Introduction to Chicano-Latino Studies................ 3
Mexican American History .................................. 3
Child Growth and Development........................... 3
Introduction to Microeconomics, or Honors Introduction to Microeconomics.......... 3
Introduction to Macroeconomics, or
Honors Introduction to Macroeconomics......... 3
Cultural Geography ........................................... 3
World Geography .............................................. 3
World Geography .............................................. 3
Western Civilization to 1648, or Honors Western Civilization to 1648................ 3
$\begin{array}{ll}\text { HIST 2/2H } \quad \text { Western Civilization since 1648, or } \\ & \text { Honors Western Civilization since } 1648 \text {.......... } 3\end{array}$
HIST 15 History of the British Isles .....  3
HIST 17 History of the Muslim World ..... 3
HIST 18 History of Ancient Greece ..... 3
HIST 21 United States Civil War ..... 3
HIST 22 History of American Women. ..... 3
HIST 29 History ..... 3
HIST 30 California History ..... 3
HIST 34 History of the American Civil Rights Movement...
HS 20 Introduction to Social Welfare ..... 3
POLSCI 1 Modern Politics. ..... 3
POLSCI 5 Comparative Government. ..... 3
POLSCI 24 International Relations ..... 3
PSY 2/2H General Psychology, or Honors General Psychology. ..... 3
PSY 5 Social Psychology. ..... 3
PSY 15 Psychology of Religion ..... 3
PSY 25 Human Sexuality ..... 3
PSY 33 Personal and Social Adjustment ..... 3
SOC 1A/1AH Introduction to Sociology, or Honors Introduction to Sociology ..... 3
SOC 1B Critical Thinking about Social Problems ..... 3
SOC 2 American Minority Groups ..... 3
SOC/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. ..... 3
SOC 32 Introduction to Marriage and Family ..... 3
WSTS 10 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

## 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 Units |  |
| :---: | :---: |
| SPAN 2 | High-Beginning Spanish, or |
| SPAN 2NS | Preparatory Spanish for Spanish Speakers ...... 5 |
| SPAN 3 | Intermediate Spanish, or |
| SPAN 3NS | Intermediate Spanish for Spanish |
|  | Speakers .................................................. 5 |
| SPAN 4 | High-Intermediate Spanish, or |
| SPAN 4NS | High-Intermediate Spanish for |
|  | Spanish Speakers ...................................... 5 |

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 $7 \quad$ Advanced Spanish: Composition and Grammar .
SPAN $8 \quad$ Advanced Spanish Conversation......................... 4
SPAN 9 Spanish Business and Culture ............................ 4
SPAN 41 Introduction to Poetry in Spanish........................ 4
SPAN 42 Hispanic American Culture................................. 4
Total 23
Note: Two of the following courses may be challenged according to Foreign Language Department policy: Spanish 1, 2.

## LIBRARY TECHNOLOGY

## LIBRARY TECHNOLOGY - MAJoR \#5171

Program prepares students to work as a paraprofessional in a variety of libraries.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Apply basic knowledge of library principles and practices to a specific library setting.
2. Perform skills associated with the technical service functions in libraries.
3. Use skills associated with the delivery of public services currently in use in libraries.
4. Analyze the purpose of the paraprofessional in all types of libraries.


## LIBRARY TECHNOLOGY - MAJoR *5171

Certificate of Achievement prepares students to work as a paraprofessional in a variety of libraries.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Apply basic knowledge of library principles and practices to a specific library setting.
2. Perform skills associated with the technical service functions in libraries.
3. Use skills associated with the delivery of public services currently in use in libraries.
4. Analyze the purpose of the paraprofessional in all types of libraries.

| REQUIRED COURSE WORK |  | Units |
| :---: | :---: | :---: |
| LITEC 51 | Introduction to Library Services .. | . 3 |
| LITEC 52A | Organization of Information... | 3 |
| LITEC 52B | Collection Management..... |  |
| LITEC 55 | Library Public Service. |  |
| LITEC 56 | Information Technology. |  |
| LITEC 57 | Reference: Print and Online Sources.. | .... 3 |
| LITEC 61 | Information and Computer Literacy . |  |
| Select one of the following: |  | Units |
| LITEC 54 | Literature and Services for Youth. |  |
| LITEC 62 | Medical Resources and Libraries. |  |
| LITEC 63 | Legal Resources and Libraries .. |  |
|  | Tota | 21-22 |

Note: Requires completion of the major (21-22 units). Students interested in a Certificate of Achievement are urged to consulta counselor or faculty adviser regarding this program.

## MANUFACTURING TECHNICIAN <br> - MAJOR \#8061

This curriculum provides training in maintenance mechanic, electrical control systems, and principles of industrial refrigeration (ammonia) systems.

## CERTIIICATE

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 Refrigeration ........ 52 Hours
EST 50 Introduction to Electronics ......................... 3 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

$\begin{array}{lr}\text { First Semester } & \\ \text { MKTG } 10 & \text { Principles of Marketing ..................................... } 3\end{array}$
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 |  |
| MKTG 12 | Advertising and Promotion. |  |
| Associate Degree Requirements ................................................ 7 |  |  |
|  | Total | 16 |
| SECOND YEAR |  |  |
| First Semester |  | Units |
| MKTG 14 | Retailing |  |
| Associate Degree Requirements. |  | 10 |
|  | Total | 13 |
| Second Semester |  | Units |
| MKTG 21 | Digital Marketing. | ... 3 |
| BT 115 | Refresher Math. |  |
| Associate Degree Requirements ................................... |  | .. 10 |
|  | Total | 16 |
| Recommended Electives: ACCTG 4A; BA 5, 10; MKTG 17, 19. (MKTG |  |  |
| 19, 1st \& 2nd se experience.) | mester, should be equivalent to 500 ho | of work |

Note: Associate degree requirements are listed on page 35.

## 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.

## REOUIRED COURSES 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.

REOUIRED COURSES Units
MKTG 10 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.

## CERTIIICATE

## 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.
REOUIRED COURSES Units
MKTG 14 Retailing............................................................ 3
MKTG 17 Visual Merchandising ........................................ 3
MKTG 22 Introduction to Fashion Merchandising................ 3
Total 9

## MARKETING, FASHION MERCHANDISING <br> - MAJOR \#2152

This degree prepares students for employment in the field of Fashion Merchandising.

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcome:

1. Prepares students for a wide variety of careers related to marketing, management, buying, and selling of fashion goods.
REQUIRED CORE COURSES Units
ACCTG 4A Financial Accounting.......................................... 4
ART 3 Two-Dimensional Design .................................... 3
ECON 40 Introduction to Microeconomics ......................... 3
FM 26 Apparel and Textiles ........................................... 3
FM 27 Introduction to Fashion Merchandising................ 3
ELECTIVE COURSES (CHOOSE ONE) Units
CIT 15 Computer Concepts ........................................... 3
DS 21 Finite Mathematics ........................................... 3
Total 19
RECOMMENDED SEQUENCE
First Year - First Semester Units
ART 3 Two-Dimensional Design .................................... 3
Elective Course ............................................................................. 3
First Year - Second Semester Units
ECON 40 Introduction to Microeconomics .......................... 3
Second Year - First Semester Units
ACCTG 4A Financial Accounting.......................................... 4
FM 27 Introduction to Fashion Merchandising................. 3
Second Year - Second Semester Units
FM 26 Apparel and Textiles ............................................ 3
Notes:
2. 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.
3. Associate degree requirements are listed on page 35.
4. General Education requirements for transfer certification are on page 47.

## MARKETING, FASHION MERCHANDISING <br> - 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
ART 7 Beginning Drawing............................................. 3
BA $51 \quad$ Business Planning and New Venture
Launch1.5

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
TA 36 Costume Design................................................ 3
Total $\quad 25.5$
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 |  |
| BA 33 | Human Relations in the Workplace.. |  |
| BA 43 | Principles of Management. |  |
| CIT 15 | Computer Concepts |  |
|  | Total | 12 |
| Second Semester |  | Units |
| BA 31 | Human Resource Management... | ..... 3 |
| BT 131 | Applied Accounting, or |  |
| ACCTG 4A | Financial Accounting........ | ..3.5-4 |
| MKTG 10 | Principles of Marketing. | ....... 3 |
| MKTG 14 | Retailing..... | . 3 |

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 35 of the catalog, upon application, will be awarded the associate in science degree.

## PERSONAL SALES - MAJOR \#2114

A step incentive certificate signifying proficiency in personal sales.

## CERTIFICATE

## Student Learning Outcomes.

1. Identify marketing-related opportunities.
2. Design and execute a sales promotion plan.
3. Identify and describe the principles of personal sales promotion and appropriate applications in various sales situations.
4. Display soft skills required for workplace success including team building, conflict management, communication, and professional behavior.

## REQUIRED COURSES Units

BA 33 Human Relations in the Workplace....................... 3
MKTG 10 Principles of Marketing ...................................... 3
MKTG 11 Selling and Sales Management........................... 3
Total 9

## RETAILING - MAJOR \#2116

A step incentive certificate signifying proficiency in entry-level retailing skills.

## CERTIFICATE

## Student Learning Outcomes:

1. Develop and implement a marketing plan in response to market opportunities.
2. Apply effective leadership skills while managing marketing functions within a business enterprise.
3. Identify and describe appropriate application of the wheel of retailing to various retailing situation.
4. Identify and describe the types of retailers and appropriate distribution methods for each type of retail situation.
5. Display soft skills required for workplace success including team building, conflict management, communication, and professional behavior.
REOUIRED COURSES Units
BA 33 Human Relations in the Workplace....................... 3
MKTG $10 \quad$ Principles of Marketing ...................................... 3
MKTG 14 Retailing........................................................... 3
Total 9

Associate Degree
for Transfer
A Degne with a Mainanter:

## MATHEMATICS FOR TRANSFER

- FORMERLY MATHEMATICS - MAJOR \#6250

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

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Students will solve application problems in the natural sciences, management sciences, and social sciences using sound mathematical principles.
2. Students will demonstrate algebraic proficiency when using the concepts taught in each course to solve multi-step problems.
3. Students will use limits, derivatives, and integrals to calculate rates of change and infinite sums.

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

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

## 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 Assis-tant-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 ............................................ 4
BT 23 Job Search and Workplace Skills ....................... 3
CIT 15 Computer Concepts ........................................... 3
FN $40 \quad$ Nutrition..................................................... 3
HIT 10 Medical Terminology...................................... 3
HLTH 2 First Aid and Safety....................................... 3
HS 24 Interviewing and Counseling............................. 3
MA1 Legal and Ethical Concepts ................................ 2
MA 2 Pharmacology ..................................................... 3
MA 4 Office Lab Procedures ...................................... 3
MA 5 Diagnostic and Therapeutic Procedures ............... 3
MA 6A Clinical Training......................................... 3
MA 6B Advanced Training......................................... 3
MA 19 Work Experience (Cooperative),
Occupational ................................................. 3
Total 42
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 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 Assis-tant-Clinician Program and be prepared to furnish transcripts when requested.
4. Have no physical impairment that would preclude the performance of all Medical Assistant-Clinician duties. After selection as a qualified student to the Medical Assistant-Clinician Program, the student must submit evidence of physical examination by a licensed physician.
5. Students are enrolled into the program in cohorts per semester.
CERTIFICATE OF ACHIEVEMENT
Student Learning Outcomes:
6. Identify common medical conditions and diseases.
7. Perform clinical skills commonly associated in the physician'soffice.
REQUIRED COURSES ..... Units
MA 1 Legal and Ethical Concepts ..... 2
MA 2 Pharmacology ..... 3
MA 4 Office Lab Procedures ..... 3
MA 5 Diagnostic and Therapeutic Procedures ..... 3
MA 6A Clinical Training .....  3
MA 6B Advanced Training. ..... 3
MA 19 Work Experience (Cooperative), Occupational .....  3
Total 20
MUSICAssociate Degreefor TransferA Desare with a Glainutay
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.
REOUIRED CORE COURSES ..... Units
MUS 1A Music Theory I ..... 3
MUS 1B Music Theory II ..... 3
MUS 2A Music Theory III ..... 3


MUS 1B Music Theory II............................................... 3
MUS 2A Music Theory III............................................ 3
MUS 2B Music Theory IV............................................... 3
MUS 7A Ear Training: Level I....................................... 1
MUS 7B Ear Training: Level II..................................... 1
MUS 7C Ear Training: Level III..................................... 1
MUS 7D Ear Training: Level IV ..................................... 1
MUS 13 History of Music........................................... 3
MUS 18 Basic Conducting and Score Reading ................. 2
Select eight units of Large Ensemble from the following: Units
MUS 40 Concert Band ........................................................ 2
MUS 46 Symphony Orchestra.................................... 2
MUS 68 Symphonic Band......................................... 2
MUS $76 \quad$ College Philharmonic Orchestra. 2

Brass, Woodwinds, String, and Percussion players select eight units in your field from the following: Units MUS 42A Intermediate/Advanced Brass (Brass Choir)...... 1-2
$\begin{array}{ll}\text { MUS 42C } & \text { Intermediate/Advanced Strings } \\ \text { (String Orchestra)........................................-2 }\end{array}$
MUS 42D $\begin{aligned} & \text { Intermediate/Advanced Percussion } \\ & \text { (Percussion Ensemble)...............................-2 }\end{aligned}$
VOCAL MAJORS - MAJOR \#5820
ASSOCIATE IN ARTS DEGREE
Student Learning Outcomes:

1. Perform vocal music of at least three different time periods.
2. Hear, analyze, read, and write music.
3. Distinguish historical musical styles while using appropriate conducting patterns.
REQUIRED CORE COURSES Units
MUS 1A Music Theory I................................................ 3
MUS 1B Music Theory II.................................................. 3
MUS 2A Music Theory III............................................. 3
MUS 2B Music Theory IV............................................ 3
MUS 7A Ear Training: Level I....................................... 1
MUS 7B Ear Training: Level II......................................... 1
MUS 7C Ear Training: Level III........................................... 1
MUS 7D Ear Training: Level IV ...................................... 1
MUS 13 History of Music............................................... 3
MUS 18 Basic Conducting and Score Reading ................. 2 Total 21

Eight units of Intermediate/Advanced class requirement: Units MUS 26 Intermediate/Advanced Voice ............................-2
Select eight units of Large Ensemble from the following:
Units
MUS 30 College Choir............................................-. $1-7$
MUS 34 Fresno Chorale..........................................1-2
MUS 39 Opera and Musical Theatre Workshop................. 2
MUS 39A Opera Workshop - Baroque/Classical .................. 2
MUS 39B Opera Workshop: Romantic Period ..................... 2
MUS 39C Classical Musical Opera.................................. 2
MUS 38D Contemporary Opera and Musical Theatre ........... 2
MUS 60 Symphonic Choir........................................ 2

## GUITAR MAJORS - MAJOR \#5830

## ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Perform guitar music of at least three different time periods.
2. Hear, analyze, read, and write music.
3. Distinguish historical musical styles while using appropriate conducting patterns.

REOUIRED CORE COURSES Units
MUS 1A Music Theory I.................................................. 3
MUS 1B Music Theory II................................................. 3
MUS 2A Music Theory III ................................................ 3
MUS 2B Music Theory IV................................................ 3
MUS 7A Ear Training: Level I........................................... 1
MUS 7B Ear Training: Level II...................................... 1
MUS 7C Ear Training: Level III...................................... 1
MUS 7D Ear Training: Level IV .......................................... 1
MUS 13 History of Music................................................ 3
MUS 18 Basic Conducting and Score Reading ................. 2 Total 21

Eight units of INT/ADV class requirement: Units
MUS 29 Intermediate/Advanced Guitar ........................1-2
For the Large Ensemble requirement, all guitar majors select eight units from the following: Units
MUS 30 College Choir.................................................... 2
MUS 34 Fresno Chorale................................................. 2
MUS 40 Concert Band .................................................... 2
MUS 41 Jazz Ensemble................................................... 2
MUS 46 Symphony Orchestra.......................................1-2
MUS 47A Jazz Combo: New Orleans, Swing and Bop.......... 2
MUS 47B Jazz Combo: Cool and Mainstream.................... 2
MUS 47C Jazz Combo: Modern and Fusion........................ 2
MUS 47D Jazz Combo: World Music .................................. 2
MUS 48 Latin Jazz Ensemble ............................................ 2
MUS 53 Latin Jazz Workshop ...................................... 2
MUS 54 Afro-Latin Ensemble............................................ 2
MUS 55 Afro-Caribbean Ensemble ................................. 2

| MUS 60 | Symphonic Choir.......................................................................................... 2 |
| :--- | :--- |
| MUS 68 | Symphonic Band............................................................................................................ 2 |

## PIANO MAJORS - MAJOR \#5840

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Perform piano music of at least three different time periods.
2. Hear, analyze, read, and write music.
3. Distinguish historical musical styles while using appropriate conducting patterns.
REQUIRED CORE COURSES Units
MUS 1A Music Theory I................................................. 3
MUS 1B Music Theory II............................................. 3
MUS 2A Music Theory III.............................................. 3
MUS 2B Music Theory IV.............................................. 3
MUS 7A Ear Training: Level I....................................... 1
MUS 7B Ear Training: Level II....................................... 1
MUS 7C Ear Training: Level III...................................... 1
MUS $7 D \quad$ Ear Training: Level IV ..................................... 1
MUS 13 History of Music............................................ 3
MUS 18 Basic Conducting and Score Reading ................. 2 Total 21
Eight units of INT/ADV class requirement: Units
MUS 22 Intermediate/Advanced Piano........................... 1-2
For the Large Ensemble requirement, all piano majors select
eight units from the following:
MUS $30 \quad$ College Choir................................................. 2
MUS 34 Fresno Chorale.................................................... 2
MUS 40 Concert Band ................................................ 2
MUS 41 Jazz Ensemble.........................................................
MUS 46 Symphony Orchestra.................................... $1-2$
MUS 47A Jazz Combo: New Orleans, Swing and Bop.......... 2
MUS 47B Jazz Combo: Cool and Mainstream..................... 2
MUS 47C Jazz Combo: Modern and Fusion........................ 2
MUS 47D Jazz Combo: World Music ................................. 2
MUS 48 Latin Jazz Ensemble....................................... 2
MUS 53 Latin Jazz Workshop ........................................ 2
MUS 54 Afro-Latin Ensemble.............................................. 2
MUS 55 Afro-Caribbean Ensemble ................................. 2
MUS 60 Symphonic Choir............................................ 2
MUS 68 Symphonic Band.......................................... 2
MUS 70 Contemporary Jazz Ensemble.......................... 2
MUS 71 Lab Jazz Ensemble......................................... 2
MUS 72 Jazz Composer's Orchestra.............................. 2

MUS 76
MUS 90
MUS 91
MUS 92

## BRASS PERFORMANCE - MAJoR *5811

The Brass Performance Certificate Program ensures that the brass music major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

## CERTIFICATE

## Student Learning Outcomes:

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES
Units
MUS $3 \quad$ Music Fundamentals, or
MUS 1A Music Theory I............................................... 3
MUS 12 Music Appreciation, or
MUS 13
History of Music3
Total 6

Select four units of Intermediate/Advanced from the following:
Units
MUS 42A Intermediate/Advanced Brass
(Brass Choir) 1-2
Select four units of Large Ensemble from the following: Units
MUS 40 Concert Band .................................................... 2
MUS 46 Symphony Orchestra.......................................... 2
MUS 68 Symphonic Band................................................ 2
MUS 76 College Philharmonic Orchestra.......................... 2

## GUITAR PERFORMANCE - MAJOR \#5831

The Guitar Performance Certificate Program ensures that the guitar music major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.
CERTIFICATE
Student Learning Outcomes:

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES Units
MUS 3 Music Fundamentals, or
MUS 1A Music Theory I.............................................. 3
MUS 12 Music Appreciation, or
MUS 13 History of Music
3
MUS 29 Intermediate/Advanced Guitar ............................. 4

Select four units of Large Ensemble from the following: Units
MUS 30
College Choir
MUS 30 College Choir..............................................-1-2
MUS 35 City Singers ................................................. 2
MUS 39 Opera and Musical Theatre Workshop................. 2
MUS 39A Opera Workshop - Baroque/Classical .................. 2
MUS 39B Opera Workshop: Romantic Period ..................... 2
MUS 39C Classic Musical Theatre .................................... 2
MUS 39D Contemporary Opera and Musical Theatre ........... 2
MUS 40 Concert Band ....................................................... 2
MUS 41 Jazz Ensemble.........................................-2
MUS 47A Jazz Combo: New Orleans, Swing and Bop.......... 2
MUS 47B Jazz Combo: Cool and Mainstream..................... 2
MUS 47C Jazz Combo: Modern and Fusion........................ 2
MUS 47D Jazz Combo: World Music ................................ 2
MUS 48 Latin Jazz Ensemble ....................................... 2
MUS 53 Latin Jazz Workshop ...................................... 2
MUS 54 Afro-Latin Ensemble........................................ 2
MUS 55 Afro-Caribbean Ensemble .................................. 2
MUS 60 Symphonic Choir........................................-2
MUS 68 Symphonic Band...........................................-.
MUS 70 Contemporary Jazz Ensemble..........................-2
MUS 71 Lab Jazz Ensemble........................................-2
MUS 92 Vocal Jazz Ensemble ....................................... 2
JAZZ PERFORMANCE - MAJOR \#5812
This program satisfies the music course requirements for the certificate in Jazz Performance which provides the fundamental skills necessary for the jazz performer.

## CERTIFICATE

## Student Learning Outcomes.

1. Perform 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 |
| :---: | :---: |
| MUS 10B | Intermediate/Advanced Jazz Improvisation....... 2 |
| MUS 16 | Jazz History and Appreciation....................... |

MUS 16 Jazz History and Appreciation ............................ 3
Total 5
Select three units from the following: Units
MUS 1A Music Theory I.................................................... 3
$\begin{array}{ll}\text { MUS } 3 & \text { Music Fundamentals } \\ \text { MUS } 4 & \text { Jazz Theory ................................................ } 3\end{array}$
MUS 6 Jazz Arranging and Composition........................ 3
Select four units of Large Ensemble from the following: Units
MUS 41 Jazz Ensemble..............................................
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 92 Vocal Jazz Ensemble ........................................ 2

## MUSIC THEORY - MAJoR \#5860

The Music Theory Certificate Program ensures completion of the under- graduate music theory requirements necessary for the AA degree in Music and/or transfer to CSU, UC and some other public and private universities.

## CERTIIICATE

## Student Learning Outcomes:

1. Compose and analyze chord progressions of the common practice period
2. Analyze music scores for harmonic and formal structures of different historical, geographical, and cultural areas.
3. Write critically, synthesizing ideas and concepts about music while using correct terminology following attendance of a live music concert.
REQUIRED CORE COURSES Units
MUS 1A Music Theory I.............................................. 3
MUS 1B Music Theory II................................................ 3
MUS 2A Music Theory III............................................. 3
MUS 2B Music Theory IV........................................... 3
Total 12

## PERCUSSION PERFORMANCE - MAJOR \#5813

The Percussion Performance Certificate Program ensures that the percussion music major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

## CERTIIICATE

Student Learning Outcomes:

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.
REQUIRED CORE COURSES Units
MUS 3 Music Fundamentals, or
MUS 1A Music Theory I.............................................. 3
MUS 12 Music Appreciation, or
MUS 13 History of Music ............................................ 3

Select four units of Intermediate/Advanced from the following: Units

| MUS 42D | Intermediate/Advanced Brass |
| :--- | :--- |
| (Percussion Ensemble) ...............................-2 |  |

Select four units of Large Ensemble from the following: Units
MUS 40 Concert Band ................................................... 2
MUS 46 Symphony Orchestra...................................... 2
MUS 68 Symphonic Band........................................... 2
MUS 76 College Philharmonic Orchestra......................... 2

## PIANO PERFORMANCE - MAJOR \#5841

The Piano Performance Certificate Program ensures that the piano music major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.
CERTIFICATE

## Student Learning Outcomes:

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.
REQUIRED CORE COURSES Units
MUS 3 Music Fundamentals, or
MUS 1A Music Theory I.................................................
MUS 12
MUS 13 History of Music .............................................. 3
MUS 22 Intermediate/Advanced Piano ............................ 4
Total $\quad 10$
Select four units of Large Ensemble from the following: Units
MUS $30 \quad$ College Choir.............................................-2
MUS 39A Opera Workshop - Baroque/Classical ................. 2
MUS 39B Opera Workshop: Romantic Period .................... 2
MUS 39C Classic Musical Theatre .................................... 2
MUS 39D Contemporary Opera and Musical Theatre ........... 2
MUS 40 Concert Band .................................................... 2
MUS 41 Jazz Ensemble.............................................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 63 Chamber Singers .......................................... 2
MUS 68 Symphonic Band.......................................-2
MUS 70 Contemporary Jazz Ensemble.........................-1-2
MUS 71 Lab Jazz Ensemble .........................................-2
MUS 92 Vocal Jazz Ensemble ..................................... 2

STRING PERFORMANCE - MAJOR \#5814
The String Performance Certificate Program ensures that the string music major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

## CERTIFICATE

## Student Learning Outcomes:

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.
REQUIRED CORE COURSES Units
MUS 3 Music Fundamentals, or
MUS 1A Music Theory I........................................... 3
MUS 12 Music Appreciation, or
MUS 13
History of Music.
Total
Select four units of Intermediate/Advanced from the following:
Units
MUS 42C Intermediate/Advanced Brass
(String Orchestra).1-2

Select four units of Large Ensemble from the following: Units
MUS 46 Symphony Orchestra
MUS $76 \quad$ College Philharmonic Orchestra
1-2

## VOCAL PERFORMANCE - MAJOR \#5821

The Vocal Performance Certificate Program ensures that the vocal music major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

## CERTIFICATE

Student Learning Outcomes:

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.
REOUIRED CORE COURSES Units
MUS $3 \quad$ Music Fundamentals, or
MUS 1A Music Theory I............................................... 3
MUS $12 \quad$ Music Appreciation, or
MUS 13 History of Music ............................................ 3
MUS 26 Intermediate/Advanced Guitar ............................. 4

Elect four units of Large Ensemble from the following: Units
MUS 30 College Choir.............................................-1-2
MUS 35 City Singers ................................................. 2
MUS 39A Opera Workshop - Baroque/Classical ................. 2
MUS 39B Opera Workshop: Romantic Period ..................... 2
MUS 39C Classic Musical Theatre ....................................... 2
MUS 39D Contemporary Opera and Musical Theatre ........... 2
MUS 60 Symphonic Choir........................................-1-2
MUS 92 Vocal Jazz Ensemble .......................................... 2

## WOODWIND PERFORMANCE - MAJOR \#5815

The Woodwind Performance Certificate Program ensures that the instrumental music major (woodwinds) has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

## CERTIIICATE

## 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.

## REOUIRED CORE COURSES Units <br> MUS 3 Music Fundamentals, or <br> MUS 1A Music Theory I......................................... 3 <br> $\begin{array}{cc}\text { MUS } 12 & \text { Music Appreciation, or } \\ \text { MUS } 13 & \text { History of Music ....................................... } 3\end{array}$ Total 6

Select four units of Intermediate/Advanced from the following:
Units
MUS 42B Intermediate/Advanced Brass
(Woodwind Choir)......................................................
Select four units of Large Ensemble from the following: Units
MUS 40 Concert Band .........................................................
MUS 46 Symphony Orchestra....................................... 2
MUS 68 Symphonic Band................................................... 2
MUS 76 College Philharmonic Orchestra......................... 2

## COMMERCIAL MUSIC - MAJOR \#5850

This program satisfies the music course requirements for the associate of science degree in commercial music and satisfies the requirements for the associate of science degree with a major in commercial music or music industry and the lower division course requirements at California state universities. The commercial music major must take MUS 3 or MUS 1A, 7A, MUS 24, MUS 20, MUS 21, MUS 17, MUS 8, MUS 111, MUS 112, MUS 5. Commercial Music majors must also take at least four units of Large Ensemble and 3 units of Music Electives.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Utilize current music technology to create, notate, and record music.
2. Distinguish the fundamentals of form, theory, history, and performance as it relates to commercial music.
3. Correctly describe the development and current structure of the music industry as it applies to a career in commercial music.
REQUIRED CORE COURSES Units

MUS 3 or Music Fundamentals, or

MUS 1A Music Theory I............................................. 3
MUS 5 Computer Music Production ............................... 3
MUS 7A Ear Training: Level I.............................................. 1
MUS 8 Audio Engineering............................................... 3
MUS 17 History of Rock................................................. 3
**MUS 20 Beginning Piano: Level I .................................. 2
***MUS 21 Beginning Piano: Level II ................................. 2
*MUS 24 Beginning Voice: Level I.................................. 2
MUS 111 The Music Business......................................... 3
MUS 112 Introduction to Finale ...................................... 2
Total 24
For the Large Ensemble requirement select four units from the
following: Units
MUS 30 College Choir................................................ 2
MUS 34 Fresno Chorale................................................. 2
MUS 40 Concert Band ............................................... 2
MUS 41 Jazz Ensemble.............................................. 2
MUS 46 Symphony Orchestra...................................1-2
MUS 47A Jazz Combo: New Orleans, Swing and Bop.......... 2
MUS 47B Jazz Combo: Cool and Mainstream...................... 2
MUS 47C Jazz Combo: Modern and Fusion........................ 2
MUS 47D Jazz Combo: World Music ............................... 2
MUS 48 Latin Jazz Ensemble ............................................ 2
MUS 53 Latin Jazz Workshop ..................................... 2
MUS 54 Afro-Latin Ensemble...................................... 2
MUS 55 Afro-Caribbean Ensemble .................................. 2
MUS 60 Symphonic Choir............................................... 2
MUS 68 Symphonic Band................................................... 2
MUS 70 Contemporary Jazz Ensemble............................. 2
MUS 71 Lab Jazz Ensemble ................................................ 2
MUS 72 Jazz Composer's Orchestra................................... 2
MUS 76 College Philharmonic Orchestra.......................1-2
MUS 90 Jazz Composers Workshop ............................... 2
MUS 91 Jazz Composers Ensemble................................ 2
MUS 92 Vocal Jazz Ensemble ......................................... 2

For the Music Electives requirement, Commercial Music majors select from the following (3 units if not used previously): Units MUS 1A Music Theory I . 3
MUS 1B Music Theory II................................................. 3
MUS 2A Music Theory III................................................. 3
MUS 2B Music Theory IV................................................. 3
MUS 3 Music Fundamentals.......................................... 3
MUS 4 Jazz Theory ....................................................... 3
MUS 6 Jazz Arranging and Composition......................... 3
MUS 7B Ear Training: Level II.......................................... 1
MUS 9 Composition .................................................... 2
MUS 10A Beginning Jazz Improvisation............................. 2
MUS 10B Intermediate/Advanced Jazz Improvisation........... 2
MUS 12 Music Appreciation ........................................... 3
MUS 13 History of Music................................................ 3
MUS 16 Jazz History and Appreciation ............................. 3
MUS 18 Basic Conducting and Score Reading .................. 2
MUS 22 Intermediate/Advanced Piano ...........................1-2
MUS 25 Beginning Voice: Level II.................................... 2
MUS 26 Intermediate/Advanced Voice ........................... 1-2
MUS 27 Beginning Guitar: Level I.................................... 2
MUS 28 Beginning Guitar: Level II.................................... 2
MUS 29 Intermediate/Advanced Guitar ...........................1-2
MUS 30 College Choir................................................... 2
MUS 34 Fresno Chorale.................................................. 2
MUS 35 City Singers ...................................................... 2
MUS 40 Concert Band .................................................... 2
MUS 41 Jazz Ensemble................................................... 2
MUS 42A Intermediate/Advanced Brass (Brass Choir) ......1-2
MUS 42B Intermediate/Advanced Woodwinds
(Woodwind Choir)1-2

MUS 42C Intermediate/Advanced Strings
$\begin{array}{ll}\text { MUS 42D } & \text { Intermediate/Advanced Percussion } \\ & \text { (Percussion Ensemble)...................................1-2 }\end{array}$
MUS 46 Symphony Orchestra......................................... 2
MUS 48 Latin Jazz Ensemble .......................................... 2
MUS 49 Advanced Large Ensembles.................................. 1
MUS 57 Solo Repertoire Studies I.................................... 1
MUS 59 Advanced Chamber Ensembles ............................ 1
MUS 60 Symphonic Choir .............................................. 2
MUS 63 Chamber Singers ............................................... 2
MUS 68 Symphonic Band............................................... 2
MUS 70 Contemporary Jazz Ensemble.............................. 2
MUS 71 Lab Jazz Ensemble ............................................. 2
MUS 72 Jazz Composer's Orchestra................................. 2
MUS 74A Intermediate/Advanced Brass Performance Practices............................1-2
MUS 74B Intermediate/Advanced Woodwind Performance Practices....................1-2
MUS 74C Intermediate/Advanced String Performance Practices .1-2

MUS 74D Intermediate/Advanced Percussion Performance Practices ....................1-2
College Philharmonic Orchestra......................... 2
Jazz Composers Workshop ................................. 2
Jazz Composers Ensemble.................................. 2
Vocal Jazz Ensemble ......................................... 2
Notes: *MUS 25 or 26 may be substituted.
**MUS 21 or 22 may be substituted. ***MUS 22 may be substituted.

## COMMERCIAL MUSIC - MAJOR \#5850

This program satisfies the requirements for the Certificate of Achievement in Commercial Music and the lower division requirements at California state universities. Music majors must select one of the following areas of specialization: instrumental, vocal, guitar, piano, or commercial music. Commercial music majors must take MUS 3 or MUS 1A, 5,8 , 20, 111, and 112.

## CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Analyze, read, and write music.
2. Perform early intermediate level piano solos, duets and ensembles in an artistic manner using good technique with stylistic and aesthetic considerations.
3. Appropriately work with music industry professionals.
4. Record musicians in a professional manner.
5. Successfully manipulate Midi and Finale software.

REQUIRED CORE COURSE Units
MUS 3 or Music Fundamentals, or
MUS 1A Music Theory I.............................................. 3
MUS 5 Computer Music Production ............................... 3
MUS 8 Audio Engineering.............................................. 3
*MUS 20 Beginning Piano Level I ...................................... 2
MUS 111 The Music Business ........................................... 3
MUS 112 Introduction to Finale ......................................... 2
Total 16
*MUS 21 or 22 may be substituted

## NURSING, REGISTERED - mAJor \#4520

The profession of registered nursing involves the provision of health care services, both direct and indirect, that focus on the maintenance, promotion and restoration of health. This includes basic health care to help people cope with difficulties in daily living that are associated with actual or potential problems of health, illness or the treatment thereof. Nursing is a dynamic problem-solving profession that focuses on the response of the individual to health problems. The practice of registered nursing requires a substantial amount of scientific knowledge and technical skills as well as leadership and managerial abilities. Students attend classes on the Fresno City College campus. Nursing experience is provided in selected local hospitals and health agencies.

## Application Requirements

Enrollment in the Registered Nursing Program is limited. Minimum qualifications for selection must be met. There are no restrictions as to age, race, sex or marital status. Prior to the final date for filing an application to the program, the applicant must have:

1. Graduated from high school with a minimum grade point average of "C+" (2.5) or better in high school work or completed the General Educational Development (GED) test with an average standard score of 45 .
2. Completed Chemistry $3 A$ or equivalent with a grade of " $C$ " or better.
3. 3. Completed Biology 20, Human Anatomy, and Biology 22, Human Physiology, (or Biology 21A and 21B, Human Anatomy and Physiology) with a grade of "C" or better in each course.
1. Completed Biology 31, Microbiology, with a grade of " $C$ " or better.
2. 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.
3. Completed English 1A, Reading and Composition, with a grade of "C" or better.
4. Completed Mathematics 103, Intermediate Algebra, or a more advanced math course with a grade of "C" or better.
5. Attained a cumulative grade point average (GPA) of "C+" (2.5) or better in completed college work.
6. Completed an Academic Summary Form for the Registered Nursing Program and be prepared to furnish transcripts when requested to do so.
7. No physical impairment that would preclude the performance of all registered nurse duties.
8. Good physical and mental health.
9. Pass the Test of Essential Academic Skills (TEAS) with an overall score of $62 \%$ or better. The TEAS may only be taken twice with a minimum of 90 days between the attempts.

## Notes:

1. The college GPA and college courses of an applicant will have precedence over an applicant's high school GPA and courses.
2. Prior to registration for the semester in which the applicant is scheduled to take courses in the Registered Nursing Program, the student must submit vvidence of physical examination, current immunizations, and freedom of $T B$ by a licensed physician. The student is also required to attend a mandatory orientation meeting before the start of the semester.
3. Students are required to complete a background check.

Change of Name, Address, and/or Telephone Number
Applicants and nursing students must keep the Nursing Education Office informed of any change in name, address, and/or telephone number. Failure of applicants to inform the Nursing Education Office of changes may result in loss of entry into the program.

## Vocational Nursing Articulation

Procedures and application requirements specific to vocational nurse articulation into the Registered Nursing Program are available upon request.
Previous Education in Nursing
Any person desiring to enter the Fresno City College Registered Nursing Program by transfer or challenge will be evaluated on an individual basis after all college general requirements for transfer or challenge have been met. The college has written policies and procedures for academic training in registered nursing programs. Individuals who have completed vocational nursing programs and persons having other education in the field of nursing should contact the Director of Nursing for specific information.
Prenursing Preparation
Prenursing students planning to transfer to four-year programs in other schools should consult the catalog of the transfer school.
Academic Requirements
All program entry requirement courses listed above must be completed with a grade of "C" or better. In order to be eligible to apply for licensure as a Registered Nurse and to take the National Council Licensure Examination - RN, all other courses leading to the associate degree must also be completed with a grade of "C" or better. Students in the nursing program must earn a "C" grade or better (or a "Pass" grade when applicable) in all required nursing courses. Less than a "C" or a "Pass" grade in any required nursing course necessitates repeating the course before continuing with the major. Registered Nursing courses must be repeated in their entirety. Course repeatability and failure policy will be followed as outlined in the Registered Nursing Student Handbook.

If, based on the professional judgment of the faculty, a student demonstrates that he/she is unsuited to nursing, is not progressing satisfactorily or is engaged in unethical, unprofessional, or illegal practices, he/she may be asked to withdraw from the program.

State License
The successful completion of the prescribed registered nursing course sequence in addition to the other licensure and/or degree requirements qualifies the graduate for an associate in science degree and eligibility to apply for licensure as a Registered Nurse.

## ASSOCIATE IN SCIENCE DEGREE

Registered Nursing Course Sequence (All courses must be completed with a grade of "C" or better.)

## Student Learning Outcomes:

1. Students completing the Registered Nursing Program will be prepared to practice at a novice level as a professional nurse in the roles of caregiver, decision maker, communicator, professional, advocate, teacher, and manager as measured by $85 \%$ passing the NCLEX-RN on the first attempt.
2. At the completion of the Registered Nursing Program students will be able to coordinate nursing care for groups of clients by applying the nursing process to successfully modify care for critical and acute care clients.

## FIRST YEAR

| First Semester | Units |
| :---: | :---: |
| RN 31 | Foundations and Introduction to Medical- |
|  | Surgical Nursing ............................................ 4 |
| RN 32 | Foundations and Introduction to Medical- |
|  | Surgical Nursing Clinical ................................ 2 |
| RN 32A | Foundations and Introduction to Medical- |
|  | Surgical Nursing Skills .................................. 2 |
| RN 33 | Transcultural Health Care ................................ 1 |
| RN 35A | Pharmacology A: Introduction to |
|  | Pharmacology .............................................. 1 |
|  | Total 10 |
| Second Semest | Units |
| RN 35B | Pharmacology B: Nursing Pharmacological |
|  | Applications ................................................. 2 |
| RN 41 | Nursing Care of the Adult with Common |
|  | Health Problems.......................................... 2.5 |
| RN 42 | Nursing Care of the Adult with Common |
|  | Health Problems Clinical................................. 2 |
| RN 42A | Nursing Care of the Adult with Common |
|  | Health Problems Skills ................................... 1 |
| RN 45 | Nursing Care of the Childbearing Family |
|  | Theory..................................................... 2.5 |
| RN 46 | Nursing Care of the Childbearing Family |
|  | Clinical.................................................... 1.5 |
|  | Total 11.5 |

## SECOND YEAR

Third Semester Units
RN $51 \quad$ Nursing Care of the Adult with Complex Health Problems. . 3
RN 52 Nursing Care of the Adult and Older Adult with Complex Health Problems Clinical 2

$\begin{array}{ll}\text { RN 33 } & \text { Transcultural Health Care ................................... } 1 \\ \text { RN 35A } & \text { Pharmacology A: Introduction to } \\ & \text { Pharmacology .................................................... } 1\end{array}$ 10

Second Semester Units

RN 52A

RN 53
RN 55
RN 56

Fourth Semester
Nursing Care of the Adult and Older Adult with Complex Health Problems Skills 0.5

Nursing Care of the Older Adult ........................... 1
Nursing Care of Infants \& Children ...................... 2
Nursing Care of Infants \& Children Clinical ......... 2 Total $\quad 10.5$

RN $61 \quad$ Nursing Care of the Critically III Adult and Coordinator of Care.2.5

RN $62 \quad$ Nursing Care of the Critically III Adult and Coordinator of Care Clinical.3.5

RN 62A $\quad$ Nursing Care of the Critically III Adult Skills ..... 0.5
RN 65
Nursing Care of the Client with Behavioral and Emotional Disorders. 2
RN 66 Nursing Care of the Client with Behavioral
and Emotional Disorders Clinical..................... 2
Total $\quad 10.5$

## LVN TO RN UPGRADE

Prior to Entering Third Semester Fresno City College Nursing Curriculum RN 101

RN 102

Third Semester
RN 5
RN 52
RN 52A
RN 53

Fourth Semester
Transition to Fresno City College Registered Nursing Program 1.5

Transition to Fresno City College Registered
Nursing Program Skills.1-2

Total 2.5-3.5
Units

Nursing Care of the Critically III Adult
and Coordinator of Care..................................
RN 62
RN 62
RN 65
RN 66

Nursing Care of the Critically III Adult
and Coordinator of Care Clinical..................... 3.5
Nursing Care of the Critically III Adult Skills..... 0.5
Nursing Care of the Client with Behavioral
and Emotional Disorders............................ 2
Nursing Care of the Client with Behavioral
and Emotional Disorders Clinical...................... 22

| Required Courses on Entry for Transfer Students from other |  |  |
| :---: | :---: | :---: |
| Accredited Nursing Programs: Units |  |  |
| RN 101 | Transition to F |  |
|  | Nursing Progr |  |
| RN 102 | Transition to F |  |
|  | Nursing Pro |  |

## 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 sottware 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............................................ 1.5
BT 29 Microsoft Word II......................................... 1.5
PLEGAL 1 Introduction to Paralegalism ............................. 3
PLEGAL 2A Legal Research \& Writing I.............................. 3
PLEGAL 2B Legal Research \& Writing II.............................. 3
PLEGAL6A 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 ..... 31
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 ..... 37

## PHILOSOPHY FOR TRANSFER <br> - 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.

## 2019-2020 Fresno City College Catalog

ASSOCIATE IN ARTS DEGREE
Student Learning Outcomes:

1. Demonstrate independent and critical thinking regarding importanttopics in philosophy.
2. Analyze and evaluate arguments, both philosophical and non-philo-sophical, in accordance with the standards taught in our philosophycourses.
REOUIRED CORE COURSES ..... Units
PHIL 1A/1AH Theories of Knowledge and Reality, or Honors Theories of Knowledge and Reality.. .....  3
PHIL 1 C Ethics .....  3
PHIL 6 Symbolic Logic ..... 3
Select three of the following courses ..... Units
(min. two PHILL):HIST 1/1H Western Civilization to 1648, orHonors Western Civilization to 16483
HIST 2/2H Western Civilization since 1648, or Honors Western Civilization since 1648 ..... 3
HUMAN 10/10H Classical Humanities, or Honors Classical Humanities ..... 3
HUMAN 11/11H Modern Humanities, or Honors Modern Humanities ..... 3
PHIL 1B Social and Political Philosophy ..... 3
PHIL 1D World Religions ..... 3
PHIL 2/2H Critical Reasoning and Analytic Writing, or Honors Critical Reasoning and Analytic Writing. ..... 3
PHIL 5 Philosophy of Religion ..... 3
Total ..... 18
PHOTOGRAPHY
PROFESSIONAL PHOTOGRAPHY- FORMERLY PHOTOGRAPHY - MAJOR \#5221Students in this curriculum are trained in the major areas of pro-fessional photography. Positions for which graduates may qualify,depending upon their interest, abilities, and achievement, include portrait,commercial, editorial, digital, and retail fields. Some equipment andsupplies provided.
ASSOCIATE IN SCIENCE DEGREE
Student Learning Outcomes:
3. Produce professional quality photographs in various contemporary formats.
FIRST YEAR
First Semester ..... Units
PHOTO 6Digital Imaging Fundamentals.3


## COMMERCIAL PHOTOGRAPHY - MAJoR \#5222

Students taking these courses will develop skills in creating photographs for commercial clients from small and large scale studio and location situations. Students will learn appropriate workflow and processes to compete in the commercial marketplace.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Utilize skills in picture creation, selection and cropping with emphasis on impact and marketability.
REQUIRED COURSES ..... Units
PHOTO 6 Digital Imaging Fundamentals. ..... 3
PHOTO 12 Beginning Photoshop ..... 3
PHOTO 23 Advanced Photoshop ..... 3
PHOTO 26 Lighting Principles ..... 3
PHOTO 32 Commercial Portraiture ..... 3
PHOTO 57 Applied Color and Alternative Photographic Media ..... 3
Total ..... 18
DIGITAL PHOTOGRAPHY - MAJOR \#5223

Students taking these courses will learn the various methods and processes of digital photography emphasizing quality on all levels. From digital capture to high end output printing, students will learn control of a variety of digital systems.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Organize effective color management of images from input to output on high end digital printing devices.

| REOUIRED COURSES |  | Units |
| :---: | :---: | :---: |
| GRC 52 | Adobe Lightroom | 3 |
| PHOTO 6 | Digital Imaging Fundamentals... | ....... 3 |
| PHOTO 23 | Advanced Photoshop | . 3 |
|  | Total | 15 |

## FINE ART PHOTOGRAPHY - MAJOR \#5224

Students taking these courses will concentrate on the fine art of photography using various methods and processes with historical techniques as well as new forms. Both film and digital technologies are used to develop the creative process and personal expression.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Utilize photography as a visual communication tool.

## REQUIRED COURSES Units

PHOTO 6 Digital Imaging Fundamentals............................. 3
PHOTO 12 Beginning Photoshop......................................... 3
PHOTO 15 Photography and Visual Literacy .......................... 3
PHOTO 18 Digital Black and White Photography .................... 3

PHOTO 23 Advanced Photoshop .......................................... 3
PHOTO 57 Applied Color and Alternative Photographic Media. 3
Total 18

## PHOTOJOURNALISM - MAJOR \#5225

Students will learn the art of storytelling through images and the power in conveying another person's story through their own eyes. Digital composition and editing of storytelling images will be explored and utilized.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Produce story telling photographs and video for contemporary internet media.
REOUIRED COURSES Units
BA 52 Introduction to Entrepreneurship .......................... 3
GRC 52 Adobe Lightroom ............................................... 3
PHOTO 6 Digital Imaging Fundamentals............................. 3
PHOTO 30 Editorial Photography......................................... 3
PHOTO 49 Multimedia Photojournalism .............................. 3
Total 15

Associate Degree
for Transfer
A Dezane with a hanautac

## 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.
$\begin{array}{ll}\text { REOUIRED CORE COURSES } & \text { Units } \\ \text { PHYS 4A Physics for Scientists and Engineers................... } 4\end{array}$
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 $6 \quad$ 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, or.............. 4
MATH 11 Elementary Statistics...................................... 4
POLSCI 1 Modern Politics.................................................. 3
POLSCI 3 Introduction to Political Theory and Thought ....... 3
POLSCI 5 Comparative Government................................... 3
POLSCI 24 International Relations........................................ 3
LIST B: Select two of the following: Units
BA 20 Law and the Legal System.................................. 3
$\begin{array}{cc}\text { ECON } 40 & \text { Introduction to Microeconomics, or } \\ \text { ECON } 50 & \text { Introduction to Macroeconomics .................... } 3\end{array}$
POLSCI 13 Legal and Judicial Reasoning...................................... 3
SOC 1B Critical Thinking about Social Problems .............. 3


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.

## REOUIRED CORE COURSES Units <br> PSY 2/2H General Psychology, or <br> Honors General Psychology. <br> 3 <br> 3 <br> PSY 36 <br> Biological Psychology. <br> PSY 42 Statistics for the Behavior Sciences..................... 4 Total 10

## ELECTIVES

DEPTH: Choose two (2) of the following: Units
PSY 5

PSY 12 Social Psychology.............................................. 3
PSY 16 Abnormal Psychology ............................................ 3
PSY 18 Criminal Personalities........................................ 3
Total 6
LIFESPAN: Choose one (1) of the following: Units
PSY $25 \quad$ 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 American Pluralism: A Search for Common Ground in a Multicultural Society. .. 3
$\begin{array}{ll}\text { ANTHRO 2/2H } & \begin{array}{l}\text { Cultural Anthropology, or } \\ \text { Honors Cultural Anthropology ......................... } 3\end{array}\end{array}$
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.
REOUIRED CORE COURSE Units
PSY 2/PSY 2H General Psychology, or
Honors General Psychology............................ 3
PSY 36 Biological Psychology........................................ 3
PSY/MATH 42 Statistics for the Behavioral Sciences................... 4
$\begin{array}{ll}\text { PSY } 45 & \text { Introduction to Research Methods in } \\ & \text { Psychology ..................................................... } 3\end{array}$
Select one of the following course: Units
BIOL 5 Human Biology ................................................. 4
PSY 5 Social Psychology............................................. 3

Choose one of the following courses:
NOTE: Psychology 5 can be taken in this section only if it was not taken as part of the previous sections

Units
PSY 5
Social Psychology. 3
PSY 16 Abnormal Psychology ........................................ 3
PSY 25 Human Sexuality ............................................... 3
PSY 33 Personal and Social Adjustment.......................... 3
Notes: Required Major Courses ................................ 19-20 units.
CSU General Education or IGETC.......................... 39 units.
Transferable Elective as needed to reach 60 transferable units.
Degree Total. 60 units.

## PHYSICAL EDUCATION

## SPORTS MEDICINE - MAJOR \#4330

This degree is designed to prepare students for various fields of study related to health care and athletic sports related injuries as well as preparation for transfer to a four year university.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Identify and discuss the different Sports Medicine professions and their role in the health care continuum.
2. Identify anatomy and physiology as it pertains to human performance and injury.
3. Differentiate career opportunities relative to different populations.
4. Demonstrate basic cardiopulmonary resuscitation, first aid skills, musculoskeletal and general medical skills.

## REQUIRED COURSES <br> Units

BIOL 20 Human Anatomy, or
BIOL 21A Human Anatomy \& Physiology I...................... 4
BIOL 22
BIOL 21B
Human Physiology, or Human Anatomy \&Physiology II . .5
FN $35 \quad$ Nutrition and Health, or
FN 41
Sports Nutrition..2-3

HLTH 2

First Aid and Safety .....  3

HLTH 3 Concepts in Health and Fitness........................... 3
PE 15A Weight Training (Women), or
PE 15B Weight Training (Men), or
PE 15C
Weight Training (Coed) .1-2
PE 18A Sports Medicine Lab A ...................................... 2
PE 18B Sports Medicine Lab B....................................... 2
PE $20 \quad$ Athletic Training ................................................ 4
Total 26-28

## 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 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 completed Biology 20, Human Anatomy, and Biology 22, Human Physiology, or Biology 21A, Human Anatomy and Physiology I, and Biology 21B, Human Anatomy and Physiology II (or equivalent), with a grade of "C" or better.
3. Have completed Health Information Technology 10, Medical Terminology (or equivalent), with a grade of " $C$ " or better.
4. Have attained a minimum cumulative grade point average (GPA) of "C+" (2.75) in completed college work.
5. Have no physical impairment that would preclude the performance of all radiologic technology duties.
6. Be in good physical and mental health.

Note: Prior to registration for the semester in which the applicant is scheduled to take courses in Radiologic Technology, the student must submit evidence of physical examination by a licensed physician.
Background Check
Upon entry into the program, students will be required to obtain a background check.
Change of Name, Address, and/or Telephone Number
Applicants and radiologic technology students must keep the Allied
Health, Physical Education, and Athletics office informed of any change in name, address, and/or telephone number. Failure of applicants to inform the Allied Health, Physical Education, and Athletics office of this vital information may result in loss of entry into the program.

## Academic Requirements

All program entry requirement courses listed above must be completed with a grade of "C" or better.

Students in the radiologic technology program must earn a "C" grade or better (or a "Credit" grade when applicable) in all program courses. Less than a "C" or a "Credit" grade in any radiologic technology course requires that the course be repeated before continuing with the major. Courses must be repeated in their entirety. Courses may be repeated once only.

Safe professional practice is necessary for retention of students in the program. If a student demonstrates that he/she is unsuited to the profession or is not progressing satisfactorily based on the professional judgment of the faculty, he/she may be asked to withdraw from the program.

## ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcome:

1. Students will pass the ARRT National Registry Examination on the first attempt.
Radiologic Technology Course Sequence (all courses must be completed with grade of " C " or better)
First Year - First Semester Units
RAD 1A Fundamentals of Radiology Technology ............... 6
RAD 1B Basic Radiographic Positioning Laboratory.......... 1
RAD 1C Clinical Orientation Laboratory............................ 3
$\begin{array}{ll}\text { RAD 1D } & \text { Nursing Procedures in Radiologic } \\ & \text { Technology.................................................... } 3\end{array}$
$\begin{array}{llr} & \text { Total } & 13 \\ \text { First Year } & \text { Second Semester } & \\ \text { RAD 2A } & \text { Radiation Biology .............................................. } 6 \\ \text { RAD 2B } & \text { Advanced Radiographic Positioning } & \\ & \text { Laboratory................................................................. } 3 \\ \text { RAD 2C } & \text { Clinical Observation Laboratory................ } 3\end{array}$
RAD 2D Quality Assurance in Radiologic Technology........ 1 Total 10

First Year - Summer Semester Units
RAD 3 Basic Clinical Radiologic Technology .................. 9
Total 9
$\begin{array}{llr}\text { Second Year - First Semester } & \text { Units } \\ \text { RAD 4A } & \text { Pathology in Radiologic Technology ................. } 2 \\ \text { RAD 4B } & \text { Advanced Clinical Radiologic Technology.......... } 12 \\ \text { RAD 4C } & \text { Advanced Radiologic Positioning } \\ & \text { Laboratory-Cranium........................................... } 1\end{array}$
Total 15
Second Year - 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.

## ASSOCIATE IN ARTS DEGREE

CORE COURSES Units
HLTH 1 Contemporary Health Issues ............................... 3
HLTH 2 First Aid and Safety ............................................ 3
$\begin{array}{ll}\text { REC } 19 & \text { Work Experience (Cooperative), } \\ & \text { Occupational ........................................................ } 3\end{array}$
REC 20 Introduction to Recreation ................................... 3
REC 21 Recreation Leadership........................................ 3
REC 23 Outdoor Recreation ............................................ 3
PE Courses Four (4) Physical Education Activity..................... 4
Total 22
RECOMMENDED SEQUENCE
First Semester Units
HLTH 1 Contemporary Health Issues ............................... 3
REC 20 Introduction to Recreation ................................... 3
PE Course Physical Education Activity ................................ 1
Second Semester Units
HLTH 2 First Aid and Safety ............................................ 3
$\begin{array}{ll}\text { REC } 19 & \text { Work Experience (Cooperative), } \\ & \text { Occupational ........................................................ } 3\end{array}$
PE Course Physical Education Activity ................................ 1

| Third Semester |  | Units |
| :---: | :---: | :---: |
| REC 21 | Recreation Leadership. | 3 |
| PE Course | Physical Education Activity. |  |
| Fourth Semester |  | Units |
| REC 23 | Outdoor Recreation | 3 |
| PE Course | Physical Education Activity. |  |

## RESPIRATORY CARE PRACTITIONER

- MAJOR \#4610

The Respiratory Care Practitioner (RCP) is a health care specialist involved in managing, diagnostically evaluating, and providing care to patients with deficiencies and abnormalities affecting their cardiopulmonary system. Respiratory care practitioners comprise a critical sector of the allied health care workforce. Next to nurses, RCPs are the most frequently seen health care provider at the patient bedside. Enrollment is limited in the Respiratory Care Practitioner Program. There are no restrictions as to age, race, or marital status. The program is lottery based. In order to qualify for admission to the program, the applicant must have met all of the following conditions: Application Requirements: Minimum prerequisite requirements for application to the Respiratory Care Practitioner Program follow. 1. Graduated from high school with a minimum grade point average (GPA)of 2.0 or completed the General Educational Development test with an average standard score of 45. 2. Completed the following prerequisites with a C or better: Biology 31, Biology 20 and Biology 22 or Biology 21A and Biology 21B, Chemistry 3A, Mathematics 103. Advisory of English 1A. 3. All program entry requirement courses must be completed with a grade of " $C$ " or better. 4. All courses leading to the associate degree must also be completed with a grade of " C " or better. 5 . Have attained a minimum cumulative grade point average (GPA) of 2.5 in completed college work. 6 . Students in the respiratory care practitioner program must earn a " C " grade or better (or a "Credit" grade when applicable) in all required respiratory care courses. 7. Less than a "C" or a "Pass" grade in any required Respiratory Care course necessitates repeating the course before continuing with the major. 8. Respiratory Care courses must be repeated in their entirety. 9. Course repeatability and failure policy will be followed as outlined in the Respiratory Care Student Handbook. 10. Have no physical impairment that would preclude the performance of any respiratory care practitioner duties. 11. Be in good physical and mental health. 12. Complete application for the RCP program. Applications may be pick up at the Allied Health, Physical Education and Athletics division office. 13. Return the completed application to the division office by the deadline. The application period may be found on the Fresno City College website. 14. Background checks and drug screens are mandatory. 15. Program orientation is mandatory. 16. Safe professional practice is necessary for retention of students in the program. If a student demonstrates that he or she is unsuited to the profession or is not progressing satisfactorily based on the professional judgment of the faculty, the student may be asked to withdraw from the program.

ASSOCIATE IN SCIENCE DEGREE
Respiratory Care course sequence (all must be completed with a "C" grade or better):
Student Learning Outcome:

1. To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRT).
FIRST YEAR
Units
RCARE 16
Patient Assessment .. 3
RCARE 16B
Diagnostic Methods
.3
RCARE 17 Respiratory Care Pharmacology .......................... 3
RCARE 18 Physiology of the Respiratory System .................. 3
RCARE 20 Introduction to Respiratory Care....................... 5.5
RCARE $21 \quad$ Applications and Procedures in
Respiratory Care.. 10

## SECOND YEAR Units

RCARE 21B Simulation Lab Skills ......................................... 1
RCARE $22 \quad$ Clinical Applications and Ventilator Management in Respiratory Care 8
RCARE 23 Clinical Applications in Respiratory Care II.......... 8
RCARE 24 Neonatal and Pediatric Diseases ......................... 2
RCARE 25 Respiratory Disease........................................... 2

Respiratory Care Practitioner Program Requirements
(A "C" or better grade is required in each course.)
In addition to the program application requirements and the Respiratory Care course sequence requirements, the following courses are required to apply for the associate degree:
PHYSC 11 Introductory Physical Science.............................. 3
Total 47
Note: All applications requirements, program requirements, and selection criteria are subject to change. Students will enter the selection pool based on the current catalog or catalog supplement. Contact a Fresno City College Health Science Counselor every semester for current information.

## SIGN LANGUAGE INTERPRETING PREPARATION PROGRAM - major \#5101

To prepare students for entry-level interpreting positions in a variety of settings such as schools, social service agencies and limited medical situations.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcome:

1. Discuss and apply knowledge of linguistic, cross-cultural and interpretation theories.
2. Demonstrate communicative competency in English and in ASL through effective communication in settings with speakers of varying age, gender and ethnicity.
3. Analyze, identify, and apply personal, professional and ethical decisions in a manner consistent with theoretical models and standard professional practice.
4. Formulate effective one-on-one group interpretation/transliteration in limited settings.
REQUIRED CORE COURSES 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 .. 3 Total 25


Associate Degree
for Transfer
A Degres with a Gainatocs

## 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 Units
PSY 5 Social Psychology............................................. 3
PSY/MATH 42 Statistics for the Behavioral Sciences, or
MATH $11 \quad$ Elementary Statistics.................................. 4
$\begin{array}{ll}\text { SOC 1A/1AH } & \begin{array}{l}\text { Introduction to Sociology, or } \\ \text { Honors Introduction to Sociology ...................... } 3\end{array}\end{array}$
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 Cultural Anthropology, or Honors Cultural Anthropology ........................ 3
HS 20 Introduction to Social Welfare ............................. 3
SOC 2 American Minority Groups .................................. 3
SOC/WSTS 5 Sociology of Rape .............................................. 3
SOC/WSTS 7 Domestic Violence: Abuse within the Family........ 3
SOC/HS 10 Introduction to Aging Studies.............................. 3
SOC/CLS 14 Sociology of the Mexican American Community 3
SOC 31 The Child in Society: A Social Problems Approach. 3
WSTS $10 \quad$ Changing Roles of Women. ..... 3
Notes: Required Major Courses ..... 19 units. CSU General Education or IGETC........................... 39 units. Transferable Elective as needed to reach 60 transferable units. Degree Total. .60 units.

## SPANISH - 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 | 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
SPAN 41 Introduction to Poetry in Spanish...................... 4
SPAN 42 Hispanic American 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 35. General Education requirements for transfer certification are listed on page 47.
2. Two Spanish courses can be used to fulfill the area "C" General Education requirement (in Humanities) for graduation or transfer.
3. Two of the following courses may be challenged according to Foreign Language Department policy: Spanish 1, 2.

Associate Degree
for Transfer
A Dkance with a htainatas.

## SPANISH FOR TRANSFER - MAJOR \#5550

The Associate in Arts in Spanish for Transfer is designed to prepare students for further study in Spanish at the university level. A degree in Spanish is a great way to prepare students for entry into a variety of career options requiring intermediate or better levels of fluency. The Associate in Arts in Spanish major also acquaints students with the cultures of Spanish speaking countries. The Associate in Spanish for Transfer is specifically designed for students who plan to complete a bachelor's degree in Spanish at a CSU campus. To earn the Associate in Spanish for Transfer, students must complete 60 required semester units of CSU-transferable coursework, CSU-GE Breath or IGETC requirements and 21-24 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. The local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admissions and transfer requirements.

## ASSOCIATE IN ARTS DEGREE

## Student Learning Outcomes:

1. Engage in conversation using the Spanish in the daily life situation.
2. Read with a certain depth of understanding magazine or newspaper articles, short stories, and literacy excerpts written in Spanish.
3. Write at the advanced level in a variety of modalities including personal and professional letters, short narratives, and descriptive essays.
4. Recognize and understand cultural similarities and differences between U.S. culture and that of the Spanish speaking world. Distinguish simple behavioral patterns that represent these cultures and behave in culturally appropriate ways in specific situations.
REQUIRED CORE COURSES Units
SPAN 1 Beginning Spanish............................................. 5
SPAN $2 \quad$ 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 $7 \quad$ Advanced Spanish: Composition and Grammar

| SPAN 8 | Advanced Spanish Conversation................................. 4 |
| :--- | :--- |
| SPAN 9 | Spanish Business and Culture ...................... 4 |
| SPAN 41 | Introduction to Poetry in Spanish...................... 4 |
| SPAN 42 | Hispanic American Culture............................... 4 |
|  |  | Total $\quad 21-24$

## Notes:

1. Students entering the Spanish program at Spanish 2 or higher are required to complete the specified unit requirements of the degree. Students must consult with the Foreign Language Department Chair for approval of course substitutions.
2. Some of the above courses may have prerequisite. See the catalog or schedule of classes.
3. The Associate Degree requires completion of the major (21-24 units) witha "C" or better in each course plus the completion of the General Education (either CSU-GE Breadth or IGETC) for a total of 60 semester units with a 2.0 or better GPA.
4. Two of the following courses may be challenged according to Foreign Language Department policy: Spanish 1, 2.

## THEATRE ARTS - 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
Costume Design $\qquad$
TA 30
TA 15C
TA 38
TA 31
TA 32
TA 41
TA 42
TA 43
Theatre Appreciation, or
Creative Writing: Playwriting, or
Script Analysis $\qquad$ ... 3
Theatre History and Literature I, or Theatre History and Literature II. $\qquad$
Beginning Acting, or Beginning Acting for Theatre Majors................ 3
Intermediate Acting ............................................ 3
TA 46Voice for the Actor.3

Three Units from the Following Courses: Units
TA 28 Introduction to Stage Makeup ............................. 3
TA 40 Performance Practicum...................................... 3
TA 44A Actors Workshop............................................... 3
TA 48A Teasers I........................................................ 0.5

## THEATRE ARTS FOR TRANSFER - major \#5445

The Associate in Arts in Theatre Arts for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the associate in arts transfer degree, students must complete a maximum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. Students are required to complete: A) a minimum of 18 semester units in the major with a grade of $C$ or better while maintaining a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework. B) 60 semester CSU-transferable units using the California State University-General Education-Breadth pattern (CSU-GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. C) No more than 60 semester units are required.

## ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Identify the literature and styles of theatre.
2. Demonstrate the acting process.
3. Demonstrate the production process.

CORE COURSES Units
TA $30 \quad$ Theatre Appreciation, or
TA 31 Theatre History and Dramatic Literature I......... 3
TA 40
TA 23
TA 41
TA 42

Performance Practicum, or
Technical Theatre Practicum .............................. 3
Beginning Acting, or
Beginning Acting for Theatre Majors............... 3

Elective Courses: Select 9 Units from the following courses: Units

Note: TA 40 can be taken in this section only if they were not taken as part of the core. 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.
Transferable Elective as needed to reach 60 transferable units.
Degree Total.................................................... 60 units.

## DESIGN/TECHNICAL THEATRE STUDIES - MAJOR \#5482

The Design/Technical Theatre Studies major emphasizes a hands on approach and places special focus on the well-rounded theatre artist. Students who complete the program can successfully transfer to a fouryear 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
$\begin{array}{cc}\text { TA } 41 & \text { Beginning Acting, or } \\ \text { TA } 42 & \text { Beginning Acting for Theatre Majors................ } 3\end{array}$
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
TA 32
TA 36
TA 38
TA 39A
TA 39B
TA 40
TA 45
TA 49
Theatre History and Dramatic Literature I 3
Theatre History and Dramatic Literature II ............ 3
Costume Design................................................ 3
Script Analysis ................................................... 3
Intermediate Crew Practicum I............................. 1
Intermediate Crew Practicum II............................ 1
Performance Practicum ...................................... 3
Kennedy Center American College Theater Festival Topics
Introduction to Theatre Design ............................ 3
Notes:

1. Recommended electives for Physical Education: DANCE 10, 11, 12A, 14, \& 16.

## WELDING TECHNOLOGY

## METAL FABRICATION OPTION - mAjor *8371

Instruction in the design and fabrication of metal projects by welding and related practices. Skills will be taught in design, manufacturing processes, production techniques, and material cost estimation.

## ASSOCIATE IN SCIENCE DEGREE

## Student Learning Outcomes:

1. Given an idea or description, students will be able to design and plan the construction of one or more advanced metal fabricated projects.
2. From design and specifications, students will be able to determine estimated steel weights and cost calculations.
3. Students will be able to demonstrate the proper safety precautions, setup and use of tools and equipment common to metal fabrication.
4. In the construction of their project, students will apply various types of welds and other joining processes with quality workmanship to assemble the metal components of advanced projects.
5. During the construction of their project, students will demonstrate the efficient use of time and materials to produce their advanced projects.

## 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 Intermediate Welding Design and Fabrication ...... 5
Electives ..............................................................2-3
Recommended Electives: CAM 10; CADD 24, 34; ENGR 10, 11; WELD 56.
Note: Associate degree requirements are listed on page 35.

## 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
$\begin{array}{llr}\text { First Semester } & & \text { Units } \\ \text { AT 10 } & \text { Technical Computer Applications...................... } 3 \\ \text { AT 130 } & \text { Industrial Mathematics, or } & \\ \quad \text { MATH 201 } & \text { Elementary Algebra...............................-5-5 } \\ \text { WELD 2A } & \text { Introduction to Welding Technology.................. } 6\end{array}$

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 Intermediate Welding Design and Fabrication ...... 5
Electives ............................................................2-3
Recommended Electives: CAM 10; CADD 24, 34; ENGR 10, 11; WELD 56.

## PIPE AND STRUCTURAL STEEL CERTIFICATION <br> 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

$\begin{array}{llr}\text { First Semester } & & \text { Units } \\ \text { AT } 10 & \text { Technical Computer Applications............. } 3\end{array}$
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

| SECOND YEAR |  |  |
| :---: | :---: | :---: |
| First Semester |  | Units |
| WELD 4A | Heavy Plate, Structural Steel and Welding Certification. |  |
| Recommended Elective ....................................................... 3 |  |  |
|  | Total | 8 |
| Second Semester |  | Units |
| WELD 4B | Pipe, Tube Welding and Certification.... |  |
| Recommended Elective ......................................................... 3 |  |  |
|  | Total | 8 |

## 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................................-5 |
| DRAFT 12 | Dratting Practices....................................... 3 |
| WELD 2A | Introduction to Welding Technology................. 6 |
|  | Total 15-17 |
| Second Semester | $r$ 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

$\begin{array}{lll}\text { First Semester } & & \text { Units } \\ \text { WELD 4A } & \begin{array}{ll}\text { Heavy Plate, Structural Steel and Welding } \\ & \text { Certification.................................................. }\end{array} .\end{array}$
Recommended Elective .......................................................... 3 Total 8 Second Semester Units
WELD 4B Pipe, Tube Welding and Certification................... 5
Recommended Elective ............................................................. 3
Total 8
Recommended Electives: CAM 10; CADD 14, 24; ENGR 10, 11; WELD 56.
WELDING DESIGN \& FABRICATION - MAJor *8374
This certificate of achievement provides pre-employment training for an entry level job in the welding fabrication industry. Instruction in the design and fabrication of metal projects will be completed through the welding process. Skills will be taught in design, materials cost estimation and manufacturing processes.

## CERTIFICATE OF ACHIEVEMENT

## Student Learning Outcomes:

1. Given an idea or description students will be able to design and plan the construction of one or more advanced metal fabricated projects.
2. From the design and specifications, students will be able to determine estimated steel weights and cost calculations.
3. Students will be able to demonstrate the proper safety precautions, setup and use of tools and equipment common to metal fabrication.
4. In the construction of their project, students will apply various types of welds with quality workmanship to assemble the steel components of advanced projects.
5. During the construction of their project, students will demonstrate the efficient use of time and materials to produce advanced projects.

## FIRST YEAR

| First Semester | Units |
| :---: | :---: |
| AT 10 | Technical Computer Applications ...................... 3 |
| CADD 16 | 3D Solid Modeling I.................................. 3 |
| Second Semeste | r Units |
| WELD 3A | Welding Design and Fabrication ..................... 5 |
| SECOND YEAR |  |
| First Semester | Units |
| WELD 3B | Intermediate Welding Design and Fabrication ..... 5 |
|  | Total 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 culting 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.
$\begin{array}{lrl}\text { First Semester } & & \text { Units } \\ \text { AT 130 } 130 & \text { Industrial Mathematics................................. } 3\end{array}$
WELD 2A Introduction to Welding Technology.................... 6
Total $\quad 9$
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 cross-and inter-cultural contexts.
2. Analyze the study of the intersections and complications of class, race, age, ethnicity, nationality, health/disability, and sexual identity as fundamental categories of social and cultural analysis.
3. Engage in in-depth examination of one aspect of women's experience learned through (for example) a literary genre, a time period, a geographic region, or focus on a very narrow topic.
4. Connect ideas and concepts from various fields about oppression and patriarchy as these affect women to common themes or topics.
5. Evaluate the roles of women in society from a historical and sociological perspectives.
Program Requirements 20
REQUIRED CORE COURSES Units
WSTS 10 Changing Roles of Women................................. 3
WSTS/HS 25 Assertiveness Training ..................................... 2
Total 5
Course Options: Select a minimum of 15 units Units
AMST 10 American Pluralism: A Search for Common $\begin{aligned} & \text { Ground in a Multicultural Society..................... } 3\end{aligned}$
WSTS/SOC 5 Sociology of Rape........................................ 3
WSTS/SOC 7 Domestic Violence: Abuse within the Family........ 3
WSTS/HIST 22 History of American Women.............................. 3
WSTS/CLS 24 La Chicana and Latina...................................... 3
WSTS/ASAMER 30 Asian-American Women................................... 3
WSTS/ENGL 36 Women's Literature............................................... 3
WSTS/AFRAM 41 African-American Women's Studies .................... 3
WSTS/FN 43 Women's Nutrition.............................................. 2
WSTS/BA 44 Women in Management .................................. 3
WSTS 47 Introduction to Lesbian and Gay Studies.............. 3
Note: Associate degree requirements are listed on page 35.

# COURSE DESCRIPTIONS 

Descriptions of courses offered at Fresno City College follow in alphabetical order.

## Repeating a Course

It is the policy of this District that, unless specifically exempted by statute or regulation, every course, section or class, reported for state aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets such prerequisites as may be established pursuant to Subchapter 1, Chapter 6, Division 6, Title 5 of the California Code of Regulations, commencing with Section 55000.

Courses generally offered in only one of the two regular semesters are identified with a Fall (fall semester) or Spring (spring semester). Courses generally offered in only the evening program or during the summer session are so designated.

The State has mandated the maximum number of times a course may be repeated is three (3).

## Key to Graduation or Transfer Status

## Designations

The identification of the transfer acceptance of Fresno City College courses by the California State University and University of California systems was one of the outcomes of the Fresno City College Student Success Project. Listed at the end of each course description, if applicable, are abbreviations identifying the transfer or graduation status of the course. The key to the abbreviations follows:
A Associate degree applicable
CSU Transferable to the California State University system
CSU-GE Meets the general education requirements for California State University transfer certification. Completion of all courses in the California State University General Education transfer certification pattern will permit a student to transfer to a campus in the California State University system without having to complete additional lower division general education courses after transfer.
I Meets the requirements of the Intersegmental General Education Transfer Curriculum (IGETC). Completion of all IGETC requirements will permit a student to transfer to a campus in either the California State University or University of California system without having to complete additional lower division general education courses after transfer.
UC Transferable to the University of California system

## Schedule of Classes

The schedule of classes contains information necessary for registration and is available at the Admissions Office. Where no prerequisite is indicated, none is required except as explained in the section on "Prerequisites" which follows. Students should study the Schedule of Classes very carefully before completing registration.

## Course Credit Limitation

A student shall not be granted credit for the completion of a course that is a prerequisite for another course previously completed by the student.

## Prerequisites/Corequisites/Advisories

Students are urged to study the description of courses in this catalog to ensure that prerequisites are satisfied before registering for a course. Correct registration at an early date is important.

It is the student's responsibility to be certain that they have met the necessary prerequisite(s) for any course taken. The student may be dropped from any class where it is verified that the necessary prerequisite has not been taken.

It should be understood by the student that whether or not a prerequisite is specifically stated, the instructional staff of this college assumes that each student who enrolls in a transfer-level course possesses sufficient competencies in the areas of reading, writing, and mathematics to be able to profit from instruction.

Advisory indicates that the institution recommends, but does not require, certain course work be taken prior to enrolling in the described course.

Corequisite indicates that the course must be taken simultaneously with another course if not already completed.

Prerequisite is defined to mean a condition of enrollment that a student must meet in order to register in a course or program. A student may challenge any prerequisite by completing the Prerequisite Challenge Form available in the Counseling Center.

## Course Numbering System

1-99: Associate degree applicable courses that are also transferable to baccalaureate institutions
100-199: Associate degree applicable courses that are NOT transferable to baccalaureate institutions
200-299: Nondegree applicable credit courses
300-399: Noncredit courses

## Course Classification System

Pursuant to revisions to the California Administrative Code, Title 5, Sections 55000 and 55062, all courses listed within the college catalog fall into one of the following classifications:

Credit, Degree Applicable
Credit, Nondegree Applicable
Noncredit
The majority of courses have retained their previous classification and are credit, degree applicable. The exceptions are as follows:

## A. Credit, Nondegree Applicable

Admin of Justice 204
Admin of Justice 211
Admin of Justice 217
Admin of Justice 219
Admin of Justice २20
Admin of Justice २२२
Admin of Justice 223
Admin of Justice 224
Admin of Justice 225
Admin of Justice 226

Admin of Justice 227
Admin of Justice 227A
Admin of Justice 227B
Admin of Justice 227C
Admin of Justice 227D
Admin of Justice 233
Admin of Justice 233A
Admin of Justice 233B
Admin of Justice 233C
Admin of Justice 233D
Admin of Justice 233E
Admin of Justice 233F
Admin of Justice 233G
Admin of Justice 233H
Admin of Justice 2331
Admin of Justice 233J
Admin of Justice 233K
Admin of Justice 233L
Admin of Justice 233M

Instructor Training/Academy Instructor<br>Expandable Straight Baton Instructor<br>Background Investigation<br>Requalification-Basic Course<br>Radar Operator<br>Internal Affairs Investigator<br>Basic Tactical Communication<br>Interview and Interrogation<br>Standardized Field Sobriety Tests (SFSTs)<br>Advanced Roadside Impaired Driving<br>Enforcement (ARIDE)<br>ICI Gang Investigations Course<br>ICI Major Drug Investigation Course<br>ICI Criminal Investigator Core Course<br>ICI Vehicle Theft Course<br>ICI Advanced Gang Investigations<br>AR-15 Armorer Course<br>Tactical Firearms<br>Firearms - Tactical Rifle<br>Civil Procedures for Law Enf Officers<br>CalGang End User Training<br>Police Training Officer (PTO)<br>Wilderness Tracking<br>Electronic Weapons<br>Driving (PSP)<br>Court \& Temporary Holding Facility<br>Advanced Officer Course<br>Arrest \& Control Update<br>Training Conference<br>Patrol Canine Handler Update

Admin of Justice 233Q
Admin of Justice 233R
Admin of Justice 233S
Admin of Justice 233U

Admin of Justice 234
Admin of Justice 234A
Admin of Justice 234B
Admin of Justice 234C
Admin of Justice 235
Admin of Justice 235A
Admin of Justice 235B

Admin of Justice 235C
Admin of Justice 235D
Admin of Justice 235E
Admin of Justice 235F

Admin of Justice 235G
Admin of Justice 240
Admin of Justice 240A
Admin of Justice 240B
Admin of Justice 240D
Admin of Justice 240E
Admin of Justice 240F
Admin of Justice 240G
Admin of Justice 240H
Admin of Justice 240
Admin of Justice 243
Admin of Justice 243A
Admin of Justice 243B
Admin of Justice 243C
Admin of Justice 243D
Admin of Justice 243E

Admin of Justice 243F
Admin of Justice 243G
Admin of Justice 245
Admin of Justice 245A
Admin of Justice 245B
Admin of Justice 245C
Admin of Justice 245D
Admin of Justice 245E
Admin of Justice 245F
Admin of Justice 245G
Admin of Justice 245H
Admin of Justice 245
Admin of Justice 245J
Admin of Justice 245K
Admin of Justice 245L
Admin of Justice 245M

Introduction to Tactical Dispatcher Course Response to Active Shooters Update Training Conference - Gang Update Training Conference - Emotional Survival for Officers Update
Adult Corrections Officer Core Course
Adult Corrections Officer Core Enhancement Course
PC 832 Laws of Arrest
PC 832 Firearms
Reserve Officer - Firearm Update Training
Reserve Officer - Vehicle Transition Update Training
Reserve Officer Driver Awareness Issues -
Below 100 Update
Reserve Officer - E.V.O.C. Update Training
Reserve Officer - C.P.R./A.E.D. Update Training
Reserve Officer - First Aid Update Training
Reserve Officer - Electronic \& Impact Weapons
Update Training
Reserve Officer - Report Writing Update Training
Arrest and Control Update
Tactical Rifle for Law Enforcement
Firearms Update
Driver Training - Emergency Vehicle Update
Bias Based Policing Update Training
Principled Policing Update
First Aid for Medical Injuries Update
CPR/AED Update Training
First Aid for Traumatic Injuries Update
Arrest and Control Update for Probation Officers
Juvenile Institution Orientation Training
Expandable Baton for Probation Officers
Pepper Spray Training for Probation Officers
Basic Use of Force Options for Probation Officers
Tactical Approaches and Entries for
Probation Officers
Field Tactics Update for Probation Officers
Offender Behavior Modification
Academy Instructor Certification Course Update
Arrest \& Control Techniques Update
Baton User Update
Canine Agitator
Detective School
Driver Awareness Instructor
Driver Awareness Update
Driver Training Instructor
PIT Instructor
Driver Training/EVOC/PIT Update
Driver Training Simulator
Driving/Force Option Simulators Combo
Drug Facilitated Sexual Assault
Electronic Weapons

Admin of Justice 245N
Admin of Justice 2450
Admin of Justice 245P
Admin of Justice 245Q
Admin of Justice 245R
Admin of Justice 245S
Admin of Justice 245T
Admin of Justice 245U
Admin of Justice 245V
Admin of Justice 245W
Admin of Justice 245X
Admin of Justice 245Y
Admin of Justice 2452
Admin of Justice 246
Admin of Justice 246A
Admin of Justice 246B
Admin of Justice 246C
Admin of Justice 246D
Admin of Justice 246E
Admin of Justice 246F
Admin of Justice 246G
Admin of Justice 246H

Admin of Justice 246|
Admin of Justice 246J
Admin of Justice 246K
Admin of Justice 262
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 276A
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
Auto Tech 261

Firearms Instructor Update
Arrest \& Control Techniques Update
Tactical Rifle Advanced
Tactical Rifle Update
Tactical Rifle 1st Responder
Tactical Shotgun
Tactical Handgun Advanced
First Aid \& CPR Refresher
Force Option Simulator
Less Lethal Weapons
Mental IIIness Awareness Refresher
Officer Safety/Field Tactics
Officer Safety/Field Tactics Update
Rifle Marksmanship and Sniper
Search/Arrest Warrant
Traffic Collision Investigation Update
Use of Force Update
Perishable Skills Program I
Perishable Skills Program II
Rifle Instructor
K9 Handler Update
MACTAC - Multi Assault, Counter
Terrorism Action Capabilities
Basic Bicycle Patrol
Drug/Alcohol Standardized Field
Sobriety Tests Update
Crisis Intervention Training
SB 29 Mental Health Awareness for FTOs
Pre-Police Academy Conditioning
Advanced Officer Topics \#2
Basic Police Academy-Part 1
Basic Police Academy-Part 2
PC 832 Laws of Arrest/Arrest \& 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
POST Basic Supervisor Course
STC Basic Supervisor Course
Public Safety Dispatcher
Citizens' Police Academy
Basic Correctional Academy
Communications Training Officer
Probation Core Course
Juvenile Correctional Officer Core
Firearms Instructor Course
Field Training Officer
FTO Update
Drug Influence-H \& S 11550
Traffic Collision Investigation
BAR Specified Diagnosis and Repair Training

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
Counseling 247A
Counseling 247B
Counseling 249
Counseling 267
Decision Science 221
Decision Science 223
Dental Hygiene 200
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 263RW
EMLS 263W

EMLS 264LS
EMLS 264R
EMLS 264W
EMLS 265R

Automatic Power Trains I
Automatic Power Trains II
Suspen/Wheel Align
Auto Braking Systems
Engine Performance and Diagnosis
Electrical Systems
Auto Air Conditioning
Auto Engines
Automotive Information Systems
Street Rod Technology
ASE Cert Preparatory
Lamp/Brk Adj Prep
Biology Skills
Grammar Fundamentals
Introduction to Online Learning
College Study Skills, General Habits
College Study Skills, Academic Skills
Job Preparation
Financial Aid Money Management
Support for Finite Mathematics
Support for Business Statistics
Clinical Dental Hygiene IV
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 Reading and Writing
Low Intermediate Academic Writing
and Grammar
Intermediate Listening and Speaking
Intermediate Academic Reading and Vocabulary
Intermediate Academic Writing and Grammar High Intermediate Academic Reading and Vocabulary

EMLS 265W

EMLS 270

EMLS 284RW
EMLS 285RW
English 205
English 252
English 277
English 278
English 281
English 282
Fire Technology 200
Fire Technology 201
Fire Technology 202
Fire Technology 203
Fire Technology 204
Fire Technology 205
Fire Technology 222A
Fire Technology 2२2B
Fire Technology 230A
Fire Technology 230B
Fire Technology 230C
Fire Technology 230D
Fire Technology 230E
Fire Technology 233
Fire Technology 240A
Fire Technology 240B
Fire Technology 240C
Fire Technology 240D
Fire Technology 260A
Fire Technology 260B
Fire Technology 260C
Fire Technology 260D
Fire Technology 261
Fire Technology 265
Fire Technology 269
Math 201
Math 203S
Math 211
Math 211S
Math 250
Math 255
Math 260A
Math 260B
Math 260C
Math 2600
Math 277
Nursing, Registered 201
Nursing, Registered 202
High Intermediate Academic Writing
and Grammar
Pronunciation Improvement and
Accent Reduction
Intermediate Academic Reading and Writing
High-Intermediate Academic Reading and Writing
Accelerated Reading and Composition Skills
Writing Improvement
Reading Skills
Reading Comprehension
Sentence and Grammar Writing
Paragraph Writing
Advanced Company/Chief Officer
Advanced Apparatus Driver/Operator
Advanced Firefighter
Advanced EMT/EMT-Paramedic
Advanced Technical Rescue
Advanced Fire Prevention/Fire Investigation
Firefighter II Part A
Firefighter II Part B
Fire Apparatus Driver Operator 1A
Fire Apparatus Driver Operator 1B
Fire Apparatus Driver/Operator - Aerial Apparatus
Fire Apparatus Driver/Operator - Water Tender
Fire Apparatus Driver/Operator - Wildland Fire
Apparatus
Advanced Firefighter Continuing Education
Fire Inspector 1 A
Fire Inspector 1B
Fire Inspector 1C
Fire Inspector 1D
Chief Fire Officer 3A
Chief Fire Officer 3B
Chief Fire Officer 3C
Chief Fire Officer 3D
EMT 1 Refresher
I-300, Intermediate ICS
Advanced Firefighter Topics
Elementary Algebra
Support for College Algebra
Pre-Statistics
Support for Statistics
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
I

Nursing, Registered 203
Nursing, Registered 204
Nursing, Registered 205

Nursing, Registered 206
Nursing, Registered 207
Photography 267
Photography 277
Special Studies 277
Theatre Arts 200
Vocational ESL 265R
Vocational ESL 265W
B. Noncredit

Admin of Justice 369A
Air Conditioning 353
Applied Tech 340
Applied Tech 350
Applied Tech 360
Automotive Technology 373
Automotive Technology 374
Automotive Technology 375
Automotive Technology 376
Automotive Technology 377
Business Administration 310
Business Administration 333
Business \& Technology 306
Business \& Technology 307
Business \& Technology 332
Business \& Technology 370A
Business \& Technology 370B
Business \& Technology 375A
Business \& Technology 375B
Business \& Technology 375C
Business \& Technology 375D
Business \& Technology 375E
Business \& Technology 377
Developmental Services 359
EMLS 363R

EMLS 363RW
EMLS 363W
EMLS 364LS
EMLS 364R
EMLS 364W
EMLS 365R
EMLS 365W
EMLS 370

RN Refresher Course
Intro to the Nursing Profession
Care of the Childbearing and Parenting
Family Theory
Care of the Childbearing and Parenting
Family Simulation
Perioperative Nursing
Intro to Aerial Multimedia
Aerial Multimedia II
Credit, Nondegree SP ST
Movement for the Production The Little Prince
Applied Inter Reading for College and Careers
Applied Inter Writing for College and Careers

Advanced Office Topics
Principles of Industrial Refrigeration
Introduction to Machine Shop
Pneumatic \& Hydraulic Systems
Mechanical Power Drive Systems
Fork Litt Safety and Operation
State Laws and Federal Regulations
Safe Operation Fundamentals
Operations of Commercial Vehicles I
Operations of Commercial Vehicles II
Introduction to Business
Human Relations in the Workplace
Computer Keyboarding
Introduction to Word Processing
Customer Service in the One-Person Office
Office Asst Applications
Office Asst Applications
Introduction to Keyboarding
Introduction to Filing
Basic Office Communications
Math Review and Ten-Key Calculator
Job Search Documents
Getting Started with Computers and
Workplace Technology
Differential Learn Diag
Low Intermediate Academic Reading and
Vocabulary
Low-Intermediate Reading and Writing
Low Intermediate Academic Writing and Grammar
Intermediate Listening and Speaking
Intermediate Academic Reading and Vocabulary
Intermediate Academic Writing and Grammar
High Intermediate Academic Reading and
Vocabulary
High Intermediate Academic Writing and Grammar
Pronunciation Improvement and Accent Reduction

EMLS 384RW
EMLS 385RW
English 300
Graphic Communications 300A
Graphic Communications 314
Graphic Communications 315
Graphic Communications 316
Graphic Communications 317
Graphic Communications 320A
Graphic Communications 320B
Graphic Communications 322
Graphic Communications 323
Graphic Communications 324A
Graphic Communications 324B
Graphic Communications 325
Graphic Communications 327
Graphic Communications 330
Graphic Communications 331
Graphic Communications 332
Graphic Communications 334
Graphic Communications 339A
Graphic Communications 340A
Graphic Communications 341
Graphic Communications 347
Graphic Communications 351
Graphic Communications 352
Graphic Communications 353
Heat, Vent, \& Air Conditioning 350
Heat, Vent, \& Air Conditioning 351 RETA/CARO Ready - Industrial Refrigeration
Marketing 301
Math 312
Music 322
Music 326
Music 327
Music 339
Music 340
Music 341
Music 342A
Music 342B
Music 342C
Music 342D
Music 344
Music 348
Music 375
Photography 323
ST 300
Special Studies 377
Theatre Arts 346
Theatre Arts 347
Theatre Arts 348

RETA/CARO Ready - EPA Section 608
Technician Certification
Intermediate Academic Reading and Writing
High Intermediate Academic Reading and Writing
Academic Learning \& Literacy Skills
Adobe ACA Certification
Adobe Acrobat Professional
Web Page Design
Web Design Techniques
Adobe Illustrator
Intro to Applied Graphics - Adobe Tools
Intro to Applied Graphics - Media
Digital Media
Video Editing - Adobe Premiere Pro
Intro to 2-D Animation with Adobe Animate
Intro to 2-D Animation - Harmony Sottware
CMS Web Design
Digital Video Production
Adobe InDesign/Professional Publishing
Intermediate Photoshop
Video Techniques
Introduction to 3-D Animation
Introduction to Graphic Design
Intermediate Graphic Design
Visual Communications
Introduction to Four Dimensional Design
Storyboarding
Adobe Lightroom
Adobe After Effects Retail Sales and Customer Service Fundamentals Advanced Arithmetic for Pre STEM Students
Senior Piano Skills
Senior Vocal Skills
Senior Guitar Skills
Senior Opera Workshop
Senior Skills Concert Band
Senior Jazz Performance Ensemble
Senior Brass Skills
Senior Woodwind Skills
Senior String Skills
Senior Percussion Skills
Senior Choral Skills
Senior Latin Jazz Skills
Senior Community Orchestra
Advanced Photoshop
Tutoring
Zero Unit, No Grade Sp St
Senior Musical Performance Skills
Senior Musical Theatre Skills
Senior Play Production

Career \& Technology Center Courses
Auto Mechanics $371 \quad$ Engine Repair
Auto Mechanics $372 \quad$ Engine Performance
Auto Mechanics $375 \quad$ Automotive Brake Systems
Auto Collision Repair $371 \quad$ 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
Indust Training 372
Maint Mechanic 370
Maint Mechanic 371
Maint Mechanic 372
Manuf Mechanic 351
Manuf Mechanic 352A
Manuf Mechanic 352B
Manuf Mechanic 352 C
Manuf Mechanic 352D Technical Report Writing
Manuf Mechanic 353A Fluid Power Fundamentals
Manuf Mechanic 353B Pneumatic Fundamentals
Manuf Mechanic 353C Hydraulic Fundamentals
Manuf Mechanic 354A Power Transmission
Manuf Mechanic 354B Welding Fundamentals
Manuf Mechanic 354C Electrical Fundamentals

## SCCCD INTRA-DISTRICT ARTICULATED COURSES

The list of "in-lieu" courses that Clovis Community College, Fresno City College and Reedley College (which includes the Madera Community College Center and Oakhurst Community College Center) have agreed to articulate with one another to meet major requirements for an Associate in Arts degree, an Associate in Science degree, or a Certificate of Achievement is available at the Counseling Department.

Note: It is the student's responsibility to verify with an academic counselor that the "in-lieu" course(s) successfully completed can meet the respective college's: (a) local general education; (b) CSU GE pattern; (c) IGETC pattern; and/or (d) major requirements for the Associate Degree for Transfer (ADT). Do not ask a friend! Additional resources can be found in the respective college's catalog and ASSIST.org.

## COURSE DESCRIPTIONS

## ACCOUNTING (ACCTG)

## 4A FINANCIAL ACCOUNTING

## 4 units, 4 lecture hours, 1 lab hour

ADVISORY: Computer Information Technology 12 or 15. A working knowledge of basic arithmetic is recommended.

Explores what financial accounting is, why it is important, and how it is used by investors and creditors to make decisions. Covers the accounting information system and the recording and reporting of business transactions with a focus on the accounting cycle, financial statements, and statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flows, internal controls, and ethics. (C-ID ACCT 110) (A, CSU, UC)

## 4B MANAGERIAL ACCOUNTING

4 units, 4 lecture hours, 1 lab hour
PREREQUISITE: Accounting 4A or equivalent.
Examination of how managers use accounting information in making decisions related to planning, directing, and controlling. Covers cost terms and concepts, cost control, accounting for costs in manufacturing and service organizations, cost behavior, cost structure, cost-volume-profit analysis, profit planning, standard costs, and capital budgeting. (C-ID ACCT 120) (A, CSU, UC)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

## 1-8 units

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to accounting. Collaborative learning objectives established specific to accounting. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 51 INTERMEDIATE ACCOUNTING

3 units, 3 lecture hours, 1 lab hour,
(Formerly Accounting 51 and 151)
PREREQUISITE: Accounting 4A or equivalent.
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 federal (not state) individual income taxes including calculation of gross income, exclusions, deductions, losses, credits, and property transactions. Requires students to utilize a computerized tax system to reinforce concepts and methodology presented in the course. (A, CSU)

## 54A PRINCIPLES OF AUDITING

3 units, 3 lecture hours
PREREQUISITE: Accounting 4A or equivalent.
Explores the objectives and the techniques in the verification of business financial statements. Covers the duties, responsibilities, and professional ethics of the auditor, the auditor's report, and analysis of internal controls. (A, CSU)

## 56 PAYROLL ACCOUNTING

3 units, 3 lecture hours
PREREQUISITE: Accounting 4A or equivalent.
Covers payroll accounting including computing gross wages, tax withholdings and net pay, maintaining payroll records, journalizing payroll transactions, and preparing federal tax forms. (A, CSU)

## 57 GOVERNMENTAL ACCOUNTING <br> 3 units, 3 lecture hours <br> PREREQUISITE: Accounting 4A or equivalent. <br> An examination of the accounting processes used within municipal county, state, and federal governments. Includes budgetary control, types of funds, and interpretation of reports. (A, CSU)

## 61 FORENSIC ACCOUNTING

## 3 units, 3 lecture hours

PREREQUISITE: Accounting 4A or equivalent.
The action of identifying, recording, settling, extracting, sorting, reporting, and verifying past financial data or other accounting activities in settling current or prospective legal disputes or using such past financial data in projecting future financial data to settle legal disputes. (A, CSU)

## 70 QUICKBOOKS FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Accounting 4A. Eligibility for English 1A recommended.

Introduction to accounting procedures and applications using QuickBooks including setting up companies, general ledger, sales processing, accounts receivable, purchasing, accounts payable, bank reconciliation, and payroll. (A, CSU)

## 73 SAGE 100 FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Accounting 4A or equivalent.
Introduction to accounting procedures and applications using Sage 100 software. Curriculum covers creating a new company and performing accounting functions using the general ledger, accounts receivable, accounts payable, payroll, and bank reconciliation modules. (A, CSU)

## ADMINISTRATION OF JUSTICE (AJ) PolICE ACADEMY

## 204 INSTRUCTOR TRAINING/ACADEMY INSTRUCTOR CERTIFICATION COURSE

 1.5 units, 1.55 lecture hours, 0.32 lab hours, (Pass/No Pass), (Formerly Administration of Justice 104)PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Presentation skills and techniques that can be applied in any presentation environment. An overview of learning activities, facilitation of group activities, public speaking, and resources available to enhance presentations. Also, designed to increase the skills of Basic Academy Instructors in delivering POST Learning Domain curricula. Materials fee will be charged.

## 211 EXPANDABLE STRAIGHT BATON INSTRUCTOR

0.4 unit, 8.5 lecture hours, 8.5 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of, and familiarity regarding officer safety related to police baton use; knowledge of proper and safe tactical movement related to police baton use; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under physical situations; knowledge of proper and safe arrest and control techniques related to police baton; knowledge of, and familiarity with, California Penal codes used in law enforcement use of force pertaining to the police baton; knowledge of effective verbal and non-verbal communication used in law enforcement during arrest procedure related to the police baton; knowledge of, and familiarity with, case law pertinent to law enforcement related to the use of the police baton; ability to perform CPR and First Aid techniques; knowledge of proper documentation in police reports pertaining to the use of the police baton.

Train officers to instruct department personnel in the use of the expandable and straight baton. Materials fee will be charged.

## 217 BACKGROUND INVESTIGATION

1.5 units, 33.6 lecture hours, (1 week), (Pass/No Pass), (Formerly Administration of Justice 117)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Basic techniques and procedures for background investigators. Materials fee will be charged.

## 219 REOUALIFICATION-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 unit, 25.2 lecture hours, (1 week), (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

This course requires extensive knowledge of all types of police operations, because an internal investigator will be asked to investigate a wide variety of complaints. The investigator will need to possess deep
operational knowledge because in part, he or she will be called upon to make judgments regarding the truthfulness and accuracy of individuals who are interviewed or investigated. Students will also be required to have detailed knowledge of California law, case law, evidence collection, and criminal justice procedures. Knowledge of, and familiarity with, proper use of force during law enforcement operations; knowledge of proper use of verbal and non-verbal communication used in law enforcement contacts with the public; knowledge of, and familiarity with, current case law related to proper law enforcement procedures in daily policing; knowledge of the proper use of police weaponry as it pertains to its use in daily policing; knowledge of local, state and federal law violations pertaining to law enforcement officers working under color of authority. Ethical issues, legal considerations, investigative tools and procedures concerning public safety internal investigations. Procedures under California Government Code sections 3300 to 3311 and case law. Materials fee will be charged.

## 223 BASIC TACTICAL COMMUNICATION

0.4 unit, 8.4 lecture hours, (1 week), (Pass/No Pass)
PREREQUISITE: None
Development, practice and delivery of effective conflict management of communication skills required for public safety personnel. Materials fee will be charged.

## 224 INTERVIEW AND INTERROGATION

1 unit, 25.2 lecture hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of, and familiarity with, California Penal and Vehicle codes use during policing interviews and interrogation to form proper questions related to crime events; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement interviewing and interrogation; knowledge of, and familiarity with, the United States Constitution pertaining to citizen's rights pertaining to police related detainments and questioning during law enforcement operations.

Assist patrol officers in interviewing and interrogating persons involved in criminal investigations using behavioral analysis, observation skills, legal aspects, interview preparation, documentation and trial follow-up. Materials fee will be charged.

## 225 STANDARDIZED FIELD SOBRIETY TESTS (SFSTS)

0.5 unit, 16.8 lecture hours, (1 week), (Pass/No Pass)

PREREQUIIITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Develop skills in recognizing, interpreting and administering the Standardized Field Sobriety Tests, write reports, testify in court for cases involving driving under the influence.

## 226 ADVANCED ROADSIDE IMPAIRED DRIVING ENFORCEMENT (ARIDE)

## 0.5 unit, 16.8 lecture hours, (1week), (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. Must possess a California POST SFST certificate issued by a POST certified presenter. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

ARIDE is required by the National Standardized Field Sobriety Testing Program Standards to enroll in a Drug Recognition Evaluator course, includes information on various drugs and/or alcohol and their effect on humans as it related to violations of federal, state and local laws.

## 227 ICI GANG INVESTIGATION COURSE

 2 units, 2.34 lecture hours, (Pass/No Pass), (Open Entry/Open Exit)PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency. Student must have the legal authority to possess the required law enforcement weaponry involved in this course.

Provides current law enforcement investigators with the information and skills to aid them in the successful investigation of gang related crimes, provide expert testimony, and in the use of informants, prison gangs, and gang subcultures; PC 186.22/Case Law; gang documentation/ file management; interview \& interrogation techniques; and the investigative benefit of social networking \& technology, development of a personal curricula vitae, writing a search warrant, and building a gang prosecution case.

## 227A ICI MAJOR DRUG INVESTIGATION COURSE

1.5 units, 1.5 lecture hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 225, 226, and 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

The Robert Presley Investigation (ICI) Major Drug Investigation Course is one of 14 ICI Foundation Specialty Courses within the Robert Presley Institute of Criminal Investigation. This course is designed for peace officers who are currently assigned or will be assigned to investigate major drug investigations. The course covers drug in field training, undercover surveillance, and counter surveillance. Provides qualifications to identify, arrest, and successfully prosecute various major drug violations. This course is designed to enhance the effectiveness of the individual criminal investigators skills in performing the multi-disciplined, multi-leveled tasks necessary to successfully conduct comprehensive major drug investigations. Instruction in this course is provided through a coordinated, experience-based adult learning approach.

## 227B ICI CRIMINAL INVESTIGATOR CORE COURSE <br> 2 units, 2.34 lecture hours, (Pass/No Pass), (Open Entry/Open Exit) <br> PREREQUISITE: Administration of Justice 270B.

This is the core course for the Robert Presley Institute of Criminal Investigation (ICI) and is the prerequisite program for all subsequent ICl specialty courses. The ICI is designed to improve the effectiveness of individual criminal investigators by providing instruction through a coordinated, experience-based adult learning approach which addresses instruction related to crime scene management, working with victims and witnesses, case management and documentation, interviewing and interrogation skills, search and seizure issues, surveillance techniques, case reporting, informant management, search warrant preparation, courtroom testimony, and media relations.

## 227C ICI VEHICLE THEFT COURSE

## 0.5 unit, 2.33 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

This ICI foundation specialty course provides investigators with the basic training techniques, skills and information necessary to conduct successful vehicle theft investigations. This course includes instruction on the following types of vehicle theft investigations: vehicle theft by fraud; Vehicle Identification Number (VIN) switched vehicles; salvaged vehicles, and thefts of construction equipment, watercraft, commercial vehicles and motorcycles. This course also provides students with training related to the preparation and execution of search warrants, and vehicle thett investigative resources such as NICB, insurance companies, financial corporations and/or vehicle dealerships. At the conclusion of this course the student/investigator will be able to: interpret and apply vehicle theft related laws; understand the role and responsibilities of the vehicle theft investigator; determine if a vehicle has been VIN switched; determine if a vehicle has been stolen; utilize appropriate investigative resources to assist in vehicle theft investigations; obtain the identification of a vehicle with the VIN removed; and successfully prepare for and assist in the prosecution of cases involving vehicle theft.

## 227D ICI ADVANCED GANG INVESTIGATIONS

## 0.5 unit, 2.33 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Provides investigators with the information and skills to successfully investigate gang related crimes and testify as a gang expert. The course is designed for active, hands-on participation by all students. Course work will include preparation for submitting a gang wiretap affidavit, understanding gang association warrants, a review of both prosecution and defense strategies in gang cases, and preparing for expert testimony. The course will conclude with a mock-courtroom exercise, administered by gang District Attorneys. The student will have an opportunity to practice their gang expert testimony skills with both direct and cross examination

## 233 AR-15 ARMORER COURSE

## 0.4 unit, 1.4 lab hours, (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; knowledge or and familiarity with, the everyday use, vehicle racking, storage environments, and handling of the patrol rifle; ability to achieve a qualifying score during AR-15 shooting to ensure scoping of a rifle; knowledge of, and familiarity with, the nomenclature of a common patrol rifle used in policing; the ability to manipulate small tools during assemble and disassemble of the patrol rifle; knowledge of proper and safe tactical movement while carrying a AR-15 patrol rifle; knowledge of, and familiarity with, case law pertinent to law enforcement patrol rifles and legal adjustments; ability to perform CPR and First Aid techniques.

Knowledge, skill, and abilities to perform disassemble, assemble, inspection, repair, installation of parts, safety check, use proper tools, function check the AR-15/M-16 patrol rifle.

## 233A TACTICAL FIREARMS (PSP)

## 0.1 unit, 0.58 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; due to transition drills satisfy PC 33220(b); ability to achieve a qualifying score during handgun shooting; ability to achieve a qualifying score during shotgun training; knowledge of, and familiarity with, sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of, and familiarity with, the use of force continuum related to policing; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling while transitioning weapons; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Knowledge of tactical handgun, shotgun and rifle proficiency with techniques, exercise, and course-of-fire focusing on, weapons safety, drawing techniques, shooting fundamentals, target identification, speed, accuracy and effectiveness under stress, movement conditions, transitioning and clearing malfunctions.

## 233B FIREARMS - TACTICAL RIFLE

## 0.3-0.4 unit, 0.93-1.4 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during AR-15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of, and familiarity with, California Penal codes used in law enforcement pertaining to use of force; knowledge of case law pertaining to use of force in policing; knowledge of, and familiarity with, use of force continuum and weapon selection used in policing; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Designed to satisfy Penal Code 33220(b) requirements by the State of California for law enforcement officers to carry and use a patrol rifle.

## 233C CIVIL PROCEDURES FOR LAW ENFORCEMENT OFFICERS

## 0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of, and familiarity with, California Penal codes used in law enforcement pertaining to enforcement of court orders, property levy and till taps; knowledge of, and familiarity with, community policing and problem-solving pertaining to civil disputes; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement in the civil process; ability to read court orders pertaining to policing; knowledge of, and familiarity with, officer safety techniques used in disturbance calls; knowledge of the NCIC system related to pre-investigation of action plans prepared by law enforcement.

Enforcement of civil procedures common to Law Enforcement, such as, landlord tenant disputes, till taps, property 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 judgments regarding the in-field training of police officers. Students will also be required to have detailed knowledge of California law, case law, evidence collection, and criminal justice
procedures. Knowledge of, and familiarity with, proper use of force during law enforcement operations; knowledge, and familiarity with, Penal and Vehicle codes; knowledge, and familiarity with, Health \& Safety codes; knowledge of proper use of verbal and non-verbal communication used in law enforcement contacts with the public; knowledge of, and familiarity with, current case law related to proper law enforcement procedures in daily policing; knowledge of the proper use of police weaponry as it pertains to its use in daily policing; knowledge of the rank structure in policing; knowledge, and familiarity of, local, state, and federal laws, and policies, pertaining to law enforcement.

Meets POST requirements for the training of Patrol Training Officers. Topics include PTO program goals, objectives, role of PTO, expectations of the PTO, adult learning, coaching and training methods.

## 233F WILDERNESS TRACKING

## 0.3 unit, 20.8 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Possession of a valid California Driver's License; Knowledge of, and familiarity with, the Incident Command System used by public safety; Knowledge of GPS handheld devices; experience with survival techniques and equipment used in woodland and mountainous terrain; Knowledge of, and familiarity with, backpacking equipment used in mountainous terrain; Knowledge of, and familiarity with public safety radio use; currently certified to perform CPR and First Aid; Knowledge of, and familiarity with, officer safety techniques pertaining to contacting wanted suspect hiding in the wilderness.

Train students involved in active search and rescue or wanted suspects, in techniques of person tracking in mountainous terrain, both day and night operational tracking.

## 233G ELECTRONIC WEAPONS

0.1 unit, 6.2 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of range safety guidelines associated with non-lethal weapons; knowledge of Penal code sections related to use of force in policing; knowledge of emotional response during an arrest process; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers during arrest of resistive subject situations; knowledge of proper and safe arrest and control techniques; knowledge of, and familiarity with, the use of force continuum pertaining to policing; knowledge and ability to use handcuffing commonly used in policing; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement use of non-lethal weapons; knowledge of report writing related to police use of force reports; ability to perform CPR and First Aid techniques.
Training in use of conducted energy weapons including TASER X26E, X26P and effects of electricity on biological systems, central nervous system and case law regarding the use of electronic weapons.

## 233H DRIVING (PSP)

## 0.1 unit, 0.06 lecture hours, 0.41 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Possession of a valid California Driver's License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency driving, knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; knowledge of how perception and reaction time affects a vehicle's total stopping distance; knowledge of, and familiarity with, the importance and proper use of safety belts in a law enforcement vehicle; knowledge of Fresh and Stale lights at intersections; knowledge of a space cushion surrounding a vehicle; knowledge of the components of a vehicle inspection; knowledge of and familiarity with, the use of code 3 light and siren equipment commonly used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement emergency driving; ability to perform CPR and First Aid techniques.

Meets the 4-hour PSP requirements for patrol vehicle operations, course will consist of both slow speed exercises and pursuit training.

## 233I COURT \& TEMPORARY HOLDING FACILITY

## 0.1 unit, 0.46 lab hours, (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate, or California Standards of Training for Corrections Basic Course, completion of a POST PC 832 course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of the Penal code, Vehicle code, Health \& Safety codes related to the degrees of crime related to an inmate in a detention facilities; knowledge of officer safety techniques related to the movement of arrestees in confined areas; knowledge of case laws related to the housing of juvenile vs. adults in detention facilities; knowledge of courtroom procedures related to inmate movements within a courthouse; knowledge of First Aid procedures related to non-handgun suicides.

Meets requirements of Section 1024, Title 5, California Code of Regulations for training personnel responsible for supervision of inmates in, and supervisors of, a court holding or temporary holding facility regarding jail standards, jail operations, liability, inmate segregation, suicide prevention, emergency procedures and planning.

## 233J ADVANCED OFFICER COURSE

## 0.1 unit, 0.06 lecture hours, 0.24 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of blood borne pathogens as they pertain to law enforcement services; Certified to carry and deploy a law enforcement TASER; ability to perform CPR and First Aid techniques; knowledge of, and experience with, law enforcement suspect containment during criminal in-progress crimes; knowledge of, and familiarly with, proper and safe tactical movement pertaining to policing; knowledge of, and experience with, law enforcement mindset during policing operations; Knowledge of, and experience with, proper police driving techniques. 5 -hour course, updated instruction on officer mindset, perimeters, yearly updates for electronic weapons and California OSHA blood borne pathogens.

## 233K ARREST \& CONTROL UPDATE

## 0.1 unit, 0.06 lecture hours, 0.24 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of, and familiarity regarding officer safety related to resistive subjects; knowledge of, and familiarity with, control holds and takedowns used in policing; knowledge of, and familiarity with, the principals of Awareness, Balance and Control pertaining to policing; knowledge of, and familiarity with, cursory search and full arrest searches in policing; knowledge of body parts as personal weapons acceptable to policing; knowledge of, and familiarity with common concealed weapons on subjects pertinent to policing; knowledge of Penal code sections related to use of force in policing; knowledge of emotional response
during an arrest process; knowledge of proper and safe firearms retentions; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and disaster situations; knowledge of proper and safe arrest and control techniques; knowledge of, and familiarity with, the use of force continuum pertaining to policing; knowledge and ability to use handcuffing commonly used in policing; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement; knowledge of report writing related to police use of force reports; ability to perform CPR and First Aid techniques.
5.2 hour course meets POST PSP requirements for arrest and control technique update for California law enforcement officers.

## 233L TRAINING CONFERENCE

0.1-0.3 unit, 8.4-16.8 lab hours, ( 1 week), (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police operations, due to the large umbrella of liability covering a wide variety of law enforcement daily operations. The student will need to possess deep operational knowledge because in part, he or she will be called upon to make judgements regarding the involvement of police operations. Students will also be required to have detailed knowledge of California law, case law, evidence collection, and criminal justice procedures. Knowledge of, and familiarity with, proper use of force during law enforcement operations; knowledge of proper use of verbal and non-verbal communication used in law enforcement contacts with the public; knowledge of, and familiarity with, current case law related to proper law enforcement procedures in daily policing; knowledge of the proper use of police weaponry as it pertains to its use in daily policing; Knowledge of the rank structure in policing; knowledge, and familiarity of, local, state, and federal laws, and policies, pertaining to law enforcement.

8 -16 hour course provides an overview of managing risk in the high-risk world of law enforcement operations, focusing on civil liability, training, leadership and updated case studies.

## 233M PATROL CANINE HANDLER UPDATE

0.5 unit, 1.8-2.23 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. Certified law enforcement canine handler. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Course contains legal updates, safety concerns, obedience training, canine personalities, handling techniques, search techniques, environmental concerns, person apprehensions, first aid, and documentation for handlers of patrol canines.

## 233N SEARCH AND RESCUE TRAINING UPDATE

0.5 unit, 1.78-2.34 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Law Enforcement search and rescue techniques, rope training, rescue equipment, patient packaging, navigation, tracking, survival skills and field operations.

## 2330 UNDERWATER SEARCH AND RECOVERY UPDATE

0.5 unit, 1.8-2.23 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. Students must be advanced law enforcement certified SCUBA divers. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Underwater search and recovery techniques for SCUBA diving in poor conditions, search and navigating underwater, and utilizing a helicopter during a search.

## 233P SEARCH \& RESCUE INCLEMENT WEATHER UPDATE

0.5 unit, 1.8-2.23 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Law Enforcement search and rescue techniques for rescue of persons in swift water environments, snow, inclement weather, various terrains and interaction with helicopter or air support.

## 2330 INTRODUCTION TO TACTICAL DISPATCHER COURSE

0.4 unit, 1.4 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 278 and 284.
Enhance existing public safety dispatcher skills of a seasoned dispatcher to provide advanced dispatching communication knowledge to assist patrol/SWAT officers during high priority critical incidents.

## 233R RESPONSE TO ACTIVE SHOOTERS UPDATE

0.1 unit, 0.58 lab hour, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Review and update law enforcement responses to active shooter situations that call for single/multiple officer teams, utilizing proper weapon handling, proper room entry techniques, and single/multiple threat assessments and threat contacts.

## 233S TRAINING CONFERENCE - GANG UPDATE 0.1-0.3 unit, 0.47-0.97 lab hour, (Pass/No Pass), (Open Entry/Open Exit) <br> PREREQUISITE: Administration of Justice 270B. A California

 Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.Review and update law enforcement responses to current gangs, gang internal workings, criminal actions, case follow-up and officer safety concerns updating law enforcement officers and investigators.

## 233U TRAINING CONFERENCE - EMOTIONAL SURVIVAL FOR OFFICERS UPDATE

0.1-0.3 unit, 0.47-0.93 lab hour, (Pass/No Pass), (Open Entry/Open Exit) PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Review and update how current law enforcement officers cope with stress, physical and emotional challenges.

## 234 ADULT CORRECTIONS OFFICER CORE COURSE

6 units, 4.5 lecture hours, 5.77 lab hours, (Pass/No Pass), (Open Entry/Open Exit) PREREQUISITE: None.
Satisfies the requirements for Standards and Training for Corrections (STC), basic correctional academy training.

## 234A ADULT CORRECTIONS OFFICER CORE ENHANCEMENT COURSE <br> 1 unit, 0.44 lecture hour, 1.9 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 234. Successful completion of Administration of Justice 234 when taken in tandem without a separation between courses (Administration of Justice 234 and Administration of Justice 234A).

This course is designed as an enhancement to the 176 hour Adult Corrections Core. The course provides training in the following subjects: CPR and First-aid, Chemical Agents, PREA, Carotid Restraint, PepperBall, Excited Delirium, and ADA Issues.

## 234B PC 832 LAWS OF ARREST

1.5 units, 1.14 lecture hours, 1.2 lab hours, (Pass/No Pass), (Open Entry/Open Exit) PREREQUISITE: None.
Basics in arrest and control techniques and knowledge of California laws related to the requirements of Section 832 (Level III) of the California Penal Code.

## 234C PC 832 FIREARMS

0.4 unit, 1.4 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course.

Basic use of firearms to fulfill the requirements of section 832 of the California Penal Code.

## 235 RESERVE OFFICER - FIREARM UPDATE TRAINING

0.1 unit, 0.06 lecture hour, 0.18-0.28
lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Updates firearms skills related to reserve peace officers working with full-time officers, designed for working reserve officers qualified to carry law enforcement firearms.

## 235A RESERVE OFFICER - VEHICLE TRANSITION UPDATE TRAINING

0.1 unit, 0.06 lecture hour, $0.18-0.28 \mathrm{lab}$ hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Identifies the various vehicle handling/driving differences from standard Ford sedans to All-wheel drive Explorers used in law enforcement vehicles, handling and equipment placement issues.

## 235B RESERVE OFFICER DRIVER AWARENESS ISSUES - BELOW 100 UPDATE

0.1 unit, 0.06 lecture hour, 0.18-0.28 lab
hour, (Pass/No Pass), (Open Entry/Open
Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Review common driving issues encounter by patrol officers that cause accidents, injuries, deaths and review positive driving practices to reduce officer driving death.

## 235C RESERVE OFFICER - E.V.O.C. UPDATE TRAINING <br> 0.1 unit, 0.06 lecture hour, 0.18-0.28 lab hour, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Provide instruction on the proper driving techniques to maneuver a vehicle at both slow speeds and high speeds. Allowing students to get first-hand experience at driving at slow speed and high speed under different circumstances and having to utilize the radio and stay aware of other vehicles on the roadway.

## 235D RESERVE OFFICER - C.P.R/A.E.D. UPDATE TRAINING

0.1 unit, 0.06 lecture hour, $0.18-0.34$ lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Provides updated information or techniques necessary to perform C.P.R. and A.E.D. during medical emergencies in the field for reserve officers.

235E RESERVE OFFICER - FIRST AID
UPDATE TRAINING
0.1 unit, 0.06 lecture hour, $0.18-0.28$ lab
hour, (Pass/No Pass), (Open Entry/Open
Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Provide working reserve officers updated information and techniques common to infield injuries encountered by public safety.

## 235F RESERVE OFFICER - ELECTRONIC \& IMPACT WEAPONS UPDATE TRAINING

0.1 unit, 0.06 lecture hour, 0.18-0.28 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Techniques for the proper use of expandable batons and electronic weapons, as well as legal update information for those weapons used by public safety.

## 235G RESERVE OFFICER - REPORT WRITING UPDATE TRAINING

0.1 unit, 0.06 lecture hour, 0.18-0.28 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Information on writing skills associated with the documentation of public safety incidents, proper sentence structure, writing styles, formatting and required information for prosecution of incidents or crimes.

## 240 ARREST AND CONTROL UPDATE

0.1 unit, 0.06 lecture hour, 0.18 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Review and update how current law enforcement officers cope with stress, physical and emotional challenges.

## 240A TACTICAL RIFLE FOR LAW ENFORCEMENT

 0.3 unit, 0.93 lab hour, (Pass/No Pass), (Open Entry/Open Exit)PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency. Student must have the legal authority to possess the required law enforcement weaponry involved in this course.

Designed to train public safety officer who can possess law enforcement specialty rifles, rifle safety, malfunction drills, basic tactic for deployment of rifles within the scope of the public safety environment. Meets requirement of Penal Code 33220(b) and POST regulation 1081.

## 240B FIREARMS UPDATE

0.1 unit, 0.06 lecture hour, 0.18 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency. Student must have the legal authority to possess the required law enforcement weaponry involved in this course.

Update training for public safety officers who carry sidearm, transition training, judgement, shooting techniques, building upon current knowledge and training.

## 240D DRIVER TRAINING - EMERGENCY VEHICLE UPDATE

0.1 unit, 0.36 lab hour, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency. Student must have the legal authority to possess the required law enforcement weaponry involved in this course. Student must possess a valid California Driver's License.

Provides minimum topics for driver training/awareness required by POST perishable skills program, pursuit intervention, legal issues, and vehicle dynamics. Course is building on possessed past experience and training in driving a police vehicle.

## 240E BIAS BASED POLICING UPDATE TRAINING

0.1 unit, 0.06 lecture hour, 0.18 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Review and update of bias based policing and racial profiling issues related to Law Enforcement.

## 240F PRINCIPLED POLICING UPDATE

0.1 unit, 0.47 lab hour, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Principled policing teaches policing approaches to law enforcement officers that emphasize respect, listening, neutrality and trust while also addressing the common implicit biases that can be barriers to this approach.

## 240G FIRST AID FOR MEDICAL INJURIES UPDATE

0.1 unit, 0.06 lecture hour, 0.18 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Identify medical emergencies including childbirth, and provide basic life support skills and treatment.

## 240H CPR/AED UPDATE TRAINING

0.1 unit, 0.06 lecture hour, 0.18 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Identify sudden cardiac arrest and demonstrate proper CPR and use of the Automatic External Defibrillator.

## 2401 FIRST AID FOR TRAUMATIC INJURIES UPDATE

0.1 unit, 0.06 lecture hour, 0.18 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Identify priorities in patient assessment and treatment of traumatic injuries confronted by law enforcement field officers.

## 243 ARREST AND CONTROL UPDATE FOR PROBATION OFFICERS

0.1 unit, 0.47 lab hour, (Pass/No Pass), Open Entry/Open Exit)
PREREQUISITE: A California Standards and Training for Corrections Probation Officer CORE course certificate issued from an accredited training provider, or equivalent as determined by the division dean or their appointee. These skills and knowledge base are related to adopted STC and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Arrest and control techniques directed toward probation officers working in the field and within detention facilities.

## 243A JUVENILE INSTITUTION ORIENTATION TRAINING <br> 0.5 unit, 1.8 lab hours, (Pass/No Pass), (Open Entry/Open Exit) <br> PREREQUISITE: Administration of Justice 286. <br> Orientation skills essential for newly hired Juvenile Correctional Officers to meet performance standards and to obtain benefits from subsequent on-the-job training.

## 243B EXPANDABLE BATON UPDATE FOR PROBATION OFFICERS

0.1 unit, 0.46 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 285. Prior to beginning this course, students must already be familiar with the nomenclature, control holds, take downs, strikes, patterns of movement, and the California Penal Codes used in law enforcement pertaining to the expandable baton.

Expandable baton techniques directed toward probation officers working in the field.

## 243C PEPPER SPRAY TRAINING FOR PROBATION OFFICERS

0.1 unit, 0.46 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 285 and 286.
Pepper spray deployments and decontamination for probation officers working in the field, and juvenile correctional officers working in a juvenile institution.

## 243D BASIC USE OF FORCE OPTIONS FOR PROBATION OFFICERS

0.1 unit, 0.46 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 285 and 286.
Force options training for probation officers and juvenile correctional officers. Understanding of case law, arrest and control techniques, pepper spray, restraints, and restraint techniques.

## 243E TACTICAL APPROACHES AND ENTRIES FOR PROBATION OFFICERS <br> 0.3 unit, 0.93 lab hour, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 285. Legal understanding of use of force and experience handling a law enforcement firearm. Carries a firearm as part of issued equipment.

Tactical approaches and entries into a residence or building, clearing rooms and addressing potential threats. Simunitions equipment is utilized for probation officers working in the field in this training.

## 243F FIELD TACTICS UPDATE FOR PROBATION OFFICERS

## 0.1 unit, 0.46 lab hour, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 285. Experience handling and shooting a law enforcement firearm. Carries a firearm as part of issued equipment.

Field tactics update for probation officers conducting probation checks on probationers. Simunitions equipment is utilized for approach and entry scenario training.

## 243G OFFENDER BEHAVIOR MODIFICATION

0.4 unit, 1.4 lab hours, (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUIIITE: Administration of Justice 285 and 286 . Working in a probation assignment that supervises high-risk felony offenders.

The three components of Cognitive Self-Change, Social Skills, and Problem Solving are the nexus to Thinking for a Change offender behavior modification. Directed toward officers working in a juvenile detention facility or probation officers in the field.

## 245 ACADEMY INSTRUCTOR CERTIFICATION COURSE UPDATE

0.1 unit, 8.4 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Dispatcher Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Updated teaching techniques related to teaching in the Basic Regular Course (Police Academy) that satisfies the POST PAM Section 1070 requirements.

## 245A ARREST \& CONTROL TECHNIQUES UPDATE <br> 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.

## 245B BATON USER UPDATE

## 0.1 unit, 0.06 lecture hours, 0.18 lab hours,

 (Pass/No Pass), (Open Entry/Open Exit)PREREQUIIITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of, and familiarity regarding officer safety related to police baton use; knowledge of proper and safe tactical movement related to police baton use; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under physical situations; knowledge of proper and safe arrest and control techniques related to police baton; knowledge of, and familiarity with, California Penal codes used in law enforcement use of force pertaining to the police baton; knowledge of effective verbal and non-verbal communication used in law enforcement during arrest procedure related to the police baton; ; knowledge of, and familiarity with, case law pertinent to law enforcement related to the use of the police baton; ability to perform CPR and First Aid techniques; knowledge of proper documentation in police reports pertaining to the use of the police baton.

Update users of the police straight or expandable baton that have been previously certified to carry a police baton.

## 245C CANINE AGITATOR

## 0.1 unit, 8.4 lab hours, (1 Week), (Pass/No Pass)

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 or advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of law enforcement incidents, crime scenes and emergency environments that police canines are deployed. Students must be experienced in the behaviors of police canine during in the field deployments. A student relies on patrol experiences with knowledge and familiarity with the Penal code, Vehicle code, Health \& Safety code, knowledge and familiarity with case law pertaining to canine policing; knowledge and familiarity with collection of evidence; knowledge and familiarity with criminal suspect's rights; be in good physical condition to move quickly, have agilely and strength to endure canine strikes; certified for CPR and First Aid.

Properly read the drive and react to police canines during active training of police dogs in the service of law enforcement, use agitation equipment, understand protection dogs.

## 245D DETECTIVE SCHOOL

## 0.3-0.4 unit, 0.93-1.4 lab hours, (Pass/No

 Pass)PREREQUISITE: Administration of Justice 270B. 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 diagramming; knowledge and familiarity with interviewing and interrogation of subjects pertaining to policing; certificate to use NCIC as part of criminal investigations.

Training for new detectives covering, case management, interrogation, interviewing, crime scene, media relations, warrants, evidence and other related subjects.

## 245E DRIVER AWARENESS INSTRUCTOR

## 0.4 unit, 25.2 lab hours, (1 week),

 (Pass/No Pass)PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Possession of a valid California Driver's License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving, knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; Knowledge and familiarity with, case law pertinent to law enforcement emergency driving; ability to perform CPR and First Aid techniques.

Satisfies POST PAM 1070 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)

PREREQUIIITE: 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.

## 245H PIT INSTRUCTOR

## 0.1 unit, 8.4 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Possession of a valid California Driver's License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving, knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; knowledge and familiarity with, case law pertinent to law enforcement emergency driving; ability to perform CPR and First Aid techniques.

Satisfies POST PAM 1070 requirements to teach law enforcement PIT.

## 2451 DRIVER TRAINING/EVOC/PIT UPDATE

## 0.1 unit, 0.46 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Possession of a valid California Driver's License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving, knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; knowledge and familiarity with, case law pertinent to law enforcement emergency driving; ability to perform CPR and First Aid techniques.

Satisfies POST PAM requirement for driver's update, legal aspects, implementation of PIT and EVOC.

## 245J DRIVER TRAINING SIMULATOR

## 0.1 unit, 0.06 lecture hours, 0.18 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of driving a marked law enforcement vehicle in all types of environmental considerations and response classifications, such as code 3 . Possession of a valid California Driver's License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving, knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; knowledge and familiarity with case law pertinent to law enforcement emergency driving; knowledge
and familiarity with proper steer and braking techniques; knowledge and familiarity with interior patrol vehicle restrictions/limitations while driving such vehicles; knowledge and familiarity with proper radio use and procedures during emergency responses or vehicle pursuits.

Using a law enforcement training simulator, train students in seatbelt, steering, breaking, weight transfer, road position, speed judgment, throttle usage, defensive driving in various scenarios.

## 245K DRIVING/FORCE OPTION SIMULATOR <br> 0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police interactions with resistive subjects during law enforcement contacts, a law enforcement officer has a wide variety of contacts that they by law or policy must respond to , a student must have knowledge of multitasking within short periods of time, knowledge and familiarly with Penal and Health \& Safety codes, knowledge and familiarity with safe tactical movement, knowledge and familiarity with verbal and non-verbal communication; knowledge and familiarity with case law pertinent to police use of force; knowledge and familiarity with arrest and control techniques; knowledge and familiarity with use of police handcuffing procedures; knowledge and familiarity with the use of the police baton; knowledge and familiarity with police handguns, shotguns and rifles; knowledge and familiarity with the physical requirements associated with policing; knowledge and familiarity with radio procedures during stressful event in policing; knowledge of and familiarity with case law related to use of force in policing; Possession of a valid California Driver's License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving, knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; knowledge and familiarity with case law pertinent to law enforcement emergency driving; knowledge and familiarity with proper steer and braking techniques; knowledge and familiarity with interior patrol vehicle restrictions/limitations while driving such vehicles; knowledge and familiarity with proper radio use and procedures during emergency responses or vehicle pursuits.

Satisfies the POST PAM requirement for updated simulator training in driving and use of force for law enforcement.

## 245L DRUG FACILITATED SEXUAL ASSAULT

## 0.3 unit, 16.8 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police crime scenes, because as a generalist patrol officer you have a wide variety of investigative responsibilities. Patrol officers and detectives require an extensive knowledge of investigating sexual assaults incidents. A officer relies on their past academy and patrol experience with knowledge and familiarity with the Penal code, Vehicle code, Health \& Safety code, knowledge and familiarity with case law pertaining to policing; knowledge and familiarity with collection of evidence; knowledge and familiarity with criminal suspect's rights; knowledge and familiarity with the chain of evidence in policing; knowledge and familiarity with fingerprint identification, impressions, collection procedures pertaining to policing; knowledge and familiarity with legal authority; knowledge and familiarity with generating crime scene notes that document observations, scene conditions and investigative actions pertaining to policing; knowledge and familiarity with systematic methods to search crime scenes pertaining to policing; knowledge and familiarity with crime scene diagramming; knowledge and familiarity with interviewing and interrogation of subjects pertaining to policing; certificate to use NCIC as part of criminal investigations.

Training for law enforcement patrol officers and detectives related to sexual assaults related to the use of drugs to commit sexual assault, drugs, evidence collection, suspect interview, and related laws.

## 245M ELECTRONIC WEAPONS

## 0.1 unit, 0.06 lecture hours, 0.18 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of range safety guidelines associated with non-lethal weapons; knowledge of Penal code sections related to use of force in policing; knowledge of emotional response during an arrest process; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers during arrest of resistive subject situations; knowledge of proper and safe arrest and control techniques; knowledge of, and familiarity with, the use of force continuum pertaining to policing; knowledge and ability to use handcuffing commonly used in policing; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement use of non-lethal weapons; Knowledge of report writing related to police use of force reports; ability to perform CPR and First Aid techniques.
Satisfies the requirement for law enforcement officers to carry a TASER, nomenclature, case law, medical considerations, and deployment.

## 245N FIREARMS INSTRUCTOR UPDATE <br> 0.4 unit, 25.2 lab hours, (1 week), (Pass/No Pass)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during hand gun shooting; ability to achieve a qualifying score during shotgun training; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge of, and familiarity with, California Penal codes used in law enforcement; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Updates currently certified POST Firearm Instructors, course contains, psychology of survival for trainers, pistol update, rifle update, shotgun update, adult learning concepts, instructor liability and vehicle tactics.

## 2450 TACTICAL HANDGUN

## 0.1 unit, 0.06 lecture hours, 0.25 lab hours,

 (Pass/No Pass), (Open Entry/Open Exit)PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during hand gun shooting; ability to achieve a qualifying score during shotgun training; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge of, and familiarity with, California Penal codes used in law enforcement; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Handgun training, marksmanship, loading drills, shooting on the move, multiple targets, threat assessment, barricades, team shooting, shooting from vehicles.

## 245P TACTICAL RIFLE ADVANCED

## 0.1 unit, 0.46 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during hand gun shooting; ability to achieve a qualifying score during shotgun training; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge of, and familiarity with, California Penal codes used in law enforcement; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Advanced rifle techniques, shooting drills, multiple targets, weapons safety, shooting positions, sight picture, distance shooting and angles.

## 2450 TACTICAL RIFLE UPDATE

## 0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during hand gun shooting; ability to achieve a qualifying score during shotgun training; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge of, and familiarity with, California Penal codes used in law enforcement; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Update methods of tactical rifle, weapon safety, sight picture, tactical considerations, sling carry positions, moving target methods and shooting drills.

## 245R TACTICAL RIFLE 1ST RESPONDER

## 0.3 unit, 0.93 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during hand gun shooting; ability to achieve a qualifying score during shotgun training; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge of, and familiarity with, California Penal codes used in law enforcement; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

1st Responders tactical rifle training, deployment considerations, threat assessment, barricade shooting, distance shooting, stress shooting, team and tandem shooting.

## 245S TACTICAL SHOTGUN

## 0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during handgun shooting; ability to achieve a qualifying score during shotgun training; knowledge of, and familiarity with, sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of, 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.

Tactical use of the patrol shotgun, safety, effectiveness, shooting positions, loading/unloading, carry positions, shooting on the move, transitioning drills, multiple targets and shotgun manipulation.

## 245 T TACTICAL HANDGUN ADVANCED

## 0.1 unit, 0.47 lab hours, (Pass/No Pass),

 (Open Entry/Open Exit)PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students mustalready 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 hand ling; ability to achieve a qualifying score during handgun shooting; ability to achieve a qualifying score during shotgun training; knowledge of, and familiarity with, sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of, and familiarity with, the use of force continuum related to policing; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling while transitioning weapons; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Advanced handgun, safety, officer survival, combat shooting, mindset, handgun capabilities, multiple targets, multiple targets and distance shooting.

## 245U FIRST AID \& CPR REFRESHER

## 0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. These skills and knowledge base are related to adopted POST and/or industry standards. Students will need to have completed a Law Enforcement First Aid and CPR course to attend this refresher course. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Refresh legal issues, responding to emergencies, control bleeding, using an Automated External Defibrillator, basic First Aid and CPR demonstration.

## 245V FORCE OPTION SIMULATOR

0.1 unit, 0.06 lecture hours, 0.18 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police interactions with resistive subjects during law enforcement contacts, a law enforcement officer has a wide variety of contacts that they by law or policy must respond to, a student must have knowledge of multitasking within short periods of time, knowledge and familiarly with Penal, Vehicle and Health \& Safety codes, knowledge and familiarity with safe tactical movement, knowledge and familiarity with verbal and non-verbal communication; knowledge and familiarity with case law pertinent to police use of force; knowledge and familiarity with arrest and control techniques; knowledge and familiarity with use of police handcuffing procedures; knowledge and familiarity with the use of the police baton; knowledge and familiarity with police handguns, shotguns and rifles; knowledge and familiarity with the physical requirements associated with policing; knowledge and familiarity with radio procedures during stressful event in policing; knowledge of and familiarity with case law related to use of force in policing; knowledge and familiarity with verbal communications with resistive subject pertaining to policing; certified to carry lethal and non-lethal weapons in policing.

Simulator environment for patrol officers to improve use of force weaponry, verbalization, decision making during use of force suspect contacts.

## 245W LESS LETHAL WEAPONS

## 0.1 unit, 0.06 lecture hours, 0.18 lab hours,

 (Pass/No Pass), (Open Entry/Open Exit)PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:
Course requires extensive knowledge of all types of police interactions with resistive subjects during law enforcement contacts, a law enforcement officer has a wide variety of contacts that they by law or policy must respond to , a student must have knowledge of multitasking within short periods of time, knowledge and familiarly with Penal, Vehicle and Health \& Safety codes, knowledge and familiarity with safe tactical movement, knowledge and familiarity with verbal and non-verbal communication; knowledge and familiarity with case law pertinent to police use of force; knowledge and famil iarity with arrest and control techniques; knowledge and familiarity with the physical requirements associated with policing; knowledge and familiarity with radio procedures during stressful event in policing; knowledge of and familiarity with case law related to use of force in policing; knowledge and familiarity with verbal communications with resistive subject pertaining to policing; certified to carry lethal and non-lethal weapons in policing.

Patrol and SWAT officer less lethal weapons, related laws, nomenclature, deployment factors, transitioning, ammunition, storage, tactical considerations, storage and documentation.

## 245X MENTAL ILLNESS AWARENESS REFRESHER

0.1 unit, 0.06 lecture hours, 0.18 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Dispatcher Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police interactions with subjects with mental illnesses during law enforcement contacts, a law enforcement officer has a wide variety of contacts that they by law or policy must respond to, a student must have knowledge of multitasking within short periods of time, knowledge and familiarly with Penal and Health \& Safety codes, knowledge and familiarity with safe tactical movement, knowledge and familiarity with verbal and non-verbal tactical communication; knowledge and familiarity with medical response resources related to subjects with mental illnesses.
Contact by law enforcement officers with mental illness conditions, causes, definitions, schizophrenia, Bipolar disorder, treatment approaches and practical exercise.

## 245Y OFFICER SAFETY/FIELD TACTICS

## 0.4 unit, 1.4 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police interactions with resistive subjects during law enforcement contacts, a law enforcement officer has a wide variety of contacts that they by law or policy must respond to, a student must have knowledge of multitasking within short periods of time, knowledge and familiarly with Penal, Vehicle and Health \& Safety codes, knowledge and familiarity with safe tactical movement, knowledge and familiarity with verbal and non-verbal communication; knowledge and familiarity with case law pertinent to police use of force; knowledge and familiarity with arrest and control techniques; knowledge and familiarity with the physical requirements associated with policing; knowledge and familiarity with radio procedures during stressful event in policing; knowledge of and familiarity with case law related to use of force in policing; knowledge and familiarity with verbal communications with resistive subject pertaining to policing; certified to carry lethal and non-lethal weapons in policing.

Tactics for patrol officers' officer safety during daily operations, firearms, arrest \& control, searching techniques, K-9s, officer down and officer rescue.

## $245 Z$ OFFICER SAFETY/FIELD TACTICS UPDATE

0.1 unit, 0.06 lecture hours, 0.18 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police interactions with resistive subjects during law enforcement contacts, a law enforcement officer has a wide variety of contacts that they by law or policy must respond to, a student must have knowledge of multitasking within short periods of time, knowledge and familiarly with Penal, Vehicle and Health \& Safety codes, knowledge and familiarity with safe tactical movement, knowledge and familiarity with verbal and non-verbal communication; knowledge and familiarity with case law pertinent to police use of force; knowledge and familiarity with arrest and control techniques; knowledge and familiarity with the physical requirements associated with policing; knowledge and familiarity with radio procedures during stressful event in policing; knowledge of and familiarity with case law related to use of force in policing; knowledge and familiarity with verbal communications with resistive subject pertaining to policing; certified to carry lethal and non-lethal weapons in policing.

Updated training for patrol officers on safety, tactics, searches, exterior and interior tactics.

## 246 RIFLE MARKSMANSHIP AND SNIPER

0.5 unit, 50 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires an extensive knowledge and familiarity with use of for situations during extreme high risk situations in law enforcement sniper required situations. Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge and familiarity with California Penal codes used in law enforcement pertaining to use of force; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Patrol and SWAT officer rile advanced course, ballistics, zeroing, ammunition, responsibilities, maintenance, moving targets, use of force decision making and shooting drills.

## 246A SEARCH/ARREST WARRANT

## 0.1 unit, 0.47 lab hours, (Pass/No Pass),

 (Open Entry/Open Exit)PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of Vehicle codes pertaining to policing; knowledge of persons under the influence of drugs or alcohol related to vehicle collision investigations; knowledge of, and familiarity with, officer safety during Field Sobriety Testing in the field during policing; knowledge of, and familiarity with, courtroom testimony related to policing; knowledge of, and familiarity with, evidence collection pertaining to policing; Knowledge of, and familiarity with, police report writing; knowledge of, and familiarity with, crime scene photography; knowledge of, and familiarity with, vehicle identification numbers located on several location of vehicles; certified for NCIC use.

Warrant deployment, search warrant process, warrant planning, interior tactics, application, and scenarios.

## 246B TRAFFIC COLLISION INVESTIGATION UPDATE <br> 0.3 unit, 0.93 lab hours, (Pass/No Pass), (Open Entry/Open Exit) <br> PREREQUISITE: A California Peace Officer Standards and Training

 Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of Vehicle codes pertaining to policing; knowledge of persons under the influence of drugs or alcohol related to vehicle collision investigations; knowledge of, and familiarity with, officer safety during Field Sobriety Testing in the field during policing; knowledge of, and familiarity with, courtroom testimony related to policing; knowledge of, and familiarity with, evidence collection pertaining to policing; Knowledge of, and familiarity with, police report writing.

Update to basic traffic collision investigation course, CIM manual, diagramming, data retrieval system, and field exercise.

## 246C USE OF FORCE UPDATE

## 0.3 unit, 0.93 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of blood borne pathogens as they pertain to law enforcement services; Certified to carry and deploy a law enforcement TASER; ability to perform CPR and First Aid techniques; knowledge of, and experience with, law enforcement suspect containment during criminal in-progress crimes; knowledge of, and familiarly with, proper and safe tactical movement pertaining to policing; knowledge of, and experience with, law enforcement mindset during policing operations; Knowledge of, and experience with, proper police driving techniques. Update law enforcement officers in electronic weapons, O.C., less lethal shotgun, legal update, baton and force options.

## 246D PERISHABLE SKILLS PROGRAM I

## 0.3 unit, 0.93 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean, Academy Director, or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires an extensive knowledge and familiarity with use of for situations during extreme high risk situations in law enforcement sniper required situations. Possession of a valid California Driver's License; Certified to carry a law enforcement tactical rifle under Penal Code section 33220(b). Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers
under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge and familiarity with California Penal codes used in law enforcement pertaining to use of force; knowledge of, and experience driving a law enforcement emergency vehicle; knowledge of how perception and reaction time affects a vehicle's total stopping distance; knowledge and familiarity with the importance and proper use of safety belts and tactical removal of safety belts; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Advanced officer update covering, driving skills, CPR \& First Aid, blood borne pathogens, tactical communication, body cameras, case law, marksmanship, handgun, shotgun, and arrest \& control.

## 246E PERISHABLE SKILLS PROGRAM II <br> 0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of, and familiarity regarding officer safety related to police baton use; knowledge of proper and safe tactical movement related to police crowd control; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under physical situations; knowledge of proper and safe arrest and control techniques related to domestic violence incidents; knowledge of, and familiarity with, California Penal codes used in law enforcement use of force pertaining to crowd control and domestic violence; knowledge of effective verbal and non-verbal communication used in law enforcement during citizen contacts; knowledge of, and familiarity with, case law pertinent to law enforcement related to domestic violence; ability to perform CPR and First Aid techniques; knowledge of proper documentation in police reports pertaining to crowd control and domestic violence; knowledge of and familiarity with community policing and problem solving.

Advanced officer update covering, domestic violence, crowd control, tactical communication and racial profiling.

## 246F RIFLE INSTRUCTOR

## 0.5 unit, 2.34 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, Academy Director, or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires an extensive knowledge and familiarity with use of for situations during extreme high risk situations in law enforcement sniper required situations. Certified to carry a law enforcement tactical rifle under Penal Code section 33220(b). Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge and familiarity with California Penal codes used in law enforcement pertaining to use of force; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Train students in instructing the use of rifles by law enforcement officers using adult learning concepts, weapon systems, range safety, legal aspects, target diagnosis, use of drills, tactical movements and weapons maintenance.

## 246G K9 HANDLER UPDATE

0.1-0.4 unit, 8.4-25.2 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point or advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of law enforcement incidents, crime scenes and emergency environments that police canines are deployed. Students must be experienced in the behaviors of police canine during in the field deployments. A student relies on patrol experiences with knowledge and familiarity with the Penal code, Vehicle code, Health \& Safety code, knowledge and familiarity with case law pertaining to canine policing; knowledge and familiarity with collection of evidence; knowledge and familiarity with criminal suspect's rights; be in good physical condition to move quickly, have agilely and strength to endure canine strikes; certified for CPR and First Aid.

K9 handler skills update for currently certified canine handler working in law enforcement.

## 246H MACTAC - MULTI ASSAULT, COUNTER TERRORISM ACTION CAPABILITIES

0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Multi-assault, counter terrorism capabilities overview related to the response to terrorism in the United States for local law enforcement.

## 246 BASIC BICYCLE PATROL

1.5 units, 1.87 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Familiarizes the sworn law enforcement bike officer patrol riding techniques, use of force concerns, legal procedures, equipment and maintenance.

## 246J DRUG/ALCOHOL STANDARDIZED FIELD SOBRIETY TESTS UPDATE

0.1 unit, 0.46 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Provide students with the ability to refresh their knowledge at recognizing and interpreting evidence of DUI violations, administer and interpret standardized field sobriety tests, describe DUI evidence, give verbal testimony and document the incident.

## 246K CRISIS INTERVENTION TRAINING

## 0.5 unit, 2.23 lab hours, (Pass/No Pass),

 (Open Entry/Open Exit)PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency. Course meets the minimum topics of SB29 \& PC 13515.28(a)(1)

Provides students with increased knowledge about mental health crisis, mental illness, the stigma associated with mental illness, and de-escalation strategies to avoid violent confrontations. Course meets the minimum topics of SB29 \& PC 13515.28(a)(1)

## 262 SB 29 MENTAL HEALTH AWARENESS FOR FTOS

0.1 unit, 0.47 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
ADVISORY: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

8-hour mental health awareness information required for newly assisted Field Training Officers (FTOs) to conform with California Senate Bill 29.

## 268 PRE-POLICE ACADEMY COURSE

1 unit, 4.2 lecture hour, (6 weeks), (Pass/No Pass)
ADVISORY: In good physical condition to perform physical training.

Expose future FCC Police Academy students to a POST Basic Police Academy structure and environment. Discipline, structure, physical demands, studying, safety, uniform maintenance, Learning Domain books will be introduced.

## 269A ADVANCED OFFICER TOPICS \#2

0.2-4 units, 0.1-2.33 lecture hours,
0.1-2.33 lab hours, (1-18 weeks), (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B or equivalent, or currently employed by a Public Safety Agency.

Satisfies mandatory yearly requirements of the California Commission on Peace Officer Standards and Training (POST) or Standards for Training in Corrections (STC) for advanced officer training. May be offered in seminar, lecture, and/or laboratory format. Examination of topics, current trends, and/or issues as mandated by POST or STC and not covered by regular catalog offerings. Course content to be determined by POST or STC. The format of delivery will vary. No class will be presented in less than four hours of subject matter, or more than 84 hours of subject matter. These courses may be presented within one week or 18 weeks with variables between those two time limits. The variable format is provided due to public safety officers' demanding schedules and the officer's limited flexing times available to train.

## 270A BASIC POLICE ACADEMY - PART 1

## 17.5 units, 12.3 lecture hours,

10.75 lab hours, ( 20 weeks)

PREREQUISITE: Successful completion of post: (1) POST Standardized Reading Comprehension and Writing Skills Test; (2) POST Physical Agility Test; and (3) Physical Exam. Possess a valid Class C California Driver's License. Proof of a Department of Justice criminal history clearance to possess a firearm (PC13511.5), or be sponsored by a law enforcement agency.

Satisfies the requirement of the California Commission of Peace Officer Standards and Training (POST) for Basic Police Academy training mandatory for every full-time peace officer under Penal Code Section 830.1. Must be taken in tandem without a time separation between courses (Administration of Justice 270A and Administration of Justice 270B). Materials, range, driving, health, and parking fees will be charged.

## 270B BASIC POLICE ACADEMY - PART 2

20.5 units, 11.2 lecture hours, 12.93 lab hours, ( 24 weeks)

PREREQUIIITE: 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 <br> 10 units, 9 lecture hours, 3.4 lab hours

PREREQUIIITE: Valid Class C California Driver's License. Proof of a Department of Justice criminal history clearance to possess a firearm (PC 13511.5) or be sponsored by a law enforcement agency.

Satisfies mandatory training requirements for Level III Reserve Peace Officer and is the mandatory prerequisite for the Administration of Justice 273 (Level II module). Must provide a handgun, ammo, and safety equipment associated with a firearms course.

## 273 REGULAR BASIC COURSE - MODULAR FORMAT - MODULE II

13 units, 11.1 lecture hours, 6.1 lab hours
PREREQUISITE: Successful completion of Administration of Justice 272 (Module III). Current (within the last 3 years) in PC 832, Arrest and Firearms, training requirements. Proof of a Department of Justice criminal history clearance to possess a firearm (PC 13511.5). Passage of the POST - Constructed Comprehensive Module 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 POST BASIC SUPERVISOR

## 4.5 units, 42 lecture hours, (2 weeks), ( Pass/No Pass), (Formerly Administration of Justice 73 and 76)

PREREQUISITE: POST training curriculum for the newly promoted law enforcement supervisor. Role identification, leadership styles, values, ethics, and principles, assertive leadership, etc. Materials fee will be charged.

POST training curriculum for the newly promoted law enforcement supervisor. Role identification, leadership styles, values, ethics and principles, assertive leadership, etc. Materials fee will be charged.

## 276A STC BASIC SUPERVISOR COURSE

## 4.5 units, 42 lecture hours, (2 weeks), (Pass/No Pass)

PREREQUISITE: A Standards and Training for Corrections (STC) Probation Officer CORE Course, Adult Correctional Officer CORE Course, or Juvenile Correctional Officer CORE course certificate issued from an accredited training provider for STC or equivalent as determined by the Division Dean or their appointee. These skills and knowledge base are related to adopted STC and/or industry standards. NOTE: approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

This course meets the 80-hour requirement of Minimum Jail Standards Title 15, Section 181 for supervising adult corrections officer, supervising probation officer, or supervising juvenile corrections officer. Topics include role identification, leadership styles, investigations, role transition, assertive leadership, training, employee relations, administrative support, stress, performance appraisal, communications, media relations, counseling, planning and organization, discipline, report review, values/ethics and principles, and liability issues. Material fees are charged for this course.

## 278 PUBLIC SAFETY DISPATCHER

7 units, 8.4 lecture hours, ( 15 weeks), (Pass/No Pass), (Formerly Administration of Justice 89 and 78)
PREREQUISITE: A Standards and Training for Corrections (STC) Probation Officer CORE Course, Adult Correctional Officer CORE Course, or Juvenile Correctional Officer CORE course certificate issued from an accredited training provider for STC or equivalent as determined by the Division Dean or their appointee. These skills and knowledge base are related to adopted STC and/or industry standards. NOTE: approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

This course meets the 80-hour requirement of Minimum Jail Standards Title 15, Section 181 for supervising adult corrections officer, supervising probation officer, or supervising juvenile corrections officer. Topics include role identification, leadership styles, investigations, role transition, assertive leadership, training, employee relations, administrative support, stress, performance appraisal, communications, media relations, counseling, planning and organization, discipline, report review, values/ethics and principles, and liability issues. Material fees are charged for this course.

## 279 CITIZENS' POLICE ACADEMY

0.5 unit, 3.15 lab hours, ( 17 weeks), (Pass/No Pass), (Formerly Administration of Justice 79)
PREREQUIIITE: 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)
PREREQUIIITE: 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 famil iarity 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 FTO program, Ethics, Coaching, Teaching/Training demonstrations, Evaluations, Driver Safety Issues, Intervention Techniques, Remediation, Documentations and other issues related to the FTO environment.

## 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 <br> ADVISORY: Eligibility for English 1A recommended. COREQUI-

 SITE: Aerospace Studies 3.Detailed look at strategy, doctrine, and evolution of the art and science of air, space and cyberspace power atter 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 <br> 1 unit, 4 lab hours, (Pass/No Pass)

COREQUISITE: Aerospace Studies 1 A , or 1B, or 2A, or 2B. (Note: if a cadet has taken all 4 of the possible corequisite courses, they do no need to enroll in a corequisite course again. They can then take Aerospace 3 as a stand-alone course.)

A practicum of Air Force customs and courtesies, issuing military commands, instructing, directing and evaluating the preceding skills, studying the environment of an Air Force officer and learning about areas of opportunity available to commissioned officers. (A, CSU, UC)

## 5 DRILL AND CEREMONY FUNDAMENTALS

0.5 unit, 0.5 lecture hour, 0.5 lab hour

ADVISORY: Eligibility for English 1A recommended. COREQUISITE: Aerospace Studies 1A, or 1B, or 2A, or 2B. (Note: if a cadet has taken all 4 of the possible corequisite courses, they do no need to enroll in a corequisite course again. They can then take Aerospace 3 as a stand-alone course.)

The elements of military drill, individual and group precision movements, development of command voice; technical, stylistic and aesthetic aspects of creative drill maneuvers; encompasses both rehearsal and public performance. (A, CSU)

AFRICAN-AMERICAN STUDIES (AFRAM) FORMERLY CULTURAL STUDIES/BLACK STUDIES

## 1 INTRODUCTION TO AFRICAN-AMERICAN STUDIES <br> 3 units, 3 lecture hours, (Formerly Cultural Studies 1) <br> ADVISORY: Eligibility for English 1A recommended. Introduction to African-American Studies: an interdisciplinary study of Arrican-American history and heritage from Pre Colonial West Africa through the 21st Century. (A, CSU-GE, UC, I)

## 2 AFRICAN AMERICAN CULTURAL ADAPTATION

3 units, 3 lecture hours, (Formerly Cultural Studies 20)
ADVISORY: Eligibility for English 1A recommended.
Examination and evaluation of the dynamic development of African American culture from the era of enslavement through the election of the first African American President of the United States. (A, CSU, UC)

## 3 AFRICAN-AMERICAN ART

3 units, 3 lecture hours, (Formerly Cultural Studies 3)
ADVISORY: Eligibility for English 1A recommended.
Introduction and overview of the creative production of African and African American people through different media: painting, architecture, sculpture, drawing, and painting. (A, CSU-GE, UC, I)

## 4 CLASSICAL AND PRE COLONIAL AFRICA

3 units, 3 lecture hours, (Formerly Cultural
Studies 4)
ADVISORY: Eligibility for English 1A recommended.
Classical African society from its earliest origins through the European 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 AFRICAN DIASPORA OF THE AMERICAS

3 units, 3 lecture hours, (Formerly Cultural Studies 5)
ADVISORY: Eligibility for English 1A recommended.
A historical overview and contemporary evaluation of the African diaspora of the Colonial Era focusing on North American, South America and the Caribbean. (A, CSU, UC)

## 6 AFRICAN CULTURES AND LANGUAGES

 3 units, 3 lecture hours, (Formerly Cultural Studies 6)ADVISORY: Eligibility for English 1A recommended. Introduction and overview of West African linguistic traits, coIonial language adaptation and cultural implication of language usage. Includes evaluation of music elements as language and traits that were carried by the African Diaspora to the Americas and Caribbean. (A, CSU, UC)

## 8 AFRICAN-AMERICAN CREATIVE WORKSHOP

3 units, 2 lecture hours, 3 lab hours, (Formerly Cultural Studies 8)
ADVISORY: Eligibility for English 1A recommended.
A creative multi-discipline workshop based on the history and culture of the African-American. (A, CSU-GE, UC)

## 15 AFRICAN-AMERICAN MUSIC

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction and overview of the music of African Americans including West African traditions and styles, Antebellum music, the Harlem Renaissance and other post Reconstruction era music, Jazz music and the many derivatives and variations of African American music of the 20th century, though contemporary genres of Rap and Hip Hop. (A, CSU-GE, UC, I)

## 17 AFRICAN-AMERICAN LITERATURE

3 units, 3 lecture hours, (See also

## English 17)

PREREQUISITE: English 1 A or equivalent.
Reading critical works of African and African-American writers and understanding cultural values and themes as expressed in essays, short stories, novels, poetry, and plays. (A, CSU-GE, UC, I)

## 34 HISTORY OF THE AMERICAN CIVIL RIGHTS MOVEMENT

3 units, 3 lecture hours, (See also History 34)
ADVISORY: English 1A recommended.
History of the struggle for civil and human rights in American history, focusing on the African American movement. Legal, moral, ethical, religious and humanistic foundations of the Movement. Forms of discrimination, segregation and oppression and various forms of resistance to them. Efforts to protect human and civil rights in the United States. (A, CSU-GE, UC, I)

## 41 AFRICAN-AMERICAN WOMEN'S STUDIES

3 units, 3 lecture hours, (See also Women's
Studies 41), (Formerly Cultural Studies 41)
ADVISORY: Eligibility for English 1A recommended.
Analyzes the social, political, and cultural history of African American women in the United States from an interdisciplinary perspective including the complex ways that ethnicity, class and gender have shaped African American women's lives and the strategies they have used to empower themselves and their communities. (A, CSU, UC)

## AIR CONDITIONING

SEE HEATING, VENTILATION, AND AIR CONDITIONING

## ALLIED HEALTH (ALHLTH)

## 1 INTRODUCTION TO PUBLIC HEALTH

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
An introduction to the discipline of Public Health. Basic concepts and terminologies of public health and the history and accomplishments of public health officials and agencies. An overview of the functions of various public health professions and institutions and an in-depth examination of the core public health disciplines. Topics include the epidemiology of infectious and chronic disease, prevention and control of diseases in the community including the analysis of the social determinants of health and strategies for eliminating disease, illness and health disparities among various populations, community organizing and health promotion programming, environmental health and safety, global health, and health care policy and management. (C-ID PHS 102) (A, CSU, UC)

## 2 HEALTH AND SOCIAL JUSTICE

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
This course provides an introduction to the health inequities in the United States that stem from unequal living conditions. Students will explore how education, socioeconomic status, racism and gender shape health epidemics and policy development. The basic skills necessary for advocating for health and social justice will be theoretically demonstrated. ( $\mathrm{A}, \mathrm{CSU}, \mathrm{UC}$ )

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

## 1-8 units, 3.33-33.3 lab hours

COREQUISITE: Allied Health 204. Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors. ADVISORY: Eligibility for English 1A recommended.

Supervised employment extending the classroom based on occupational learning related to the student's major. Collaborative learning objectives established specific to the particular occupational field. Seventy -five hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 20 IMPROVING CULTURAL COMPETENCE THROUGH CROSS-CULTURAL EXPERIENCE

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Identifying cultural and spiritual differences and developing strategies to overcome potential conflicts. Intended for study abroad. (A, CSU)

## 21 CULTURALLY RELEVANT HEALTH PROMOTION EXPERIENCE

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Short term field study abroad course to research and identify basic health promotion activities relevant to the country and local ethnic groups. (A, CSU)

## 100 INTRODUCTION TO HEALTH CAREERS

2 units, 2 lecture hours
PREREQUISITE: None.
A prerequisite course for allied health programs to establish a solid foundation in the understanding of allied health professions and the multidisciplinary environment. (A)

## 104 AUTISM TECHNICIAN TRAINING

3 units, 3 lecture hours
PREREQUISITE: None.
Prepares students for entry-level positions in the field of behavioral health treatment for individuals with autism spectrum disorders (ASD). Students who successfully complete the course will have the training and experience required to be eligible to take the exam to become a Registered Behavior Technician (RBT). Provides students with foundational knowledge in autism spectrum disorders (ASD), applied behavior analysis, and evidence-based intervention techniques. (A)

AMERICAN INDIAN STUDIES (AMIND) FORMERLY NATIVE AMERICAN STUDIES

## 20 NATIVE PEOPLES OF CALIFORNIA 3 units, 3 lecture hours, (Formerly

 Anthropology 20)ADVISORY: Eligibility for English 1A recommended.
The ethnohistory, linguistics, spiritual beliefs, political organization, subsistence patterns, gender, arts, oral history, social issues, images and cultures of the indigenous peoples of California. Conflict with various colonial forces and contemporary issues. (A, CSU-GE, UC)

## 31 AMERICAN INDIAN CULTURE

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
The Native Nations of North America (American Indians) from antiquity to the present; regional survival strategies and expressive arts; effects of invasion and colonization with an emphasis on self-preservation and continuing sovereignty. (A, CSU-GE, UC, I)

## 32 AMERICAN INDIAN HISTORY

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
The history of the American Indian nations from antiquity to the mid-20th century, with an emphasis on pre-Columbian life, the European invading nations, and federal-Indian relations in the United States. (A, CSU, UC)

## 34 THE AMERICAN INDIAN IN CONTEMPORARY SOCIETY 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
American Indian in North America after the Second World War to the present; emphasis on current events and legislation; issues involving the inherent sovereignty of American Indian nations and their place in modern global society. (A, CSU-GE, UC, I)

## 35 AMERICAN INDIAN ART

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Major American Indian art traditions of North America. Pre-contact and early-contact-era traditions and the evolution of Indian art forms in contemporary times. Design and techniques in Indian art. Emphasis on North, Central and South America. (A, CSU-GE, UC, I)

## AMERICAN SIGN LANGUAGE <br> SEE FOREIGN LANGUAGES

## AMERICAN STUDIES (AMST)

## 10 AMERICAN PLURALISM: A SEARCH FOR COMMON GROUND IN A MULTICULTURAL SOCIETY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Multidisciplinary examination of racial and ethnic identity in a multicultural society, the roots of prejudice and of religious and ethnic animosities, with special emphasis on what forces unite as well as divide this country. (C-ID SJS 110) (A, CSU-GE, UC, I)

## 11 LAW AND DEMOCRACY <br> 3 units, 3 lecture hours

PREREQUIITE: English 1A.
Evaluation, debate, and critical analysis of law and legal issues that affect individuals, their families, and communities. Practical and historical aspects of civil, criminal, constitutional, immigration, and consumer law in a diverse society, with an orientation toward civic involvement in the local community. Includes an interdisciplinary exploration of themes such as equality, citizenship, access, and social justice. (C-ID SJS 110) (C-ID SJS 110) (A, CSU-GE, UC, I)

## ANTHROPOLOGY (ANTHRO)

## 1 BIOLOGICAL ANTHROPOLOGY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A.
Concepts, methods of inquiry, and scientific explanations for biological evolution and application to the human species. Topics include: genetics, evolutionary theory, human variation and biocultural adaptations, comparative primate anatomy and behavior, and the fossil evidence for human evolution. Scientific method serves as foundation of the course. (C-ID ANTH 110) (A, CSU-GE, UC, I)

## 1L BIOLOGICAL ANTHROPOLOGY LABORATORY

1 unit, 3.5 lab hours
COREQUISITE: Anthropology 1. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

A hands-on laboratory experience to supplement Biological Anthropology. May be taken either concurrently with Anthropology 1 or in a subsequent term. Exercises will provide additional experience and hands-on activities to expand student learning in the following major subject areas: the scientific method, evolution and natural selection with a specific focus on human evolution, evolutionary genetics, modern human variation, forensic anthropology, primate anatomy and behavior, and the hominid fossil record. (A, CSU-GE, UC, I)

## 2 CULTURAL ANTHROPOLOGY

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A.
Explores how anthropologists study human culture. The broad arc of human experiences: subsistence, social, political, and economic organization, communication and creative expression, family and kinship, belief systems. Includes discussion of gender, racial and ethnic identity labels, and the effects of colonialism and globalization. Ethnographic case studies; professional anthropological research ethics; the application of anthropology to understanding humans around the globe. (C-ID ANTH 120) (A, CSU-GE, UC, I)

## 2H HONORS CULTURAL ANTHROPOLOGY

3 units, 3 lecture hours, (Formerly
Honors 2A)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Explores how anthropologists study human culture. The broad arc of human experiences: subsistence, social, political, and economic organization, communication and creative expression, family and kinship, belief systems. Includes discussion of gender, racial and ethnic identity labels, and the effects of colonialism and globalization. Ethnographic case studies; professional anthropological research ethics; the application of anthropology to understanding humans around the globe. Honors takes a greater cross-disciplinary perspective, places greater emphasis on the use of anthropology on the understanding of the modern world, and more critically evaluates the methods and theory of anthropology. (C-ID ANTH 120) (A, CSU-GE, UC, I)

## 3 ARCHAEOLOGY AND WORLD PREHISTORY 3 units, 3 lecture hours <br> ADVISORY: Eligibility for English 1A. <br> 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)

## 12 VISUAL ANTHROPOLOGY: INTRODUCTION TO ETHNOGRAPHIC FILM

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to the use of film by anthropologists as a research and educational tool. Films depicting different cultures from around the world are viewed and evaluated. Various attributes of ethnographic film are examined. (A, CSU, UC, I)

## 13 ANTHROPOLOGY OF MAGIC, WITCHCRAFT, AND RELIGION

3 units, 3 lecture hours
ADVISORY: 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 archaeoological 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 1 A 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 1 A 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 ChicanoLatino Studies 28)
ADVISORY: Eligibility for English 1A.
A survey of history, geography, socio-political, religious systems, and cultural achievements of Mesoamerican civilizations such as the Olmec, Zapotec, Teotihuacano, Mayan, Toltec, and Aztec/Mexican. (A, CSU, UC)

## 30 TOPICS IN ANTHROPOLOGY

1-4 units, 1-3 lecture hours, 0-9 lab hours
ADVISORY: Eligibility for English 1A.
Examination of topics, current trends, and/or issues in the subdisciplines of anthropology not covered by regular catalog offerings. Course content and unit credit to be determined by faculty. May be offered in seminar, lecture, and/or laboratory format. Recommended preparation varies with topic. (A, CSU, UC approved as variable topics; evaluation completed by individual campuses after admission.)

## APPLIED TECHNOLOGY (AT)

## 10 TECHNICAL COMPUTER APPLICATIONS

3 units, 3 lecture hours, 1 lab hour, (Formerly Industrial Education 23) ADVISORY: Eligibility for English 1A recommended.
An introduction to computers, elements of computer hardware and software and how they are used in the workplace, and the social impact of computers. Hands-on introduction and development of general computer skills for technical programs such as word processing, spreadsheet, presentation applications, and email. Fulfills the computer literacy graduation requirement. (A, CSU, UC)

## 11 BASIC ELECTRICITY

3 units, 3 lecture hours, (Formerly Industrial Education 11)
ADVISORY: Eligibility for English 1A recommended.
Fundamental concepts of electricity and its applications. Lecture/ demonstration. (A, CSU)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. 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 Applied Technology Division departments. Collaborative learning objectives established specific to the particular occupational field. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 21 OCCUPATIONAL SAFETY AND HEALTH

2 units, 2 lecture hours, 0.5 lab hours, (Formerly Industrial Education 36)
ADVISORY: Eligibility for English 1A recommended. Applied Technology 10 recommended.

Employer and employee responsibility, federal and state 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

 OPPORTUNITIES3 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 260 C 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: Applied Technology 10.
Learn about the different types of written job-related reports. An emphasis is placed on job-related records, forms, and letters. (A)

## 140 INTRODUCTION TO MACHINE SHOP

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Applied Technology 10 recommended.
Introduction to machine shop equipment in regards to safety, operation and application. (A)

150 PNEUMATIC \& HYDRAULIC SYSTEMS
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended. Applied Technology 10 recommended.

Principles and practices of hydraulics/pneumatics as used in the industry. Study of the different applications and management of hydraulics for the most efficient use. Basic pneumatic principles and application systems. (A)

## 160 MECHANICAL POWER DRIVE SYSTEMS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 125 and 126 recommended. Applied Technology 130 recommended.

The theory behind and practical principles of using mechanical power to do work and includes power sources, drive trains, gearboxes, conveyor systems, and specialized transmission devices. Emphasis will be placed on troubleshooting and repair techniques, safety and reliability. (A)

## 340 INTRODUCTION TO MACHINE SHOP

2 lecture hours, 3 lab hours, (Pass/No Pass)
ADVISORY: Eligibility for English 125 and 126 recommended. Applied Technology 130 recommended.

Introduction to machine shop equipment in regards to safety, operation and application.

## 350 PNEUMATIC \& HYDRAULIC SYSTEMS

2 lecture hours, 3 lab hours, (Pass/No Pass)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended. Applied Technology 10 recommended.

Principles and practices of hydraulics/pneumatics as used in the industry. Study of the different applications and management of hydraulics for the most efficient use. Basic pneumatic principles and application systems.

## 360 MECHANICAL POWER DRIVE SYSTEMS

3 lecture hours, 1 lab hour, (Pass/No Pass)
ADVISORY: Eligibility for English 125 and 126 recommended. Applied Technology 130 recommended.

The theory behind and practical principles of using mechanical power to do work and includes power sources, drive trains, gearboxes, conveyor systems, and specialized transmission devices. Emphasis will be placed on troubleshooting and repair techniques, safety and reliability.

ARCHITECTURE (ARCH)

## 10 ARCHITECTURAL DESIGN AND VISUALIZATION I

3 units, 2 lecture hours, 4 lab hours ADVISORY: Architecture 14.
Basic principles and concepts of design while concurrently addressing the skills of freehand drawing, manual dratting and visualization. History and development of perspective during the Renaissance. (A, CSU, UC)

## 11 INTRODUCTION TO ARCHITECTURE AND ENVIRONMENTAL DESIGN

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Familiarization with the professional fields of architecture, landscape architecture, structural engineering, city planning and construction. Roles of the architect and the project team. Introduction to design principles and elements. Phases of the construction project. Licensing requirements. Visiting Lecturers. (A, CSU, UC)

## 12 ARCHITECTURAL PRACTICE I

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Methods of construction and drafting practices as applied to architectural contract documents concerning plans and details for light wood frame structures. Use and application of building codes and reference material. Site contours and grading. Field trips may be required. (A, CSU)

## 14 DIGITAL TOOLS FOR ARCHITECTS

2 units, 1 lecture hour, 3 lab hours ADVISORY: Eligibility for English 1A recommended.
Digital tools in the context of architectural practice. Basic 3D modeling and image manipulation. Presentation layout and output. (A, CSU)

## 15A HISTORY OF ARCHITECTURE I

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
History of architecture from prehistory to the Middle Ages including Europe, Asia, Africa, and Pre-Columbian America. Relationship between social, cultural, religious, and physical conditions that influenced the built environment.(A, CSU-GE, UC, I)

## 15B HISTORY OF ARCHITECTURE II

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
History of architecture from the Renaissance to the 21st century. Relationship between social, cultural, religious, and physical conditions that influenced the built environment. (A, CSU-GE, UC, I)

## 20 ARCHITECTURAL DESIGN AND VISUALIZATION II

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Architecture 10 and 14.
Continuation of Architecture 10. Extended development of the content of Architecture 10 plus the introduction of color theory. Principles and means for the creation of two dimensional and three dimensional organizations. (A, CSU, 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 light commercial materials and construction. Computer-aided dratting in commercial architectural applications. (A, CSU)

## 24 BUILDING INFORMATION MODELING

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Building Information Modeling (BIM) in the context of architectural practice. Generation of architectural plans within a BIM environment to include dimensions, details, basic materials and rendering. (A, CSU)

## 30 ARCHITECTURAL DESIGN AND VISUALIZATION III

## 3 units, 2 lecture hours, 4 lab hours

PREREQUISITE: 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)
ADVISORY: Eligibility for English 1A recommended.
International building codes and local building zoning ordinanc-
es. (A, CSU)

## 32 STATICS AND STRENGTH OF MATERIALS

3 units, 3 lecture hours, (Formerly
Architecture 31)
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic Algebra is recommended.

Static force systems, trusses, shear, moment, and deflection. Physical properties of materials, shear and moment diagrams, and sizing of structural members. (A, CSU)

## 34 DIGITAL RENDERING

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Generation of architectural renderings to include lighting, reflec-
tion, environment and beginning animation. (A, CSU)

## 40 ARCHITECTURAL DESIGN AND <br> VISUALIZATION IV

3 units, 2 lecture hours, 4 lab hours
PREREQUIIITE: Architecture 30.
Continuation of Architecture 30. Extended development of the content of Architecture 30 with emphasis on the design process. Projects of an architectonic nature will be completed. Development of an educational portfolio. (A, CSU)

## 41A OFFICE PRACTICES

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic is recommended.

Contracts, specifications, scheduling, estimating and bid practices and procedures as they relate to architectural practice. (A, CSU)

## 42 TIMBER AND STEEL STRUCTURES

3 units, 3 lecture hours, (Formerly
Architecture 32)
PREREQUIIITE: Architecture 32.
Calculation and design of timber and steel structures. Engineering of connections. Completion of structural framing plans. (A, CSU)

## ARMENIAN

SEE FOREIGN LANGUAGES

## ART (ART)

## 2 ART APPRECIATION

3 units, 3 lecture hours, (Formerly Art 10)
ADVISORY: English 1A.
Introduction to the visual arts and human creativity across history and diverse global cultures. Topics include the media of art, techniques, design principles, subject matter, style and theories of art within historical context. (C-ID ARTH 100) (A, CSU-GE, UC, I)

## 3 TWO-DIMENSIONAL DESIGN

3 units, 2 lecture hours, 4 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to the elements and principles of two-dimensional design which are common to the visual arts. A foundation course stressing visual perception and an effective knowledge of the graphic means of expression and communication. Required for art majors. (C-ID ARTS 100) (A, CSU-GE, UC)

## 4 THREE-DIMENSIONAL DESIGN

3 units, 2 lecture hours, 4 lab hours
ADVISORY: Eligibility for English 1A recommended.
Exploration and experimentation with the formal elements and principles of visual language in three dimensional design. Required for art majors. Introduces design elements and principles as they apply to 3 -dimensional space and form; theory and practice. Includes projects in various media such as: plaster, paper, wood, clay, metal, cement and the use of digital technology. (C-ID ARTS 101) (A, CSU, UC)

## 5 ART HISTORY ANCIENT TO MEDIEVAL

3 units, 3 lecture hours, (Formerly Art 25)
ADVISORY: Eligibility for English 1A recommended.
A survey of the Western Art from prehistory to the Medieval period including Neolithic, ancient Near East, Egyptian, Greek, Roman, Islamic, Byzantine, Romanesque and Gothic cultures. (C-ID ARTH 110) (A, CSU-GE, UC, I)

## 5H HONORS ART HISTORY ANCIENT TO

 MEDIEVAL3 units, 3 lecture hours,
(Formerly Honors 5A)
ADVISORY: English 1AH. Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

A survey of the Western Art from prehistory to the Medieval period including Neolithic, ancient Near East, Egyptian, Greek, Roman, Islamic, Byzantine, Romanesque and Gothic cultures. Honors section will include additional readings of primary and secondary source material along with oral presentations and class discussions. (C-ID ARTH 110) (A, CSU-GE, UC, I)

## 6 ART HISTORY RENAISSANCE TO MODERN

3 units, 3 lecture hours, (Formerly Art 26)
ADVISORY: English 1A.
Introductory survey of Western Art from the Renaissance to the modern era. Covers major art styles in Europe and the United States including: Renaissance, Baroque, Neoclassicism, Realism, Impressionism, Cubism, Surrealism and other 20th century avant-garde movements. (C-ID ARTH 120) (A, CSU-GE, UC, I)

## 6H HONORS ART HISTORY RENAISSANCE TO MODERN

3 units, 3 lecture hours, (Formerly Honors 6A)
ADVISORY: English 1AH. Meet the qualifications for consideration for acceptance into the Leon S. Peters Honors Program recommended. See Honors Program listing in the college catalog.

A survey of Western Art from the Renaissance to the present. Major art styles and movements covered include Renaissance, Baroque, Neo-Classicism, Impressionism, Cubism, Surrealism, etc. Honors sections will include additional readings of primary and secondary source material, class discussions and oral presentations. (C-ID ARTH 120) (A, CSU-GE, UC, I)

## 7 BEGINNING DRAWING

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 7A)
ADVISORY: Eligibility for English 1A recommended. Introduction to the creation of visual images through drawing.

Introduction to principles, elements, and practices of drawing, employing a range of subject matter and drawing media. Focus on perceptually based drawing, observational skills, technical abilities, and creative responses to materials and subject matter. (C-ID ARTS 110) (A, CSU-GE, UC)

## 8 BEGINNING FIGURE DRAWING AND ANATOMY

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 8A)
ADVISORY: Eligibility for English 1A recommended. Human anatomy for artists with the practice of drawing the human figure from the live model. (C-ID ARTS 200) (A, CSU, UC)

## 9 BEGINNING PAINTING: OIL/ACRYLIC

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 14A)
ADVISORY: Art 3 and 7 and eligibility for English 1A recommended.

Introduction to painting through the study of historical and contemporary processes, principles and best practices. Focus on exploration of painting materials, perceptual skills and color theory, paint mixing and technique, as well as creative responses to materials and subject matter. (C-ID ARTS 210) (A, CSU-GE, UC)

## 10 BEGINNING CERAMICS

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 11A)
ADVISORY: Eligibility for English 1A recommended.
Introduction to ceramics materials, concepts, and processes including design principles, creative development, hand-building, throwing, glaze techniques, firing and ceramic terminology. The course covers aesthetics and creative development of clay objects examining historical, contemporary, and personal modes of expression across cultures. (A, CSU-GE, UC)

## 11 BEGINNING SCULPTURE

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 17A)
ADVISORY: Art 4.
Introduction to creative self-expression in a variety of sculptural media which may include but is not limited to clay, steel fabrication, bronze casting, glass casting, stone, wood, plaster, and new media such as installation and 3D printing/scanning. (A, CSU-GE, UC)

## 12A CRAFT WORKSHOP: LIVING TRADITIONS

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 48 and 12)
ADVISORY: Eligibility for English 1A recommended.
Introduction to the materials, tools, processes and concepts of a variety of craft media (may include work in fibers, metal, leather, or wood). Cultural and historical traditions as well as contemporary work will be studied. (C-ID ARTS 280) (A, CSU-GE)

## 12B INTERMEDIATE CRAFT WORKSHOP: LIVING TRADITIONS

3 units, 2 lecture hours, 4 lab hours PREREQUISITE: Art 12A.
Further advanced exploration into the tools, materials, and processes of a variety of craft media (may include work in fibers, textiles, paper making, metal, wood, glass or leather). Cultural and historical traditions as well as contemporary work will continue to be studied. (A, CSU-GE)

## 13 BEGINNING WATERCOLOR PAINTING

3 units, 2 lecture hours, 4 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to principles and practices of watercolor painting. Exploration of water media materials, processes, perceptual skills and color theory, paint mixing and technique, creative exploration of water based media. (A, CSU, UC)

## 14 BEGINNING PRINTMAKING

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 23)
ADVISORY: Eligibility for English 1A recommended.
An introduction to the basic materials, equipment, and process of fine art printmaking, including relief (woodcut and linocut), intaglio (drypoint, etching, and collagraph), planography (lithography and monotype) and stencil (screenprint). (A, CSU-GE, UC)

## 15 CERAMIC SCULPTURE

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 12)
ADVISORY: Eligibility for English 1A recommended.
An introduction to ceramic sculpture as means of self expression by examining its historic and contemporary role in societies. Technical aspects of ceramic construction and coloring techniques will be introduced in the projects. (A, CSU-GE, UC)

## 16 LIFE PAINTING

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 8 and 9. ADVISORY: Eligibility for English 1A recommended.

Introduction to figure painting from live model and reference. Develop perceptual skills, paint mixing and techniques for painting the figure, costumes and setting. (A, CSU, UC)

## 17 INTERMEDIATE DRAWING

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 7B)
PREREQUISITE: Art 7 or Art 8 or demonstration of comparable skill level determined by a drawing portfolio.

Exploration of artistic concepts, styles, and creative expression related to intermediate-level drawing, focusing on complex subject matter and concepts using a variety of drawing mediums, techniques, and methodologies. Students in this course will build on fundamental drawing skills to develop personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to drawing. (C-ID ARTS 205) (A, CSU-GE, UC)

## 18 INTERMEDIATE FIGURE DRAWING AND ANATOMY

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 8B)
PREREQUISITE: Art 8 or demonstration of comparable skill level determined by a drawing portfolio.

Exploration of artistic concepts, style, and creative expression related to intermediate-level figure drawing. Students in this course will build on fundamental drawing skills to develop personalized approaches to content and form. (A, CSU, UC)

## 19 INTERMEDIATE PAINTING: OIL/ACRYLIC

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 14B)
PREREQUISITE: Art 9 or demonstration of comparable skill level to be determined by testing and/or portfolio of past oil/acrylic painting work.

Further investigation into painting through the study of historical and contemporary processes, principles and best practices. Deeper exploration of painting materials, perceptual skills and color theory, paint mixing and technique, as well as creative responses to materials and subject matter. (A, CSU, UC)

## 20 INTERMEDIATE CERAMICS

3 units, 2 lecture hours, 4 lab hours,

## (Formerly Art 11B)

PREREQUISITE: Art 10 or 15. ADVISORY: Eligibility for English 1A recommended.

An intermediate exploration of studio ceramics. Construction and decorative processes that promote self-expression will be presented. Contemporary practices of a studio artist will be presented. (A, CSU, UC)

## 21 INTERMEDIATE SCULPTURE <br> 3 units, 2 lecture hours, 4 lab hours, (Formerly Art 17B)

PREREQUISITE: Art 11 or demonstration of comparable skill level to be determined by testing and/or portfolio of past sculpture work.

Concentrated self-expression in a variety of sculptural media which may include but is not limited to clay, steel fabrication, bronze casting, stone, wood, plaster, and new media such as installation and the use of digital technology. Students will be focusing on 2-3 of the above media and begin developing intermediate skills in their use. (A, CSU, UC)

## 22B CRAFT WORKSHOP: CONCEPTS IN FIBERS

3 units, 2 lecture hours, 4 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to basic materials, methods and vocabulary used in fiber and textile media as well as the hands-on development of expressive visual ideas. Contemporary as well as traditional history and cultural relevance of the fiber media is also explored. (A, CSU)

## 23 INTERMEDIATE WATERCOLOR PAINTING

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 13 or demonstration of comparable skill level to be determined by testing and/or portfolio of past watercolor work.

Advanced studies in watercolor painting. Further exploration of water media processes, artistic expression and technique. (A, CSU, UC)

## 24A INTAGLIO PRINTMAKING

3 units, 2 lecture hours, 4 lab hours PREREQUISITE: Art 14.
Intermediate-level intaglio printmaking. Topics may include etching, engraving, drypoint, aquatinting and photo-etching in creating editions of fine art prints. Emphasis is placed upon mastery and the creative use of these techniques. (A, CSU, UC)

## 24B LITHOGRAPH PRINTMAKING

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 14 or demonstration of comparable skill level to be determined by testing and/or portfolio of past printmaking work.

An examination of applied lithographic techniques, concentrating on process and aesthetic development. (A, CSU, UC)

## 24C RELIEF PRINTMAKING

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 14 or demonstration of comparable skill level to be determined by testing and/or portfolio of past printmaking work.

Intermediate-level relief printmaking processes, including experimentation with techniques in monotype, woodblock, linoleum block, and collage print techniques. (A, CSU, UC)

## 24D SCREENPRINTING

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 14 or demonstration of comparable skill level to be determined by testing and/or portfolio of past printmaking work.

Intermediate-level screenprinting processes, including experimentation with techniques in photo, drawing, reductive screenprinting, multicolor on textiles, and cut film. (A, CSU, UC)

## 25 MURAL PAINTING

3 units, 2 lecture hours, 4 lab hours. Offered
1 semester each academic year.
ADVISORY: Eligibility for English 1 A recommended. Art 7 and 9.
An exploration of the aesthetic and practical applications of mural painting, including historical background, planning, techniques and execution. (A, CSU, UC)

## 25A INTERMEDIATE MURAL PAINTING

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 25. ADVISORY: Eligibility for English 1A recommended.

An advanced exploration of the aesthetic and practical applications of mural painting, including historical background, planning, techniques and execution. (A, CSU, UC)

## 27 ADVANCED DRAWING

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 17 or demonstration of comparable skill level to be determined by testing and/or portfolio of past drawing work.

Exploration of artistic concepts, styles, and creative expression related to advanced-level drawing, focusing on complex subject matter and concepts using a variety of drawing mediums, techniques, and methodologies. Students in this course will develop a personalized body of work and gain further experience in constructing and preparing drawing supports. (A, CSU)

## 28 ADVANCED FIGURE DRAWING AND ANATOMY

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 18 or demonstration of comparable skill level to be determined by testing and/or portfolio of past figure drawing and anatomy work.

Investigations for the advanced student of figure drawing into artistic concepts, style, creative expression, content and materials. Emphasis is on a personalized related body of work. (A, CSU, UC)

## 29 ADVANCED PAINTING: OIL/ACRYLIC

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 19 or demonstration of comparable skill level to be determined by testing and/or portfolio of past oil/acrylic painting work.

Advanced studies in the act of painting. Emphasis on original artistic voice and development of personal portfolio. (A, CSU, UC)

## 31 ADVANCED SCULPTURE

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art21 or demonstration of comparable skill level to be determined by testing and/or portfolio of past sculpture work.

Development of a portfolio of sculptural work through concentrated advanced self-expression in a variety of sculptural media which may include but is not limited to clay, steel fabrication, bronze casting, stone, wood, plaster, and new media such as installation, social sculptural and performance. (A, CSU, UC)

## 32A BEGINNING JEWELRY AND <br> 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 jewerry-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 PREREQUIITIE: Art 32A.
Further exploration into a wide-range of methods, techniques and materials used to create jewelry and small metal objects. Advanced exploration and research into the history of jewelry-making as well as to its cultural expressiveness worldwide. (A, CSU)

## 36A INTERMEDIATE WHEEL THROWING

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 20.
Employing the Potter's Wheel to form functional and expressive pottery and forms. This course examines functional pottery from a contemporary studio practice and from a historic context. Advanced topics of glaze options and various forms will also be covered. (A, CSU, UC)

## 38A INTERMEDIATE HAND-BUILDING

3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 10 or 15.
Intermediate ceramic hand-building and exploration of clay and glaze chemistry. Historic study of ceramics as a major form of self expression. Students will be introduced to larger scale projects and alternate construction techniques. (A, CSU)

## 40 PHOTOGRAPHY AS ART

3 units, 2 lecture hours, 4 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to the processes, principles, and tools of photography as a fine art studio practice. Topics include the development of aesthetic thinking, elements of design and composition, materials and equipment, and contemporary trends in photography. Emphasis is on the development of visual literacy and creative expression. (A, CSU)

## 52 INTRODUCTION TO DIGITAL ART/NEW MEDIA

3 units, 2 lecture hours, 4 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduces digital and new media art practice. Explores the use of digital technology as tool and medium with an emphasis on conceptual and expressive content. Provides a hands-on introduction to fundamental concepts and practices utilizing contemporary digital tools resulting in the creation of visual artworks. (A, CSU)

## 55 INTRODUCTION TO ASIAN ART

3 units, 3 lecture hours, (See also Asian
American Studies 55)
ADVISORY; English 1A.
Introduction to the arts of Asia, including China, Japan, Korea, India, and Southeast Asia. Cross-listed with ASAMER-55. (C-ID ARTH 130)(A, CSU-GE, UC, I)

60 ART OF THE ANCIENT AMERICAS
3 units, 3 lecture hours, (See also Chicano-
Latino Studies 22)
ADVISORY: English 1A.
An introduction to the art and architecture of the indigenous cultures of Mesoamerica (Mexico \& Central America) and Andean South America prior to European contact. Featured cultures include Olmec, Maya, Toltec, Aztec, Paracas, Nazca, Moche, Wari \& Inca. (C-ID ARTH 145) (A, CSU-GE, UC, I)

## 70 MODERN AND CONTEMPORARY ART <br> 3 units, 3 lecture hours <br> ADVISORY: English 1A. <br> Survey of modern and contemporary art from the 19th to the 21st centuries. Chronological study of the major artistic styles and movements in Europe, the United States and the Global art world. (A, CSU-GE)

80 TOPICS IN ART
2 units, 2 lecture hours
PREREQUISITE: None.
Examination of art and art historical topics, themes and cultures in conjunction with field studies and participation in departmental study abroad program. Course content to be determined by faculty in relation to the locale of the class. Course content may include lectures, seminars, and tours. (A, CSU)

## ASIAN-AMERICAN STUDIES (ASAMER)

## 1 INDO-CHINESE AMERICANS

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
History, culture, and settlement in America of the peoples of Indo-China. The Vietnamese, Cambodian, Lao, and Hmong experience. (A, CSU-GE, UC, I)

## 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-GE, UC,I)

## 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 equivalent.
Survey of Asian American classic and contemporary literature. Reading and writing critical analysis of novels, short stories, poems and plays. (A, CSU, UC)

## 25 ASIAN-AMERICAN SOCIAL ISSUES

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Issues of contemporary relevance related to Asian Americans: gender inequality, media representation, workplace concerns, crime, anti-Asian violence, race relations, the changing Asian American family and community, homosexuality, issues in education, and political involvement. (A, CSU-GE, UC, I)

## 30 ASIAN-AMERICAN WOMEN

3 units, 3 lecture hours, (See also Women's Studies 30)
ADVISORY: Eligibility for English 1A recommended.
This course examines the historical, social, and cultural experiences of Asian American women from the late 1800s to the present. Topics include: immigration and settlement; labor participation; dating and marriage; family and career choices; inter-generational relations; participation in labor market; media portrayals; violence against women; globalization and work; and movements for social change. (A, CSU-GE, UC, I)

## 55 INTRODUCTION TO ASIAN ART

3 units, 3 lecture hours, (See also Art 55)
ADVISORY: English 1 A.
Introduction to the arts of Asia, including China, Japan, Korea, India, and Southeast Asia. Cross-listed with ART-55. (A, CSU-GE, UC, I)

## ASTRONOMY (ASTRO)

## 10 BASIC ASTRONOMY

3 units, 2 lecture hours, 2 lab hours, (generally evening only)
ADVISORY: Eligibility for English 1 A recommended. Mathematics 201 recommended.

The night sky from our local solar system to the most distant objects in the universe, including observational and theoretical methods. The history of astronomical discovery, current investigations, cosmology, solar system dynamics, life cycle of stars and galaxies, constellation lore, and the role of gravity on a local and cosmic scale. Optional field trips. (A, CSU-GE, UC, I)

## AUTOMOTIVE COLLISION REPAIR TECHNOLOGY (ACRT) <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 167W and 168R and Mathematics 201 or Applied Technology 130 recommended.

Theory and practice in minor auto body repair. Principles of auto construction and design. Correct use and application of body shop hand tools, power tools and equipment. Diagnosis and repair of minor/major collision damage and body alignment. Emphasis on automotive safety procedures and shop safety. Not open to students that have completed Automated Collision Repair Technology 151B. (A)

## 151A BASIC ACR

4.5 units, 2 lecture hours, 8 lab hours

ADVISORY: Welding Technology 2A and eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R and Mathematics 201 recommended.

Theory and practice in minor auto body repair. Principles of auto construction and design. Correct use and application of body shop hand tools, power tools and equipment. Diagnosis and repair of minor/major collision damage and body alignment. Emphasis on automotive safety procedures and shop safety. (A)

## 151B BASIC ACR

4.5 units, 2 lecture hours, 8 lab hours

PREREQUISITE: Automotive Collision Repair 151A.
Theory and practice in minor auto body repair. Principles of auto construction and design. Correct use and application of body shop hand tools, power tools and equipment. Diagnosis and repair of minor/major collision damage and body alignment. Emphasis on automotive safety procedures and shop safety. (A)

## 153 ADVANCED ACR

9 units, 4 lecture hours, 16 lab hours, (Day Program), (Formerly Body-Fender 53/54)
PREREQUISITE: Automotive Technology Collision Repair 151. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R and Mathematics 201 or Applied Technology 130 recommended.

Estimation of body repair and refinishing, analysis of mechanical components, repair of auto plastics, auto body panel replacement and adjustment, restoration of corrosion protection, application of materials for spot repair and complete repaints, surface preparation on all types of substrates, paint materials used in refinishing, refinishing equipment, and other body shop repairs such as glass and trim removal and replacement. Emphasis on automotive safety procedures and shop safety. Not open to students that have completed Automotive Collision Repair Technology 153B. (A)

## 153A ADVANCED ACR

## 4.5 units, 2 lecture hours, 8 lab hours

ADVISORY: Welding Technology 2A and eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R and Mathematics 201 recommended.

Estimation of body repair and refinishing, analysis of mechanical components, repair of auto plastics, auto body panel replacement and adjustment, restoration of corrosion protection, application of materials for spot repair and complete repairs, surface preparation on all types of substrates, paint materials used in refinishing, refinishing equipment, and other body shop repairs such as glass and trim removal and replacement. Emphasis on automotive safety procedures and shop safety. (A)

## 153B ADVANCED ACR

4.5 units, 2 lecture hours, 8 lab hours

PREREQUISITE: Automotive Collision Repair 153A. ADVISORY: Welding Technology 2A and eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R and Mathematics 201 or Applied Technology 130 recommended.

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 Body-Fender 55)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R and Mathematics 201 or Applied Technology 130 recommended.

Methods of prepping vehicles for spot repair and complete painting. Application of waterborne basecoat, solvent base coats and urethane clearcoats. (A)

## AUTOMOTVVE COLLISION REPAR (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) PREREQUIIITE: None.
Theory and practice in MIG welding, oxyacetylene welding, steel rod, brazing rod, plasma cutter, metal shrinking, working sheet metal, welded panel replacement, restoring corrosion protection, hand tool technology, shop safety and efficiency, job success and ASE certification.

## 372 BODY WORK TECHNOLOGY

2.78 lecture hours, 13.89 lab hours, (300 total hours), (Repeats = 3), (Pass/No Pass), (Open Entry/ Open Exit) PREREQUISITE: None.
Collision repair introductions and career. Includes estimating repair costs, vehicle construction and power tool technology, service specification and measurements, using body filler, doing hood, bumper, fender, lid, door, roof, and glass service. Looking at restraint system operation, passenger compartment, body/frame measurement, and unibody/frame realignment.

## 373 AUTOMOTIVE REFINISHING TECHNOLOGY

 2.78 lecture hours, 13.89 lab hours, (300 total hours), (Repeats = 3), (Pass/No Pass), (Open Entry/Open Exit) PREREQUISITE: None.Compressed air technology, refinishing materials and fasteners, repairing plastics, refinishing equipment technology, vehicle surface preparation and masking, refinishing procedures, color matching and custom painting, and paint problems and final detailing.

## AUTOMOTVE TECHNOLOGY (AUTOT)

## 9 AUTOMOTIVE ESSENTIALS

3 units, 3 lecture hours, (Formerly Industrial Education 9)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Automotive components, service tools, and equipment. Designed for the prospective industrial arts teacher and students needing an exploratory course in the automotive field. (A, CSU)

## 10 INTRODUCTION TO DIESEL TECHNOLOGY <br> 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Introduction to the field of diesel-powered trucks and equipment maintenance and service. Shop safety, industrial fasteners, hydraulic fittings, technician tool requirements, service shop organization, service procedures, maintenance schedules, and measuring tools. Designed for students majoring in Diesel Technology or those interested in the industry. (A, CSU)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

## 1-8 units

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to automotive technology. Collaborative learning objectives established specific to automotive technology. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 51 PRINCIPLES OF ENGINE THEORY AND SERVICE

4 units, 1.5 lecture hours, 8 lab hours,
(See also Automotive Technology GM 51),
(Formerly Automotive Mechanics 51)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility
for English 1A and Mathematics 201 recommended.
Engine design and operation including diagnosis, failure analysis, and service practices. Designed to accompany work experience in the trade. (A, CSU)

52 AUTOMOTIVE ELECTRICAL SYSTEMS
4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology GM 52), (Formerly Automotive Mechanics COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Basic electrical theory and operation of the automotive electrical components and systems. Testing, diagnosing, and repairing electrical components and systems including automotive computer controls using necessary equipment. Designed to accompany work experience in the trade. (A, CSU)

## 53 ENGINE PERFORMANCE

4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology GM 53)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Engine theory and construction related to engine performance. History and theory of operation for the different types of automotive systems. Latest technologies in automotive fuel delivery, emission control, and ignition systems. Testing, diagnosing, and repairing fuel, emission, and ignition systems. Use of necessary test equipment. Designed to accompany work experience in the trade. (A, CSU)

## 54 SUSPENSION, STEERING, AND WHEEL

 ALIGNMENT4 units, 1.5 lecture hours, 8 lab hours,
(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. (A, CSU)

## 55 POWER TRAINS: TRANSMISSIONS/ TRANSAXLES, DIFFERENTIALS, AND DRIVEAXLES

6 units, 6 lecture hours, 20 lab hours, (9
weeks), (See also Automotive Technology
GM 55), (Formerly Automotive Mechanics
54)

COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

The principles of automotive power train systems: automatic and manual transmissions/transaxles, transfer cases, clutch assemblies, driveaxles, drivelines, and differentials. Diagnosis, service, and repair. Designed to accompany work experience in the trade. (A, CSU)

## 56 AUTOMOTIVE BRAKING SYSTEMS

4 units, 1.5 lecture hours, 8 lab hours,
(See also Automotive Technology GM 56)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Complete disassembly and reassembly of various automotive braking systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. (A, CSU)

## 57 AUTOMOTIVE HEATING, VENTILATION, AIR CONDITIONING, AND ADVANCED ELECTRONICS

4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology GM 57), (Formerly Automotive Technology 60)
PREREQUISITE: Automotive Technology 52 and 53 or equivalent. COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1 A and Mathematics 201 recommended.

Theory and practice in automotive heating, ventilation, and air conditioning systems/components. R-12 and R-134A refrigeration systems, recovery, recycling, charging, leak, and performance testing. Diagnosis, service, and repair of the advance automotive electronics, automatic temperature/ climate control, and other computer controlled systems found on today's late model vehicles. (A, CSU)

## 58 INDIVIDUALIZED SKILLS TRAINING (IST) CHASSIS SYSTEMS I LABORATORY

## 1 unit, 4 lab hours

ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Designed for students to complete assigned automobile manufacturers' training modules: Hands-On (HO), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Automotive Technology. Designed to accompany work experience in the trade. (A, CSU)

## 58A INDIVIDUALIZED SKILLS TRAINING (IST) CHASSIS SYSTEMS II LABORATORY

## 1 unit, 4 lab hours

ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Designed for students to complete assigned automobile manufacturers' training modules in Advanced Chassis Systems: Hands-On (HO), Computer-Based Training (CBT), Web-Based Training (WBT), and/ or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Automotive Technology. Designed to accompany work experience in the trade. (A, CSU)

58B INDIVIDUALIZED SKILLS TRAINING (IST) ENGINE/PROPULSION SYSTEMS LABORATORY
1 unit, 4 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Designed for students to complete assigned automobile manufacturers' training modules in Advanced Chassis Systems: Hands-On (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, 4 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Designed for students to complete assigned automobile manufacturers' training modules in Power Train Systems: Hand-On (HO), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Automotive Technology. Designed to accompany work experience in the trade. (A, CSU)

## 61 DIESEL ENGINES

4 units, 1.5 lecture hours, 8 lab hours
PREREQUISITE: Automotive Technology 10. ADVISORY: Eligibility for English 1 A and Mathematics 201 recommended.

Diesel engine design and operation including diagnosis, failure analysis, and service practices. Designed for students who intend to develop service skills applicable to the diesel technology industry and to accompany work experience in the trade. (A, CSU)

## 62 ELECTRICAL/ELECTRONICS FOR DIESEL TECHNOLOGY

4 units, 1.5 lecture hours, 8 lab hours
PREREQUISITE: Automotive Technology 10. ADVISORY: Eligibility for English 1 A and Mathematics 201 recommended.

Electrical theory and operation of the diesel medium-duty/ heavy-duty truck electrical components and systems. Testing, diagnosing, and repairing electrical components and systems including truck computer controls using necessary equipment. Designed to accompany work experience in the trade. (A, CSU)

## 63 DIESEL FUEL AND EMISSION SYSTEMS

4 units, 1.5 lecture hours, 8 lab hours
PREREQUISITE: Automotive Technology 10. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Theory and operation for the different types of diesel technology engine performance and emission control systems. Latest technologies in diesel technology fuel delivery, emission control, and induction systems. Testing, diagnosing, and repairing fuel, emission, glow plug, and CAN network systems. Use of necessary test equipment. Designed to accompany work experience in the trade. (A, CSU)

## 64 MD/HD SUSPENSION, STEERING, AND ALIGNMENT

4 units, 1.5 lecture hours, 8 lab hours
PREREQUISITE: Automotive Technology 10. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Theory and practical application of Medium-duty/Heavy-duty truck, bus, and trailer alignment, steering, and suspension systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. (A, CSU)

## 65 MD/HD POWERTRAIN SYSTEMS

6 units, 3 lecture hours, 10 lab hours
PREREQUISITE: Automotive Technology 10. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

The principles of diesel technology power train systems: automatic and manual transmissions, clutches, driveaxles, drivelines, and differential systems. Topics include transmission types, powerflow, disassembly, component inspection, reassembly guidelines, air shift systems, troubleshooting procedures, and gear ratio calculations. Maintenance, diagnosis, service, and repair. Designed to accompany work experience in the trade. (A, CSU)

## 66 MD/HD BRAKES AND PREVENTATIVE MAINTENANCE INSPECTION (PMI)

4 units, 1.5 lecture hours, 8 lab hours
PREREQUISITE: Automotive Technology 10. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Complete disassembly and reassembly of various truck braking systems. The fundamentals of operation, wear analysis, preventive maintenance, and major service of truck undercarriages. Operating principles, component description, diagnosis, repair, and service adjustments of heavy-duty transportation and equipment air brake systems. Designed to accompany work experience in the trade. (A, CSU)

## 67 MD/HD HEATING, VENTILATION, AIR CONDITIONING AND ADVANCED ELECTRONICS

4 units, 1.5 lecture hours, 8 lab hours
PREREQUISITE: Automotive Technology 10, Automotive Technology 62, and Automotive Technology 63. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Theory and practice in truck and trailer heating, ventilation, and air-conditioning systems/components. Refrigeration systems, recovery, recycling, charging, leak, and performance testing. Diagnosis, service, and repair of the advance truck/trailer electronics, automatic temperature/ climate control, and other CAN/Computer controlled systems found on today's late model trucks/trailers. Designed to accompany work experience in the trade. (A, CSU)

## 68 INDIVIDUALIZED SKILLS TRAINING (IST) TRUCK \& BUS CHASSIS SYSTEM I LABORATORY

1 unit, 4 lab hours
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic is recommended.

Designed for students to complete assigned truck and bus manufacturers' training modules: Hands-On (HO)/Instructor Led Training (LLT), Computer-Based Training (CBT), Web-Based Training (WBT), and/ or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Diesel Technology Basic Chassis Systems. Designed to accompany work experience in the trade. (A, CSU)

## 68A INDIVIDUALIZED SKILLS TRAINING

 (IST) TRUCK \& BUS CHASSIS SYSTEM II LABORATORY1 unit, 4 lab hours
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic is recommended.

Designed for students to complete assigned truck and bus manufacturers' training modules: Hands-On (HO)/Instructor Led Training (LLT), Computer-Based Training (CBT), Web-Based Training (WBT), and/ or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Diesel Technology Advanced Chassis Systems. Designed to accompany work experience in the trade. (A, CSU)

## 68B INDIVIDUALIZED SKILLS TRAINING (IST) TRUCK \& BUS ENGINE/PROPULSION SYSTEMS

## 1 unit, 4 lab hours

ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic is recommended.

Designed for students to complete assigned truck and bus manufacturers' training modules: Hands-On $(\mathrm{HO}) /$ Instructor Led Training (ILT), Computer-Based Training (CBT), Web-Based Training (WBT), and/ or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Diesel Technology Engine/Propulsion Systems. Designed to accompany work experience in the trade. (A, CSU)

## 68C INDIVIDUALIZED SKILLS TRAINING (IST) TRUCK \& BUS POWER TRAIN SYSTEMS LABORATORY

## 1 unit, 4 lab hours

ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic is recommended.

Designed for students to complete assigned truck and bus manufacturers' training modules: Hands-On (HO)/Instructor Led Training (ILT), Computer-Based Training (CBT), Web-Based Training (WBT), and/ or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Diesel Technology Power Train Systems. Designed to accompany work experience in the trade. (A, CSU)

## 109L AUTOMOTIVE ESSENTIALS LABORATORY <br> 1 unit, 3 lab hours <br> COREQUIIITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended. <br> 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 ELECTRICAL VEHICLES (HEVS) 2 units, 1 lecture hour, 3 lab hours <br> PREREQUISITE: Automotive Technology 170A. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

 This course is designed to familiarize with the hybrid safety, hybrid transmissions, parallel/series, electric motors, batteries, control module units, hybrid internal combustion engines (ICE), power inverter systems, AC induction electric motors, and permanent magnet electric motors theory and construction. Inspection, maintenance, and service procedures on Hybrid Electric Vehicle (HEVs) systems will be emphasized. (A)
## 170C DIAGNOSIS AND REPAIR TO HYBRID ELECTRIC VEHICLES (HEVS) <br> 2 units, 1 lecture hour, 3 lab hours <br> PREREQUISITE: Automotive Technology 170B. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended. <br> 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, $A C$ induction electric motors, and permanent magnet electric motors. This course will emphasize diagnosis and repairs to Hybrid Electric Vehicles (HEVs). (A)

## 171A INTRODUCTION TO ALTERNATIVE FUELED VEHICLES (AFVS)

2 units, 2 lecture hours, 1 lab hour
PREREQUISITE: Automotive Technology 170C. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

This is an introductory course on Alternative Fueled Vehicles (AFVs). Various alternative fuels will be compared, such as Ethanol, Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG), Liquefied Petroleum Gas (LPG) and Clean Diesel. The theory of operation, system components, and safe handling of these fuels are included. (A)

## 171B SERVICE AND MAINTENANCE TO ALTERNATIVE FUELED VEHICLES (AFVS)

2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Automotive Technology 171A. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

This course is designed to familiarize with the hybrid safety, hybrid transmissions, parallel/series, electric motors, batteries, control module units, hybrid internal combustion engines (ICE), power inverter systems, AC induction electric motors, and permanent magnet electric motors theory and construction. Inspection, maintenance, and service procedures on Hybrid Electric Vehicle (HEVs) systems will be emphasized. (A)

## 171C DIAGNOSIS AND REPAIR TO ALTERNATIVE FUELED VEHICLES (AFVS)

2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Automotive Technology 171B. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

This course is designed to familiarize with diagnosis and repair on Alternative Fueled Vehicles (AFVs). Emphasis will be placed on Ethanol, Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG), Liquefied Petroleum Gas (LPG) and Clean Diesel type fuel systems. (A)

## 261 BAR SPECIFIED DIAGNOSIS AND REPAIR TRAINING

3 units, 2 lecture hours, 3 lab hours, (Formerly Automotive Technology 61)
PREREQUIIITE: Automotive Technology 52 or 53 or 9 semester units, 13 quarter units, or 180 hours of instruction at a NATEF certified and/or bureau recognized college or trade school in the areas of electrical and engine performance. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.

Introduction to Smog Check Program diagnosis and repair procedures; engine theory, engine performance, and electrical systems; automotive computer control system operations; on-vehicle diagnosing and repair mandated by the Bureau of Automotive Repair. The training provides students with comprehensive knowledge related to the diagnosis and repair of Smog Check failures.

281A AUTOMOTIVE POWER TRAINS I
3 units, 3 lecture hours, (Formerly
Automotive Technology 81A)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.

The principles of automotive power train systems: automotive transmissions, drivelines, and differentials. Diagnosis and service methods.

## 281B AUTOMOTIVE POWER TRAINS II <br> 3 units, 3 lecture hours, (Formerly <br> Automotive Technology 81B)

PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.

The principles of automotive power train systems: automatic 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 167W and 168R, and Mathematics 201 recommended.

Theory of basic 4-wheel alignment and suspension systems. Operating principles, component description, diagnosis, and service adjustment spec.

## 282B AUTOMOTIVE BRAKING SYSTEMS <br> 3 units, 3 lecture hours, (Formerly <br> Automotive Technology 82B)

PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167 W and 168R, and Mathematics 201 recommended.

Discuss complete disassembly and reassembly of various automotive braking systems. Operating principles, component description, diagnosis, repair, and service adjustments.

## 283A ENGINE PERFORMANCE AND DIAGNOSIS

3 units, 3 lecture hours, (Formerly
Automotive Technology 83A)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.

Latest technologies in automotive fuel delivery, emission control, and ignition systems. Diagnosis fuel, emission ignition systems. Introduction of diesel theory, application, and operation. Use of necessary test equipment.

## 283B ELECTRICAL SYSTEMS

3 units, 3 lecture hours, (Formerly Automotive Technology 83B)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.

Basic electrical theory of the automotive electrical components and systems. Diagnosing electrical components and systems including automotive computer controls using necessary equipment.

## 284 AUTOMOTIVE AIR CONDITIONING

3 units, 3 lecture hours, (Formerly
Automotive Technology 84)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.

Theory in automotive heating, ventilation, and air conditioning systems/components. R-12 and R-134A refrigeration systems, recovery, recycling, charging, leak, and performance testing. Discuss the diagnosis, service, and repair of automatic temperature/climate control.

## 285 AUTOMOTIVE ENGINES

3 units, 3 lecture hours, (Formerly Automotive Technology 85)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.

Engine design and operation including diagnosis, failure analysis, and service practices.

## 286 AUTOMOTIVE INFORMATION SYSTEMS

3 units, 3 lecture hours, (Formerly Automotive Technology 86)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.

Automotive service information for components, specifications, procedures, tools, and equipment. Designed for the automotive technology student or automotive technician in the field.

## 287 STREET ROD TECHNOLOGY

4 units, 2 lecture hours, 7 lab hours
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.

Modification of older vehicles to incorporate new technology from newer vehicles.

## 292 ASE CERTIFICATION PREPARATION <br> 2 units, 2 lecture hours, (Formerly Automotive Technology 92) <br> PREREQUIIITE: 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.

## 373 FORK LIFT SAFETY AND OPERATION <br> 1 lecture hour, 3 lab hours, (20 weeks), <br> (Repeats = 3), (Pass/No Pass) <br> PREREQUIIITE: None. <br> Practical and theoretical training in the operation of forklift and pallet jack and how it works. Student receive training while driving on a planned course, loading and unloading commercial vehicles and load securement, with a continuous emphasis on safe driving and operation. Students also develop their skills in minor maintenance for good pre-trip and post-trip inspection.

## 374 STATE LAWS AND FEDERAL REGULATIONS

1 lecture hour, (20 weeks), (Repeats = 3), (Pass/No Pass)
PREREQUIIITE: None.
Provide students with an understanding of California and federal motor vehicle traffic laws, highway traffic regulations, and driver's license laws needed to understand and demonstrate the ability to drive in accordance with laws and regulations.

## 375 SAFE OPERATION FUNDAMENTALS

6 lab hours, ( 20 weeks), (Repeats $=3$ ),
(Pass/No Pass)
PREREQUIIITE: None.
Provide practical and theoretical instruction in the techniques needed to drive defensively and prevent accidents in spite of the incorrect actions of others and adverse conditions. Students are prepared to recognize and perform first aid treatment in dealing with major emergencies, both medical and accidental. The course also explains and demonstrates safe practices in using and selecting proper tools for the job, both in the shop and on the road

## 376 OPERATIONS OF COMMERCIAL VEHICLES I

1 lecture hour, 6 lab hours, ( 20 weeks),
(Repeats = 3), (Pass/No Pass)
PREREQUIIITE: None.
Provide practical and theoretical knowledge in the operation of two- and three-axle tractor trailer combinations on a driving range and highway. Student will develop the hand, eye, and foot coordination for shifting a 10 -speed dual-range transmission. Additionally students will be oriented in California state laws pertaining to a commercial motor vehicle, which prepares them for the CDL Skills and Knowledge Test for the Class A license.

## 377 OPERATIONS OF COMMERCIAL VEHICLES II

9 lab hours, (20 weeks), (Repeats = 3), (Pass/No Pass)
PREREQUISITE: Automotive Technology 376.
Provide practical and theoretical knowledge in the operation of five-axle commercial vehicles with a GVWR of $80,000 \mathrm{lbs}$. and lengths over 65 feet, including single and double trailers. Students will learn to operate various types of dual-range transmissions on the driving range and in real-life city and highway traffic. Students will receive 2,000 2,500 miles of road experience with empty and loaded trailers.

## AUTOMOTIVE MECHANICS (AMCTC)

## 371 ENGINE REPAIR

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

## 372 ENGINE PERFORMANCE

16.67 lecture hours, 33.33 lab hours, ( 900
total hours), (Pass/No Pass), (Repeats = 3), (Open Entry/Open Exit), (Formerly AMVTC 72)

Basic skills necessary for an entry level job. Competency-based similar to those operations performed by automotive shop professionals. Prepares students to take the ASE certification tests.

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

## AUTOMOTIVE TECHNOLOGY: GENERAL MOTORS ASEP PROGRAM (ATGM)

## 51 PRINCIPLES OF ENGINE THEORY AND SERVICE

4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology 51)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Engine design and operation including diagnosis, failure analysis, and service practices. Designed to accompany work experience in the trade. (A, CSU)

## 52 AUTOMOTIVE ELECTRICAL SYSTEMS

4 units, 1.5 lecture hours, 8 lab hours,
(See also Automotive Technology 52),
(Formerly Automotive Technology
General Motors 32)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Basic electrical theory and operation of the automotive electrical components and systems. Testing, diagnosing, and repairing electrical components and systems including automotive computer controls using necessary equipment. Designed to accompany work experience in the trade. (A, CSU)

## 53 ENGINE PERFORMANCE

4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology 53), (Formerly Automotive Technology General Motors 32)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Engine theory and construction related to engine performance. History and theory of operation for the different types of automotive systems. Latest technologies in automotive fuel delivery, emission control, and ignition systems. Testing, diagnosing, and repairing fuel, emission, and ignition systems. Use of necessary test equipment. Designed to accompany work experience in the trade. (A, CSU)

54 SUSPENSION, STEERING, AND WHEEL ALIGNMENT
4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology 54), (Formerly Automotive Technology General Motors 31)
COREQUIIITE: Automotive Technology 9. ADVISORY: Eligibility for English 1 A and Mathematics 201 recommended.

Theory and practical application of basic 4-wheel alignment, steering, and suspension systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. (A, CSU)

55 POWER TRAINS: TRANSMISSIONS/ TRANSAXLES, DIFFERENTIALS, AND DRIVEAXLES
6 units, 6 lecture hours, 20 lab hours, (9
weeks), (See also Automotive Technology
55), (Formerly Automotive Technology General Motors 36)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

The principles of automotive power train systems: automatic and manual transmissions/transaxles, transfer cases, clutch assemblies, driveaxles, drivelines, and differentials. Diagnosis, service, and repair. Designed to accompany work experience in the trade. (A, CSU)

## 56 AUTOMOTIVE BRAKING SYSTEMS

4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology 56)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Complete disassembly and reassembly of various automotive braking systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. (A, CSU)

## 57 AUTOMOTIVE HEATING, VENTILATION, AIR CONDITIONING, AND ADVANCED ELECTRONICS

4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology 57), (Formerly Automotive Technology General Motors 34)
PREREQUISITE: Automotive Technology/Automotive Technology GM 52 and 53 or equivalent. COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1 A and Mathematics 201 recommended.

Theory and practice in automotive heating, ventilation, and air conditioning systems/components. R-12 and R-134A refrigeration systems, recovery, recycling, charging, leak, and performance testing. Diagnosis, service, and repair of the advance automotive electronics, automatic temperature/ climate control, and other computer controlled systems found on today's late model vehicles. (A, CSU)

## BIOLOGY (BIOL)

## 3 INTRODUCTION TO LIFE SCIENCE

4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introductory course exploring biological concepts as they relate to organismal structure and function, inheritance, ecology, and evolution. Recommended for non-biological science majors and liberal studies majors. Field trips required. (A, CSU-GE, UC, I)

## 4 PRINCIPLES OF ZOOLOGY

5 units, 3 lecture hours, 6 lab hours, (Formerly Zoology 1)
PREREQUIIITE: Mathematics 103 or equivalent with a grade of "C" or better. Completion within the last five years recommended. ADVISORY: Eligibility for English 1A recommended.

Animal forms using the evolutionary approach including morphology, physiology, and ecology relative to the major phyla. Field trips required. (C-ID BIOL 130S = BIOL 4 + BIOL 6) (A, CSU-GE, UC, I)

## 5 HUMAN BIOLOGY

4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

An overview of the cellular, molecular, genetic, and systems basis of life with an emphasis on the human body. For allied health majors. Fulfills prerequisites for Biology 20, 21A and 31. (A, CSU-GE, UC, I)

## 6 PRINCIPLES OF BOTANY

5 units, 3 lecture hours, 6 lab hours, (Formerly Botany 1)
PREREQUISITE: Mathematics 103 or equivalent with a grade of "C" or better. Completion within the last five years recommended. ADVISORY: Eligibility for English 1A recommended.

Morphological, physiological, ecological, genetic, and taxonomic relationships with emphasis on seed plants. Field trips required. (C-ID BIOL 130S = BIOL $6+$ BIOL 4) (A, CSU-GE, UC, I)

## 7 FIELD BIOLOGY

## 5 units, 3 lecture hours, 6 lab hours,

 (Spring)PREREQUISITE: Biology 3 or 11 A 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 1 A and Mathematics 103 , within the last five years recommended. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

One of two general biology courses for majors: the chemistry of life, cellular structure, cellular metabolism including photosynthesis, aerobic and anaerobic respiration, cellular communication, cellular division and its regulation, Mendelian genetics, molecular genetics, biotechnology, and evolution. Intended for science majors and pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors. Field trips, guest speakers, literature and scientific research, use of technology, and student presentations are included in this honors level course. (C-ID BIOL 190) (A, CSU-GE, UC, I)

## 11B BIOLOGY FOR SCIENCE MAJORS II

## 5 units, 3 lecture hours, 6 lab hours

PREREQUIIITE: Mathematics 103 within the last five years recommended. ADVISORY: Eligibility for English 1A recommended. Biology 11A.

One of two general biology courses for majors: evolution, speciation, the evolutionary history of biodiversity, plant structure and function, animal structure and function, and ecology. Intended for science majors and for pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors. Field trips required. (C-ID BIOL 140) (A, CSU-GE, UC, I)

## 14 CONSERVATION BIOLOGY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introductory course in conservation biology. An exploration of phenomena influencing Earth's biological diversity with an emphasis on ecological principles and human impacts. A focus on natural resource use, management and future challenges for a growing human population. (A, CSU-GE, UC, I)

## 20 HUMAN ANATOMY

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Biology 5 or 11 A, 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 <br> 4 units, 3 lecture hours, 3 lab hours

PREREQUISITE: Biology 5 or 11A. COREQUISITE: Chemistry 3A. ADVISORY: Eligibility for English 1A recommended.

The first class in a two semester human anatomy and physiology sequence. Biology 21A and 21B are designed to prepare students planning careers in healthcare including nursing. Not open to students with credit in both Biology 20 and Biology 22. (C-ID BIOL 115S = BIOL $21 \mathrm{~A}+21 \mathrm{~B})(\mathrm{A}, \mathrm{CSU}-\mathrm{GE}, \mathrm{UC}, \mathrm{I})$

## 21B HUMAN ANATOMY \& PHYSIOLOGY II <br> 5 units, 4 lecture hours, 3 lab hours <br> PREREQUISITE: Biology 21A and Chemistry 3A. ADVISORY:

 English 1 A .The second class in the semester anatomy and physiology sequence. Biology 21A and 21 B are designed to prepare students planning careers in healthcare, including nursing. (C-ID BIOL 115S $=$ BIOL 21A + 21B) (A, CSU-GE, UC, I)

## 22 HUMAN PHYSIOLOGY

5 units, 4 lecture hours, 3 lab hours
PREREQUISITE: Biology 20 and Chemistry 3A, completion within the last year recommended. ADVISORY: English 1A.

An examination of the functional relationships of the human body at the system, organ, and cellular levels, utilizing homeostasis as a unifying theme. Fulfills the physiology requirement for many nursing and other health-related programs. (C-ID BIOL 120B) (A, CSU-GE, UC, I)

## 31 MICROBIOLOGY

5 units, 3 lecture hours, 5 lab hours
PREREQUISITE: Biology 5 or 11A or equivalent and Chemistry $3 A$ or equivalent, each with a grade " $C$ " or better. Completion within the last five years recommended. ADVISORY: English 1A.

Classification, morphology, identification, physiology, genetics, host microbe interactions related to disease and industrial uses of microorganisms. Field trips may be required. (A, CSU-GE, UC, I)

## 46 ELEMENTARY HORTICULTURE

4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A recommended.
Growth and care of ornamental and vegetable plants including plant anatomy, general maintenance, weeds, pests, diseases, fertilizers, soils, pruning, and training. (A, CSU)

## 47 TOPICS IN BIOLOGY

1-3 units, 1-3 lecture hours, 0-3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Current topics of biological importance and concern outside the regular biology curriculum or topics that will be covered in greater depth than in a regularly offered course. (A, CSU)

## 55 INTRODUCTION TO THE BIOLOGY OF HUMANS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An introductory human biology class without a laboratory. Designed for students planning to enter medical coding or HIT programs. Not an acceptable prerequisite for Biology 20 or Biology 21A. (A, CSUGE, I)

## 222 BIOLOGY SKILLS

1 unit, 2 lecture hours, ( 9 weeks), (Pass/No Pass)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 and Mathematics 201 recommended.

An introductory class for students seeking to develop foundation skills in biological science.

BODY AND FENDER
SEE AUTOMOTIVE COLLISION REPAIR TECHNOLOGY

BOTANY
SEE BIOLOGY

BUILDING TECHNOLOGY
SEE ARCHITECTURE OR CONSTRUCTION

## BUSINESS ADMINISTRATION (BA)

## 5 WORKPLACE COMMUNICATION

3 units, 3 lecture hours, (See also Business \& Technology 5)
ADVISORY: Eligibility for English 1A recommended. Business \& Technology 1 and 112 recommended.

Professional workplace communication including written, oral, and presentation fundamentals with emphasis on organization, correctness, completeness, conciseness, and tone. (A, CSU)

## 10 INTRODUCTION TO BUSINESS

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
A multidisciplinary survey of the U.S. business environment including the examination, analysis, reasoning, advocacy, and critique of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization's policy, practices, and ability to achieve its goals. Demonstrates how these influences impact key areas of business including: organizational structure and design; management; marketing; organizational communication; technology; and financial practices. (C-ID BUS 110) (A, CSU, UC)

## 10H HONORS INTRODUCTION TO BUSINESS

3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

A multidisciplinary survey of the U.S. business environment including the examination, analysis, reasoning, advocacy, and critique of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization's policy, practices, and ability to achieve its goals. Demonstrates how these influences impact key areas of business including: organizational structure and design; management; marketing; organizational communication; technology; and financial practices. (C-ID BUS 110) (A, CSU, UC)

## 18 BUSINESS AND THE LEGAL ENVIRONMENT

4 units, 4 lecture hours, (Formerly Business Administration 18A)
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Law and the legal system: administrative, tort, criminal, contracts, agency, labor and employment, and international business law. Case studies utilized. (C-ID BUS 120) (A, CSU, UC)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

## 1-8 units

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to business administration. Collaborative learning objectives established specific to business administration. Seventy-five hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 20 LAW AND THE LEGAL SYSTEM

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
What every educated citizen should know about law as a social process and about American law and legal institutions. The historical origins of law as well as the role law plays in modern western and non-western societies. Institutional sources of law; legal reasoning; judicial decision making and remedies; an overview of the civil and criminal litigation process; administrative law and procedure; alternative dispute resolution mechanisms; ethics and the legal system. (A, CSU-GE, UC)

## 24 NEGOTIATIONS

## 1.5 units, 1.5 lecture hours

ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Negotiations in real-life professional and personal situations. Theory of negotiation as practiced in a variety of settings including; preparing, measuring, conduction and debriefing individual and group negotiations. (A, CSU)

## 25 INTERNATIONAL BUSINESS - AN INTRODUCTION

## 3 units, 3 lecture hours

ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

A study of the theory and practice of global business. Within the context of a multinational business a study of the functional areas of production, marketing, finance, human resource management, accounting, technology, legal issues and the impact of culture on the business practices.(A, CSU)

## 27 ENTREPRENEURSHIP STARTUP LAB

1-3 units: 1 unit, 1 lecture hour, 1 lab hour;
2 units, 1 lecture hour, 3 lab hours; 3 units,
1 lecture hour, 6 lab hours
ADVISORY: Eligibility for English 1A recommended.
A hands-on course for students that have entrepreneurial ideas, but need the tools and knowledge necessary for startup development, prototyping, launch and sustainability. Business leadership training, experience, knowledge and practical experience in entrepreneurship and business. (A, CSU)

## 28 E-LAW AND ETHICS

3 units, 3 lecture hours
ADVISORY: Computer Information Technology 15. Eligibility for English1A recommended.

An introduction to the legal and ethical issues involving technology and the use of the Internet. (A, CSU)

## 30 PERSONAL FINANCE

## 3 units, 3 lecture hours

ADVISORY: Business Administration 10. Eligibility for 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, UC)

## 31 HUMAN RESOURCE MANAGEMENT

3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Examines major functions of human resource management including planning, recruitment, selection, training and development, evaluation, compensation, labor relations, and motivation. (A, CSU)

## 33 HUMAN RELATIONS IN THE WORKPLACE

3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Multidisciplinary examination of how society, economics, and human behavior are inextricably interwoven into the American work environment. An emphasis on employee interaction with coworkers, clients, supervisors/managers, and their effect on the total organization. Emphasis on communication, societal and cultural differences, conflict resolution, ethics and politics, career selection and entry, inter-personal relations, motivation, leadership, attitude, and group dynamics. (A, CSU)

## 34 FUNDAMENTALS OF INVESTING

3 units, 3 lecture hours
ADVISORY: Business Administration 10 and 30 recommended. Eligibility for English 1A recommended. Eligibility Mathematics 201 recommended.

Study of basic investment theory and practice including security valuation. Includes strategies for investments in government securities, corporate bonds, stocks, mutual funds and basic derivatives. (A, CSU)

## 35 FINANCIAL MANAGEMENT FOR <br> ENTREPRENEURS AND SMALL BUSINESS

3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A and Mathematics 201 recommended.

Basic financial decision-making for business owners, entrepreneurs and financial managers. Financial statement analysis, working capital management, capital budgeting, time value of money, sources of funding, and financial markets and institutions. (A, CSU)

## 38 OPERATION OF THE SMALL BUSINESS

3 units, 3 lecture hours
PREREQUISITE: Business Administration 52 or equivalent experience creating, operating, or managing a startup or established business. ADVISORY: Eligibility for English 1A recommended.

A systematic approach to developing and managing a small business including the development of a formal, comprehensive business plan. Emphasis on discussions and practical exercises to develop expertise in the operations, marketing, human resource utilization, and financing of the small business venture. (A, CSU)

## 40 SUPERVISION AND LEADERSHIP

3 units, 3 lecture hours, (Formerly Business
Administration 39)
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Focus on first-level (operational) supervision. Emphasis on planning, organizing, staffing, leading, and controlling. (A, CSU)

## 43 PRINCIPLES OF MANAGEMENT

3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

In-depth study of the primary management functions including: strategic and tactical planning; decision-making; organizational design and systems; leadership, motivation and communication; and control systems. (A, CSU)

## 44 WOMEN IN MANAGEMENT

3 units, 3 lecture hours, (See also Women's Studies 44)
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Management and entrepreneurial behaviors for women seeking leadership skills, particularly for managers and those aspiring to executive levels. (A, CSU)

## 48 E-BUSINESS

3 units, 3 lecture hours, (Formerly eCommerce 1)
ADVISORY: Computer Information Technology 12 or 15; eligibility for English 1 A and Mathematics 201 recommended.

A study of the nature and environment of electronic commerce and its strategic implications including: information technology infrastructure; marketing and business models; ethical, financial, legal and global strategic implications; the value chain and enterprise resource planning. (A, CSU)

## 49 BUSINESS PROTOCOL FOR ENTREPRENEURS

## 2 units, 2 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Provides skill building application of business protocol required for entrepreneurs and those involved in business start-ups. (A, CSU)

## 50 BUSINESS CONCEPTS

2 units, 2 lecture hours, (Formerly Business Administration 9)
ADVISORY: Eligibility for English 1A recommended.
A study of business basics for entrepreneurs. Topics include marketing, finance, strategic planning, personnel management, basic macroeconomic principles and an assessment of entrepreneurial readiness. Primarily for nonbusiness majors or those just beginning the study of business but interested in entrepreneurship. (A, CSU)

## 51 BUSINESS PLANNING AND NEW VENTURE LAUNCH

## 1.5 units, 1.5 lecture hours

ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Business Plan development. Review of resources available to assist entrepreneurs in developing and launching a business including sources of funding. (A, CSU)

## 52 INTRODUCTION TO ENTREPRENEURSHIP

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Develops an understanding of the complex tasks faced by individuals engaged in entrepreneurial activities. Identifies the methods for developing a business idea, the process of starting a business, how to acquire resources, and the key parts of a business plan. (A, CSU)

## 58 BUSINESS MORALITY AND ETHICS

1.5 units, 1.5 lecture hours

ADVISORY: Business Administration 10, and eligibility for English 1A recommended.

Applied business ethics and its relationship to free markets, marketing, finance, and the law. Topics cover key issues including management's responsibility for accountability, corporate governance, accounting practices, stakeholder relations, and ethical decision. (A, CSU)

## 101 BASIC PROFESSIONAL AND CIVIC BEHAVIORS

0.25 unit, 0.27 lecture hour, (Pass/No Pass) PREREQUIIITE: None.
Introduces basic mindsets, life, and work skills necessary for professional success and civic engagement. (A)

102 INTERMEDIATE PROFESSIONAL AND CIVIC BEHAVIORS
0.25 unit, 0.27 lecture hour, (Pass/No Pass) PREREQUISITE: Business Administration 101. Introduces intermediate mindsets, life, and work skills necessary for professional success and civic engagement. (A)

## 103 ADVANCED PROFESSIONAL AND CIVIC BEHAVIORS

0.25 unit, 0.27 lecture hour, (Pass/No Pass) PREREQUISITE: Business Administration 101 and 102. Advanced exploration of mindsets, life, and work skills required for target career and civic engagement. (A)

## 104 APPLIED PROFESSIONAL AND CIVIC BEHAVIORS

0.25 unit, 0.27 lecture hour, (Pass/No Pass)

PREREQUIIITE: Business Administration 101, 102, and 103
Creation of action plans that integrate life skills, work skills, and mindsets into targeted career and specific civic engagement project. (A)

## 310 INTRODUCTION TO BUSINESS

3 lecture hours, (Repeats = 3), (Pass/No Pass)
ADVISORY: Eligibility for English 1A recommended.
A multidisciplinary survey of the U.S. business environment including the examination, analysis, reasoning, advocacy, and critique of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization's policy, practices, and ability to achieve its goals. Demonstrates how these influences impact key areas of business including: organizational structure and design; management; marketing; organizational communication; technology; and financial practices.

## 333 HUMAN RELATIONS IN THE WORKPLACE <br> 3 lecture hours, (Repeats = 3), (Pass/No <br> Pass) <br> 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.

## BUSINESS \& TECHNOLOGY (BT)

1 COMPUTER DOCUMENT PROCESSING I 4 units, 3 lecture hours, 3 lab hours, (Formerly BSS 1A and Business Information Processing 1)
ADVISORY: Eligibility for English 1A recommended.
Producing basic correspondence, letters, memos, tables, and reports, using current word processing program, developing keyboarding speed and accuracy, and typing by touch. Fulfills the computer literacy graduation requirement. (A, CSU)

## 2 COMPUTER DOCUMENT PROCESSING II

3 units, 2 lecture hours, 3 lab hours, (Formerly Business Information Processing 2)
PREREQUISITE: Business \& Technology 1 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Producing and formatting specialized correspondence, letters, memos, reports, tables, and business forms using a current word processing program. Building typing speed and accuracy. Fulfills the computer literacy graduation requirement. (A, CSU)

## 5 WORKPLACE COMMUNICATION

3 units, 3 lecture hours, (See also Business
Administration 5), (Formerly BSS 5 and Business General Office 5)
ADVISORY: Eligibility for English 1A recommended. Business \& Technology 1 and 112 recommended.

Professional workplace communication including written, oral, and presentation fundamentals with emphasis on organization, correctness, completeness, conciseness, and tone. (A, CSU)

## 6 RECORDS MANAGEMENT

3 units, 3 lecture hours, 1 lab hour, (Formerly Business Information Processing 10 and Business \& Technology 10)
ADVISORY: Business \& Technology 106 or equivalent. Eligibility for English 1A recommended.

An introduction to filing methods and principles for all Business \& Technology majors and employees in the business community. Internationally applied rules of records management for manual and computerized systems used to create and maintain filing systems. Mastery of alphabetic, geographic, numeric and subject filing. (A, CSU)

## 9 COMPUTER APPLICATIONS I

4 units, 3 lecture hours, 3 lab hours, (Formerly Business Information Processing 9)

ADVISORY: Business \& Technology 1 or equivalent. Eligibility for English 1A and Mathematics 201 recommended.

Hands-on learning which covers: an introduction to computers, their use, and the development of general computer skills with integrated software for office applications. Content includes word processing, spreadsheets, graphics, database, and electronic communication, using Microsoft Office. Fulfills the computer literacy graduation requirement. (A, CSU)

10 COMPUTER APPLICATIONS II
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Business \& Technology 9 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Advanced computer application skills for preparing and enhancing documents, spreadsheets, databases, and presentations for professional use. Typically the most current version of Microsoft Office is taught. Fulfills the computer literacy graduation requirement. (A, CSU)

## 11 TODAY'S OFFICE

3 units, 3 lecture hours, 1 lab hour, (Formerly Business General Office 18)
ADVISORY: Eligibility for English 1A recommended. Business \& Technology 106 or 1 or equivalent recommended.

General duties of a receptionist including telephone techniques, telecommunications, handling mail, scheduling appointments, and making travel arrangements both manually and via the internet. Perform internet research on related topics. (A, CSU)

## 13 APPLIED BUSINESS CORRESPONDENCE

2 units, 2 lecture hours, (Formerly Business Information Processing 62)
PREREQUISITE: Business \& Technology 112. ADVISORY: Eligibility for English 1A recommended.

Constructing effective business letters, memos, and reports that are accurate, complete, and well organized. Identifying and correcting problems in business correspondence and then rewriting to improve meaning, tone, and completeness. (A, CSU)

## 18 SPREADSHEET FUNDAMENTALS

2 units, 4 lecture hours, 1 lab hour, (9
weeks), (See also Computer Information
Technology 23), (Formerly Business
Information Processing 18)
ADVISORY: A working knowledge of basic arithmetic is recommended. Eligibility for English 1A recommended.

Creating and formatting a worksheet, using formulas and functions, and creating graphs; integrating spreadsheets with other programs and the World Wide Web; and creating macros. Cross-listed with CIT-23. (A, CSU)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Formerly Secretarial Science 19 and Business General Office 19)
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in 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. Cross-listed with CIT-20. (A, CSU)

26 DATABASE FUNDAMENTALS
2 units, 4 lecture hours, 1 lab hour, (9
weeks), (See also Computer Information
Technology 26), (Formerly Business
Information Processing 26)
PREREQUISITE: Computer Information Technology 15. ADVISORY: Eligibility for English 1A recommended.

Creating database files, entering data, modifying database file structure, designing queries, reports and forms. Cross-listed with CIT26. (A, CSU)

## 28 MICROSOFT WORD I

1.5 units, 1.5 lecture hours, 1 lab hour, (Formerly Business Information Processing 28)

ADVISORY: Business \& Technology 106 or equivalent. Eligibility for English 1A recommended.

Basic features of Microsoft Word. Designed to equip students with the skills to prepare personal correspondence and reports. Fulfills the computer literacy graduation requirement. (A, CSU)

## 29 MICROSOFT WORD II

1.5 units, 1.5 lecture hours, 1 lab hour, (Formerly Business Information Processing
29)

PREREQUISITE: Business \& Technology 28 or Business \& Technology 9 or equivalent recommended. ADVISORY: Eligibility for English 1A recommended.

Advanced features of Microsoft Word. Designed for office personnel using Microsoft Word on the job. Fulfills the computer literacy graduation requirement. (A, CSU)

## 32 21ST CENTURY WORKFORCE SKILLS

## 1.5 units, 1.5 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Project-based course designed to help students develop the 'soft' skills needed to succeed in today's changing workplace. Course topics will include the changing global economy, the rise of entrepreneurial-ism, how to be a competitive job seeker, and the top ten soft skills which include adaptability, analysis/solution mindset, collaboration, communication, digital fluency, entrepreneurial mindset, empathy, resilience, self-awareness, and social/diversity awareness. Supplementary items may include career/personality assessments that require a fee. (A, CSU)

## 33 SOCIAL MEDIA AND EMERGING TECHNOLOGIES IN THE WORKPLACE

3 units, 2 lecture hours, 3 lab hours ADVISORY: Business \& Technology 106. Eligibility for English 1A recommended.

Project-based course providing dynamic coverage of current information available on social networking and emerging technologies for today's workplace environments. Includes researching and applying the latest tools toward office and administrative problem solving. (A, CSU)

## 104 TEN-KEY CALCULATIONS

2 units, 2 lecture hours, 1 lab hour,
(Formerly Business General Office 8 and Business \& Technology 4)
PREREQUIIITE: None.
The operation of electronic desktop calculators and the application of these calculators to business oriented problems. The development of employable ten-key touch skills. (A)

## 106 COMPUTER KEYBOARDING

1.5 units, 1 lecture hour, 1.5 lab hours, (Formerly Business Information Processing 6 and Business \& Technology 6)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Development of skills using the touch method to key letters, numbers, and figures on a computer keyboard. (A)

## 112 BUSINESS ENGLISH

3 units, 3 lecture hours, (Formerly Business Information Processing 59 and Business \&
Technology 12)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Gain the skills needed to create grammatically correct work while improving speaking and writing skills. Review rules of English grammar and apply new concepts for communicating effectively in business settings. (A)

## 115 REFRESHER MATH

3 units, 3 lecture hours, (Formerly Business General Office 53 and Business \&
Technology 15)
ADVISORY: Eligibility for English 125 and 126 recommended. Mathematics 260A.

Review of math fundamentals involving fractions, decimals, percents, and measurements with application problems related to business and technology Designed for students preparing for business occupations. (A)

116 SPELLING AND VOCABULARY BUILDING
2 units, 2 lecture hours, (Formerly
BSS 61 and Business General Office 61
and Business \& Technology 16)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Fundamentals of effective communication in a business setting with an emphasis on spelling, proofreading, and improving vocabulary. (A)

## 120 RESUME/INTERVIEW

1 unit, 1 lecture hour, (Formerly Business
General Office 59 and 59A and Business \&
Technology 20)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Development of job-seeking skills for students preparing to enter the workforce. Creating marketable resumes and practicing steps for winning interviews. (A)

## 121 WORKING RELATIONSHIPS

1.5 units, 1.5 lecture hours, (Formerly

Business General Office 59B and Business
\& Technology 21)
ADVISORY: Eligibility for English 1A recommended.
Development of human relations competencies in the world of work for greater on-the-job happiness, productivity, and career success. (A)

## 122 TYPING SKILLBUILDING

0.5 unit, 1.5 lab hours, (Pass/No Pass), (Formerly Business Information Processing 51A and Business \& Technology 22)
PREREQUIIITE: 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)

PREREQUIIITE: None.
Techniques and practice for improving ten-key speed and accu-
racy in order to meet degree and certificate requirements. (A)

## 126 AUTOMATED BUSINESS RECORDS

1 unit, 1 lecture hour, 1 lab hour, (Formerly Business \& Technology 206)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Develop knowledge of record keeping by transferring data from paper accounting forms into a database, entering accounting information (customers, vendors, suppliers, etc.), modifying file structures, designing queries to produce accounting reports, and printing reports, all using the database sotware. (A)

## 127 MICROSOFT OUTLOOK AND E-MAIL

1 unit, 1 lecture hour, 1 lab hour
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Using the Microsoft Outlook computer program to manage e-mail, appointments, contacts, and tasks; and to make notes and journal entries. Create effective e-mail messages for professional settings. (A)

## 130 BEGINNING POWERPOINT

1 unit, 1 lecture hour, 1 lab hour
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Using basic features of Microsoft PowerPoint computer program to create presentations including editing, adding effects and presenting a finished presentation. (A)

## 131 APPLIED ACCOUNTING

3.5 units, 3 lecture hours, 2 lab hours, (Formerly Business General Office 51 and Business \& Technology 31)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Practical accounting for service and merchandising businesses involving classification of accounts, relationship of assets, liabilities, and owner's equity; posting, accounts receivable, accounts payable, financial reports, the accounting cycle, and payroll. (A)

## 132 CUSTOMER SERVICE IN THE ONE-PERSON OFFICE <br> 3 units, 2 lecture hours, 3 lab hours <br> ADVISORY: Eligibility for English 1A. <br> Practical, project-based course to enhance one's ability to gain and retain both customers and quality employees. (A)

134 EXPLORATION OF CAREERS IN BUSINESS
1 unit, 1 lecture hour, 1 lab hour
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Students will use career exploration tools and engage with local employers as they assess their interest in, and explore the many options for, a career in business. Emphasis will be on the planning and communication skills needed to analyze career options and prepare for today's job market. (A)

## 135 CAPSTONE - ONE-PERSON OFFICE

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Business \& Technology 106. Eligibility for English 1A recommended.

A project-based capstone course designed to explore productivity freeware, open-source software, and web-based tools to prepare the entrepreneur to efficiently and effectively run the office side of business. (A)

140 LEGAL DOCUMENT PROCESSING
3 units, 2 lecture hours, 3 lab hours, (See
also Paralegal 156), (Formerly BSS 57A
and Business General Office 56 and
Business \& Technology 40)
ADVISORY: Business \& Technology 1, or Business \& Technology 28, or basic knowledge of a word processing program. Ability to type at least 25 gross words per minute is recommended. Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Producing and formatting business and legal correspondence and documents using a current word processing program. (A)

## 143 MEDICAL OFFICE VOCABULARY

1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended.
Develop the ability to pronounce, spell, define, and use medical terms in a medical office. (A, CSU)

## 144 MEDICAL ADMINISTRATIVE ASSISTANT

2.5 units, 2 lecture hours, 2 lab hours, (Fall only), (Formerly BSS 58 and Business
General Office 58 and Business \&
Technology 44)
ADVISORY: Ability to touch type 25 words per minute. Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended. Business \& Technology 1 or equivalent.

Administrative procedures in a medical office/healthcare setting. Prepare documents, file charts, conduct basic office operations; consider legal, ethical and cultural issues when interacting with patients. (A)

## 147 MEDICAL MANAGEMENT SOFTWARE

2 units, 1 lecture hour, 3 lab hours, (Formerly Business Information Processing 63 and Business \& Technology 47)
ADVISORY: Business \& Technology 1.
Introduction to medical office management software. Students will learn to enter patient information, insurance information, schedule appointments, and generate reports. (A)

## 148 MEDICAL INSURANCE \& BILLING CONCEPTS

2.5 units, 2 lecture hours, 2 lab hours, (Formerly BSS 64 and Business General Office 64 and Business \& Technology 48)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167 W and 168 R recommended. Business \& Technology 1 or equivalent.

Interpret heath insurance plans, complete insurance claims forms used in a medical office, complete with coding. (A)

## 271 BUSINESS GRAMMAR FUNDAMENTALS

2 units, 2 lecture hours, (Formerly Business
Information Processing 71 and Business \&
Technology 71)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Introduction to or review of basic areas of business English: basic sentence structure, punctuation, capitalization, expression of numbers, spelling; also vocabulary developing, proofreading, and editing.

## 306 COMPUTER KEYBOARDING

1 lecture hour, 1.5 lab hours
PREREQUISITE: None.
Development of skills using the touch method to key letters, numbers, and figures on a computer keyboard.

## 307 INTRODUCTION TO WORD PROCESSING

1 lecture hour, 1.5 lab hours, $($ Repeats $=5)$ PREREQUIIITE: None.
Introduction of word processing features in various software platforms. Designed to equip students with the skills to prepare basic personal correspondence.

## 332 CUSTOMER SERVICE IN THE ONE-PERSON OFFICE

2 lecture hours, 3 lab hours, (Repeats $=5$ )
PREREQUIIITE: None.
Practical, project-based course to enhance one's ability to gain and retain both customers and quality employees.

## 370A OFFICE ASSISTANT APPLICATIONS

5 lecture hours, 10 lab hours, (20 weeks), ( 300 total hours), (Repeats $=3$ ), (Open Entry/Open Exit), (Formerly CTVTC 70, CTCTC 370 and Business \& Technology 370)

COREQUIIITE: 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 370 B .

## 370B OFFICE ASSISTANT APPLICATIONS

5 lecture hours, 10 lab hours, ( 20 weeks), ( 300 total hours), (Repeats $=3$ ), (Open Entry/Open Exit)
COREQUISITE: Business \& Technology 370A.
Develop and improve skills for those desiring office employment. Emphasis on human relations, career document preparation, resume and interview and professional appearance. Must be taken concurrently with BT 370A.

## 375A INTRODUCTION TO KEYBOARDING

12 lab hours, ( 6 weeks), (Repeats $=5$ ),
(Open Entry/Open Exit)
PREREQUIIITE: None.
Development of skills using the touch method to key letters, numbers, and figures on a computer keyboard.

## 375B INTRODUCTION TO FILING

12 lab hours, ( 2.2 weeks), (Repeats $=5$ ),
(Open Entry/Open Exit)
PREREQUIIITE: None.
An introduction to filing methods and principles. Utilize the 12 rules of filing which includes alphabetic, geographic, numeric, government, and subject filing.

## 375C BASIC OFFICE COMMUNICATIONS

3.4 lecture hours, 2 lab hours, ( 6.6 weeks),
(Repeats = 5), (Open Entry/Open Exit)
PREREQUISITE: None.
Develop and improve effective communication skills. Emphasis on spelling, proofreading, improving vocabulary, and telephone/e-mail etiquette.

## 375D MATH REVIEW AND TEN-KEY CALCULATOR

12 lab hours, ( 5 weeks), (Repeats $=5$ ),
(Open Entry/Open Exit)
PREREQUIIITE: None.
Develop and improve skills with emphasis on the 10 -key calculator and math review.

## 375E JOB SEARCH DOCUMENTS

0.83 lecture hours, 2.5 lab hours,
(Repeats = 5), (Open Entry/Open Exit) PREREQUIIITE: None.
Create essential employment documents such as a resume, cover letter, and employment application.

## 377 GETTING STARTED WITH COMPUTERS AND WORKPLACE TECHNOLOGY

5 lecture hours, 5 lab hours, (3 weeks), (30 total hours), (Pass/No Pass)
PREREQUIIITE: None.
Gain basic technology literacy required for the workplace as well as for success in introductory technology courses. Skills include: launching a computer and navigating to applications, keyboarding, emailing, and creating basic documents.

## CARPENTRY

see construction

## CHEMISTRY (CHEM)

## 1A GENERAL CHEMISTRY

5 units, 3 lecture hours, 6 lab hours
PREREQUISITE: High school chemistry with laboratory component, Chemistry 101P, or Chemistry 3A or equivalent, and Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Development of atomic theory; atoms, isotopes, molecules, and ions; compounds; classification of matter; formulas and equations; stoichiometry; introduction to aqueous reactions: precipitation, acids and bases, and gas forming and redox reactions; gas laws; kinetic molecular theory of gases; thermochemistry; modern atomic theory; 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

 ANALYSIS5 units, 3 lecture hours, 6 lab hours
PREREQUISITE: Chemistry 1A. ADVISORY: Eligibility for English 1 A 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 1 A 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 1 A recommended.

Properties and reactions of aliphatic and aromatic compounds, theories of structure, and reaction mechanisms. For biology majors and students in prehealth sciences, environmental sciences, and programs that do not require a full-year sequence in organic chemistry. Recommended for students requiring a one-semester organic chemistry course. (A, CSU-GE, UC, I)

## 18L ELEMENTARY ORGANIC CHEMISTRY LAB

2 units, 6 lab hours
PREREQUISITE: Chemistry 1B. COREQUISITE: Chemistry 28A or Chemistry 8A. ADVISORY: Eligibility for English 1A recommended.

The course will focus on techniques appropriate to an industrial setting. Experiments will cover simple organic reactions and techniques used to prepare and process samples. Topics include preparation of solutions, solution properties, filtration, extraction, distillation, determination of physical properties, recrystallization, chromatography, and spectroscopy. (A, CSU, UC)

## 20 PRACTICAL QUANTITATIVE ANALYSIS

5 units, 2 lecture hours, 9 lab hours
PREREQUISITE: Chemistry 1B. ADVISORY: Eligibility for English 1A recommended.

The theory and practice of gravimetric and volumetric analysis, electrochemistry and instrumental methods. The analysis of unknown samples by both classical and instrumental techniques with emphasis on practical applications used in real lab settings. (A, CSU, UC)

## 28A ORGANIC CHEMISTRY I

3 units, 3 lecture hours, (Formerly
Chemistry 28)
PREREQUISITE: Chemistry 1B. COREQUISITE: Chemistry 29A. ADVISORY: Eligibility for English 1A recommended.

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 $+29 \mathrm{~A}+28 \mathrm{~B}+29 \mathrm{~B}$ ) (A, CSU-GE, UC, I)

## 28B ORGANIC CHEMISTRY II

## 3 units, 3 lecture hours

PREREQUISITE: Chemistry 28A. COREQUIIITE: 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. Oxidation-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 160S $=$ CHEM 28A $+29 \mathrm{~A}+28 \mathrm{~B}+29 \mathrm{~B}$ ) (A, CSU-GE, UC, 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 $28 \mathrm{~A}+29 \mathrm{~A}+28 \mathrm{~B}+29 \mathrm{~B}$ ) (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 $28 \mathrm{~A}+29 \mathrm{~A}+28 \mathrm{~B}+29 \mathrm{~B})(\mathrm{A}$, CSU-GE, UC, I)

## 100I CHEMICAL LABORATORY INTERNSHIP <br> 2-6 units, 6-18 lab hours <br> COREQUISITE: Chemistry 18L. ADVISORY: Eligibility for English 1A recommended. <br> Supervised experience or employment in an approved chemical laboratory. (A)

## 101P GENERAL CHEMISTRY PREPARATION

3 units, 2 lecture hours, 2 lab hours
PREREQUISITE: Mathematics 201. ADVISORY: Eligibility for English 1A recommended.

Introductory chemistry for students who plan to major in a scientific field. Appropriate for students desiring to prepare themselves for CHEM 1A. Emphasizes chemical nomenclature and techniques of chemical problem solving. Topics covered include: dimensional analysis; conversions between measuring units; temperature; mass, mole and volume calculations; density; chemical equations; and solutions. Students must demonstrate a minimum of $80 \%$ competency in dimensional analysis, nomenclature, and mole calculations, on department approved proficiency quizzes, in order to pass the course. (A)

## CHICANO-LATINO STUDIES (CLS)

## 11 INTRODUCTION TO CHICANO-LATINO STUDIES

3 units, 3 lecture hours, (Formerly Cultural Studies 11)
ADVISORY: Eligibility for English 1A recommended.
The Chicano-Mexican American community, culture, and heritage in American society. An interdisciplinary approach to the study of society and culture, social and cultural change, and social and cultural conflict. Examines the roots and dynamics of Mexican and Mexican American cultures, from the Indigenous civilizations of Mesoamerica to the present. Also includes an introduction to the broader Latino population in the U.S. (A, CSU-GE, UC, I)

## 12 MEXICAN AMERICAN HISTORY

 3 units, 3 lecture hours, (Formerly Cultural Studies 12)ADVISORY: Eligibility for English 1A recommended.
A survey of Mexican American history from the indigenous civilizations of Mesoamerica to the present, with a focus on the history of Mexicans in the United States, and the historical reasons for migration. U.S.-Mexico relations and the history and heritage of the Chicana/ Chicano community in the Southwestern U.S. are explored in depth. (A, CSU-GE, UC, I)

## 13 POLITICS AND THE CHICANO-LATINO COMMUNITY

3 units, 3 lecture hours, (Formerly Cultural
Studies 13)
ADVISORY: Eligibility for English 1A recommended.
Chicano-Latino political issues, interaction with governmental and political structures, legislation, political parties, pressure groups, political socialization, and political change. The Chicano Movement. Chicano-Latino political organizations. (A, CSU, UC)

## 14 SOCIOLOGY OF THE MEXICAN AMERICAN COMMUNITY

3 units, 3 lecture hours, (See also Sociology
14), (Formerly Cultural Studies 14)

ADVISORY: Eligibility for English 1A recommended.
Sociological examination of the Chicano and Latino in American society: family, religion, education, social class, gender, and political and social institutions. Emphasis on social problems, social issues, and social change. (A, CSU, UC)

## 17A BEGINNING MEXICAN FOLK DANCE

3.5 units, 3 lecture hours, 2 lab hours, (See also Dance 17), (Formerly Cultural Studies and Chicano-Latino Studies 17)
ADVISORY: Eligibility for English 1A recommended.
History and origin of Mexican dance, from the pre-Columbian era through the arrival of the Spaniards. Analysis of the form, function, and symbolism of the music, musical instruments, movements, and choreography. Examination of the role of gender in this art form. Dances practiced and performed at the beginning level. (A, CSU-GE, UC)

## 17B BEGINNING INTERMEDIATE MEXICAN FOLK DANCE <br> 3.5 units, 3 lecture hours, 2 lab hours, (See also Dance 17B) <br> PREREQUIIITE: Chicano-Latino Studies 17A. Demonstrated

 experience and skills at the beginning level as assessed by instructor. ADVISORY: Eligibility for English 1A recommended.History and origin of Mexican dance, from the pre-Columbian era through the arrival of the Spaniards. Analysis of the form, function, and symbolism of the music, musical instruments, movements, and choreography. Examination of the role of gender in this art form. Dances practiced and performed at the pre-intermediate level. (A, CSU, UC)

## 18 LATIN JAZZ ENSEMBLE

2 units, 1 lecture hour, 3 lab hours, (See also Music 48), (Formerly Cultural Studies 18)

ADVISORY: Ability to perform on an instrument or voice at college level as determined by audition. Eligibility for English 1 A recommended.

Study and performance of Latin jazz and Afro Cuban music. Students will develop an awareness and appreciation of the music of Latin America and Cuba through artistic and cultural creation. Participation in concerts and jazz festivals required. (A, CSU, UC)

## 20 CHICANO ART

3 units, 3 lecture hours, (Formerly Cultural Studies 20)
ADVISORY: Eligibility for English 1A recommended.
Mexican, Chicano, and Latino art from the historical to the contemporary. Contemporary artforms and their ancestral cultural base. Survey of Mexican, Chicano and Latino artistic expressions. (A, CSU-GE, UC, I)

## 21 CHICANO LITERATURE

3 units, 3 lecture hours, (Spring), (Formerly Cultural Studies 21)
ADVISORY: Eligibility for English 1A recommended.
Survey of Chicano-Latino classic and popular literature. Reading and critical analysis of novels, short stories, poetry, and plays. (C-ID ARTH 145) (A, CSU-GE, UC, I)

## 22 ART OF THE ANCIENT AMERICAS

3 units, 3 lecture hours, (See also Art 60)
ADVISORY: English 1 A.
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.
A sociological analysis of Mexican American women in contemporary society. Special emphasis on her role in the family, church, education, economics, and politics. (A, CSU, UC)

## 27A INTERMEDIATE MEXICAN FOLK DANCE

3.5 units, 3 lecture hours, 2 lab hours, (See also Dance 27A)
PREREQUISITE: Chicano-Latino Studies 17B. Demonstrated experience and skills at the beginning level as assessed by instructor. ADVISORY: Eligibility for English 1A recommended.

History of the origin of Mexican dance, from the arrival of the Spaniards to the present time. Analysis of the form, function, and symbolism of the music, musical instruments, movements and choreographies. Dances practiced and performed at the intermediate level. (A, CSU, UC)

## 27B ADVANCED MEXICAN FOLK DANCE

3.5 units, 3 lecture hours, 2 lab hours,
(See also Dance 27B), (Formerly Chicano-
Latino Studies 27)
PREREQUISITE: Chicano-Latino Studies/Dance 27A. ADVISORY: Eligibility for English 1A recommended.

History of the origin of Mexican dance, from the arrival of the Spaniards to the present. Analysis of the form, function, and symbolism of the music, musical instruments, movements and choreographies. Dances practiced and performed at the advanced level. (A, CSU-GE, UC)

## 28 ANCIENT MEXICO

3 units, 3 lecture hours, (See also
Anthropology 28), (Formerly Cultural
Studies 28)
ADVISORY: Eligibility for English 1A.
A survey of history, geography, socio-political, religious systems, and cultural achievements of Mesoamerican civilizations such as the Olmec, Zapotec, Teotihuacano, Mayan, Toltec, and Aztec/Mexican. (A, CSU, UC)

## 29 HISTORY OF MEXICO, COLONIAL TO CONTEMPORARY PERIOD <br> 3 units, 3 lecture hours, (See also History <br> 29), (Formerly Cultural Studies 29) <br> ADVISORY: English 1 A. <br> A social, economic, and political survey of Mexican history from the colonial (1521) to the contemporary period. (A, CSU-GE, UC, I)

## 30 MIGRATION AND THE FAMILY: SOCIAL AND PSYCHOLOGICAL PERSPECTIVES 3 units, 3 lecture hours, (Formerly Cultural Studies 30) <br> ADVISORY: Eligibility for English 1A recommended. <br> Social and psychological perspectives on transnational migration and its impact on the family and mental health. Analysis of the dynamics of personality development and its relationship with the Mexican and Mexican American family. Emphasis on culture, socialization, resilience, and survival. (A, CSU-GE, UC, I)

## 33 COMMUNITY INVOLVEMENT: SERVICE LEARNING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Service learning in community, civic, or legal settings. Personal development, community and civic development, public policy development and analysis, and leadership theory. An introduction to Participatory Action Research. A working understanding of issues impacting the political, economic, and social fabric of the Latino community. Civic engagement related to coursework utilizing practical applications of course concepts. (A, CSU, UC)

## 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 CURRICULUM

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Verification of freedom from tuberculosis. Verification of immunization against influenza, pertussis and measles. ADVISORY: Eligibility for English 1A recommended.

Developmentally appropriate curriculum and environments for young children. Includes strategies for observation-based curriculum development and assessment for academic content areas, play, art and creativity. Includes a focus on children's development of social-emotional, communication, self-help skills, and integration of content across the curriculum. The "To Be Arranged" hours may include observation of and participation in planning learning environments and curriculum. (C-ID ECE 130) (A, CSU)

## 5 PARENT EDUCATION

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An introduction to the skills needed for effective parenting; the developmental needs of children; effective communication skills; appropriate and effective use of discipline; family structure and function. (A, CSU)

## 6 HEALTH, SAFETY AND NUTRITION IN EARLY CHILDHOOD EDUCATION

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to laws, regulations, standards, policies and procedures and early childhood curriculum related to child health safety and nutrition. Prevention, detection, and management of communicable disease; medical issues associated with disabilities and chronic illness; physical health; mental health and safety for both children and adults; collaboration with families and health professionals. Integration of concepts into planning and program development for children ages 0 to 5. (C-ID ECE 220) (A, CSU)

## 9 MUSIC, MOVEMENT, AND DRAMA FOR

 YOUNG CHILDREN3 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

 CHILDREN3 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 1 A 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 37A. Verification of freedom from tuberculosis. Verification of immunization against influenza, pertussis and measles. ADVISORY: Eligibility for English 1A recommended.

Supervised experience as ateacher 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 37 A 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 <br> 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. Current employment in a supervisory capacity in an early care and education setting. ADVISORY: Eligibility for English 1A recommended.

Methods and principles of mentoring and supervising student teachers, volunteers, staff, and other adults in early care and education settings. Emphasis is on the roles and development of early childhood professionals as mentors and leaders. This course satisfies the adult supervision requirement for the Master Teacher Permit issued by the California Commission on Teacher Credentialing. (A, CSU)

## 47 EMERGENT LITERACY

3 units, 3 lecture hours, (Formerly Child Development 47A)
ADVISORY: Eligibility for English 1A recommended.
Research-based principles and practices for providing children birth through age eight with a strong foundation in emergent language and literacy skills within a developmentally-appropriate approach. Topics include the teacher's role, preparation of the classroom environment curriculum development and teaching strategies, including ways to support the child learning English as a second language. (A, CSU)

## 48 CHILDREN WITH CHALLENGING BEHAVIORS

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Effective strategies for working with children with challenging behaviors in early childhood environments; guidelines for discussion, identification and intervention of impeding behaviors; emphasis on teacher's role in supporting children through emotional difficulties and sensory challenges; needs of children at risk, in trauma and/or deprivation. Specific disabilities or special needs which affect behavior will be studied. (A, CSU)

## 53 FAMILY CHILD CARE PROGRAMS

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
An introduction to managing a quality family child care home; meeting licensing requirements, developing policies for parents, business practices, recruiting children, and strategies to promote professionalism. Program planning including developmentally appropriate practices for children of mixed ages, guidance techniques, and designing an environment for children's learning. (A, CSU)

## 60 INTRODUCTION TO CHILD WELFARE 3 units, 3 lecture hours, (See also Human Services 60) <br> ADVISORY: Eligibility for English 1A recommended. Introduction to the child welfare system. Exploration of the goals of child welfare including safety, a permanent family and well-being of every child. Emphasis on the practice of preventing, remedying, or ameliorating child maltreatment. (A, CSU)

## CHINESE

SEE FOREIGN LANGUAGES

## CISCO

SEE ELECTRICAL SYSTEMS TECHNOLOGY (EST)

## COMMUNICATION (COMM)

FORMERLY SPEECH

## 1 INTRODUCTION TO PUBLIC SPEAKING

 3 units, 3 lecture hours, (Formerly Speech 1)ADVISORY: Eligibility for English 1A recommended.
Theories and techniques of public speaking from the perspective of the speaker and the audience. Emphasis on research, logical organization, composition and effective delivery of informative and persuasive speeches. Practice in clearly stating and developing ideas. (C-ID COMM 110) (A, CSU-GE, UC, I)

## 2 INTERPERSONAL COMMUNICATION

3 units, 3 lecture hours, (Formerly Speech
2)

ADVISORY: Eligibility for English 1A recommended.
Introduction to interaction processes in interpersonal communication settings. Emphasis on effective and appropriate uses of verbal and nonverbal messages in the initiation, development, maintenance, and termination of personal and professional relationships. (C-ID COMM 130) (A, CSU-GE, UC)

## 4 PERSUASION

3 units, 3 lecture hours, (Formerly
Speech 4)
ADVISORY: Eligibility for English 1A recommended.
Theories and practice of influence, advocacy, and reasoning from the perspective of both persuader and audience. Practice preparing effective, ethical persuasive appeals. (C-ID COMM 190) (A, CSU-GE, UC, I)

## 8 GROUP COMMUNICATION

3 units, 3 lecture hours, (Formerly Speech 8)

ADVISORY: Eligibility for English 1A recommended.
An introduction to group communication as a vehicle for solving problems, reaching decisions, and making recommendations on policy. Students will study and practice the theories, behaviors, and processes of group communication. (C-ID COMM 140) (A, CSU-GE, UC, I)

## 8H HONORS GROUP COMMUNICATION

## 3 units, 3 lecture hours

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog. Eligibility for English 1A recommended.

An introduction to group communication as a vehicle for solving problems, reaching decisions, and making recommendations on policy. Students will study and practice the theories, behaviors, and processes of group communication. Honors sections will also focus on a more in-depth analysis of group communication theory and its application. (A, CSU)

## 12 FUNDAMENTALS OF ORAL INTERPRETATION

3 units, 3 lecture hours, (See also Theatre
Arts 12), (Formerly Speech 12)
ADVISORY: Eligibility for English 1A recommended.
An introduction to performance studies analysis, appreciation, and application of theories of interpretive performance of various forms of literature including poetry, prose, and drama. (A, CSU-GE, UC)

## 20 COMMUNITY INVOLVEMENT

2-3 units, 1 lecture hour, 3-6 lab hours, (Formerly Speech 20)
ADVISORY: Eligibility for English 1A recommended.
Theory and practice of community service in nonprofit agencies. Emphasis on the analysis, practice and application of communication theory, leadership, and citizenship through a community service experience. (A, CSU)

## 25 ARGUMENTATION

3 units, 3 lecture hours, (Formerly Speech
25)

ADVISORY: Eligibility for English 1A recommended.
Analysis, reasoning, advocacy, and criticism of ideas. Emphasis on derived conclusions based on valid evidence and sound inferences without using fallacies of thought and language. Demonstration of basic principles through a variety of oral presentations and written assignments. (C-ID COMM 120) (A, CSU-GE, UC, I)

## 26 INTERCOLLEGIATE FORENSICS

 LABORATORY1-3 units: 1 unit, 1 lecture hour, 1 lab
hour; 2 units, 1 lecture hour, 3 lab hours; 3 units, 1 lecture hour, 6 lab hours, (Repeats $=$ 3), (Formerly Speech 26)

ADVISORY: Eligibility for English 1A recommended.
Competitive and practical experience in debate and public speaking. In addition to the class or activity hour each week on campus, students must either attend intercollegiate tournaments for a specified number of weekends or participate in on-campus intramural contests. (C-ID COMM 160B) (A, CSU)

## COMPUTER AIDED DRAFTING AND DESIGN

(CADD) see also drafting

## 14 2D CAD I

3 units, 2 lecture hours, 3 lab hours, (Formerly Drafting 42 and 32)
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic recommended.

Creating and modifying digital drawings for the architectural, engineering, mechanical, manufacturing and other related industries. (A, CSU)

## 16 3D SOLID MODELING I

3 units, 2 lecture hours, 3 lab hours, (Formerly Drafting 20 and Computer Aided
Drafting and Design 26 and 34)
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic recommended.

CAD generated 2D sketches, 3D solid models, assemblies and detailed drawings for the mechanical and manufacturing industries. Design topic included. (A, CSU)

## 22 MECHANICAL DRAWING I

## 3 units, 2 lecture hours, 3 lab hours

PREREQUISITE: Computer Aided Drafting and Design 16.
Sheet metal, fasteners and welding drawings using solid modeling practices. Use of precision measuring tools and tolerances will also be covered. Industry Certified Exams. (A, CSU)

## 24 2D CAD II

3 units, 2 lecture hours, 3 lab hours PREREQUISITE: Computer Aided Drafting and Design 14.
Advanced 2D CAD topics for the computer aided draftsperson in the disciplines of architecture, engineering, mechanical, manufacturing and other related industries. (A, CSU

## 26A 3D SOLID MODELING II

## 3 units, 2 lecture hours, 3 lab hours

PREREQUISITE: Computer Aided Drafting and Design 16.
Advanced drawings and features, design tables, configurations and sub-assemblies using 3D solid modeling techniques for mechanical and manufacturing industries. Industry Certified Exam. (A, CSU)

## 28 PRODUCT DEVELOPMENT I

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 16.
Create real istic rapid prototypes/models from digital solid models using processes such as 3 D printing, silicone molds, casting resins, vacuum forming, laser cutting and engraving and the application of finishes. Industry Certified Exam. (A, CSU)

## 32 REVERSE ENGINEERING I

3 units, 2 lecture hours, 3 lab hours,
(Formerly Drafting 22 and Computer Aided
Drafting and Design 24)
PREREQUISITE: Computer Aided Drafting and Design 16.
Reverse engineering practices using specialized software and various scanners including laser. Traditional methods will also be covered. (A, CSU)

## 36A 3D SOLID MODELING III

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 16.
Create renderings and animations of solid models and assemblies. The application of advanced modeling features and techniques. Create solid models using surface modeling techniques. Run simulations on solid models to determine the factor of safety. (A, CSU)

## 42 MECHANICAL DRAWING III

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drating and Design 28 and 36A.

Project design using various CAD systems. Portfolio creation including presentation models. Industry Certified Exams. (A, CSU)

## COMPUTER AIDED MANUFACTURING (CAM)

## 5 CNC OPERATION \& MAINTENANCE FOR MACHINIST

2.5 units, 1.5 lecture hours, 3 lab hours, (Formerly Computer Aided Manufacturing 25)

ADVISORY: Eligibility for English 1A recommended.
Learn how to read part prints and use measurement tools for first part inspection setup \& operation CNC Mill \& Lathe Machine, learn the G\&M Codes for tool programming, shop safety and preform basic maintenance. (A, CSU)

## 10 CNC MILL PROGRAMMING \& OPERATION I

 4 units, 2 lecture hours, 6 lab hours, (Formerly Drafting and Computer Aided Drafting and Design 44)ADVISORY: Eligibility for English 1A recommended.
The CAM 10 class is designed to teach entry-level Machinist to design 3D parts in Mastercam and Fusion 360 CAD/CAM software. This core class is first in a sequence for the CNC Machinist career. (A, CSU)

## 15 CNC PROGRAMMING FOR MACHINIST

## 2.5 units, 1.5 lecture hours, 3 lab hours

PREREQUISITE: Computer Aided Drating and Design 14 or 16, or Computer Aided Manufacturing 10.

Designed for students who have CAD (Computer Aided Design) experience and are interested in CAM (Computer Aided Manufacturing) CAD/CAM. Students will use Mastercam \& Fusion 360 tool programming software packages for Computer Numerical Control part programming. (A, CSU)

## 20 CNC MILL PROGRAMMING \& OPERATION II

4 units, 2 lecture hours, 6 lab hours
PREREQUISITE: Computer Aided Manufacturing 10.
The CAM 20 Class is an intermediate Digital Manufacturing course that teaches students the skill of CNC Machine setup/Operation \& 3D Solid Geometry Design with Mastercam \& Fusion 360 for Mill Tool Programming. (A, CSU)

## 26 LATHE PROGRAMMING AND OPERATION II <br> 3 units, 2 lecture hours, 3 lab hours <br> PREREQUISITE: Computer Aided Manufacturing 10. <br> Mastercam \& Fusion 360 is the 3D Solid Designing and Tool Programming software for the Computer Numerical Control Operation Lathe course. Learn how to create production parts for part inspection. (A, CSU)

31 MULTI-AXIS MILLING \& PROGRAMMING
3 units, 2 lecture hours, 3 lab hours
COREQUISITE: Computer Aided Manufacturing 20.
Multi-Axis Milling \& Programming class is design to teach advance CAD/CAM tools for Multi-Axis Tool machining and Part Fixtures used in today's job shops. (A, CSU)

## COMPUTER INFORMATION TECHNOLOGY (CIT)

 FORMERLY INFORMATION SYSTEMS
## 12 COMPUTER LITERACY

3 units, 3 lecture hours, 1 lab hour, (Formerly Computer Information Systems
56 and Information Systems 12)
ADVISORY: Eligibility for English 1A recommended.
Basic introduction to computers and their usage in business. Basic principles of hardware and software; networking, e-commerce, shopping for a personal computer; social issues, such as ethics and security, associated with the role of computers in the world today; and an introduction to word processing, spreadsheets, database, and internet principles and usage. Fulfills the computer literacy graduation requirement. (A, CSU, UC)

## 15 COMPUTER CONCEPTS

3 units, 3 lecture hours, 1 lab hour, (Formerly Computer Information Systems 15 and Information Systems 15)
ADVISORY: Eligibility for English 1 A is recommended. A working knowledge of basic arithmetic is recommended.

Introduction to computers and their use. Topics include basic principles of hardware and software, application programs, systems software, telecommunications, networks, program design, the Internet, and the World Wide Web. Students will work with Windows and the Internet; word processing, spreadsheet, and database programs; and a programming language. Fulfills the computer literacy graduation requirement. (C-ID ITIS 120) (A, CSU, UC)

## 17 WINDOWS

2 units, 3 lecture hours, 1 lab hour, (9 weeks), (Formerly Computer Information Systems 14 and Information Systems 14)
ADVISORY: Eligibility for English 1A recommended.
Basic introduction to Microsoft Windows. Introductory handson operations for students who want to learn how to manage files, run applications, customize desktops, browse the internet, use email, and work with pictures and music. (A, CSU)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Formerly Information Systems
19)

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to computer information technology. Collaborative learning objectives established specific to computer information technology. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 20 MICROSOFT OFFICE

3 units, 3 lecture hours, 1 lab hour, (See also Business \& Technology 25), (Formerly Information Systems 25)
PREREQUISITE: Computer Information Technology 15.
The major software components of the Microsoft Office suite: Word, Excel, Access, and PowerPoint. Working within the Windows graphical user interface, creating applications and sharing data files to develop solutions that use more than one component of the suite. (A, CSU)

## 23 SPREADSHEET FUNDAMENTALS

2 units, 4 lecture hours, 1 lab hour, (9
weeks), (See also Business \& Technology
18), (Formerly Information Systems 5 and 18)

ADVISORY: Eligibility for English 1A recommended. A working knowledge of basic arithmetic is recommended.

Creating and formatting a worksheet, using formulas and functions, and creating graphs; integrating spreadsheets with other programs and the World Wide Web; and creating macros. (A, CSU)

## 24 ADVANCED SPREADSHEETS

2 units, 4 lecture hours, 1 lab hour, (9
weeks), (Formerly Information Systems 20)
PREREQUISITE: Computer Information Technology 23 or Business \& Technology 18.

Advanced capabilities of spreadsheets. Solving complex problems using spreadsheets, creating and using macros, creating data tables, working with multiple worksheets and workbooks, and using Visual BASIC to enhance a spreadsheet. (A, CSU)

## 26 DATABASE FUNDAMENTALS

2 units, 4 lecture hours, 1 lab hour, (9 weeks), (See also Business \& Technology 26), (Formerly Information Systems 6 and 2 6)

PREREQUISITE: Computer Information Technology 15. ADVISORY: Eligibility for English 1 A recommended.

Creating database files, entering data, modifying database file structure, designing queries, reports and forms. (A, CSU)

## 28 CLIENT/SERVER DATABASES

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15.
Fundamentals of relational database systems. How to design, program and administer a client / server database. (A, CSU)

## 31 BEGINNING EXCEL

1 unit, 1 lecture hour, 1 lab hour, (See
also Business \& Technology 24), (Formerly
Information Systems 24 and 74)
ADVISORY: Eligibility for English 1A recommended. A working knowledge of basic arithmetic is recommended.

Creating a worksheet, formatting the worksheet, using formulas and functions, enhancing the display of workbooks, and creating graphs. (A, CSU)

## 40 COMPUTER OPERATING SYSTEMS

4 units, 3.5 lecture hours, 2 lab hours,
(Formerly Information Systems 22)
PREREQUISITE: Computer Information Technology 12 or 15.
Principles of computer operating systems. A survey and comparison of the graphical user interface along with the command line interface using various operating systems such as Microsoft Windows and Linux, etc. (A, CSU, UC)

## 45 DATA COMMUNICATIONS

3 units, 3 lecture hours, 1 lab hour,
(Formerly Computer Information Systems
and Information Systems 17)
PREREQUISITE: Computer Information Technology 15. ADVISO-
RY: Eligibility for English 1A recommended.
This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP (Internet Protocol) addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for further study of computer networks. It uses the OSI (Open Systems Interconnection) and TCP (Transmission Control Protocol) layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. (A, CSU)

## 48A IT+ FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Computer Information Technology 15. Eligibility for English 1A recommended.

Skills for personal computer software applications and hardware support including features and functions of common operating systems, network connectivity using security and web browsing best practices. (A, CSU)

## 48B A+ AND SECURITY PRINCIPLES

3 units, 3 lecture hours, 1 lab hour, (Formerly Information Systems 238, Computer Information Technology 238, and Computer Information Technology 48)
ADVISORY: Computer Information Technology 15. Eligibility for English 1 A recommended.

Skills for personal computer software and hardware support; server software and hardware support: installation, configuration, diagnosing and troubleshooting system software, basic networking, memory management, server principles and configuration and network security. Prepares students to take industry certification exams. Basic understanding information security in a business environment. Introduces network security, legal, ethical, and professional security issues, risk management, access control, and intrusion detection. Students learn the basics of information security. (A, CSU)

## 50 FUNDAMENTALS OF NETWORKING

4 units, 4 lecture hours, 1 lab hour,
(Formerly Information Systems 28, 30 and 30A.)
PREREQUISITE: Computer Information Technology 45.
Implementing and supporting a network infrastructure. For product support professionals who will be responsible for installing, configuring and supporting a network infrastructure. Fundamentals of Windows and UNIX/Linux servers. (A, CSU)

## 54A NETWORK SECURITY

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Computer Information Technology 45 and Electrical Systems Technology 62.

An introduction to network security principles including firewall technologies, AAA, intrusion prevention, securing LANs, implementing VPNs, and managing secure networks. (A, CSU)

## 54B CYBERSECURITY OPERATIONS

3 units, 2 lecture hours, 3 lab hours ADVISORY: Computer Information Technology 45 and 58C.
An introduction to cybersecurity operations including detecting cybersecurity breaches and effectively responding to security incidents. This class is meant to provide a background for students desiring entry level work as a cybersecurity analyst within security operations centers. (A, CSU)

## 55 DATABASE SECURITY

3 units, 3 lecture hours, 1 lab hour, (Formerly Information Systems 30F)
PREREQUISITE: Computer Information Technology 45 and 50.
Design a database security framework for small, medium, and enterprise networks by using Microsoft Windows technologies. The fundamentals include Microsoft SQL Server, MySQL, and Oracle. (A, CSU)

## 57 WIRELESS NETWORK SECURITY

3 units, 3 lecture hours, 1 lab hour
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 Wireless Network Security certification exam. (A, CSU)

## 58B COMPUTER FORENSICS

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

This course introduces the methods used to conduct a computer forensics investigation. Topics include an overview of computer forensics as a profession, the computer investigation process, operating systems' boot processes and disk structures, data acquisition and analysis, ethics, and a review of standard computer forensic tools. (A, CSU)

## 58C SECURITY+ FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. 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 exams like CompTIA Security+ exam and the E-C Council Certified Ethical Hacker exam. (A, CSU)

## 58E PENETRATION TESTING

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVIS0RY: Computer Information Technology 40, 45, and 50 recommended.

Fundamental overview of network security penetration testing, cryptography, vulnerability testing, password cracking, general hacking, authentication methods, packet filtering, proxy servers, and encryption strategies to protect business information systems. Prepares students for industry standard security certifications. (A, CSU)

## 58 F ETHICAL HACKING

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVIS0RY: 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)
PREREQUIIITE: 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)

## 63 BEGINNING JAVA PROGRAMMING

4 units, 4 lecture hours, 1 lab hour, (Formerly Information Systems 33 and 39)
ADVISORY: Computer Information Technology 15. Eligibility for English 1A recommended.

Developing Java Applets and applications using the Java programming language. Emphasis on object-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 COREQUISITE: Computer Information Technology 63.
An introduction to software development for the Android platform. Create Android applications that can run on smart phones, tablets and other devices. Explore user interface (UI) considerations for Android devices. Use Java and XML to write object-oriented programs emphasizing the use of classes, abstraction and inheritance, controller and delegate patterns, and core objects used in the Android software development kit. (A, CSU)

## 66 BEGINNING C++ PROGRAMMING

4 units, 4 lecture hours, 1 lab hour, (Formerly Information Systems 36)
ADVISORY: Computer Information Technology 15. Eligibility for English 1A recommended.

Software development using the $\mathrm{C}_{++}$programming language. Emphasis on object-oriented design, computations, strings, pointers, functions, classes, and objects. (A, CSU, UC)

## 69 IOS PROGRAMMING APPLICATIONS

4 units, 4 lecture hours, 1 lab hour COREQUISITE: Computer Information Technology 70.
An introduction to software development for the iOS (Apple) plafform. Create iOS applications that can run on the iPhone, iPod Touch, or the iPad. Explore user interface (UI) considerations for Apple devices. Use Objective-C, Cocoa Framework and Xcode to write object-oriented programs emphasizing the use of classes, abstraction and inheritance, controller and delegate patterns, and core objects used in the iOS software development kit. (A, CSU)

## 70 BEGINNING SWIFT PROGRAMMING

4 units, 4 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A recommended.
An introduction to programming using the Swift language. Emphasis on fundamentals including computation, control structures, functions, classes, object-oriented design, inheritance, and algorithm performance. Preparation for sotware development on the macOS and iOS platforms. (A, CSU, UC)

## 80 INTERNET BASICS

2 units, 4 lecture hours, 1 lab hour, (9 weeks), (Formerly Information Systems 7 and 40)
PREREQUIIITE: None.
Introduction to the Internet and the World Wide Web, including the use of e-mail, discussion boards, browser basics, FTP, searching the Web, History of the Internet, Internet ethics, e-commerce, and Netiquette. (A, CSU)

81 WORLD WIDE WEB RESEARCH
2 units, 4 lecture hours, 1 lab hour, (9
weeks), (Formerly Information Systems 8
and 41)
ADVISORY: Computer Information Technology 15.
Using the World Wide Web for research. Topics include browsers, search engines, Boolean logic, and URLs. Requires preparing and presenting reports from the research. (A, CSU)

## 82 INTRODUCTION TO WEB DEVELOPMENT

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15.
Survey of contemporary web technologies in authoring, distributing, and browsing. Topics include: web servers, scripting, protocols, E-Commerce, information architecture, website traffic analysis, search engine optimization, and website usability. (A, CSU)

## 84 WEB DEVELOPMENT FRAMEWORKS

4 units, 4 lecture hours, 1 lab hour PREREQUISITE: Computer Information Technology 93.
A survey of various web development frameworks to significantly simplify the web development process. Using frameworks to automate web development activities. (A, CSU)

## 85 HTML AND CSS

3 units, 3 lecture hours, 1 lab hour PREREQUISITE: Computer Information Technology 15.
Design web pages for the Internet using a web page design language. (A, CSU)

## 90 BEGINNING GO LANGUAGE <br> PROGRAMMING

4 units, 4 lecture hours, 1 lab hour,
(Formerly Information Systems 28)
PREREQUIIITE: None.
An introduction to the Go programming language, which is an open-source modern language associated with developing fast, efficient, and scalable web applications. (A, CSU)

## 93 JAVASCRIPT

## 4 units, 4 lecture hours, 1 lab hour

PREREQUIIITE: Computer Information Technology 15.
Fundamentals of JavaScript to add interactivity to web pages and web sites on the Internet. Topics include writing functions, using data from forms, buttons, menus, and text boxes, and using if conditional statements and program loops to make web pages "smarter". (A, CSU)

## 94 NODE.JS

4 units, 4 lecture hours, 1 lab hour
ADVISORY: Computer Information Technology 93. Eligibility for English 1A recommended.

Creating dynamic web pages from a server side perspective. Creating server side scripting applications in Node.js. 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)

## 97 WEB DEVELOPMENT WITH THE GO PROGRAMMING LANGUAGE

4 units, 4 lecture hours, 1 lab hour
ADVISORY: Computer Information Technology 90.
Using the Go programming language to create web applications at scale in addition to creating web API's, micro-services, and other distributed services. (A, CSU)

## 99 INTRODUCTION TO MACHINE LEARNING

4 units, 4 lecture hours, 1 lab hour PREREQUISITE: Computer Information Technology 94.
A broad introduction to machine learning, datamining, and statistical pattern recognition. Neural models will be created to find patterns in large data sets using Tensorflow. (A, CSU)

## 161 MICROSOFT WINDOWS SKILL

1 unit, 0.5 lecture hour, 1.5 lab hours, (Pass/
No Pass), (Open Entry/Open Exit)
PREREQUIIITE: None.
Intended for students new to Microsoft Windows or with existing knowledge using an older version of Windows. Designed to improve current skills and learn additional features of Windows Explorer. (A)

## 202 INTRODUCTION TO ONLINE LEARNING

1 unit, 1 lecture hour, 3 lab hours, (9
weeks), (Pass/No Pass)
PREREQUISITE: None.
Learn the skills necessary to improve performance in classes online.

## COMPUTER SCIENCE (CSCI)

## 1 INTRODUCTION TO PROGRAMMING CONCEPTS AND METHODOLOGIES

3 units, 2.5 lecture hours, 2 lab hours
PREREQUISITE: Mathematics 103. ADVISORY: Eligibility for English 1A recommended.

Introduction to computer science with emphases on critical thinking skills and programming concepts. Topics include deductive reasoning, computer hardware and software, programming concepts and methodology. The course is designed to prepare students with little or no programming experience for CSCl 40. The course satisfies the Computer Familiarity requirement. (C-ID COMP 112) (A, CSU, UC)

## 26 DISCRETE MATHEMATICS FOR COMPUTER SCIENCE

4 units, 3.5 lecture hours, 2 lab hours
PREREQUISITE: Computer Science 40 and Mathematics 5A. ADVISORY: Eligibility for English 1A recommended.

Elements of discrete mathematics which have applications to computer science. Topics include sets, propositional and predicate logic, relations and functions, mathematical induction, graphs, and trees. (C-ID COMP 152) (A, CSU-GE, UC, I)

40 PROGRAMMING CONCEPTS AND METHODOLOGYI
4 units, 3.5 lecture hours, 2 lab hours, (Formerly Mathematics 30A and Computer
Science 30A)
PREREQUISITE: Mathematics 103 or equivalent. COREQUISITE: Mathematics 4A or equivalent. ADVISORY: Eligibility for English 1A, and Computer Science 1 recommended.

Introduction to problem solving, algorithm development, procedural and data abstraction using the $\mathrm{C}_{++}$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. (A, CSU, UC)

## 45 COMPUTER ARCHITECTURE AND ORGANIZATION

4 units, 3.5 lecture hours, 2 lab hours
PREREQUISITE: Computer Science 40. ADVISORY: Eligibility for English 1A recommended.

Introduction to functional organization of digital computers and low level programming; internal representation of data, binary arithmetic, machine instructions, addressing modes, subroutine linkage, macros and interrupts, PC Assembly language programming. (C-ID COMP 142) (A, CSU, UC)

## CONSTRUCTION - CARPENTRY (CONS)

## 14 BUILDING INSPECTION

3 units, 3 lecture hours, (Formerly Building Code and Safety Administration 14)
ADVISORY: Eligibility for English 1A recommended.
Familiarization with inspections of residential one and two-family dwellings and type $V$ construction, in preparation for I.C.C. Building Inspector certification. (A, CSU)

## 18 CALIFORNIA DISABLE ACCESS REGULATIONS

3 units, 3 lecture hours, (Formerly Building Code and Safety Administration 18)
ADVISORY: Eligibility for English 1A recommended.
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)

## 50 BASIC RESIDENTIAL CONSTRUCTION

4 units, 3 lecture hours, 4 lab hours
ADVISORY: Eligibility for English 1A and Applied Technology 130 or Mathematics 201 recommended.

General introductory and basic skills in residential construction. Emphasis on hand and power tool use. Foundations, framing, roofing, interior and exterior finish techniques and materials. (A, CSU)

## 50A BASIC RESIDENTIAL CONSTRUCTION

3 units, 2 lecture hours, 3 lab hours, (Formerly Construction 50)
ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

This course provides students with general basic residential construction knowledge and skills including guided hands on practice using hand and power tools to complete simple construction projects including, but not limited to: Concrete, framing and roofing. (A, CSU)

50B BASIC RESIDENTIAL CONSTRUCTION
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

General introductory and basic skills in residential construction. Emphasis on hand and power tools, interior and exterior finish, finish carpentry, and roofing. (A, CSU)

## 51 RESIDENTIAL CONSTRUCTION:

FOUNDATIONS AND FRAMING
9 units, 4 lecture hours, 16 lab hours,
(Formerly Construction 51/52)
ADVISORY: Construction 50A or 50 . Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Hands-on construction of a residential house including construction of foundation forms, installation of rough plumbing, placement and finishing of concrete, lay out and construction of wall framing, placement of roof trusses and construction of associated roof framing, and the application of roofing material. (A, CSU)

## 52A INTRODUCTORY CONSTRUCTION MANAGEMENT 1 <br> 9 units, 4 lecture hours, 16 lab hours

ADVISORY: Construction 51 and 53 and eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Learn basic construction management skills while taking on the role of lead carpenter during the construction of a home in our community. (A, CSU)

## 52B INTRODUCTORY CONSTRUCTION MANAGEMENT 2 <br> 9 units, 4 lecture hours, 16 lab hours

ADVISORY: Construction 51 and 53 and eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Students will learn basic construction management skills while taking on the role of lead carpenter during the construction of the construction program's project house or residential related projects. (A, CSU)

## 53 RESIDENTIAL CONSTRUCTION: EXTERIOR AND INTERIOR FINISH

9 units, 4 lecture hours, 16 lab hours, (Formerly Construction 53/54)
ADVISORY: Construction 50 or $50 B$. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Hands on construction of a residential house, including window and door installation, stucco lathing, siding installation, drywall hanging and finishing, cabinet and hardware installation, finish carpentry, interior and exterior painting, fencing, and concrete flat work including driveways and walks. (A, CSU)

## 55 ROOF FRAMING SYSTEMS

## 2.5 units, 1 lecture hour, 5 lab hours

ADVISORY: Construction 50 or 50A. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Introduction to conventional and truss roof framing in residential construction including hands on construction of roof structures. You will learn about load path and structural integrity. Includes methods to calculate rafter, hip and other roof framing member lengths. (A, CSU)

## 56A RESIDENTIAL PLUMBING 1

3 units, 2 lecture hours, 4 lab hours
COREQUISITE: Construction 56AL. ADVISORY: Construction
50 or 50 A. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1 A recommended.

Learn to design and install a residential waste, supply water and gas system by hands on installation in a home being built on a permanent site. You will also learn how the plumbing code affects how you design and install your plumbing work. Familiarization with the uniform plumbing code including inspection of systems leading to possible I.A.P.M.O. and or I.C.C. certification. (A, CSU)

## 56AL RESIDENTIAL PLUMBING LAB 1

## 0.5 unit, 1.5 lab hours

COREQUIIITE: Construction 56A. ADVISORY: Construction
50 or 50A. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1 A recommended.

Off campus lab activity installing plumbing systems in the Fresno City College Project House. To be taken concurrently (same semester) with Construction 56A. (A, CSU)

## 56B RESIDENTIAL PLUMBING 2

3 units, 2 lecture hours, 4 lab hours
COREQUISITE: Construction 56BL. ADVISORY: Construction 50 or 50A. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Correct installation techniques for residential finish plumbing fixtures and the code requirements associated with them. Familiarization with the uniform plumbing code including inspection of systems leading to possible I.A.P.M. O. and or I.C.C. certification. Construction 56 B to be taken concurrently (same semester) with Construction 56BL. (A, CSU)

## 56BL RESIDENTIAL PLUMBING LAB 2

0.5 unit, 1.5 lab hours

COREQUISITE: Construction 56B. ADVISORY: Construction
50 or 50A. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Off campus lab activity installing plumbing systems in the Fresno City College project house. To be taken concurrently (same semester) with Construction 56B. (A, CSU)

## 60 ENERGY EFFICIENT REMODELING

8 units, 4 lecture hours, 13 lab hours
ADVISORY: Construction 50A and 50B or Construction 53 or Construction 50. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Cosmetic and structural residential improvements with an emphasis on improving energy efficiency. Lab to be hands on in an existing home. (A, CSU)

## 65 FUNDAMENTAL CONSTRUCTION <br> ELEMENTS

3 units, 3 lecture hours
ADVISORY: Applied Technology 130. Eligibility for English 1A recommended.

Introductory skills in residential construction including OSHA 10 certification, basic drafting, computer applications, construction calculations and construction equipment. (A, CSU)

## 149 INTRODUCTION TO CONSTRUCTION

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Applied Technology 130. Eligibility for English 1A recommended.

Overview of trades and careers related to the construction industry. Hands on lab activities related to selected areas of construction. (A)

## 175A RESIDENTIAL WIRING 1

4 units, 3 lecture hours, 3 lab hours
COREQUISITE: Construction 175AL. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1 A recommended.

Introduction to electrical code, installation methods. Electrical circuits hands on practice. Installation of the rough electrical system in the Fresno City College construction program's project house at an off campus location. Construction 175AL must be taken concurrently with Construction 175A. (A)

## 175AL RESIDENTIAL WIRING LAB 1

## 0.5 unit, 1.5 lab hours

COREQUISITE: Construction 175A. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Hands on Rough Wiring of a residential building. Course must be taken concurrently with Construction 175A. (A)

## 175B RESIDENTIAL WIRING 2

4 units, 3 lecture hours, 3 lab hours
COREQUISITE: Construction 175BL. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Electrical code. Hands on finish equipment installation, 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

0.5 unit, 1.5 lab hours

COREQUISITE: Construction 175B. ADVISORY: Eligibility for Applied Technology 130 or Mathematics
201 and eligibility for English 1A recommended.
Students will apply classroom knowledge and gain hands on experience during installation of finish apparatus in the FCC project house. Course must be taken concurrently with Construction 175B. (A)

## COUNSELING (COUN)

## 43 GROUP DYNAMICS AND SELF UNDERSTANDING

2 units, 2 lecture hours, (Formerly Guidance Studies 43)
ADVISORY: Eligibility for English 1A recommended.
An in-depth look at concepts key to self-understanding and developing a support system. This includes addressing psycho-social topics such as: personal responsibility, stress-management, interpersonal skills and communication. (A, CSU)

## 48 CAREER PLANNING AND DEVELOPMENT <br> 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. ( $\mathrm{A}, \mathrm{CSU}$ )

## 53 COLLEGE AND LIFE MANAGEMENT <br> 3 units, 3 lecture hours, (Formerly Guidance Studies 53) <br> ADVISORY: Eligibility for English 1A recommended. <br> This course is designed to assist students in developing the necessary tools for future success by providing structures and activities that illustrate the relationship between interpersonal and intrapersonal interactions. Course topics include development of student's personal strengths, interpersonal relationships, personal values, healthy lifestyle choices, and success skills. (A, CSU, UC)

## 54 CIVIC RESPONSIBILITY AND LEADERSHIP <br> 1 unit, 1 lecture hour, (Formerly Guidance Studies 54) <br> ADVISORY: Eligibility for English 1A recommended. <br> Designed to assist students with the transition process from college to other life roles. Understanding role responsibilities to self and the community. Soft skills, leadership development, and life planning. (A, CSU)

150 COLLEGE TRANSITION AND SUCCESS
1 unit, 1 lecture hour, (Formerly Guidance Studies 50, 150, and Counseling 250)
ADVISORY: Eligibility for English 125 and 126 recommended. Designed to provide students with personal and academic support during their transition onto the campus and campus culture. Resources and learner-centered strategies include supportive services, self-assessment, time management, campus resources, catalog information, educational planning, career awareness, interdependence, personal responsibility and many others that will help students with academic growth, personal growth, retention, persistence and success. (A)

## 247A COLLEGE STUDY SKILLS, GENERAL HABITS <br> 1 unit, 2 lecture hours, ( 9 weeks), (Formerly Guidance Studies 47A, 52, and 147A) <br> ADVISORY: Eligibility for English 125 and 126 recommended. <br> 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 successtul in college. Topics include; study-skills strategies for lecture and textbook note taking, memorization techniques, test taking strategies and other study methods.

## 249 JOB PREPARATION

1 unit, 1 lecture hour, (Formerly Guidance Studies 49 and 149)
ADVISORY: Eligibility for English 125 and 126 recommended. Development of positive interpersonal relationships in the workplace. Includes practicing interview techniques and positive workplace behaviors, exploring career implications and the job market.

## 267 FINANCIAL AID MONEY MANAGEMENT

 1 unit, 1 lecture hour, (Formerly Guidance Studies 167 and Counseling 167)ADVISORY: Working knowledge of basic arithmetic recommended.

Designed to help develop a basic awareness of financial aid money management skills including personal student budgeting, and the nature and purpose of financial aid assistance.

CRIMINOLOGY (CRIM)

```
FORMERLY ADMINISTRATION OF JUSTICE
```


## 1 INTRODUCTION TO CRIMINOLOGY

3 units, 3 lecture hours, (Formerly
Administration of Justice 1)
ADVISORY: English 1A recommended.
Characteristics of the criminal justice system in the U.S. with cross cultural content; evolution of prevailing principles; crime measurement; theoretical explanations for criminality and responses to it; future challenges; functions of the police, courts and correctional system; legal process, sentencing, and incarceration policies. (C-ID AJ 110) (A, CSU, UC)

## 3 LEGAL ASPECTS OF EVIDENCE

3 units, 3 lecture hours, (Formerly
Administration of Justice 3)
ADVISORY: Eligibility for English 1A recommended.
Categories of evidence, and the legal rules relating to admission or exclusion with attention to history and development. (C-ID AJ 124) (A, CSU)

## 4 PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM

3 units, 3 lecture hours, (Formerly
Administration of Justice 4)
ADVISORY: Eligibility for English 1A recommended.
Examination and analysis of due process in the criminal justice system from pre-arrest through trial and appeal using statutory, case law, and constitutional precedents. (C-ID AJ 122) (A, CSU)

## 5 COMMUNITY RELATIONS

3 units, 3 lecture hours, (Formerly
Administration of Justice 5)
ADVISORY: Eligibility for English 1A recommended.
Relationship between our communities and the justice system in addressing crime and conflict; challenges and potential for administering criminal justice within a multicultural society with conflicting values in culture, religion, and law. (C-ID AJ 160) (A, CSU, UC)

## 6 CONCEPTS OF CRIMINAL LAW

3 units, 3 lecture hours, (Formerly

## Administration of Justice 6)

ADVISORY: Eligibility for English 1A recommended.
Analysis of criminal liability in the U.S.; classification of crimes (persons, property, morals, and public welfare), elements of offenses; common and statutory law; acceptable evidence; defenses; prosecution and defense decision making. (C-ID AJ 120) (A, CSU, UC)

## 7 CONCEPTS OF ENFORCEMENT SERVICES

3 units, 3 lecture hours, (Formerly
Administration of Justice 7)
ADVISORY: Eligibility for English 1A recommended.
Role expectations for line enforcement officers; patrol, traffic and public service responsibilities; physical and psychological officer survival. (A, CSU)

## 8 CRIMINAL INVESTIGATION

4 units, 3 lecture hours, 3 lab hours, (Formerly Administration of Justice 8)
ADVISORY: Eligibility for English 1A recommended.
Techniques, procedures, and ethical considerations involved in crime investigation; organization of the process; crime scene logistics; searches; recovery and preservation of evidence; documentation; scientific examination; and trial presentation. (C-ID AJ 140) (A, CSU)

## 9 CRIME SCENE FORENSIC EVIDENCE

3 units, 3 lecture hours
PREREQUISITE: Criminology 8 or equivalent. ADVISORY: Eligibility for English 1 A 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)

[^2]
## 13 THE CONSTITUTION AND YOUR INDIVIDUAL RIGHTS <br> 3 units, 3 lecture hours, (Formerly <br> Administration of Justice 13) <br> ADVISORY: Eligibility for English 1A recommended. <br> 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 <br> 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 units

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors. Selection for program participation. ADVISORY: Eligibility for English 1A recommended.

Supervised employment extending the classroom based on occupational learning related to criminology. Collaborative learning objectives established specific to criminology. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 20 INTRODUCTION TO CORRECTIONS

3 units, 3 lecture hours, (Formerly
Administration of Justice 20)
ADVISORY: Eligibility for English 1A recommended.
History and analysis of the methods of punishment; alternatives to them, and their impact upon the justice system and its correctional component; adult and juvenile corrections (probation and parole); examination of penal institutions, their populations, and contemporary issues; alternative programs designed for specific Correctional Institutions, and their impact upon the Corrections client and the society at large. (C-ID AJ 200) (A, CSU)

## 21 CORRECTIONAL REPORT WRITING 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
The practical aspects of gathering, organizing, and preparing written reports for correctional activities on local, state, and federal levels. Techniques of communicating facts, information, and ideas effectively in a simple, clear, and logical manner for various types of criminal justice systems reports, letters, memoranda, directives, and administrative reports. Students will gain practical experience in note taking, report writing, and presenting testimony in court. (A, CSU)

## 23 CORRECTIONAL INTERVIEWING AND COUNSELING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An overview of the techniques in counseling and interviewing available to practitioners in corrections. The use of appropriate techniques and theories in confidence building which may be used by the correctional employee in client interviews and counseling. For students planning to enter or already employed within the correctional science field. (A, CSU)

## 24 CONTROL AND SUPERVISION IN CORRECTIONS

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
An overview of supervision of inmates in local, state, and federal correctional institutions. Issues of institutional control in a continuum from daily living through crisis situations. Emphasis on the role played by the offender and the correctional worker. Inmate subculture, violence, and the officers in a hostile prison environment. The causes and effects of abusive tactics. (A, CSU)

## 25 LEGAL ASPECTS OF CORRECTIONS

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
The historical framework, concepts and precedents that guide correctional practice. The corrections environment, the civil rights of prisoners, and the responsibilities and liabilities of corrections officials. (A, CSU)

## 36 GANGS AND CORRECTIONS

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Specialized knowledge relating to the correctional impact of gangs. The history of gangs and the issues associated with the development of gangs. Focus on the emergence of prison gangs following a series of changes within correctional systems. Review of the types of gangs and the criminal activities associated with the gang. Special emphasis on the prison gang and correctional issues including identification, intake, classification, communication, and trends. Psychological and sociological dynamics. Institutional management and future trends. (A, CSU)

## DANCE (DANCE)

## 8 HIP HOP TECHNIQUE <br> 1 unit, 3 lab hours

ADVISORY: Eligibility for English 1A recommended.
Basic technique and style of Hip Hop dance both historical and current emphasizing musicality, rhythms, and the basic movement required to develop Beginning Hip Hop skills. (A, CSU)

## 9 DANCE CONDITIONING

## 1 unit, 3 lab hours

ADVISORY: Eligibility for English 1A recommended.
Conditioning techniques which promote body awareness, improve body alignment, enhance and expedite body ability for dance skills, and aid in preventing injuries common to various dance styles. (A, CSU, UC)

## 10A BEGINNING MODERN DANCE TECHNIQUE

1 unit, 3 lab hours, (Formerly Physical Education 4 and Dance 10)
ADVISORY: Eligibility for English 1A recommended.
Modern dance exercises and improvisations involving body movement, rhythm, design, dynamics, technique, and expression. Body conditioning exercises for posture, strength, and flexibility. (A, CSU, UC)

## 10B PRE-INTERMEDIATE MODERN DANCE TECHNIQUE

## 1 unit, 3 lab hours

PREREQUISITE: Dance 10A or appropriate dance experience as determined by the instructor. ADVISORY: Eligibility for English 1A recommended.

Pre-intermediate modern dance exercises and improvisations involving body movement, rhythm, design, dynamics, technique, and expression. Body conditioning exercises for posture, strength, and flexibility. (A, CSU, UC)

## 12A BEGINNING BALLET PART 1

1 unit, 3 lab hours, (Formerly Dance 12 and Physical Education 26)
ADVISORY: Eligibility for English 1A recommended.
Fundamental technique of classical Ballet using barre exercises and center work, basic concepts of Ballet dance vocabulary, and Ballet terminology for the beginning student. (A, CSU, UC)

## 12B BEGINNING BALLET PART 2

## 1 unit, 3 lab hours

PREREQUISITE: Dance 12A or equivalent as demonstrated through testing and recommended by instructors. ADVISORY: Eligibility for English 1A recommended.

Pre-intermediate-level technique of classical Ballet using barre exercises and center work, learning more Ballet terminology for the pre-intermediate student. (A, CSU, UC)

## 13A INTERMEDIATE BALLET TECHNIQUE

1.5 units, 1 lecture hour, 2 lab hours

PREREQUISITE: Dance 12B or relevant experience as determined by instructor. ADVISORY: Eligibility for English 1A recommended.

Intermediate level Ballet technique using barre exercises and center works, may include a demonstration of creating and teaching a ballet phrase in the class. (A, CSU, UC)

## 13B PRE-ADVANCED BALLET TECHNIQUE <br> 1.5 units, 1 lecture hour, 2 lab hours <br> PREREQUISITE: Dance 13A or relevant experience as determined by instructor. ADVISORY: Eligibility for English 1A recommended. <br> 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 <br> 1 unit, 3 lab hours <br> 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 efinement of jazz dance technique, building upon skills and techniques covered in Dance 14. Presentation of different jazz styles. (A, CSU, UC)
## 16 BEGINNING TAP DANCE

## 0.5 unit, 2 lab hours

ADVISORY: Eligibility for English 1A recommended.
An introduction of various tap styles, sequences, and dance patterns to develop rhythm, coordination, and balance. (A, CSU, UC)

## 17A BEGINNING MEXICAN FOLK DANCE

3.5 units, 3 lecture hours, 2 lab hours, (See also Chicano-Latino Studies 17A), (Formerly Dance 17)
ADVISORY: Eligibility for English 1A recommended.
History and origin of Mexican dance, from the pre-Columbian era through the arrival of the Spaniards. Analysis of the form, function, and symbolism of the music, musical instruments, movements, and choreography. Examination of the role of gender in this art form. Dances practiced and performed at the beginning level. (A, CSU-GE, UC)

## 17B BEGINNING INTERMEDIATE MEXICAN FOLK DANCE

3.5 units, 3 lecture hours, 2 lab hours, (See
also Chicano-Latino Studies 17B)
PREREQUISITE: Chicano-Latino Studies/Dance 17A. Demonstrated experience and skills at the beginning level as assessed by instructor. ADVISORY: Eligibility for English 1A recommended.

History and origin of Mexican dance, from the pre-Columbian era through the arrival of the Spaniards. Analysis of the form, function, and symbolism of the music, musical instruments, movements, and choreography. Examination of the role of gender in this art form. Dances practiced and performed at the pre-intermediate level. (A, CSU, UC)

## 18 INTERMEDIATE TAP DANCE

## 0.5 unit, 2 lab hours

PREREQUISITE: Dance 16 or appropriate previous tap dance experience as determined by the instructor. ADVISORY: Eligibility for English 1A recommended.

Progressive refinement of tap dance technique, building upon skills and techniques covered in Dance 16. Presentation of more advanced tap steps and styles. (A, CSU, UC)

## 20A BEGINNING MODERN DANCE COMPOSITION

3 units, 2 lecture hours, 3 lab hours, (Formerly Physical Education 20A)
ADVISORY: Eligibility for English 1A recommended. Dance 10A recommended.

Modern dance technique warm up and exercises for development of movement vocabulary, strength, flexibility, alignment, range of motion, and rhythmic coordination. Guided group improvisations will be used for development of personal movement vocabulary, creative outlet, and to hone in on basic improvisational skills. Study of modern dance as an art form including brief discussions on history and theory. Study of dance composition theories and conceptual approaches. Creation of solo and group work. (A, CSU-GE, UC)

## 20B INTERMEDIATE MODERN DANCE COMPOSITION

3 units, 2 lecture hours, 3 lab hours, (Formerly Physical Education 20B) PREREQUISITE: Dance 10A. ADVISORY: Eligibility for English 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 portfolio of past Modern Dance, Ballet, Jazz performance work. ADVISORY: Eligibility for English 1A recommended.

Intermediate level dance technique, conditioning, improvisation, choreography, rehearsal, and performance on main stage in a formal theatrical presentation. Participants need to demonstrate their technical level during the first three weeks of classes. (A, CSU, UC)

## 26 AMERICAN COLLEGE DANCE FESTIVAL

1.5 units, 2 lecture hours, 5 lab hours, ( 9 weeks), (Repeats = 3)
COREQUIIITE: Dance 21 or 22. ADVISORY: Eligibility for English 1A recommended.

Preparation of dance participants for attendance at the American College Dance Festival. Participation in master classes and participation/ attendance at adjudication concerts. (A, CSU)

## 27A INTERMEDIATE MEXICAN FOLK DANCE

3.5 units, 3 lecture hours, 2 lab hours, (See also Chicano-Latino Studies 27A)
PREREQUISITE: Chicano-Latino Studies/Dance 17B. Demonstrated experience and skills at the beginning level as assessed by instructor. ADVISORY: Eligibility for English 1A recommended.

History of the origin of Mexican dance, from the arrival of the Spaniards to the present time. Analysis of the form, function, and symbolism of the music, musical instruments, movements and choreographies. Dances practiced and performed at the intermediate level. (A, CSU, UC)

## 27B ADVANCED MEXICAN FOLK DANCE

3.5 units, 3 lecture hours, 2 lab hours, (See also Chicano-Latino Studies 27B), (Formerly Dance 27)
PREREQUISITE: Chicano-Latino Studies/Dance 27A. ADVISORY: Eligibility for English 1 A recommended.

History of the origin of Mexican dance, from the arrival of the Spaniards to the present time. Analysis of the form, function, and symbolism of the music, musical instruments, movements and choreographies. Dances practiced and performed at the advanced level. (A, CSU-GE, UC)

## 28 INTERMEDIATE MODERN DANCE TECHNIQUE

1.5 units, 1 lecture hour, 2 lab hours ADVISORY: Dance 10B. Eligibility for English 1A recommended. Intermediate-evel modern dance, emphasis on inverted movement, fast-pace locomotor patterns, and weight sharing. (A, CSU, UC)

## 28B PRE-ADVANCED MODERN DANCE TECHNIQUE

2 units, 1.5 lecture hours, 2 lab hours PREREQUIIITE: Dance 28.
Pre-Advanced-level modern dance, emphasis honing previous skills including a variety of locomotor patterns, creativity, and deeper understanding of modern dance concepts. (A, CSU, UC)

## 30 DANCE APPRECIATION

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Survey of dance as a historical form of cultural and theatrical expression. Emphasis on the growth of ballet and modern dance from their origins to the current trends in the United States. Dance 30 does not meet the Physical Education requirement. (A, CSU-GE, UC, I)

## 31 DANCE WORKSHOP PERFORMANCE 2

2-4 units, 1 lecture hour, 3-9 lab hours
PREREQUISITE: Dance 21. ADVISORY: Eligibility for English 1A recommended.

Intermediate-advanced dance technique and conditioning, improvisation, choreography, rehearsal, and performance in an informal setting. Includes opportunities for support activities for the production. (A, CSU, UC)

## 32 DANCE THEATRE PERFORMANCE 2

2-4 units, 1 lecture hour, 3-9 lab hours
PREREQUISITE: Dance 22. ADVISORY: Eligibility for English 1A recommended.

Intermediate/advanced-level dance technique and conditioning, improvisation, choreography, rehearsal, and performance for formal theatrical presentation. (A, CSU, UC)

## DECISION SCIENCE (DS)

## 21 FINITE MATHEMATICS

3 units, 3 lecture hours, (Formerly Decision
Science 22)
PREREQUIIITE: Mathematics 103 or placement by multiple measures. ADVISORY: Eligibility for English 1A recommended.

Applications of linear, exponential, and logarithmic functions, matrix operations, and inverse matrices. Linear programming techniques, mathematics of finance, probability, and counting theory. Limits, rates of change, and derivatives. (A, CSU-GE, UC, I)

## 23 BUSINESS STATISTICS

3 units, 3 lecture hours, 1 lab hour,
(Formerly Business Administration 23)
PREREQUISITE: Mathematics 103 or placement by multiple measures.

The use of probability and predictive techniques to facilitate decision-making using data from disciplines including business, social sciences, psychology, life sciences, health sciences, and education. The analysis will incorporate the use of EXCEL/Other Statistical Software and a graphing calculator. Descriptive measures including central tendency and dispersion, probability theory, discrete and continuous probability distributions, sampling distributions, central limit theorem, time series, index numbers, statistical inference using one and two sample hypothesis tests using both the normal and $t$ distributions for both means and proportions, estimation, correlation, regression, analysis of variance (ANOVA), and nonparametric methods including Chi-squared. (C-ID MATH 110) (A, CSU-GE, UC, I)

## 221 SUPPORT FOR FINITE MATHEMATICS

1 unit, 0.5 lecture hour, 1.5 lab hours
COREQUISITE: Decision Science 21.
Extends instruction in DS 21, providing additional hours of support per week. Instructor lead instruction, one-on-one tutoring. Small group and technology-enhanced instruction relating to DS 21 curriculum.

## 223 SUPPORT FOR BUSINESS STATISTICS

1 unit, 0.5 lecture hour, 1.5 lab hours COREQUIIITE: Decision Science 23.
Extends instruction in DS 23, providing three hours of additional support per week. Instructor Lecture, One-on-one tutoring. Small group and technology-enhanced instruction relating to DS 23 curriculum.

## DENTAL HYGIENE (DH)

## 1A ORAL BIOLOGY

2 units, 2 lecture hours, 1 lab hour, (Fall, first year)
PREREQUISITE: Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Dental Hygiene 3A, 4, and 10.

Anatomy of orofacial structures; study of the physiological and structural functions of the teeth and supporting tissues; embryology and histology of oral structural formation; oral anatomy relative to administration of local anesthetic agents. (A, CSU)

## 1B GENERAL AND ORAL PATHOLOGY

4 units, 4 lecture hours, (Spring, first year)
PREREQUIIITE: Dental Hygiene 1A, $3 \mathrm{~A}, 4$, and 10. COREQUISITE: Dental Hygiene $2,5 \mathrm{~A}, 6 \mathrm{~A}, 8 \mathrm{~A}, 11$ 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. COREQUIIITE: 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, $8 B, 9$ 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; asepsis and infection control procedures; use and care of instruments; patients records; clinical operations and appointment procedures; equipment maintenance and sterilization. (A, CSU)

## 3B DENTAL SPECIALTIES

1 unit, 2 lecture hours, ( 9 weeks), (Spring, 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 ora radiographic images of normal and abnormal anatomy and artifacts; interpretation of radiographic and pictorial pathology of the hard and soft structures of the oral cavity. (A, CSU)

## 5A CLINICAL DENTAL HYGIENE I

2.5 units, 8 lab hours, (Spring, first year), (Pass/No Pass)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 2, 6A, 8A, 11 and 12 .

Beginning experience in the treatment of adult and child patients; various clinical procedures including scaling and polishing techniques oral inspection, dental and periodontal charting, principles of ultrasonic scaling, radiographic techniques, plaque control instruction, and fluoride application; principles of dental hygiene practice. (A, CSU)

## 5B CLINICAL DENTAL HYGIENE II

5 units, 16 lab hours, (Fall, second year), (Pass/No Pass)
PREREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 8A, 11 and 12. COREQUISITE: Dental Hygiene 1C, 6B, 7A, and 13.

Intermediate experiences in the treatment of dental hygiene patients; includes principles and procedures of Dental Hygiene 5A plus techniques for pain management; various field experiences. (A, CSU)

## 5C CLINICAL DENTAL HYGIENE III

5 units, 16 lab hours, (Spring, second year), (Pass/No Pass)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. COREQUISITE: Dental Hygiene 1D, 3B, 7B, 8B, 9 and 14.

Advanced experience in patient treatment procedures; includes principles and procedures of Dental Hygiene 5A and Dental Hygiene 5B plus the techniques of soft tissue curettage, nitrous oxide-oxygen analgesia, and nutritional counseling. (A, CSU)

## 6A MEDICAL EMERGENCIES IN THE DENTAL

 OFFICE1 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)

[^3]
## 7B COMMUNITY DENTAL HEALTH II

1 unit, 1 lecture hour, (Spring, second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. COREQUISITE: Dental Hygiene 1D, 3B, 5C, 8B and 14.

Community dental health; implementation of target group dental health project; tobacco cessation program; health care delivery systems; available methods for purchase of dental care; community fluoridation and biostatistics. (A, CSU)

## 8A PATIENT MANAGEMENT

2 units, 2 lecture hours, (Spring, first year)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 11, and 12.

Patient characteristics, motivation, and management; interpersonal communication and treatment planning. Treatment of the compromised patient. (A, CSU)

## 8B PRACTICE AND FINANCIAL MANAGEMENT

2 units, 2 lecture hours, (Spring,
second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A, 8A and 13. COREQUISITE: Dental Hygiene 1D, 3B, 5C, 7B, 9 and 14.

Office practice management and the dental hygienist's role in the office team; ethical and legal aspects of dentistry and dental hygiene; personal business matters relating to dental hygiene practice. (A, CSU)

## 9 NUTRITION IN DENTISTRY

1 unit, 1 lecture hour, (Spring, second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. COREQUISITE: 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. COREQUIIITE: 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 SEMINAR TOPICS II, ADVANCED INSTRUMENTATION

1 unit, 2 lecture hours, ( 9 weeks), (Fall, second year)
PREREQUISITE: Dental Hygiene 12. COREQUISITE: Dental Hygiene 5B.

Various topics related to advanced clinical practice of dental hygiene. Incorporation of evidence based decision making (EBDM) in development of clinical judgment, dental hygiene diagnosis, care/ treatment planning, implementation of dental hygiene therapies and problem solving. Integration of advanced dental hygiene instruments, power scaling techniques, clinical skills and treatment modalities. The intent of DH 13 Seminar Topics II, Advanced Instrumentation, is to strengthen the student's ability to incorporate EBDM and advanced skill performance with instrumentation techniques. (A, CSU)

## 14 CLINICAL SEMINAR TOPICS III

1 unit, 2 lecture hours, ( 9 weeks), (Fall, second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. 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 $5 \mathrm{~A}, 5 \mathrm{~B}$, and 5 C . Provides treatment opportunities that allow students to maintain and perfect their dental hygiene skill level between program graduation and successful completion of clinical licensing examinations. Students must have current CPR certification and malpractice insurance.

## DEVELOPMENTAL SERVICES (DEVSER)

## 50 ADAPTED FITNESS AND FLEXIBILITY

1 unit, 1 lecture hour, 1 lab hour, (Formerly Physical Education 50)
ADVISORY: Eligibility for English 1A recommended.
Designed for students with disabling conditions. Development and/or maintenance of basic physical/mental skills with an introduction to basic nutrition, disability and pharmaceutical issues. Measured cardiovascular fitness, stretching, nutritional evaluation and current disability/ pharmaceutical topics. (A, CSU, UC)

## 51 ADAPTED AQUATICS

0.5 unit, 2 lab hours, (Formerly Physical Education 51)
ADVISORY: Eligibility for English 1A recommended.
Designed for students with disabling conditions. Development and/or maintenance of basic physical skills, knowledge, and attitude for successful participation in aquatics. Measured skill performance and cardiovascular fitness. (A, CSU, UC)

## 52 ADAPTED SPORTS

0.5 unit, 2 lab hours, (Formerly Physical Education 52)
ADVISORY: Eligibility for English 1A recommended.
Designed for students with disabling conditions. Sports skills of Frisbee, Frolf, Bocci, Horseshoe. (A, CSU, UC)

## 53 ADAPTED STRENGTH TRAINING 0.5 unit, 2 lab hours, (Formerly Physical Education 53)

ADVISORY: Eligibility for English 1A recommended.
Designed for students with disabling conditions. Development and/ or maintenance of strength. Adapted fundamental/advanced strength, flexibility, and cardiovascular endurance. (A, CSU, UC)

## 54 ADAPTED WALKING AND CONDITIONING

1 unit, 1 lecture hour, 1 lab hour, (Formerly Physical Education 8 and 54)
ADVISORY: Eligibility for English 1A recommended.
Designed for students with disabling conditions. Development and/ or maintenance of basic physical/mental conditioning skills with and introduction to basic nutrition, disability and pharmaceutical issues. Measured cardiovascular fitness, stretching, nutritional evaluation and current disability/pharmaceutical topics. (A, CSU, UC)

## 55 ADAPTED FLEXIBILITY AND STRENGTH

1 unit, 1 lecture hour, 1 lab hour, (Formerly Physical Education 55)
ADVISORY: Eligibility for English 1A recommended.
Designed for students with disabling conditions. Development and/or maintenance of flexibility, strength, and fitness using progressive resistance, stretching, and cardiovascular fitness activities. A very basic introduction to nutrition and current disability/pharmaceutical issues. (A, CSU, UC)

## 250 WORKABILITY ASSESSMENT AND CAREER AWARENESS

3 units, 2 lecture hours, 3 lab hours, (Pass/
No Pass)
PREREQUISITE: None.
Designed for students with documented disabilities. Emphasizes the development of tools, ideas, and strategies designed to be the 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 foll lowing: 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)
PREREQUIIITE: None.
Designed for students with documented disabilities. Emphasizes developing strategies in the workplace and personal life related to personal disability, work ethics, communication and socialization. Expanding communication skills as a vehicle for solving problems.

## 260 WORKABILITY JOB SEARCH

3 units, 3 lecture hours, (Pass/No Pass), (Formerly Developmental Services 60) PREREQUIIITE: None.
Designed for students with documented disabilities. Emphasizes the development of job search strategies including online applications, social networking sites, internet job search sites, creating and utilizing a professional network. Demonstrates how a targeted job search leads the student through the process of identifying open positions for which students are qualified. Students will develop and maintain a job search log during their job search process.

## 262 GROUP INTERACTION FOR STUDENTS WITH DISABILITIES

2 units, 2 lecture hours, (Pass/No Pass),
(Formerly Developmental Services 62)
PREREQUISITE: None.
Development and improvement of self-understanding through group interactions. Designed for students with documented disabilities.

## 264 TRANSITION TO COLLEGE FOR STUDENTS

 WITH DISABILITIES1 unit, 1 lecture hour, (Pass/No Pass)
PREREQUIIITE: 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)
PREREQUIIITE: None.
Designed for students with documented disabilities. Emphasis on home and money management, health, hygiene and safety, and food and nutrition.

## 273 INDEPENDENT LIVING SKILLS FOR DSP\&S STUDENTS

2 units, 6 lab hours, (Pass/No Pass), (Formerly Developmental Services 73) PREREQUISITE: None.
Designed for students with documented disabilities. Basic independent living skills. Including appropriate social interaction, self-advocacy, self-care, community involvement, personal choice and managing life events.

## 275 HORTICULTURE SKILLS I

2 units, 6 lab hours, (Pass/No Pass), (Formerly Developmental Services 75)
PREREQUISITE: Student must have a diagnosed, verifiable disability.

Designed for students with documented disabilities. Basic techniques of foliage plant care and growing vegetables and ornamentals, with emphasis on transferable employment skills.

## 276 HORTICULTURE SKILLS II

2 units, 6 lab hours, (Pass/No Pass),
(Formerly Developmental Services 76)
PREREQUISITE: Student must have a diagnosed, verifiable disability. ADVISORY: Developmental Services 275.

Designed for students with documented disabilities. Intermediate techniques of foliage plant care and growing vegetables and ornamentals, with emphasis on transferable employment skills.

## 277 ADAPTED COMPUTER LITERACY

2 units, 1 lecture hour, 3 lab hours
(Pass/No Pass), (Formerly Developmental

## Services 77)

PREREQUISITE: Student must have a diagnosed, verifiable disability.

Designed for students with documented disabilities. Introduction to computers and commonly used microcomputer applications. Emphasis on computer use and adaptation. In depth coverage of computers and their impact in society.

## 278 MODIFIED WORD PROCESSING

2 units, 1 lecture hour, 3 lab hours, (Pass/ No Pass), (Formerly Developmental Services 78)
PREREQUISITE: Student must have a diagnosed, verifiable disability. ADVISORY: Developmental Services 277.

Designed for students with documented disabilities. Basic word processing terminology and understanding of Microsoft Word.

## 279 MODIFIED COMPUTER APPLICATIONS

2 units, 1 lecture hour, 3 lab hours, (Pass/
No Pass), (Formerly Developmental
Services 79)
PREREQUISITE: Student must have a diagnosed, verifiable disability. ADVISORY: Development Services 278.

Expansion and enhancement of word processing, data management, spreadsheet, and other highly marketable microcomputer applications.

## 282 GREENHOUSE WORKFORCE PREP 3 units, 9 lab hours, (Pass/No Pass),

 (Formerly Developmental Services 82)PREREQUISITE: Student must have a diagnosed, verifiable disability. ADVISORY: Developmental Services 275 and 276.

Designed for students with documented disabilities. Introduction to vocational training in an actual working greenhouse. Assists students in preparing for success in future employment. Topics include ornamental and vegetable plant growing and care, occupational behavior and interpersonal skill development. Designed for students with documented disabilities.

## 291 STRATEGIES FOR ACADEMIC SUCCESS

 2 units, 2 lecture hours, (Pass/No Pass) PREREQUISITE: None.Designed for students with 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 <br> 2 units, 2 lecture hours, (Pass/No Pass) PREREQUISITE: None. <br> 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 recommended. Working knowledge of basic arithmetic recommended.

Freehand sketching, orthographic projection, measuring devices, geometric construction, pictorial drawing and dimensioning. (A, CSU)

## ECONOMICS (ECON)

## 25 INTRODUCTION TO ECONOMICS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1 A recommended. Mathematics 201 recommended.

Introduction to market economies and contemporary economic issues through a survey of microeconomic and macroeconomic concepts. Topics include supply and demand, role of government, production and costs, measuring the macroeconomy, economic policy, and economic growth. Course is not designed for students majoring in Business or Economics. (A, CSU-GE)

## 40 INTRODUCTION TO MICROECONOMICS <br> 3 units, 3 lecture hours, (Formerly <br> 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 <br> 3 units, 3 lecture hours, (Formerly <br> Economics 1A) <br> 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)

## EDUCATION (EDUC)

## 6 INTRODUCTION TO SPECIAL EDUCATION

3 units, 3 lecture hours, (Formerly Educational Aide 6 and 60)
ADVISORY: Eligibility for English 1A recommended.
An overview of special education in Kindergarten through grade 12 (K-12). Includes the history of special education, laws and regulations governing service provision, philosophies, assessment methods and personnel requirements. (A, CSU)

## 7 EXCEPTIONAL LEARNERS

3 units, 3 lecture hours, (Formerly Educational Aide 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. (C-ID EDUC 200 = EDUC 19 + EDUC 30) (A, CSU)

## 19X WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

## 1-8 units

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to secondary teacher education. Collaborative learning objectives established specific to the secondary teacher education field. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (C-ID EDUC 200 = EDUC 19X + EDUC 30) (A, CSU)

## 30 INTRODUCTION TO TEACHING

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Introduction to the concepts and issues related to teaching diverse learners in today's contemporary schools, Kindergarten through grade 12 ( $\mathrm{K}-12$ ). Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary educational issues, California's content standards and frameworks, and teacher performance standards. (C-ID EDUC $200=$ EDUC $30+$ EDUC 19) (A, CSU, UC)

## ELECTRICITY

SEE ELECTRICAL SYSTEMS TECHNOLOGY

## ELECTRICAL SYSTEMS TECHNOLOGY (EST)

 FORMERLY ELECTRONIC TECHNOLOGY
## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Formerly Electronic
Technology 19)
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. 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

3 units, 3 lecture hours, (Formerly Electronic Technology 50)
ADVISORY: Eligibility for English 1A recommended.
An introduction to electronics and the Electrical Systems Technology program. Intensive review and practice in the reading \& math skills, and critical thinking necessary for success in any electronics or electrically related career. (A, CSU)

## 51 DIRECT CURRENT FUNDAMENTALS OF ELECTRONICS

3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 51)
ADVISORY: Eligibility for English 1A recommended. Electrical Systems Technology 53 and Applied Technology 130.

Fundamental principles and applications of direct current circuits. Emphasis on properties of conductors, insulators, and basic components and circuit theory. (A, CSU)

## 52 ALTERNATING CURRENT FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A recommended. Electrical Systems Technology 51 and Applied Technology 10.

Fundamental principles and applications of alternating current circuits. Emphasis on comparing and contrasting direct current and alternating current, power production, and residential, commercial, industrial applications. (A, CSU)

## 53 LAB SAFETY PRACTICES

2 units, 2 lecture hours, 1 lab hour, (Formerly Electronic Technology 57)
ADVISORY: Eligibility for English 1A recommended.
Introduction to the proper and safe use of hand tools, electrical devices/instruments, and component identification, and general circuit assembly procedures. (A, CSU)

## 54 INTEGRATED DEVICES

3 units, 3 lecture hours, 1 lab hour,
(Formerly Electronic Technology 52)
ADVISORY: Eligibility for English 1A recommended. Electrical Systems Technology 52 recommended.

Fundamentals of integrated devices and their applications. Proper and safe use of test equipment. (A, CSU)

## 55A DIGITAL CONCEPTS

3 units, 3 lecture hours, 1 lab hour,
(Formerly Electronic Technology 53)
ADVISORY: Electrical Systems Technology 50. Eligibility for English 1 A recommended.

Introduction to digital systems and subcomponents. Introduction to analog vs. digital world, numbering systems, logic gates, decoders, encoders, multiplexer and multiplexed transmission, registers and memory devices, as well as, digital circuit design using computer software. (A, CSU)

## 55B FACILITY AUTOMATION

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 50. Eligibility for English 1 A recommended.

Facility automation fundamentals identifying various aspects of the control systems within a commercial building. (A, CSU)

## 55C SCADA SYSTEMS

2 units, 2 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 56B. Eligibility for English 1 A recommended.

Principles and applications of SCADA. Aspects of the data acquisition system including system specifications and software applications. (A, CSU)

## 56A WIRING METHODS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54. Eligibility for English 1 A recommended.

Introduction and application of electrical wiring methods as recognized by the National Electrical Code. Includes wiring methods and procedures for residential, commercial and industrial applications. Major emphasis will be placed upon electrical safety. (A, CSU)

## 56B MOTOR CONTROLS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54. Eligibility for English 1 A recommended.

Investigation and implementation of motor control. Emphasis on the fundamentals of logic and wiring as applied to motor controls. (A, CSU)

## 56C INDUSTRIAL ELECTRONICS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54, 56B and 58. Eligibility for English 1A recommended.

Application of electronic principles in the industrial environment. Emphasis on variable frequency drives, control circuits and electronic components. (A, CSU)

## 57A ANALOG COMMUNICATIONS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54 and 55A. Eligibility for English 1A recommended.

Analog modulation techniques and the frequency spectrum. (A, CSU)

## 57B DIGITAL COMMUNICATIONS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54 and 55A. Eligibility for English 1A recommended.

Digital multiplexing, digital conversions, and network communication. (A, CSU)

## 57C VOICE AND DATA CABLING

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54. Eligibility for English 1A recommended.

The course focuses on cabling issues related to data and voice connections and provides an understanding of the industry and its worldwide standards, types of media and cabling, physical and logical networks, as well as signal transmission. (A, CSU)

## 58 PROGRAMMABLE LOGIC CONTROLLERS

3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 58)
ADVISORY: Electrical Systems Technology 56B. Eligibility for English 1A recommended.

Basic programming of programmable logic controllers, and input/ output device interfacing. (A, CSU)

## 59 INSTRUMENTATION SYSTEMS

3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 60)
ADVISORY: Electrical Systems Technology 50 or 51. Eligibility for English 1 A recommended.

Basic instrumentation and control concepts with application in process control systems. Calibrating, terminology, and Piping and Instrument Diagram (P\&ID) symbols as established by the Instrumentation, Systems, and Automation Society. (A, CSU)

## 60 A+PC MAINTENANCE AND REPAIR

3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 61)
ADVISORY: Electrical Systems Technology 50. Eligibility for English 1A recommended.

Skills for computer hardware support; installation, configuration, diagnosing and troubleshooting computer hardware. (A, CSU)

## 61 NETWORKING FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 59)
ADVISORY: Eligibility for English 1A recommended. Electrical Systems Technology 55A, 60 and Applied Technology 10 strongly recommended.

Principles and structure of IP Addressing, the fundamentals of Ethernet, TCP/IP Protocol and equipment operation. This class prepares the student for the Cisco CCENT and/or CCNA Certification. (A, CSU)

## 62 ROUTER \& SWITCHING ESSENTIALS

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Electrical Systems Technology 61. ADVISORY: Eligibility for English 1A recommended.

Describes the architecture, components, and operations of routers and switches in a network. This class prepares the student for the Cisco CCENT and/or CCNA Certification. (A, CSU)

## 63 SCALING NETWORKS

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Electrical Systems Technology 62. ADVISORY: Eligibility for English 1A recommended.

Describes the architecture, components, and operations of routers and switches in a larger and complex network. This class prepares the student for the Cisco CCNA Certification. (A, CSU)

## 64 ADVANCED NETWORKING AND MANAGEMENT

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Electrical Systems Technology 63. ADVISORY: Eligibility for English 1 A recommended.

Discusses the WAN technologies and network services required by converged applications in a complex network. This class prepares the student for the Cisco CCNA Certification. (A, CSU)

## 80 INTRODUCTION TO PHOTOVOLTAICS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54. Eligibility for English 1A recommended.

Designed for students interested in an entry level career in the solar industry. Introduction to the fundamental principles and functions of the photovoltaic industry along with the physical installation for a photovoltaic system. (A, CSU)

## 81 PHOTOVOLTAIC SYSTEMS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54 and 56A. Eligibility for English 1A recommended.

Introduction of photovoltaic system requirements, design and configurations, installation techniques, and their applications in residential, commercial, and industrial. (A, CSU)

## 82A INTRODUCTION TO ROBOTICS

## 3.5 units, 3 lecture hours, 2 lab hours

ADVISORY: Electrical Systems Technology 50 or 51 . Eligibility for English 1A recommended.

Equipment (tools, computers and machinery) and processes used in the development and construction of robotics used in manufacturing, medical and aerospace industries. Creating prototype drawings and constructing various prototype robots. (A, CSU)

## 82B ROBOTIC APPLICATIONS

## 3.5 units, 3 lecture hours, 2 lab hours

PREREQUIIITE: Electrical Systems Technology 82A or with instructor approval. ADVISORY: Eligibility for English 1A recommended. Introduction to the applications of robotics in industry, with emphasis on automated work cells set-up, programming and operations. Course topics will include basic concepts and components of a typical automated work cells end effector designs and production line interfacing are studied. Students will design work cells and develop functional work cell simulators. (A, CSU)

## 83A ROBOTICS, INDUSTRIAL-INTRODUCTION

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A recommended. Electrical Systems Technology 54.

This introduction covers the basic operation, programming, and vision integration with industrial robots. (A, CSU)

## 83B ROBOTICS, INDUSTRIAL - ADVANCED <br> APPLICATION

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A recommended. Electrical Systems Technology 83A.

Advanced maintenance, programming, operation, and collaborative applications. (A, CSU)

## 84A INTRODUCTION TO BIOMEDICAL ELECTRONICS

3 units, 3 lecture hours
PREREQUISITE: Electrical Systems Technology 51, 52, and 54.
ADVISORY: Eligibility for English 1A recommended.
A study of biomedical instrumentation and equipment used in
the health care field. (A, CSU)

## 96A NATIONAL ELECTRICAL CODE PART 1

3 units, 3 lecture hours
ADVISORY: Electrical Systems Technology 55B, 56A, and 56B. Eligibility for English 1A recommended.

Application of all rules for engineering, designing, installing, maintaining, and inspecting electrical systems. Designed for newcomers and professionals seeking preparation for obtaining additional certifications or further knowledge. Branch circuits, electrical services, overcurrent protection and grounding Part I. (A, CSU)

## 96B NATIONAL ELECTRICAL CODE PART 2 <br> 3 units, 3 lecture hours

ADVISORY: Electrical Systems Technology 55B, 56A, and 56B. Eligibility for English 1A recommended.

Application of the rules for engineering, designing, installing, maintaining and inspecting installations. Designed for newcomers to the electrical industry and professional seeking preparation for obtaining additional certifications or further knowledge. General wiring, motors, controls, transformers, other equipment and grounding, Part II. (A, CSU)

## 96C NATIONAL ELECTRICAL CODE PART 3

3 units, 3 lecture hours
ADVISORY: Electrical Systems Technology 55B, 56A, and 56B. Eligibility for English 1A recommended.

Application of the rules for engineering, designing, installing, maintaining and inspecting electrical installations. Designed for newcomers to the electrical industry and professionals seeking preparation for obtaining additional certifications or further knowledge. General wiring, motors, controls, transformers, other equipment and grounding. (A, CSU)

## 96D NATIONAL ELECTRICAL CODEELECTRICAL SAFETY 3 units, 3 lecture hours <br> ADVISORY: Electrical Systems Technology 55B, 56A, and 56B. Eligibility for English 1A recommended. <br> 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 a an off-campus location. Emphasis on current wiring practices and electrical codes. (A)

## 175A RESIDENTIAL WIRING 1

4 units, 3 lecture hours, 3 lab hours, (See also Construction 175A)
COREQUISITE: Electrical Systems Technology 175AL. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Introduction to electrical code, installation methods. Electrical circuits hands on practice. Installation of the rough electrical system in the Fresno City College construction program's project house at an off campus location. Electrical Systems Technology 175AL must be taken concurrently with Electrical Systems Technology 175A. (A)

## 175AL RESIDENTIAL WIRING LAB 1

0.5 unit, 1.5 lab hours, (See also Construction 175AL)
COREQUIITIE: Electrical Systems Technology 175A. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1 A 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 1 A recommended.

Electrical Code. Hands on finish equipment installation, trouble shooting. Specialty circuits. Installation of the finish materials in the City College construction program's project house. Electrical Systems Technology 175BL must be taken concurrently with Electrical Systems Technology 175B. (A)

## 175BL RESIDENTIAL WIRING LAB 2

0.5 unit, 1.5 lab hours, (See also Construction 175BL)
COREQUISITE: Electrical Systems Technology 175B. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Students will apply classroom knowledge and gain hands on experience during the installation of finish apparatus in the FCC project house. Course must be taken concurrently with Electrical Systems Technology 175B. (A)

## ELECTRONICS

SEE ELECTRICAL SYSTEMS TECHNOLOGY (EST)

## ENGINEERING (ENGR)

## 1A ELEMENTARY PLANE SURVEYING 1

4 units, 3 lecture hours, 3 lab hours
PREREQUIIITE: Mathematics 4A. ADVISORY: Eligibility for English 1A recommended.

Principles and practice of plane surveying: office computations and design; operation of surveying field equipment; and production of engineering plans/maps. Topics include distances, angles, and directions; differential leveling; traversing; property/boundary surveys; topographic surveys/mapping; volume/earthwork; horizontal and vertical curves; land description techniques; and GPS. Extensive field work using tapes, levels, transits, theodolites and total stations. (C-ID ENGR 180) (A, CSU, UC)

## 2 GRAPHICS

4 units, 2 lecture hours, 6 lab hours
PREREQUISITE: Mathematics 4A. ADVISORY: Eligibility for English 1A recommended.

Principles of engineering drawings in visually communicating engineering designs and an introduction to computer-aided design (CAD). Topics include the development of visualization and sketching skills, orthographic projections, mechanical dimensioning and tolerancing practices, 2 D and 3D CAD skills and the engineering design process. The use of CAD software is an integral part of the course. (C-ID ENGR 150) (A, CSU, UC)

## 4 ENGINEERING MATERIALS

3 units, 3 lecture hours, (Formerly Engineering 32)
PREREQUIITE: Chemistry 1A and Physics 4A. ADVISORY: Eligibility for English 1A recommended.

Properties of engineering materials and their relation to atomic structure. The effect of microstructure on the mechanical, electrical, magnetic and thermal properties. Phase equilibria and strengthening processes for metals, ceramics, and polymers. (A, CSU, UC)

## 5 PROGRAMMING AND PROBLEM SOLVING IN MATLAB

4 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Mathematics 5A. ADVISORY: Eligibility for English 1 A recommended.

Utilizes the MATLAB environment to provide students with a working knowledge of computer-based problem solving methods relevant to science and engineering. Introduces the fundamentals of procedural and object-oriented programming, numerical analysis, and data structures. Examples and assignments in the course are drawn from practical applications in engineering, physics, and mathematics. (C-ID ENGR 220) (A, CSU, UC)

## 6 CIRCUITS WITH LAB

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Physics 4B. COREQUISITE: Mathematics 7. ADVISORY: Eligibility for English 1A recommended.

An introductory course in the analysis of DC and AC linear circuits containing resistors, inductors, capacitors, independent and dependent voltage and current sources, and operational amplifiers. Lecture topics include Ohm's Law, Kirchhoff's Laws, node and mesh analysis, Thevenin's and Norton's Theorems, superposition, natural and forced response in first and second order circuits, phasor analysis, resonance, AC steady- state power calculations, power transfer, and energy concepts. Lab component includes construction, testing, and analysis of linear electrical circuits. (C-ID ENGR 260 \& 260L) (A, CSU, UC)

## 8 STATICS

3 units, 3 lecture hours, (Formerly
Engineering 25)
PREREQUISITE: Physics 4A. COREQUISITE: Mathematics 6. ADVISORY: Eligibility for English 1A recommended.

Rigid bodies in static equilibrium when acted upon by forces and couples in two- and three-dimensional space. Included are the equilibrium of rigid bodies, trusses, frames, and machines, as well as the calculations of the centers of mass, centroids, friction, and moments of inertia. Additional topics which may be covered include distributed forces in cables, beams, and fluid statics; mass moments of inertia; and virtual work. (C-ID ENGR 130) (A, CSU, UC)

## 10 INTRODUCTION TO ENGINEERING

## 2 units, 1 lecture hour, 3 lab hours

ADVISORY: Eligibility for English 1A recommended.
This course explores the branches of engineering, the functions of an engineer, and the industries in which engineers work. Explains the engineering education pathways and explores effective strategies for students to reach their full academic potential. Presents an introduction to the methods and tools of engineering problem solving and design including experimentation, data analysis, computer and communication skills, and the interface of the engineer with society and engineering ethics. (C-ID ENGR 110) (A, CSU, UC)

## 11 MANUFACTURING PROCESSES

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Processing and manufacturing techniques for steel, ceramics, polymers, composites and other industrial materials. Topics include the capabilities and limitations of casting, welding, forming, and machining. Demonstrations and field trips may be included. (A, CSU)

## 12 DIGITAL LOGIC DESIGN

4 units, 3 lecture hours, 3 lab hours
COREQUISITE: Mathematics 103. ADVISORY: Eligibility for English 1A recommended.

Introductory course in the fundamentals of designing digital computer hardware. Course covers: logic gates, binary number system, conversion between number systems, Boolean algebra, Karnaugh maps, combinational logic, digital logic design, flip-flops, programmable logic devices (PLDs), counters, registers, memories, state machines, designing combinational logic and state machines into PLDs, and basic computer architecture. Lab assignments are design oriented. (A, CSU, UC)

ENGINEERING TECHNOLOGY
SEE DRAFTING

## ENGLISH (ENGL)

## 1A READING AND COMPOSITION

## 4 units, 4 lecture hours

PREREQUISITE: English 125 or English for Multi-Lingual Students 167 W and English 126 or English for Multi-Lingual Students 168R or English for Multi-Lingual Students 180RW or placement by multiple measures.

Reading, analyzing, and writing college-level prose, with emphasis on the expository; studying writing as a process; exploring different writing strategies; summarizing, editing, and critiquing; conducting research (gathering, organizing, evaluating, integrating and documenting information). (C-ID ENGL 100) (A, CSU-GE, UC, I)

## 1AH HONORS READING AND COMPOSITION

4 units, 4 lecture hours, (Formerly
Honors 1E)
PREREQUISITE: A "pass" grade in English 125 or English for Multi-Lingual Students 167W and English 126 or English for Multi-Lingual Students 168R or appropriate score on reading and writing sections of the Placement Test. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Reading, analyzing, and writing college-level prose, with emphasis on the expository: studying writing as a process; exploring different writing strategies; summarizing, editing, and critiquing; conducting research (gathering, organizing, evaluating, integrating and documenting information). Honors sections may cover additional subject matter such as creative writing, peer response, the study of oral narrative and its relationship to writing and composing on the computer. (C-ID ENGL 100) (A, CSU-GE, UC, I)

## 1B INTRODUCTION TO THE STUDY OF LITERATURE

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
Reading and critical analysis of short stories, novels, poems, and plays. (C-ID ENGL 120) (A, CSU-GE, UC, I)

## 3 CRITICAL READING \& WRITING

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
Developing critical thinking skills in reading and writing beyond English 1A. Reasoning for analysis and argument writing based mainly on non-fiction readings. (C-ID ENGL 105) (A, CSU-GE, UC, I)

## 3H HONORS CRITICAL READING \& WRITING 3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Developing critical thinking skills in reading and writing beyond English 1A. Reasoning for analysis and argument writing based mainly on non-fiction readings. Honors sections may cover additional subject matter, such as more in-depth analytical research, extensive analysis of rhetorical discourse, and the study of how critical reasoning and argument is utilized in content area research and practice. (C-ID ENGL 105) (A, CSU-GE, UC, I)

## 12 THE BIBLE AS LITERATURE

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
A survey of the Bible as literature. Reading and critical analysis of the OId and New Testaments. (A, CSU-GE, UC, I)

## 14 FOLKLORE

## 3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent.
Reading and critical analysis of 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 equivalent.
Analysis and writing of poetry for critical review. (C-ID ENGL $200=$ ENGL $15 \mathrm{~A}+15 \mathrm{~B})(\mathrm{A}, \mathrm{CSU}, \mathrm{UC})$

## 15B CREATIVE WRITING: FICTION

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
Writing fiction for critical review. (C-ID ENGL $200=$ ENGL 15A
+15B) (A, CSU, UC)
15C CREATIVE WRITING: PLAYWRITING
3 units, 3 lecture hours, (See also Theatre
Arts 15C)
PREREQUISITE: English 1A or equivalent.
Analysis and writing of plays for critical review. (A, CSU, UC)

## 15D CREATIVE WRITING: CREATIVE

 NONFICTION3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
Intensive workshop in memoir, lyric essay, and all other forms of creative nonfiction writing; appropriate readings and analyses for critical review. (A, CSU, UC)

## 17 AFRICAN-AMERICAN LITERATURE

3 units, 3 lecture hours, (See also African-
American Studies 17)
PREREQUISITE: English 1A or equivalent.
Reading critical works of African and African-American writers and understanding cultural values and themes as expressed in essays, short stories, novels, poetry, and plays. (A, CSU-GE, UC, I)

## 20 ASIAN AMERICAN LITERATURE

3 units, 3 lecture hours, (See also Asian-
American Studies 20)
PREREQUISITE: English 1A or equivalent.
Survey of Asian American classic and contemporary literature. Reading and writing critical analysis of novels, short stories, poems and plays. (A, CSU, UC)

## 36 WOMEN'S LITERATURE

3 units, 3 lecture hours, (See also Women's Studies 36)
PREREQUISITE: English 1A or equivalent.
Survey of literature by women in fiction, drama, poetry, biography, and essay. Covers multicultural and international literature from classical to contemporary periods, in addition to feminist and gender theory. (A, CSU-GE, UC, I)

## 40 THEMES IN LITERATURE

## 3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent.
Themes, authors, or genres through close readings, contextual approaches, interpretations, and critical evaluations. The subject will vary with the instructors, for example, "Rites of Passage in the American Consciousness," "The Detective as Hero"; Emily Dickinson, Carlos Fuentes; Popular Literature, Science Fiction. (A, CSU-GE, UC)

## 42 CLASSIC MYTHS

3 units, 3 lecture hours, (See also

## Humanities 42)

PREREQUISITE: English 1A or equivalent.
Reading and critical analysis of basic mythic themes in literature, film, and the visual arts. The origin of myths in ritual, their development in western civilization, and their ultimate form and continued presence in the arts. (A, CSU-GE, UC, I)

## 44A WORLD LITERATURE TO THE RENAISSANCE

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
A survey of the most enduring fiction, drama, and poetry from classical antiquity to the renaissance. (C-ID ENGL 140) (A, CSU-GE, UC, I)

## 44B WORLD LITERATURE SINCE THE RENAISSANCE <br> 3 units, 3 lecture hours <br> PREREQUISITE: English 1A or equivalent. <br> A survey of the most enduring fiction, drama, and poetry from the neo-classic era to 1950. (C-ID ENGL 145) (A, CSU-GE, UC, I)

## 45 CONTEMPORARY WORLD LITERATURE

3 units, 3 lecture hours
PREREQUIIITE: English 1A or equivalent.
Contemporary (since 1950) works in world literature in fiction, drama, poetry, biography, and essay. (A, CSU-GE, UC, I)

## 46A ENGLISH LITERATURE TO 1800

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
A survey of British and Irish fiction, poetry, and drama from the earliest writings through 1800. (C-ID ENGL 160) (A, CSU-GE, UC, I)

## 46B ENGLISH LITERATURE FROM 1800 TO THE PRESENT

3 units, 3 lecture hours
PREREQUIIITE: English 1 A or equivalent.
A survey of British and lrish 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
PREREQUIIITE: English 1 A or equivalent.
An introduction to the plays and poetry of William Shakespeare, including selections from the tragedies, comedies, histories, and sonnets.
(A, CSU-GE, UC, I)
48A INTRODUCTION TO AMERICAN LITERATURE TO 1865
3 units, 3 lecture hours
PREREQUISITE: English 1 A or equivalent.
A survey of short stories, novels, poetry, essays, and plays produced by the diverse canon of American writers of the period. (C-ID ENGL 130) (A, CSU-GE, UC, I)

## 48B INTRODUCTION TO AMERICAN LITERATURE 1865 TO THE PRESENT

3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
A survey of short stories, novels, poetry, essays, and plays produced by the diverse canon of American writers of the period. (C-ID ENGL 135) (A, CSU-GE, UC, I)

## 105 GRAMMAR AND PUNCTUATION

3 units, 3 lecture hours, (Formerly
English 5)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Elements of basic sentence structure, including appropriate punctuation. (A)

## 125 WRITING SKILLS FOR COLLEGE <br> 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 and by analyzing and utilizing rhetorical strategies appropriate to purpose and audience. Develops basic research skills. Prepares students for English 1A. (A)

## 126A ACADEMIC READING EFFICIENCY

2 units, 2 lecture hours
PREREQUISITE: None.
Develops efficient academic reading and learning strategies which improve retention and application of learned content in college courses other than English. (A)

## 205 ACCELERATED READING AND COMPOSITION SKILLS

2 units, 2 lecture hours, (Pass/No Pass)
PREREQUIIITE: Placement by multiple measures. COREQUISITE: English 1A.

Support course with concurrent enrollment in English 1A Reading and Composition. Emphasizes skills in critical reading, expository and argumentative writing, and research techniques. Includes intensive instruction and practice in reading, writing, and critical thinking skills for successful completion of ENGL 1A.

## 252 WRITING IMPROVEMENT

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 52)
PREREQUISITE: Designated score on English placement test with other relevant criteria or satisfactory completion of English 250 or 281. Not recommended for students learning English as a second language. Not primarily for students with identified learning disabilities.

Develops rudimentary essay building skills, including paragraph and essay development. Helps students identify and correct extensive grammatical errors. Prepares students for English 125. Students must satisfactorily complete course work to receive credit for the class.

## 277 READING SKILLS

2.5 units, 2 lecture hours, 2 lab hours, (Formerly English 77)
PREREQUISITE: Designated score on English placement test with other relevant criteria.

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.

Development of reading skills through vocabulary usage, literal comprehension, and critical comprehension. Development of various strategies for comprehending different types of written material. Prepares students for English 126.

## 281 GRAMMAR AND SENTENCE WRITING

2.5 units, 2 lecture hours, 2 lab hours, (Pass/No Pass), (Formerly English 81)
PREREQUISITE: Designated score on English placement test with other relevant criteria.

Development of a basic understanding of paragraph and essay structures and an understanding that writing is for communication. Identification of possible essay topics and develop an ability to find and correct grammatical errors. Prepares students for English 252 or 282.

## 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 .

Development of writing skills through understanding, finding and correcting grammatical errors. Prepares students for English 125.

300 ACADEMIC LEARNING \& LITERACY SKILLS 3 lecture hours, (Pass/No Pass), (Retakes = 3)
PREREQUIIITE: None.
Develops academic reading and comprehension strategies in order to retain and apply learned information in college content area courses. Emphasis is on structured note-taking and study skills for expository materials. This course is designed for non-transfer students or for self-placement.

ENGLISH FOR MULTI-LINGUAL STUDENTS (EMLS)<br>FORMERLY ENGLISH AS A SECOND LANGUAGE

## 167W ADVANCED ACADEMIC WRITING AND GRAMMAR

4 units, 4 lecture hours, (Formerly English
54D, English as a Second Language 67 and
English for Multi-Lingual Students 67)
PREREQUISITE: Use of language other than English as a primary language. Designated score on the college placement test or completion of English for Multi-Lingual Students 265 W with a grade of " C " or better.

At an advanced level, develops students' skills through the process of writing, revising and editing essays which includes logical development and organization of ideas. Develops analytical and critical thinking skills by reading and responding to model essays. Reinforces grammar skills, and develops study skills for an academic environment. Designed to prepare multi-lingual students and English Language Learners (ELL) for English 1A and content area courses. (A)

## 168R ADVANCED ACADEMIC READING AND VOCABULARY

4 units, 4 lecture hours, (Formerly English as a Second Language 68 and English for Multi-Lingual Students 68)
PREREQUISITE: Use of language other than English as a primary language. Designated placement based on college placement criteria (see most recent EMLS Department approved Multiple Measures document) or completion of English for Multi-lingual Students 265R with a grade of "C" or better.

At an advanced level, develops students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for college content classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Develops study skills for an academic environment. Designed to prepare multi-lingual students and English Language Learners (ELL) for English 1A and content area courses. (A)

## 180RW ADVANCED ACADEMIC READING AND WRITING

6 units, 6 lecture hours
PREREQUISITE: English for Multi-Lingual Students 265R and 265W.

This advanced, academic literacy course is designed for multi-lingual students (EMLS, formerly ESL). Students will read various types of col lege-level in which students will engage with diverse reading materials in order to process knowledge and build schema; they will engage in intentional writing based on source material using an academic format in preparation for English 1A and content area courses. (A)

## 263R LOW ACADEMIC INTERMEDIATE READING AND VOCABULARY

4 units, 4 lecture, (Pass/No Pass), (Formerly
English as a Second Language 63R and 263R)
PREREQUISITE: Use of language other than English. Designated score on college placement test.

Advances students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for mainstream college classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 264R and mainstream courses.

## 263RW LOW-INTERMEDIATE READING AND WRITING

5 units, 5 lecture hours, (Pass/No Pass)
PREREQUIIITE: None.
This low-intermediate, academic literacy course is designed for Multi-lingual students (EMLS), in which students will engage with diverse reading materials in order to process knowledge and build schema for intentional academic format writing based on sources in preparation for EMLS 264R, 264W, 364R, 364W and content area courses.

## 263W LOW ACADEMIC INTERMEDIATE WRITING AND GRAMMAR

4 units, 4 lecture hours, (Pass/No Pass),
(Formerly English 54A and English as a
Second Language 63, 63W and 263W)
PREREQUISITE: Use of language other than English as primary language. Designated score on college placement test.

Develops the process of writing, revising and editing at high-beginning to low-intermediate level. Includes preparation for and composition of paragraphs and appropriate grammar as taught through model paragraphs and exercises. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 264W.

## 264LS INTERMEDIATE LISTENING AND SPEAKING

3 units, 3 lecture, (Pass/No Pass)
PREREQUIIITE: None.
A listening and speaking course designed for multi-lingual speakers who wish to develop their oral language skills at the intermediate level. This course can be taken concurrently with other English for Multi-Lingual courses.

## 264R INTERMEDIATE ACADEMIC READING AND VOCABULARY

4 units, 4 lecture, (Pass/No Pass), (Formerly English as a Second Language 64R and 264R)
PREREQUISITE: Use of language other than English as a primary language. Designated placement based on college placement criteria (see most recent EMLS Department approved Multiple Measures document) or completion of English for Multi- Lingual Students 263R with a grade of "C" or better.

At an intermediate level, develops students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for college content classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 265R and content area courses.

## 264W INTERMEDIATE ACADEMIC WRITING AND GRAMMAR

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 54B and English as a Second Language 64, 64W and 264W)
PREREQUISITE: Use of language other than English as primary language. Designated score on college placement test or completion of English for Multi-Lingual Students 263W with a grade of "C" or better.

At the intermediate level, develops the process of writing, revising, and editing. Includes preparation for and composition of paragraphs and short essays. Reinforces grammar skills and develops study skills. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 265W and content area courses.

## 265R HIGH INTERMEDIATE ACADEMIC READING AND VOCABULARY <br> 4 units, 4 lecture hours, (Pass/No Pass), (Formerly English as a Second Language 65R and 265R) <br> PREREQUISITE: Use of language other than English as a primary language. Designated placement based on college placement criteria (see most recent EMLS Department approved Multiple Measures document) or completion of English for Multi-Lingual Students 264R with a grade of "C" or better.

At a high intermediate level, develops students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for college content classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 168R and content area courses.

## 265W HIGH INTERMEDIATE ACADEMIC WRITING AND GRAMMAR <br> 4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 54C and English as a Second Language 65, 65W and 265W) <br> PREREQUISITE: Use of language other than English as a primary

 language. Designated score on college placement test or completion of English Multi-Lingual Students 264 W with a grade of " C " or better.At the high-intermediate level develops the process of writing, revising, and editing. Includes the preparation for and composition of essays and use of appropriate grammar as taught through model essays and exercises. Develops study skills for an academic environment. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 167W and content area courses

## 270 PRONUNCIATION IMPROVEMENT AND ACCENT REDUCTION

3 units, 3 lecture hours, (Pass/No Pass) PREREQUIIITE: None.
This course is for EMLS students at the Intermediate to Advanced levels to improve oral communication (listening/speaking) skills including phonetic accuracy and fluency. Improving oral communication skills results in greater speaker confidence and intelligibility.

## 284RW INTERMEDIATE ACADEMIC READING AND WRITING

5 units, 5 lecture hours, (Pass/No Pass)
PREREQUISITE: English for Multi-Lingual Students 263RW or 363RW or placement by multiple measures. Use of a language other than English.

First semester of the academic reading and writing sequence designed to introduce non-native English speakers to the demands of Academic English. Emphasizes structuring the academic paragraph and developing short academic essays in response to text based prompts Focuses on developing academic reading, writing, language (i.e grammar, vocabulary), and critical thinking skills. Designed to prepare multi-lingual students and English language learners for EMLS 285RW or EMLS 385RW.

## 285RW HIGH-INTERMEDIATE ACADEMIC READING AND WRITING

5 units, 5 lecture hours, (Pass/No Pass)
PREREQUISITE: English for Multi-Lingual Students 284RW or 384RW or placement by multiple measures. Use of a language other than English.

Second semester of the academic reading and writing sequence designed to introduce non-native English speakers to the demands of Academic English. Emphasizes refining the academic paragraph and structuring the academic essay in response to text-based prompts. Focuses on developing academic reading, writing, language (i.e. grammar, vocabulary), and critical thinking skills. Designed to prepare multi-lingual students and English language learners for EMLS 180.

## 363R LOW INTERMEDIATE ACADEMIC READING AND VOCABULARY <br> 4 lecture hours, (Pass/No Pass), $($ Repeats $=3)$ <br> PREREQUISITE: Use of language other than English. Designated

 score on college placement test; department-approved Multiple Measures.Advances students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for mainstream college classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 264R or 364R and mainstream courses.

## 363RW LOW-INTERMEDIATE READING AND WRITING

5 lecture hours, (Pass/No Pass),
$($ Repeats $=3)$
PREREQUISITE: None.
This low-intermediate, academic literacy course is designed for Multi-lingual students (EMLS), in which students will engage with diverse reading materials in order to process knowledge and build schema for intentional academic format writing based on sources in preparation for EMLS 264R, 264W, 364R, 364W and content area courses.

## 363W LOW INTERMEDIATE ACADEMIC WRITING AND GRAMMAR

4 lecture hours, (Pass/No Pass), $($ Repeats $=3)$
PREREQUISITE: Use of language other than English. Designated score on college placement test; department-approved Multiple Measures.

Develops the process of writing, revising and editing at high-beginning to low-intermediate level. Includes preparation for and composition of paragraphs and appropriate grammar as taught through model paragraphs and exercises. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 264W or 364W.

## 364LS INTERMEDIATE LISTENING AND SPEAKING <br> 3 lecture hours, (Repeats = 3), (Pass/No Pass) PREREQUISITE: None.

A listening and speaking course designed for multi-lingual speakers who wish to develop their oral language skills at the intermediate level. This course can be taken concurrently with other English for Multi-Lingual Students courses.

## 364R INTERMEDIATE ACADEMIC READING AND VOCABULARY

4 lecture hours, (Pass/No Pass),
(Repeats $=3$ )
PREREQUISITE: English for Multi-Lingual Students 263R or 363R. Use of language other than English. Designated score on college placement test; department-approved Multiple Measures.

At an intermediate level, develops students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for college content classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 265R or 365R and content area courses.

## 364W INTERMEDIATE ACADEMIC WRITING AND GRAMMAR <br> 4 lecture hours, (Pass/No Pass), <br> (Repeats = 3) <br> PREREQUISITE: English for Multi-Lingual Students 263W or

 363W. Use of language other than English. Designated score on college placement test; department-approved Multiple Measures.At the intermediate evel, develops the process of writing, revising, and editing. Includes preparation for and composition of paragraphs and short essays. Reinforces grammar skills and develops study skills. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 265W or 365W and content area courses.

## 365R HIGH INTERMEDIATE ACADEMIC READING AND VOCABULARY

4 lecture hours, (Pass/No Pass), (Repeats = 3)
PREREQUIIITE: English for Multi-Lingual Students 264R or 364R. Use of language other than English. Designated score on college placement test; department-approved Multiple Measures.

At a high intermediate level, develops students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for college content classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 168 R and content area courses.

## 365W HIGH INTERMEDIATE ACADEMIC WRITING AND GRAMMAR

4 lecture hours, (Pass/No Pass), (Repeats = 3)
PREREQUISITE: English for Multi-Lingual Students 264W or 364W. Use of language other than English. Designated score on college placement test; department-approved Multiple Measures.

At the intermediate level, develops the process of writing, revising, and editing. Includes preparation for and composition of paragraphs and short essays. Reinforces grammar skills and develops study skills. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 167 W and content area courses.

## 370 PRONUNCIATION IMPROVEMENT AND ACCENT REDUCTION

3 lecture hours, (Pass/No Pass),
$($ Repeats $=3)$
PREREQUIIITE: None.
This non-credit course is for EMLS students at the Intermediate to Advanced levels to improve oral communication (listening/speaking) skills including phonetic accuracy and fluency. Improving oral communication skills results in greater speaker confidence and intelligibility.

## 384RW INTERMEDIATE ACADEMIC READING AND WRITING

5 lecture hours, (Pass/No Pass), $($ Repeats $=3)$
PREREQUISITE: English for Multi-Lingual Students 263RW or 363RW or placement by multiple measures. Use of a language other than English.

First semester of the academic reading and writing sequence designed to introduce non-native speakers to the demands of Academic English. Emphasizes structuring the academic paragraph and developing the academic essay in response to text-based prompts. . Focuses on developing academic reading, writing, language (i.e. grammar, vocabulary) and critical thinking skills. Designed to prepare multi-lingual students and English language learners for EMLS 285RW, or EMLS 385RW.

## 385RW HIGH INTERMEDIATE ACADEMIC READING AND WRITING <br> 5 lecture hours, (Pass/No Pass), (Repeats $=3$ ) <br> PREREQUISITE: English for Multi-Lingual Students 284RW or

 384RW or placement by multiple measures. Use of a language other than English.Second semester of the academic reading and writing sequence designed to introduce non-native English speakers to the demands of Academic English. Emphasizes refining the academic paragraph and structuring the academic essay in response to text-based prompts. Focuses on developing academic reading, writing, language (i.e. grammar, vocabulary), and critical thinking skillss. Designed to prepare multi-lingual students and English Language Learners for EMLS 180RW.

FASHION MERCHANDISING (FM) FORMERLY RETAILING FASHION

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

## 1-8 units

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to fashion merchandising. Collaborative learning objectives established specific to fashion merchandising. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 26 APPAREL AND TEXTILES

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to basic textiles; the study of fibers, yarns and fabric identifications, with emphasis on various processes of textile manufacturing, fabric finishes, sustainability/environmental concerns and appropriates for end use. This course qualifies for various Fashion Vocational Certificates. (A, CSU)

## 27 INTRODUCTION TO FASHION MERCHANDISING

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Provides students an introduction to the world of fashion merchandising. Includes the history/global perspectives, uniqueness, and opportunities in fashion. Also presents fundamentals of fashion, basic fashion terminology, and an overview of textiles and apparel. (A, CSU)

## 28 VISUAL MERCHANDISING

3 units, 3 lecture hours, (See also Marketing
17), (Formerly Retailing Fashion 17)

ADVISORY: Eligibility for 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 1890s to 1960, including the development of narrative, documentary, and avant-garde film of the period; the aesthetic, technological, economic, and social factors that shaped this medium; and its impact on diverse societies and cultural values. (A, CSU-GE, UC, I)

## 2B HISTORY OF CINEMA 1960-PRESENT

3 units, 3 lecture hours, (Formerly Film 1B)
ADVISORY: Eligibility for English 1A recommended.
A survey of international film history from 1960 to the present, including the development of narrative, documentary, and 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 2B recommended.

Introduction to video filmmaking, including scripting, shooting, and editing short digital films. Emphasis on personal and creative expression. (A, CSU, UC)

## 6 FILM GENRES

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Genre study to provide a clear context for appreciating the fundamental components of film as art and as social expression. Investigates the origins, evolution and transformations of various film genres, including film noir, the Western, science-fiction, the musical, horror, war, or the crime film. Covers the formal and thematic conventions of each genre and the genre as a reflection of the social environments that produced them. (A, CSU-GE, UC, I)

## 7 INTRODUCTION TO SCREENWRITING <br> 3 units, 3 lecture hours <br> ADVISORY: Eligibility for English 1A recommended. <br> Introduction to the basic techniques for writing for the screen from story concept to completed script. (A, CSU)

## FIRE TECHNOLOGY (FIRET)

## 1 FIRE PROTECTION ORGANIZATION

3 units, 3.27 lecture hours, (Formerly Fire Science 1)
ADVISORY: Eligibility for English 1A recommended.
An introduction to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as a part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions. (C-ID FIRE 100X) (A, CSU)

## 2 FIRE PREVENTION TECHNOLOGY

3 units, 8.4 lecture hours, ( 7 weeks), (Spring), (Formerly Fire Science 6) ADVISORY: Eligibility for English 1A recommended. History and philosophy of fire prevention, organization, and operation of a fire prevention bureau; use of fire codes; identification and correction of fire hazards; the relationship of fire prevention with fire safety education; and understanding of detection and suppression systems. (C-ID FIRE 110X) (A, CSU)

## 3 FIRE PROTECTION EQUIPMENT AND SYSTEMS

3 units, 8.4 lecture hours, ( 7 weeks),
(Spring), (Formerly Fire Science 7)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. (C-ID FIRE 120X) (A, CSU)

## 4 BUILDING CONSTRUCTION FOR FIRE PROTECTION

3 units, 3.27 lecture hours, (Spring), (Formerly Fire Science 5)
ADVISORY: Eligibility for English 1A recommended.
Components of building construction that relate to fire and life safety; focus on firefighter safety; elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. (C-ID FIRE 130X) (A, CSU))

## 5 FIRE BEHAVIOR AND COMBUSTION

3 units, 3.27 lecture hours, (Spring), (Formerly Fire Science 3)
ADVISORY: Eligibility for English 1A recommended.
Theory and fundamentals of how and why fires start, spread, and are controlled; fire chemistry and physics, fire characteristics of materials, extinguishing agents and fire control techniques. (C-ID FIRE 140X) (A, CSU)

## 8 FIRE HYDRAULICS

3 units, 8.4 lecture hours, (7 weeks)
(Spring), (Formerly Fire Science 8)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Hydraulic laws and formulas as applied to the fire service, including application of formulas and mental calculation to hydraulic problems, water supply problems, and underwiter's requirement for pumps. Reviews basic mathematics. (A, CSU)

## 9 FIRE FIGHTING PRACTICES

3 units, 8.4 lecture hours, ( 7 weeks), (Spring), (Formerly Fire Science 9) ADVISORY: Eligibility for English 1A recommended.
An in-depth analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground; fire fighting strategy and tactics; methods of attack; pre-planning fire problems. (A, CSU)

## 14 PRINCIPLES OF FIRE \& EMERGENCY SERVICES SAFETY \& SURVIVAL

3 units, 8.4 lecture hours, ( 7 weeks)
ADVISORY: Eligibility for English 1A recommended.
Basic concepts of occupational health and safety as it relates to emergency services organizations; risk evaluation and control procedures for emergency and non-emergency situations. (A, CSU)

## 23 COMPANY OFFICER 2A: HUMAN <br> RESOURCE MANAGEMENT FOR <br> COMPANY OFFICERS

2 units, 2.34 lecture hours, (Formerly Fire
Technology 223)
PREREQUISITE: Completion of the Fire Fighter II course or equivalent.

This course provides information on the use of human resources to accomplish assignments, evaluating member performance, supervising personnel, and integrating health and safety plans, policies, and procedures into daily activities as well as the emergency scene. (A, CSU)

## 24 COMPANY OFFICER 2B: GENERAL ADMINISTRATIVE FUNCTIONS FOR COMPANY OFFICERS

1 unit, 1.12 lecture hours, (Formerly Fire Technology 224)
PREREQUISITE: Completion of the Fire Fighter II course or equivalent.

This course provides information on general administrative functions and the implementation of department policies and procedures and addresses conveying the fire department's role, image, and mission to the public. (A, CSU)

## 25 COMPANY OFFICER 2C: FIRE INSPECTIONS AND INVESTIGATIONS FOR COMPANY OFFICERS

2 units, 2.23 lecture hours, (Formerly Fire Technology 225)
PREREQUISITE: Completion of the Fire Fighter II course or equivalent.

This course provides information on conducting inspections, identifying hazards and addressing violations, performing a fire investigation to determine preliminary cause and securing the incident scene and preserving evidence. (A, CSU)

## 26 COMPANY OFFICER 2D: ALL-RISK COMMAND OPERATIONS FOR COMPANY OFFICERS

2 units, 2.23 lecture hours, (Formerly Fire Technology 226)
PREREQUISITE: Completion of the Fire Fighter II course or equivalent.

This course provides information on conducting incident size-up, developing and implementing an initial plan of action involving single and multiunit operations for various types of emergency incidents to mitigate the situation following agency safety procedures, conducting pre-incident planning, and develop and conduct a post-incident analysis. (A, CSU)

## 27 COMPANY OFFICER 2E: WILDLAND INCIDENT OPERATIONS FOR COMPANY OFFICERS

2 units, 2.23 lecture hours, (Formerly Fire Technology 227)
PREREQUISITE: Completion of the Fire Fighter II course or equivalent. All Risk Command Operations for Company Officers S-290 Intermediate Fire Behavior (classroom delivery only).

This course provides information on evaluating and reporting incident conditions, analyzing incident needs, developing and implementing a plan of action to deploy incident resources completing all operations to suppress a wild land fire, establishing an incident command post, creating an incident action plan, and completing incident records and reports. (A, CSU)

## 29 INTERMEDIATE WILDLAND FIRE BEHAVIOR 2 units, 2.25 lecture hours <br> ADVISORY: Completion of CalFire or NWCG S-190. <br> This is a classroom-based skills course designed to prepare the prospective supervisor to undertake safe and effective fire management operations. It is the second course in a series that collectively serves to develop fire behavior prediction knowledge and skills. This course may be presented throughout the United States. Fire environment differences are discussed as necessary, and the instructor should stress local conditions. (A, CSU)

## 30E INCIDENT COMMANDER HAZMAT

0.4 unit, 0.4 lecture hour, 0.15 lab hour PREREQUIIITE: None.
A study of the emergency response to Hazardous Material (Hazmat) incidents with an emphasis on the role of the Incident Commander (IC) as defined by OSHA Hazardous Waste Operations and Emergency Response (Hazwoper) regulations, including basic hazardous materials chemistry, regulations, the tactics and strategy of mitigation, decontamination, and scene management. Upon successful completion, students will receive a certificate in Hazardous Materials IC from the California Specialized Training Institute (CSTI). (A, CSU)

## 50L INSTRUCTORIINSTRUCTIONAL METHODOLOGY

2 units, 2.25 lecture hours, (Formerly Fire Technology 150L)
ADVISORY: Eligibility for English 1A recommended.
Skills and knowledge needed for the entry level professional instructor to perform his or her duties safely, effectively, and competently. The curriculum is based on the 2012 edition of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications. At the end of this course, candidates for Instructor I certification will be able to teach and deliver instruction from a prepared lesson plan utilizing instructional aids and evaluation instruments. The Instructor I will also be able to adapt a lesson plan and complete the reporting requirements to the local jurisdiction. (A, CSU)

## 130A BASIC FIRE ACADEMY - PART 1

13 units, 8 lecture hours, 14.4 lab hours
PREREQUISITE: Valid Public Safety First Aid and CPR course as defined by California Health \& Safety Code, Section 1797.182. Valid EMT-B National Registry Certification. Initial PT Test (25 push-ups, 35 sit-ups, 15 minute 1.5 mile run). Completion of Fire Technology 1 or equivalent.

Skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications, the 2012 edition of NFPA 1051 Standard for Wildand 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)
PREREQUIIITE: Fire Technology 150D or equivalent.
Provide emergency personnel with information on the three elements of wildand fire behavior including fuel, weather, and topography, elements of the Incident Command System with an emphasis on Incident Action Planning, and duties and responsibilities of the Strike Team leader. I-Zone firefighting as it relates to the communications process, the elements of size-up, and the key components of a report on conditions. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)

## 150N INSTRUCTOR II INSTRUCTIONAL DEVELOPMENT

2 units, 8.4 lecture hours, ( 5 weeks)
PREREQUISITE: Fire Technology 150L
This course provides the skills and knowledge needed for the intermediate level professional instructor to perform his or her duties safely, effectively, and competently. The curriculum is based on the 2012 edition of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications and the 2012 edition of NFPA 1403 Standard on Live Fire Training Evolutions. At the end of this course, candidates for Instructor Il certification will be able to develop lesson plans and evaluation instruments, teach and deliver instruction, and evaluate and coach other instructors. The Instructor II will also be able to analyze resources and formulate a program budget. (A)

## 160A CONFINED SPACE RESCUE TECHNICIAN 1 unit, 0.56 lecture hour, 1.67 lab hours, (Pass/No Pass) <br> PREREQUISITE: Fire Technology 130B. Successful completion

 of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.This course is an intensive hands-on training program that will prepare you to respond to confined space emergencies. This course of instruction prepare the student in identifying confined spaces and permit-required confined spaces, the hazards associated with permit required confined spaces, target industries and hazards, state and federal regulations, components of a rescue operation, and the roles and responsibilities of the rescue team. (A)

## 160B RESCUE SYSTEMS 1

## 0.5 unit, 0.22 lecture hour, 2.01 lab hours,

 (Pass/No Pass)PREREQUISITE: Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Key topics include: Team organization, rescue, and environmental considerations, use of ropes, knots rigging and pulley systems, descending, rappelling, and belaying tools and techniques, subsurface rescue techniques, use of cribbing, wedges, cutting/prying and hydraulic tools, use of fire service ladders in specialized rescue situations, and day and night simulated rescue exercises. (A)

## 200 ADVANCED COMPANY/CHIEF OFFICER

0.3-2.5 units, 1-8 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire 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 curriculum is based on the general knowledge and skill requirements of the following National Fire Protection Association Standards. 1001 Standard for Professional Firefighter Qualifications, 1021: Standard for Fire Officer Professional Qualifications, 1026: Standard for Incident Management Personnel Professional Qualifications, 1250: Recommended Practice in Fire and Emergency Service Organization Risk Management, 1500: Standard on Occupational Safety and Health Program.

## 201 ADVANCED APPARATUS DRIVER/ OPERATOR

## 0.5-3 units, 2-10 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/ Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it's limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

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 FIREFIGHTER

0.5-3 units, 2-10 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wild land 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 wildand response and suppression methods, have the ability to don and doff wild land personal protective equipment and know its'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 wildand 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.

## 222A FIREFIGHTER II PART A

## 2 units, 1.87 lecture hours, 0.47 lab hour

PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Provides the skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications. The five overarching themes of the California State Fire Fighter II curriculum are: general knowledge germane to the profession, fire department communications, fireground operations, rescue operations, and prevention, preparedness, and maintenance.

## 222B FIREFIGHTER II PART B

## 3 units, 2.7 lecture hours, 1.79 lab hours

PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Provides the skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications. The five overarching themes of the California State Fire Fighter II curriculum are: general knowledge germane to the profession, fire department communications, fireground operations, rescue operations, and prevention, preparedness, and maintenance.

## 230A FIRE APPARATUS DRIVER OPERATOR 1A

## 1 unit, 0.88 lecture hour, 1.35 lab hours,

 (Pass/No Pass)PREREQUISITE: Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides information on fire apparatus preventive maintenance and driving/operating. Topics include routine tests, inspections, and servicing functions, operate, back, maneuver, and turn a fire apparatus in a variety of conditions; and operate all fixed systems and equipment on a fire apparatus. This course is based on the 2014 edition of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications. This course fulfills the requirements for a Class C Firefighter Endorsement.

## 230B FIRE APPARATUS DRIVER OPERATOR 1B

 1 unit, 0.89 lecture hour, 1.34 lab hours, (Pass/No Pass)PREREQUISITE: Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides information on pumping apparatus preventive maintenance and operations. Topics include routine tests, inspections, and servicing functions; producing hand, master, and foam fire streams, relay pump operations; and supplying water to fire sprinkler and standpipe systems. This course is based on the 2014 edition of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications.

## 230C FIRE APPARATUS DRIVER/OPERATOR AERIAL APPARATUS

1.5 units, 1.13 lecture hours, 1.1 lab hours, (Pass/No Pass)
PREREQUISITE: Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides information on aerial apparatus preventive maintenance and operations. Topics include routine tests, inspections, and servicing functions on the systems and components unique to an aerial apparatus; maneuvering, positioning, and stabilizing an aerial apparatus; maneuvering, positioning, and lowering the aerial device; and deploying and operating an elevated master stream. This course is based on the 2014 edition of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications.

## 230D FIRE APPARATUS DRIVER/OPERATOR WATER TENDER

0.5 unit, 0.36 lecture hour, 1.42 lab hours, (Pass/No Pass)
PREREQUISITE: Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides information on water tender preventive maintenance and operations. Topics include routine tests, inspections, and servicing functions unique to a water tender; maneuvering and positioning a water tender at a water shuttle fill site; and establishing, maneuvering, and positioning at a water shuttle dumpsite. This course is based on the 2014 edition of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications.

## 230E FIRE APPARATUS DRIVER/OPERATOR WILDLAND FIRE APPARATUS <br> 0.5 unit, 0.25 lecture hour, 1.09 lab hours, (Pass/No Pass) <br> PREREQUISITE: Fire Technology 130B. Successful completion

 of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.This course provides information on preventive maintenance and operation of a wildland fire apparatus. Topics include routine tests, inspections, and servicing functions on the systems and components unique to wildland fire apparatus, and operating a wildland fire apparatus and producing an effective fire stream. This course is based on the 2014 edition of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications.

## 233 ADVANCED FIREFIGHTER CONTINUING EDUCATION

0.4-1 unit, 1.34-4.45 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2001 or 2013 Firefighter 1 curriculum or IFSAC or PROBOARD Firefighter I curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it's limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

Satisfies annual mandatory continuing education requirements of local Fire Agencies, Fresno County Health Department, the California State Fire Marshals Office, and appropriate sections of the California Code of Regulations; may be offered in seminar, lecture, and/or lab format; specific course deliver method to be determined by each respective agency.

## 240A FIRE INSPECTOR 1A

1 unit, 0.93 lecture hour, 0.41 lab hours, (Pass/No Pass)

PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides students with a basic knowledge of the roles and responsibilities of a Fire Inspector I including legal responsibilities and authority, codes and standards, the inspection process, confidentiality and privacy requirements, and ethical conduct, and administrative tasks including preparing inspection reports, recognizing the need for a permit or plan review, investigating common complaints, and participating in legal proceedings.

## 240B FIRE INSPECTOR 1B

1 unit, 1.2 lecture hours, 0.14 lab hours, (Pass/No Pass)
PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides students with a basic knowledge of fire and life safety aspects related to the roles and responsibilities of a Fire Inspector I including building construction, occupancy classifications, occupancy load, means of egress, hazardous conditions, fire growth potential, fire flow, and emergency planning and preparedness measures.

## 240C FIRE INSPECTOR 1C

1 unit, 1.34 lecture hours, (Pass/No Pass)
PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides students with a basic knowledge of field inspection roles and responsibilities of a Fire Inspector I including basic plan review, emergency access for an existing system, hazardous materials, and the operational readiness of fixed fire suppression systems, existing fire detection and alarm systems, and portable fire extinguishers.

## 240D FIRE INSPECTOR 1D

0.5 unit, 0.89 lecture hour, (Pass/No Pass)

PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides students with a basic knowledge of a Fire Inspector's field inspection roles and responsibilities specific to California including tents, canopies, and temporary membrane structures; fireworks and explosives; and wildland urban interface environments.

## 260A CHIEF FIRE OFFICER 3A

1 unit, 0.85 lecture hour, 0.6 lab hour, (Pass/ No Pass)
PREREQUISITE: Fire Technology 130B, 223, 224, 225, 226, and 227. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides students with a basic knowledge of the human resources requirements related to the roles and responsibilities of a Chief Fire Officer including developing plans for providing employee accommodation, developing hiring procedures, establishing personnel assignments, describing methods of facilitating and encouraging professional development, developing an ongoing education training program, developing promotion procedures, developing proposals for improving employee benefits, and developing a measurable accident and injury prevention program.

## 260B CHIEF FIRE OFFICER 3B

## 0.5 unit, 0.5 lecture hour, 0.5 lab hour, (Pass/No Pass)

PREREQUISITE: Fire Technology 130B, 223, 224, 225, 226, and 227. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides students with a basic knowledge of the budgeting requirements related to the roles and responsibilities of a Chief Fire Officer including developing a budget management system, developing a division or departmental budget, and describing the process for ensuring competitive bidding.

## 260C CHIEF FIRE OFFICER 3C

1 unit, 0.84 lecture hour, 0.5 lab hour, (Pass/ No Pass)
PREREQUISITE: Fire Technology 130B, 223, 224, 225, 226, and 227. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides students with a basic knowledge of the administration requirements related to the roles and responsibilities of a Chief Fire Officer including directing a department record management system, analyzing and interpreting records and data, developing a model plan for continuous organizational improvement, developing a plan to facilitate approval, preparing community awareness programs, and evaluating the inspection program of the AHJ.

## 260D CHIEF FIRE OFFICER 3D

0.5 unit, 0.82 lecture hour, 0.52 lab hour, (Pass/No Pass)
PREREQUISITE: Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides students with a basic knowledge of the emergency service requirements related to the roles and responsibilities of a Chief Fire Officer including developing a plan for the integration of fire services resources, developing an agency resource contingency plan, evaluating incident facilities, supervising multiple resources, developing and utilizing an incident action plan, obtaining incident information to facilitate transfer of command, developing and conducting a post-incident analysis, and maintaining incident records.

## 261 EMERGENCY MEDICAL TECHNICIAN 1

 REFRESHER1 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.


#### Abstract

265 I-300, INTERMEDIATE ICS 1 unit, 1.34 lecture hours, (Pass/No Pass) PREREQUISITE: Possession of a I-200 Basic ICS certificate. ICS fundamentals review; incident/event assessment and agency guidance in establishing incident objectives; unified command; incident resource management; the planning process; demobilization; transfer of command; close out. One of the California Fire Service Training and Education System classes needed for Fire Officer certification.


## 269 ADVANCED FIREFIGHTER TOPICS

0.1-2 units, 1-40 lecture hours, 1-60 lab hours, (1-18 weeks), (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Currently employed by a fire agency.
Satisfies mandatory yearly requirements of the local fire agency, Fresno County Health Department, the California State Fire Marshal's Office, and appropriate sections of the California Code of Regulations; may be offered in seminar, lecture, and/or lab format; course content to be determined by the respective agencies.

## FOOD AND NUTRITION (FN)

## 1 PRINCIPLES OF FOOD PREPARATION

3 units, 2 lecture hours, 3 lab hours, (Formerly Home Economics 1)
ADVISORY: Eligibility for English 1A recommended. A working knowledge of basic arithmetic is recommended.

Application of food science principles with emphasis on ingredient function and interaction, food preparation techniques, sensory evaluation standards, food safety and sanitation, and nutrient composition of food. (C-ID NUTR 120) (A, CSU)

## 2 ADVANCED FOOD PREPARATION

3 units, 1.5 lecture hours, 4.5 lab hours
PREREQUISITE: Food and Nutrition 1.
Advanced food preparation techniques. Emphasizes proper food handling, sanitation, plating, and balance in menus. (A, CSU)

## 35 NUTRITION AND HEALTH

3 units, 3 lecture hours, (Formerly Home
Economics 60)
ANTI-REQUISITE: Food and Nutrition 40 . If Food and Nutrition 40 has been taken for credit, Food and Nutrition 35 cannot be taken. Subjects are too similar. ADVISORY: Eligibility for English 1A recommended.

Relationship of diet to physical and emotional health; nutrients; diet patterns throughout the life cycle. Optimal nutrition to reduce the risks of cancer, heart disease, allergies, and other diseases. Social, psychological, and cultural 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 1 A recommended.
The relationship between nutrition and various contemporary health issues affecting women. Significance of nutrition as it relates to the health of women during specific stages of the life cycle. Current trends and research. (A, CSU)

## 45 THERAPEUTIC DIETS

3 units, 3 lecture hours, (Formerly Home Economics 5)
PREREQUISITE: Food and Nutrition 40. ADVISORY: Food Service Management 19. Eligibility for English 1 A 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 enroll ment in Food Service Management 19 recommended.

Current methods of supervision and leadership which are applicable to the food service industry. Methods and techniques of recruitment, selection, training and evaluation of personnel. Record maintenance, enforcement of safety and sanitary standards and supervision of food service employees. (A, CSU)

## 15 FOOD PRODUCTION MANAGEMENT

2 units, 2 lecture hours, (Formerly Dietetic Services 15)
ADVISORY: Food Service Management 19 and 35. Eligibility for English 1 A recommended. A working knowledge of basic arithmetic is recommended.

Effective management of time, staff, equipment in quantity food preparation; supervisor responsibilities. Standards and criteria, menu planning, and systems of productions. (A, CSU)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

## 1-8 units

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to food service management. Collaborative learning objectives established specific to food service management. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester, 16 units total. Orientation hours may be required. (A, CSU)

[^4]35 FOOD SERVICES, SANITATION, SAFETY AND EOUIPMENT
2 units, 2 lecture hours, (Formerly Dietetic
Services 35)
ADVISORY: Eligibility for English 1A recommended.
Food service employees' role in preventing foodborne illness. Supervisor's responsibilities in maintaining standards of health and safety. Selection and use of food service equipment for optimum safety and sanitation, and to meet federal, state and local regulations. Exam given for the National Restaurant Association ServSafe certificate. (A, CSU)

## 38 QUANTITY FOOD PREPARATION

3 units, 1.5 lecture hours, 4.5 lab hours, (Formerly Dietetic Services 58)
PREREQUISITE: Food and Nutrition 1. ADVISORY: Food Service Management 35 . Eligibility for English 1A recommended. A working knowledge of basic arithmetic is recommended.

Quantity food preparation with emphasis on recipe standardization, use of equipment and time, application of the principles of sanitation and safety, and the attractive service of food. (A, CSU)

## 144 PRESENTING SERVICE FOR FOOD SERVICE PROFESSIONALS

2 units, 2 lecture hours, (Formerly Food Service Management 44)<br>ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R or 180RW recommended. Techniques, attitude, education and demeanor required for successful food service operations. (A)

## 146 ELEMENTARY FOOD SERVICE COMPUTATION I

1.5 units, 1.5 lecture hours, (Formerly Food Service Management 46)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R or 180RW recommended. A working knowledge of basic arithmetic is recommended.

Basic math principles used daily in the food service and hospitality industry. Mathematical principles used in commercial food production and the application of these computational skills to food service. Word problems and examples exclusive to food service including the study of recipe conversion and yields, production formulas, weights and measures, the metric system and recipe and food cost analysis. (A)

## 147 ELEMENTARY FOOD SERVICE COMPUTATION II

1.5 units, 1.5 lecture hours, (Formerly Food

Service Management 47)
PREREQUISITE: Food Service Management 146. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R or 180RW recommended.

Basic math principles used daily in the food service and hospitality industry. Mathematical principles used in commercial food production and the application of these computational skills to food service. Word problems and examples exclusive to food service including the study of recipe conversion and yields, production formulas, weights and measures, the metric system and recipe and food cost analysis. (A)

## 162 MENU PLANNING FOR CHILD NUTRITION 3 units, 3 lecture hours, (Formerly Food Services 62 and Food Service Management 62) <br> ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R or 180RW recommended. <br> Overview of menu planning for child nutrition programs including menu planning options, nutrition standards, menu writing, student preferences, marketing and evaluation. Procedures for developing standardized products, budgetary controls, and evaluating procurement and delivery systems. Meets Federal, State, and Local Standards. (A)

## FOREIGN LANGUAGES

## AMERICAN SIGN LANGUAGE (ASL)

## 1 BEGINNING AMERICAN SIGN LANGUAGE

4 units, 4 lecture hours, (Formerly
American Sign Language 1A)
ADVISORY: Eligibility for English 1A recommended.
First-semester American Sign Language as used by Deaf people in America and parts of Canada. An introduction to the basic vocabulary, grammar, and culture of the Deaf community. The students will also be introduced to the literary and artistic contributions of this culture. Designed for students with no knowledge of ASL. (A, CSU-GE, UC, I)

[^5]Second-semester American Sign Language and its usefulness as a means of communication with the deaf and hard of hearing. More in-depth information on the culture of the deaf community and the literary and artistic contribution of this culture. (A, CSU-GE, UC, I)

## 3 INTERMEDIATE AMERICAN SIGN LANGUAGE

4 units, 4 lecture hours, (Formerly
American Sign Language 2A)
PREREQUISITE: American Sign Language 2 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Third semester American Sign Language and its usefulness as a means of communication with the deaf and hard of hearing. An introduction to the culture of the Deaf community and the literary and artistic contributions of this culture. (A, CSU-GE, UC, I)

## 4 HIGH-INTERMEDIATE AMERICAN SIGN LANGUAGE <br> 4 units, 4 lecture hours, (Formerly <br> American Sign Language 2B) <br> PREREQUISITE: American Sign Language 3 or equivalent. ADVISORY: Eligibility for English 1A recommended. <br> Fourth semester American Sign Language. A formal method of thinking, organizing, receiving, and sending non-verbal messages in American Sign Language. The cultural context of the Deaf community for which American Sign Language serves as the primary language. (A, CSU-GE, UC, I)

## 5 DEAF CULTURE

3 units, 3 lecture hours
PREREQUISITE: American Sign Language 2 or equivalent. ADVISORY: Eligibility for English 1A recommended.

An in-depth study of Deaf culture and the deaf community which will help students understand cultural values, language, identity, rules of interaction, and traditions. (A, CSU-GE)

## 6 STRUCTURE OF AMERICAN SIGN LANGUAGE

## 3 units, 3 lecture hours

PREREQUISITE: American Sign Language 3 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Examination of the parts of a sign; building words in American Sign Language; sentence types(questions, statements, relative clauses, etc.) the meaning and issue of iconicity, and sentence structure (syntax). Other grammatical features of American Sign Language will include, classifiers, verb modulations and aspects, and the role of facial expression, mouth morphemes, body orientation, and eye gaze. (A, CSU, UC)

## 7 DEAF HISTORY

3 units, 3 lecture hours
PREREQUISITE: American Sign Language 2 or equivalent. ADVISORY: Eligibility for English 1A recommended.

An examination of the historical eras impacting Deaf people's lives and the evolution of deaf education and ASL from pathological/ cultural views. (A, CSU-GE, UC, I)

## 8 AMERICAN SIGN LANGUAGE

LITERATURE/FOLKLORE

## 3 units, 3 lecture hours

PREREQUISITE: American Sign Language 2. ADVISORY: Eligibility for English 1 A 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, communication process, responsibilities and environments in which Sign Language interpreters are involved, as well as the professional licensure and assessment within the profession. (A, CSU)

## 21 AMERICAN SIGN LANGUAGE TO ENGLISH TRANSLATION

3 units, 3 lecture hours
PREREQUISITE: American Sign Language 3 or equivalent. ADVISORY: Eligibility for English 1 A recommended.

Introduction to the cognitive processing skills and techniques used to translate American Sign Language to English. (A, CSU, UC)

## 22 ENGLISH TO AMERICAN SIGN LANGUAGE TRANSLATION

## 3 units, 3 lecture hours

PREREQUISITE: American Sign Language 3 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Introduction to the basic translation skills from English to American Sign Language that focus on message analysis, transfer and reformulation without the pressures of simultaneity. (A, CSU, UC)

ARMENIAN (ARMEN)

## 1 BEGINNING ARMENIAN

5 units, 5 lecture hours, (Formerly
Armenian 1A)
ADVISORY: Eligibility for English 1A recommended.
First semester beginning Armenian listening, speaking, grammar, writing, reading and vocabulary. Designed for students who have no knowledge of Armenian. (A, CSU-GE, UC, I)

## 2 HIGH-BEGINNING ARMENIAN

5 units, 5 lecture hours, (Formerly
Armenian 1B)
PREREQUISITE: Armenian 1 or two years of high school Armenian or equivalent. ADVISORY: Eligibility for English 1A recommended.

Second semester Armenian listening, speaking, grammar, writing, reading and vocabulary. (Offered infrequently) (A, CSU-GE, UC, I)

## CHINESE (CHIN)

## 1 BEGINNING CHINESE

5 units, 5 lecture hours, (Formerly
Chinese 1A)
ADVISORY: Eligibility for English 1A recommended.
First semester Mandarin Chinese listening/speaking, reading/ writing, vocabulary, and grammar. Designed for students who have no knowledge of Chinese. (A, CSU-GE, UC, I)

## 2 HIGH-BEGINNING CHINESE

5 units, 5 lecture hours, (Formerly
Chinese 1B)
PREREQUISITE: Chinese 1 or two years of high school Chinese or equivalent. ADVISORY: Eligibility for English 1A recommended.

Second semester Mandarin Chinese listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)

FRENCH (FRENCH)

## 1 BEGINNING FRENCH

5 units, 5 lecture hours, (Formerly French 1A)
ADVISORY: Eligibility for English 1A recommended.
First semester French listening, speaking, grammar, writing, reading, and vocabulary. Designed for students who have no knowledge of French. (A, CSU-GE, UC, I)

## 2 HIGH-BEGINNING FRENCH

5 units, 5 lecture hours, (Formerly
French 1B)
PREREQUISITE: French 1 or two years of high school French or equivalent. ADVISORY: Eligibility for English 1A recommended.

Second semester French listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)

## 3 INTERMEDIATE FRENCH

5 units, 5 lecture hours, (Formerly

## French 2A)

PREREQUISITE: French 2 or three years of high school French or equivalent (Extensive living experience with the language). ADVISORY: Eligibility for English 1A recommended.

Third semester French listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)

## GERMAN (GERMAN)

## 1 BEGINNING GERMAN

5 units, 5 lecture hours, (Formerly
German 1A)
ADVISORY: Eligibility for English 1A recommended.
First semester German listening, speaking, grammar, writing, reading, and vocabulary. Designed for students who have no knowledge of German. (A, CSU-GE, UC, I)

```
2 HIGH-BEGINNING GERMAN
5 units, 5 lecture hours, (Formerly German 1B)
PREREQUISITE: German 1 or two years of high school German or equivalent. ADVISORY: Eligibility for English 1A recommended.
Second semester German listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)
```


## HMONG (HMONG)

## 1 BEGINNING HMONG

5 units, 5 lecture hours, (Formerly Hmong 1A)
ADVISORY: Eligibility for English 1A recommended.
First semester Hmong listening, speaking, grammar, writing, reading, and vocabulary. Designed for students who have no knowledge of Hmong. (A, CSU-GE, UC, I)

## 2 HIGH-BEGINNING HMONG

5 units, 5 lecture hours, (Formerly
Hmong 1B)
PREREQUISITE: Hmong 1 or two years of high school Hmong or equivalent. ADVISORY: Eligibility for English 1A recommended.

Second semester Hmong listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)

## JAPANESE (JAPAN)

## 1 BEGINNING JAPANESE

5 units, 5 lecture hours, (Formerly Japanese 1A)
ADVISORY: Eligibility for English 1A recommended.
First semester Japanese listening, speaking, grammar, writing, reading and vocabulary. Designed for students who have no knowledge of Japanese. (A, CSU-GE, UC, I)

## 2 HIGH-BEGINNING JAPANESE

5 units, 5 lecture hours, (Formerly Japanese 1B)
PREREQUISITE: Japanese 1 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Second semester Japanese listening, speaking, grammar, writing, reading and vocabulary. (A, CSU-GE, UC, I)

## PORTUGUESE (PORT)

## 1 BEGINNING PORTUGUESE

## 5 units, 5 lecture hours

ADVISORY: Eligibility for English 1A recommended.
First semester Portuguese listening, speaking, grammar, writing, reading, and vocabulary, Portuguese and Brazilian cultures. Designed for students who have no knowledge of Portuguese. (A, CSU-GE, UC, I)

## 2 HIGH-BEGINNING PORTUGUESE

## 5 units, 5 lecture hours

PREREQUISITE: Portuguese 1, or two years of high school Portuguese or equivalent. ADVISORY: Eligibility for English 1A recommended.

Second semester Portuguese listening, speaking, grammar, reading, writing, and vocabulary, Portuguese and Brazilian culture. (A, CSU-GE, UC, I)

## SPANISH (SPAN)

## 1 BEGINNING SPANISH

5 units, 5 lecture hours, (Formerly Spanish 1A)
ADVISORY: Eligibility for English 1A recommended.
First semester Spanish listening, speaking, grammar, writing, reading, and vocabulary. Designed for students who have no knowledge of Spanish. Not open to students qualified for or with credit in Spanish 3NS or 4NS. (C-ID SPAN 100) (A, CSU-GE, UC, I)

## 2 HIGH-BEGINNING SPANISH

5 units, 5 lecture hours, (Formerly Spanish 1B)
PREREQUISITE: Spanish 1 or two years of high school Spanish or equivalent. ADVISORY: Eligibility for English 1A recommended.

Second semester Spanish listening, speaking, grammar, reading, writing, and vocabulary. Not open to students qualified for or with credit in Spanish 3NS or 4NS. (C-ID SPAN 110) (A, CSU-GE, UC, I)

## 2NS PREPARATORY SPANISH FOR NATIVE SPEAKERS

5 units, 5 lecture hours
ADVISORY: Eligibility for English 1A recommended. Native Spanish speaking proficiency or appropriate high beginning level as assessed by instructor.

Designed for the student with a basic/heritage life experience using the Spanish language. Development of reading, writing, speaking and listening skills and culture in Spanish. Not open to students with credit in Spanish 2. (A, CSU-GE, UC, I)

## 3 INTERMEDIATE SPANISH

5 units, 5 lecture hours, (Formerly Spanish 2A)
PREREQUISITE: Spanish 2 or three years of high school Spanish or equivalent (Extensive living experience with the language). ADVISORY: Eligibility for English 1A recommended.

Third semester Spanish listening, speaking, grammar, reading, writing, and vocabulary. (C-ID SPAN 200) (A, CSU-GE, UC, I)

## 3NS INTERMEDIATE SPANISH FOR SPANISH SPEAKERS

5 units, 5 lecture hours, (Formerly
Spanish 21)
PREREQUISITE: Spanish 2NS or Spanish native speaker proficiency, or the equivalent intermediate level as assessed by the instructor. ADVISORY: Eligibility for English 1A recommended.

Designed for the student with a basic life experience using the Spanish language. Development of correct grammar, correction of speech habits, and improving vocabulary and skills in reading and writing. Hispanic literature and culture. Conducted in Spanish. Not open to students with credit in Spanish 3 . (C-ID SPAN 220) (A, CSU-GE, UC, I)

## 4 HIGH-INTERMEDIATE SPANISH <br> 5 units, 5 lecture hours, (Formerly Spanish 2B)

PREREQUISITE: Spanish 3 or 3 NS 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 <br> 5 units, 5 lecture hours, (Formerly <br> Spanish 22)

PREREQUISITE: Spanish 3NS or equivalent or basic speaking knowledge of Spanish. ADVISORY: Eligibility for English 1 A 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. <br> 4 units, 4 lecture hours, (Formerly Spanish 3A) <br> PREREQUISITE: Spanish 4 or 4NS. ADVISORY: Eligibility for English 1A recommended. <br> 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 4NS. ADVISORY: Eligibility for English 1A recommended.

A selection of Hispanic short stories, culture and civilization. Continued development of Spanish language skills in reading, writing, and speaking. Reading and discussing articles and short stories and viewing and discussing films. Includes presentation of oral and written reports. Emphasis on Latin America. (A, CSU-GE, UC, I)

## 7 ADVANCED SPANISH: COMPOSITION AND GRAMMAR

## 4 units, 4 lecture hours

PREREQUISITE: Spanish 4 or 4NS. ADVISORY: Eligibility for English 1A recommended.

In depth development of Spanish writing and grammar. Designed for advanced students of Spanish who want to improve their witing skills. (A, CSU-GE, UC, I)

## 8 ADVANCED SPANISH CONVERSATION

4 units, 4 lecture hours
PREREQUISITE: Spanish 4 or 4NS. ADVISORY: Eligibility for English 1A recommended.

In-depth development of Spanish oral skills. Designed for advanced students of Spanish who want to improve their ability to communicate orally with people in different language situations. (A, CSU, UC)

## 9 SPANISH BUSINESS AND CULTURE

## 4 units, 4 lecture hours

PREREQUISITE: Spanish 4 or Spanish 4NS, or equivalent (extensive living experience with the language.). ADVISORY: Eligibility for English 1A recommended; Spanish 7 and Business Administration 10 recommended.

A Spanish business and culture course providing the student with the vocabulary and discourse skills necessary to function effectively in a Spanish speaking commercial environment. The course will develop the student's geographic literacy and cultural understanding of Latin America and will include translation and interpretation activities, cross-cultural communication skills, and case study analysis. (A, CSU-GE, UC)

## 41 INTRODUCTION TO POETRY IN SPANISH

## 4 units, 4 lecture hours

PREREQUISITE: Spanish 4 or Spanish 4NS or equivalent (experience using Spanish at home, work or abroad). ADVISORY: Eligibility for English 1A recommended.

Provides the first steps to Spanish metrics, rhyme, and rhythm. It also covers periods of poetry from Medieval Spain to contemporary Spain and Latin America. (A, CSU-GE, UC, I)

## 42 HISPANIC AMERICAN CULTURE <br> 4 units, 4 lecture hours, (Formerly Spanish 17)

PREREQUISITE: Spanish 4 or 4NS or equivalent (Experience using Spanish at home, work, or abroad). ADVISORY: Eligibility for English 1A recommended.

Study of the most important cultural and political issues in Hispanic American civilization and culture from Columbus to the present day. Chronicles, essays, and public speeches provide the main texts and sources of information for discussion. (A, CSU-GE, UC, I)

## FRENCH

SEE FOREIGN LANGUAGES

## GEOGRAPHY (GEOG)

## 1 PHYSICAL GEOGRAPHY

4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A recommended.
The Earth's dynamic physical systems and processes. Topics include weather, climate, geomorphology, soils, and the biosphere. Emphasis on interrelationships among systems and processes and their resulting patterns and distributions. Tools of geographic inquiry include maps, remote sensing, graphic data, and models. (C-ID GEOG 110) (A, CSU-GE, UC, I)

## 2 CULTURAL GEOGRAPHY

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Survey of basic concepts, theories, and patterns in human and cultural geography. Emphasis is placed on spatial patterns of culture, the interaction between culture and the physical environment, and cultural change. Specific topics may include reading and interpretation of maps, human impacts on the environment, agriculture and food systems, cultural landscapes, urban geography, geography of religion, gender and sexuality, geopolitics, and globalization. (C-ID GEOG 120) (A, CSU-GE, UC, I)

## 4A WORLD GEOGRAPHY <br> 3 units, 3 lecture hours, (Formerly Geography 4)

ADVISORY: Eligibility for English 1A recommended.
Introductory survey of world regional geography. Emphasis is placed on cultural, economic, political, and physical characteristics of regions, and the influence of geography on population patterns, use of natural resources, and geopolitical relationships amongst countries. Covers Europe, Russia and the Post-Soviet region, Sub-Saharan Africa, North Africa and Southwest Asia, South Asia, Southeast Asia, and East Asia. (C-ID GEOG $125=$ GEOG 4A +4 B ) (A, CSU-GE, UC, I)

## 4B WORLD GEOGRAPHY

3 units, 3 lecture hours, (Formerly Geography 5)
ADVISORY: Eligibility for English 1A recommended. Introductory survey of world regional geography. Emphasis is placed on cultural, economic, political, and physical characteristics of regions, and the influence of geography on population patterns, use of natural resources, and geopolitical relationships amongst countries. Covers North America, the Caribbean, Latin America, Australia and Oceania. (C-ID GEOG $125=$ GEOG 4A +4 B ) (A, CSU-GE, UC, I)

## 7 PHYSICAL GEOGRAPHY: EARTH'S SURFACE

4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1 A recommended. Introduction to Earth's dynamic physical systems and geomorphic processes, including tectonics, volcanism, orogenesis, denudation, and the interactions between the atmosphere, hydrosphere, lithosphere, and biosphere. Emphasis on understanding interconnections among systems, the resultant spatial patterns, and the relevance of physical geography to environmental issues. Lab includes topographic map interpretation, GIS and remote sensing, rock and mineral ID, and understanding geomorphological processes. (A, CSU-GE, UC, I)

## 8 PHYSICAL GEOGRAPHY: WEATHER AND CLIMATE

4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1 A recommended.
Introduction to atmospheric processes, energy and moisture exchanges, atmospheric pressure, global atmospheric and oceanic circulation patterns, precipitation processes, weather systems, and severe weather. Analysis of world, regional, and local climate systems, emphasizing an understanding of the mechanisms and consequences of global climate change. Course incorporates lab work focusing on observation and analysis of atmospheric data using charts. meteorological instruments and their use, weather maps, and radar and satellite imagery. (C-ID GEOG 130) (A, CSU-GE, UC, I)

## 10 INTRODUCTION TO GIS

3 units, 2.5 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended. Computer Information Technology 15 is desirable.

Introduction to the fundamental concepts of Geographic Information Systems (GIS) including familiarization with commonly used GIS software, data sources, organization and input of data, display of spatial data, querying and methods of data analysis, and real-world applications of GIS to problem-solving. (A, CSU, UC)

## 12 INTRODUCTION TO GLOBAL POSITIONING

 SYSTEMS (GPS)1 unit, 1 lecture hour, 0.5 lab hour
ADVISORY: Eligibility for English 1A recommended.
Introductory course in the principles and operation of GPS (Global Positioning Systems). Designed to develop basic competency for a variety of professional or recreational uses. Covers the basic principles, functioning, potential errors and applications of GPS. Use of GPS receivers required. Prepares students for advanced coursework in the GPS or for coursework in Geographic Information Systems. (A, CSU, UC)

## 18 INTRODUCTION TO REMOTE SENSING

3 units, 2.5 lecture hours, 2 lab hour
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Introduction to remote sensing of the Earth. History and physical principles on which remote sensing is based, sensors and their characteristics, image data sources and image acquisition, classification and interpretation of images, and techniques of analysis. Exploration of practical applications of remote sensing. (A, CSU, UC)

## 20 GEOGRAPHY OF CALIFORNIA

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Course covers California's physical, cultural, and regional geography. Content includes geology and geomorphology, climate, vegetation, water resources, and natural hazards in the state; Native American and Spanish settlement; statehood and 19th century settlement; contemporary patterns of population, migration, ethnic diversity, and political and economic geography. (C-ID GEOG 140) (A, CSU-GE, UC, I)

## 30 REGIONAL FIELD STUDIES

1-6 units, 1-3 lecture hours, 0-9 lab hours, (Repeats = 3)
ADVISORY: Eligibility for English 1A recommended.
Field study of the geography of selected regions, covering geographical topics. Physical and cultural processes, characteristics and landscapes will be observed and analyzed. Content will vary by region and may include current geographical trends and/or issues in the subdisciplines of Geography, such as environmental issues, biogeography, geomorphology, economic geography, etc. (C-ID GEOG 160) (A, CSU, UC approved as a variable topic; evaluation completed by individual campuses atter admission.)

## GEOLOGY (GEOL)

## 1 PHYSICAL GEOLOGY

4 units, 3 lecture hours, 2 lab hours
PREREQUISITE: Mathematics 201. ADVISORY: Eligibility for English 1A recommended.

Introduction to the principles and unifying concepts of earth science including geologic time, formation and internal structure of the Earth, plate tectonics, rock and mineral identification, weathering processes, landforms, earthquakes, volcanic activity, flooding, and groundwater resources. Laboratory exercises will include rock and mineral identification, and interpretation of topographic and geologic maps. Optional fieldtrips to classic geologic locations. (C-ID GEOL 101) (A, CSU-GE, UC, I)

## 2 HISTORICAL GEOLOGY

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to Earth's history using geologic dating techniques, plate tectonics, stratigraphy and the processes that have shaped the global environment. Fossil evidence for the origin and evolution of life, natural selection, and environmental change in shaping both ancient and modern living communities are also presented. Emphasis will be given to North American paleogeography and tectonics. Optional field trips. (C-ID GEOL 110) (A, CSU-GE, UC, I)

## 2L HISTORICAL GEOLOGY LAB

1 unit, 3 lab hours
COREQUIITE: 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, wild life, pest control, and population studies. (A, CSU-GE, UC, I)

## GERMAN

SEE FOREIGN LANGUAGES

## GLOBAL STUDIES (GLST)

## 1 INTRODUCTION TO GLOBAL STUDIES

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Study of the interconnectedness and interdependence of global processes. Review of the complexity of world societies and issues and related policy dilemmas through an interdisciplinary approach. Special attention given to political, economic, social, historical and cultural patterns that mark globalization processes. Included among explored topics are the environment, migration, human rights, peace, conflict, global trade, and economic linkages. (A, CSU, UC, I)

## 2 GLOBAL ISSUES

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduces origins, current status and future trends of major transnational issues. Focus on global governance and responsibilities. Topics can include population trends, economic development, basic human needs, human rights, international conflict and security and environmental concerns. (A, CSU, UC, I)

## GRAPHIC COMMUNICATIONS (GRC)

FORMERLY PRINTING TECHNOLOGY

## 14 ADOBE ACROBAT PROFESSIONAL

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Adobe Acrobat software and others used for the generation of digital documents for the world wide web, cloud storage, paperless business, distribute and print workflows, or inclusion in media productions. Fulfills computer literacy graduation requirement. (A, CSU)

## 15 WEB PAGE DESIGN

4 units, 3 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Adobe Brackets or comparable HTML editor, CSS, and components of Adobe Design Suite with emphasis on graphic design principles and digital photography included in exercises and project work. Skill development in recognition of artwork appropriate for web site design. Students capture images, design, create, and post working web sites using Adobe Creative Cloud. Fulfills computer literacy graduation requirement. (A, CSU, UC)

## 16 WEB DESIGN TECHNIQUES

4 units, 3 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. Graphic Communications 15 recommended.

Techniques, tips, tricks and software products to help the web designer. Opportunities to work with new technologies and methods of deploying content over the Internet. Fulfills computer literacy graduation requirement. (A, CSU, UC)

## 17 ADOBE ILLUSTRATOR

3 units, 2 lecture hours, 3 lab hours, (Formerly Printing Technology 17) ADVISORY: Eligibility for English 1A recommended.
Use Adobe Illustrator to design and create vector images that solve a variety of graphic problems. Hands-on work creating projects for reproduction. Fulfills computer literacy graduation requirement. (A, CSU)

## 20A INTRO TO APPLIED GRAPHICS - ADOBE TOOLS

3 units, 2 lecture hours, 3 lab hours, (Formerly Graphic Communications 20 and Printing Technology 20)
ADVISORY: Eligibility for English 1A recommended.
Overview of graphic communication processes as related to the graphics industry. Terminology, input/output considerations, current trends, and hands-on projects using Adobe Photoshop, Adobe Illustrator, and Adobe InDesign for production operations. Fulfills computer Iiteracy graduation requirement. (A, CSU)

## 20B INTRO TO APPLIED GRAPHICS - MEDIA

 3 units, 2 lecture hours, 3 lab hours, (Formerly Graphic Communications 18) ADVISORY: Eligibility for English 1A recommended. Introductory production methods of graphic communication systems incorporating print media, web design, and video production. Project work explores considerations and limitations of software for output. Units include professional development for the workplace. Fulfills computer literacy graduation requirement. (A, CSU)
## 22 DIGITAL MEDIA

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to digital media. Project work using an assortment of current software. Combine images, audio and video into cross-platform productions. Digital slide shows, image capture, and short video. Fulfills computer literacy graduation requirement. (A, CSU)

## 23 VIDEO EDITING - ADOBE PREMIERE PRO

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Graphic Communications 20B, 27, 32, 320B, 327, or 332. Eligibility for English 1A recommended.

Digital video editing techniques using Adobe Premiere Pro. Fulfills computer literacy graduation requirement. (A, CSU)

## 24A INTRO 2-D ANIMATION WITH ADOBE ANIMATE

3 units, 2 lecture hours, 3 lab hours, (Formerly Graphic Communications 24)
ADVISORY: Eligibility for English 1A recommended.
Use Adobe Animate to author two-dimensional animation. Design and production of interactive media projects. Fulfills computer literacy graduation requirement. (A, CSU, UC)

## 24B INTRO 2-D ANIMATION - HARMONY SOFTWARE

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Use Toon Boom Harmony to author two-dimensional animation. Design and production of interactive media projects. Fulfills computer literacy graduation requirement. (A, CSU)

## 25 CMS WEB DESIGN

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Design, configuration, and implementation of scalable web sites using a content management system. Fulfills computer literacy graduation requirement. (A, CSU)

## 27 DIGITAL VIDEO PRODUCTION

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to digital video production with emphasis on editing techniques. Units include planning, storytelling, vocabulary, camera handling, lighting, sound, and working with professional editing software. Students complete short exercises and create video projects. Fulfills computer literacy graduation requirement. (A, CSU, UC)

## 28 INDEPENDENT STUDY - GRAPHICS

## 1-3 units, 3-9 lab hours

ADVISORY: Eligibility for English 1 A 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

 PUBLISHING3 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 INTERMEDIATE PHOTOSHOP

3 units, 2 lecture hours, 3 lab hours ADVISORY: Eligibility for English 1A recommended.
Adobe Photoshop with emphasis on graphic design and production. Units include production for print, web, and digital media applications. Fulfills computer literacy graduation requirement. (A, CSU, UC)

## 32 VIDEO TECHNIQUES

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Production processes and post-production processes with a focus on technical aspects. Lighting, audio, camera work, and color correction. Fulfills computer literacy graduation requirement. (A, CSU, UC)

## 34 INTRODUCTION TO 3-D ANIMATION

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1 A 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, UC)

## 40A INTERMEDIATE GRAPHIC DESIGN

3 units, 2 lecture hours, 3 lab hours, (Formerly Printing Technology and Graphic Communications 40)
PREREQUISITE: Graphic Communications 39A or permission of instructor. ADVISORY: Eligibility for English 1A recommended.

Advanced principles and methods of graphic communication. Projects incorporate symbols and typography into visual design, exploring interrelationships between the formal elements and symbolic content. Fulfills computer literacy graduation requirement. (A, CSU, UC)

## 41 VISUAL COMMUNICATIONS

3 units, 2 lecture hours, 3 lab hours, (Formerly Printing Technology 41)
ADVISORY: Eligibility for English 1A recommended.
Survey of the significant techniques and examples of visual communication as employed by the mass media, including newspapers, magazines, television, and advertising. Discussion and demonstration of the tools used in analyzing visual communication. Creation and analysis of images for print, web, and video. Fulfills computer literacy graduation requirement. (A, CSU, UC)

## 47 INTRODUCTION TO FOUR DIMENSIONAL DESIGN <br> 3 units, 3 lecture hours <br> ADVISORY: Eligibility for English 1A recommended. <br> Fundamental principles and foundational competencies for digital artists and designers. (A, CSU, UC)

## 51 STORYBOARDING

1 unit, 2 lecture hours, ( 9 weeks)
ADVISORY: Eligibility for English 1A recommended.
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)

## 300A ADOBE ACA CERTIFICATION

0.5-3 lab hours, (Pass/No Pass), (Open

Entry/Open Exit), (Repeats = 3)
ADVISORY: Eligibility for English 1A recommended.
The Adobe Certified Associate coursework provides students an opportunity to demonstrate proficiency in Adobe digital communication tools by passing an industry recognized exam. Preparation for the testing process, environment, and depth of knowledge required to successfully complete the Adobe Certified Associate exam is presented as well as opportunities to pretest.

## 314 ADOBE ACROBAT PROFESSIONAL <br> 2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99) ADVISORY: Eligibility for English 1A recommended. <br> 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.

## 315 WEB PAGE DESIGN

3 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Adobe Brackets or comparable HTML editor, CSS, and 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.

## 316 WEB DESIGN TECHNIQUES

3 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1 A recommended.
Techniques, tips, tricks and software products to help the web designer. Opportunities to work with new technologies and methods of deploying content over the Internet.

## 317 ADOBE ILLUSTRATOR

2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Use Adobe Illustrator to design and create vector images that solve a variety of graphic problems. Hands-on work creating projects for reproduction.

## 320A INTRO TO APPLIED GRAPHICS ADOBE TOOLS

2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Overview of graphic communication processes as related to the graphics industry. Terminology, input/output considerations, current trends, and hands-on projects using Adobe Photoshop, Adobe Illustrator, and Adobe InDesign for production operations.

## 320B INTRO TO APPLIED GRAPHICS - MEDIA

2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Introductory production methods of graphic communication systems incorporating print media, web design, and video production. Project work explores considerations and limitations of software for output. Units include professional development for the workplace.

## 322 DIGITAL MEDIA <br> 2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99) <br> 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.

[^6]
## 324A INTRO TO 2-D ANIMATION WITH ADOBE ANIMATE <br> 2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99) ADVISORY: Eligibility for English 1A recommended. Use Adobe Animate to author two-dimensional animation. Design and production of interactive media projects.

## 324B INTRO TO 2-D ANIMATION HARMONY SOFTWARE

2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Use Toon Boom Harmony to author two-dimensional animation. Design and production of interactive media projects.

## 325 CMS WEB DESIGN

2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Design, configuration, and implementation of scalable web sites using a content management system.

## 327 DIGITAL VIDEO PRODUCTION

2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Introduction to digital video production with emphasis on editing techniques. Units include planning, storytelling, vocabulary, camera handling, lighting, sound, and working with professional editing software. Students complete short exercises and create video projects.

## 330 ADOBE INDESIGN/PROFESSIONAL PUBLISHING <br> 2 lecture hours, 3 lab hours, (Pass/No Pass), <br> (Open Entry/Open Exit), (Repeats = 99)

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.

## 331 INTERMEDIATE PHOTOSHOP

2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Adobe Photoshop with emphasis on graphic design and production. Units include production for print, web, and digital media applications.

## 332 VIDEO TECHNIQUES

2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99) ADVISORY: Eligibility for English 1A recommended.
Production processes and post-production processes with a focus on technical aspects. Lighting, audio, camera work, and color correction.

## 334 INTRODUCTION TO 3-D ANIMATION

2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended. Introduction to 3-D animation using Blender software. Projects dealing with workflow, interface, layouts, objects, lighting, animation, and rendering.

## 339A INTRODUCTION TO GRAPHIC DESIGN

2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Principles and methods of graphic communication. Projects incorporate symbols and typography into visual design, exploring interrelationships between formal elements and symbolic content.

## 340A INTERMEDIATE GRAPHIC DESIGN

2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99) ADVISORY: Eligibility for English 1A recommended.
Advanced principles and methods of graphic communication. Projects incorporate symbols and typography into visual design, exploring interrelationships between the formal elements and symbolic content.

## 341 VISUAL COMMUNICATION

2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Survey of the significant techniques and examples of visual communication as employed by the mass media, including newspapers, magazines, television, and advertising. Discussion and demonstration of the tools used in analyzing visual communication. Creation and analysis of images for print, web, and video.

[^7]
## 351 STORYBOARDING

2 lecture hours, ( 9 weeks), (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99) ADVISORY: Eligibility for English 1A recommended.
Pre-visualization for animation, video, web, and game production. Introduction to media-specific storyboarding processes and techniques.

## 352 ADOBE LIGHTROOM

2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats =99)
ADVISORY: Eligibility for English 1A recommended.
Production digital image management and adjustment with Adobe Lightroom.

## 353 ADOBE AFTER EFFECTS

2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Introduction to motion graphics and video post-processing using Adobe After Effects. Projects incorporate a series of techniques used to create video special effects.

## GUIDANCE STUDIES

SEE COUNSELING

HEALTH INFORMATION TECHNOLOGY (HIT) FORMERLY MEDICAL RECORD TECHNOLOGY

## 1 INTRODUCTION TO HEALTH

## INFORMATION MANAGEMENT

3 units, 3 lecture hours, (Formerly Medical
Record Technology 1)
ADVISORY: Eligibility for English 1A recommended.
Introduction to health care delivery systems, hospital organization, the medical record, the processes of health information management including access, retention, data collection, quantitative and qualitative analysis, and computerized health information systems; accreditation, licensure, and regulatory requirements; the role of the health information management professional. (A, CSU)

## 2 LEGAL ASPECTS OF HEALTH INFORMATION

3 units, 3 lecture hours, (Formerly Medical Record Technology 2)
COREQUISITE: Health Information Technology 1. ADVISORY: Eligibility for English 1A recommended.

Legal basis for the control, use, and release of health information; concepts of consent for treatment; HIPAA privacy and security rules; federal and state laws and regulations governing the handling of special health information; ethical practices in health information; procedures used in responding to requests for health information. (A, CSU)

## 3 QUALITY IMPROVEMENT

2 units, 2 lecture hours, (Formerly Medical Record Technology 3)
PREREQUISITE: Computer Information Technology 15 and Health Information Technology 1. ADVISORY: Eligibility for English 1A recommended.

History and development of quality improvement efforts in health care; quality assessment techniques and processes; software tools for data collection and reporting; roles and responsibilities of individuals involved in quality improvement; medical staff organization; peer review, utilization review, and risk management. (A, CSU)

## 4 DISEASE PROCESS

## 3 units, 3 lecture hours

PREREQUISITE: Health Information Technology 10 and Biology 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 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)

## 16 HEALTHCARE REIMBURSEMENT <br> 2 units, 2 lecture hours

PREREQUISITE: Health Information Technology 1. COREQUISITE: Health Information Technology 6. ADVISORY: Eligibility for English 1A recommended.

Functions and history of healthcare payment systems including insurance plans, government healthcare programs, and managed care; fraud and abuse compliance; revenue cycle management including claims processing, electronic submission, and tools for accurate reimbursement. (A, CSU)

## HEALTH SCIENCE (HLTH)

## 1 CONTEMPORARY HEALTH ISSUES

3 units, 3 lecture hours, (Formerly Health Education 1)
ADVISORY: Eligibility for English 1A recommended.
Contemporary scientific concepts and medical information designed to promote health, prevent disease, increase life span and improve the quality of life involving the cardiovascular system, physical fitness, nutrition, emotional health, human sexuality, sexually transmitted diseases, reproduction and birth control, heredity, substance abuse, cancer, consumer and environmental health and health care systems. (A, CSU-GE, UC)

## 2 FIRST AID AND SAFETY

3 units, 3 lecture hours, (Formerly Health Education 2)
ADVISORY: Eligibility for English 1A recommended.
Basic concepts and skills necessary to give first aid (including cardiopulmonary resuscitation). Satisfies the requirements of the American Red Cross for certification in Adult, Child and Infant Cardiopulmonary Resuscitation and Basic First Aid. (C-ID KIN 101) (A, CSU, UC)

## 3 CONCEPTS IN HEALTH AND FITNESS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Students learn about the different components of physical fitness, cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition as related to healthy living. (C-ID KIN 101) (A, CSU, UC)

## HEATING, VENTILATION, \& AIR CONDITIONING

 (HVAC) - FORMERLY AIR CONDITIONING
## 50 HVAC INTRODUCTION

2 units, 2 lecture hours, 1 lab hour, (Formerly Air Conditioning 50)
ADVISORY: Applied Technology 10, eligibility for English 1 A and Mathematics 201 or Applied Technology 130 recommended.

In HVAC Introduction, students are introduced to basic principles of safety, air conditioning, heating, air distribution and electricity. Students learn theory and application of HVAC technology while practicing HVAC system performance and measurement in the HVAC laboratory. (A, CSU)

## 51 HVAC COMFORT SYSTEMS

## 6.5 units, 5 lecture hours, 5 lab hours,

 (Formerly Air Conditioning 51)ADVISORY: Heating, Ventilation, and Air Conditioning 50 and 53 or concurrent enrollment, Applied Technology 10 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

In HVAC Comfort Systems, students begin building their inventory of HVAC skill-sets. Students learn theory and application of HVAC technology while learning practical skills in the laboratory including safety, cooling and heating systems, electrical distribution, electrical circuitry, test instruments, air distribution, swaging, flaring, soldering and brazing. (A, CSU)

## 52 HVAC SYSTEM COMPONENTS

## 6.5 units, 5 lecture hours, 5 lab hours,

 (Formerly Air Conditioning 52)ADVISORY: Heating, Ventilation, and Air Conditioning 50 and 54 or concurrent enrollment, Applied Technology 10 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

In HVAC Comfort Troubleshooting, students examine HVAC from a component by component perspective, and then how component function affects the HVAC system. Students also assemble an inventory of practical skill-sets relating to safety, alternating current, compressors, refrigerants, oils, leak detection, metering devices, heat pumps, maintenance, furnace venting, sheet metal duct systems, fiberglass duct systems, commercial systems, air quality equipment, and hydronic systems. (A, CSU)

## 53 HVAC COMFORT TROUBLESHOOTING

## 6.5 units, 5 lecture hours, 5 lab hours,

 (Formerly Air Conditioning 53)ADVISORY: Heating, Ventilation, and Air Conditioning 50 and 51 or concurrent enrollment, Applied Technology 10 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

In HVAC Comfort Troubleshooting, students enhance their newfound skills with topics such as safety, fasteners, control circuits, motor, cooling and gas heat, accessories, zoning, VRF systems, hydronics, retail refrigeration, and customer relations. Students also practice skills as they build operating HVAC systems. (A, CSU)

## 54 HVAC SYSTEM PROCESSES

6.5 units, 5 lecture hours, 5 lab hours, (Formerly Air Conditioning 54)
ADVISORY: Heating, Ventilation, and Air Conditioning 50 and 52 or concurrent enrollment, Applied Technology 10 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

In HVAC System Processes, students explore commercial building systems and the processes required to build, repair and maintain them. Topics include water treatment, indoor air quality, energy conservation, building management systems, air balancing, startup, shutdown, construction drawings, system design, retail refrigeration, alternative systems, and crew leadership. Students also build electromechanical skills as they design and build custom HVAC circuitry. (A, CSU)

## 56 HVAC SYSTEM INSTALLATION

2 units, 1 lecture hour, 3 lab hours,
(Formerly Air Conditioning 53 and 56)
ADVISORY: Heating, Ventilation, and Air Conditioning 50 or concurrent enrollment, and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

In HVAC System Installation, students master HVAC retrofit practices including "tailgate" design and assembly of duct systems, duct testing, condensate drains, electrical connections, gas connections and sheet metal adaptations. Course assignment may also include an off-campus HVAC system installation. (A, CSU)

## 57 HVAC DIGITAL CONTROL PRINCIPLES <br> 2 units, 2 lecture hours, 1 lab hour, <br> (Formerly Air Conditioning 57)

ADVISORY: Heating, Ventilation, and Air Conditioning 54 and Applied Technology 10, eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

In HVAC Digital Control Principles, students learn fundamental principles which drive modern digital HVAC control technology. Students are prepared for understanding of modern control systems, including wireless technology. Students also operate operating digital control systems. (A, CSU)

## 150 WIRELESS HVAC CONTROLS

2 units, 2 lecture hours, 1 lab hour
ADVISORY: Applied Technology 10, Heating, Ventilation, and Air Conditioning 57, eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 or Applied Technology 130 recommended.

In Wireless HVAC Controls, students learn advanced digital control theory while practicing wired and wireless HVAC control configuration, programming, and/or commissioning. (A)

## 350 RETA/CARO READY - EPA SECTION 608 TECHNICIAN CERTIFICATION

3 lecture hours, (Open Entry/Open Exit)
ADVISORY: Applied Technology 10 and Heating, Ventilation, and Air Conditioning 53. Proficiency in reading and writing in English and knowledge of basic algebra concepts recommended.

This course prepares students and HVACR (Heating, Ventilation, Air Conditioning, and Refrigeration) technicians for EPA (Environmental Protection Agency), Section 608 Technician Certification (Type I, II, III, and/or Universal). EPA Section 608 Refrigerant Certification is a federal certification requirement for any HVACR technician who maintains, repairs, or disposes of equipment that could release ozone depleting refrigerants into the atmosphere. The certification is an integral part of the course and will be conducted by an approved testing organization proctor. Advisory: In addition to normal registration fees, a Section 608 exam fee will be imposed by the certifying organization. Fee payment is the student's responsibility via electronic portal on the day of final exam.

## 351 RETA/CARO READY - INDUSTRIAL REFRIGERATION I

3 lecture hours, (Open Entry/Open Exit)
ADVISORY: Applied Technology 10 and Heating, Ventilation, and Air Conditioning 53. Proficiency in reading and writing in English and knowledge of basic algebra concepts recommended.

This course prepares students and HVACR technicians for the CARO (Certified Assistant Refrigeration Operator) certification exam by RETA (Refrigeration Engineers and Technicians Association), which is a highly recognized third party certification in the industrial refrigeration industry sector. The operating principles,function, maintenance, repair, and safety of ammonia-based industrial refrigeration systems are explored throughout the coursework, with emphasis on standards set-forth by RETA. Advisories: 1) In addition to normal registration fees, a RETA book exam fee will be imposed by the certifying organization. Fee payment is the student's responsibility via electronic portal on the day of final exam; 2) CARO certification is not included in this course, and must be taken separately through RETA.

## HISTORY (HIST)

## 1 WESTERN CIVILIZATION TO 1648

## 3 units, 3 lecture hours

ADVISORY: English 1A.
A survey of the political, social, economic, cultural, and intellectual developments of European civilization from its prehistoric antecedents in the Middle East to the rise of modern European nations in the seventeenth century. (C-ID HIST 170) (A, CSU-GE, UC, I)

1H HONORS WESTERN CIVILIZATION TO 1648
3 units, 3 lecture hours, (Formerly Honors 1H)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

A survey of the political, social, economic, cultural, and intellectual developments of European civilization from its prehistoric antecedents in the Middle East to the rise of modern European nations in the seventeenth century. In addition, Honors sections take a greater cross-disciplinary perspective, critically evaluate issues and controversies in historiography, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 170) (A, CSU-GE, UC, I)

## 2 WESTERN CIVILIZATION SINCE 1648

3 units, 3 lecture hours
ADVISORY: English 1A.
The philosophical, political, and economic development of the European civilizations and their "offspring" in the New World and elsewhere from the 17th century to the present era. (C-ID HIST 180) (A, CSU-GE, UC, I)

## 2H HONORS WESTERN CIVILIZATION SINCE 1648 <br> 3 units, 3 lecture hours, (Formerly Honors 2H)

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

The philosophical, political, and economic development of the European civilizations and their "offspring" in the New World and elsewhere from the 17th century to the present era. In addition, Honors sections take a greater cross-disciplinary perspective, critically evaluate issues and controversies in historiography, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 180) (A, CSU-GE, UC, I)

## 3 HISTORY OF ANCIENT ROME

3 units, 3 lecture hours
ADVISORY: English 1A and History 1.
The history, politics, social life, literature, art, architecture, religion and archaeology of Rome from the foundation of the city to the early Byzantine period. (A, CSU-GE, UC, I)

## 11 HISTORY OF THE UNITED STATES TO 1877

3 units, 3 lecture hours
ADVISORY: English 1A.
Political, social, and economic development from the colonial period through the Reconstruction Era. (C-ID HIST 130) (A, CSU-GE, UC, I)

## 12 HISTORY OF THE UNITED STATES SINCE 1877

3 units, 3 lecture hours
ADVISORY: English 1A.
Political, social and economic development since Reconstruction
Era; the US as a world power. (C-ID HIST 140) (A, CSU-GE, UC, I)

## 12H HONORS HISTORY OF THE UNITED STATES SINCE 1877

## 3 units, 3 lecture hours

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Political, social and economic development since the Reconstruction Era; the U. S. as a world power. In addition, honors sections offer more in-depth study of modern U. S. history, critically evaluate controversies in historiography, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 140) (A, CSU-GE, UC, I)

## 15 HISTORY OF THE BRITISH ISLES

3 units, 3 lecture hours
ADVISORY: English 1A.
Political, social, economic, and cultural history of the British Isles from pre-history to the present. (A, CSU-GE, UC, I)

## 17 HISTORY OF THE MUSLIM WORLD TO 1405

3 units, 3 lecture hours
ADVISORY: English 1A and History 1.
An analytical survey of Islamic history from the life of Muhammad to the Ottoman Empire. Discussion of the political and military aspects of Islam, Islamic science and medicine, and mystical movements within Islam. (A, CSU-GE, UC, I)

## 18 HISTORY OF ANCIENT GREECE <br> 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)

[^8]
## 21 UNITED STATES CIVIL WAR

3 units, 3 lecture hours
ADVISORY: English 1A and History 11.
Causes, events, and consequences of the American Civil War.
(A, CSU-GE, UC, I)

## 22 HISTORY OF AMERICAN WOMEN

3 units, 3 lecture hours
ADVISORY: English 1A.
Women in American history: social, political, and economic actions and reactions of American women; racial, ethnic, religious, geographic, and class differences. (A, CSU-GE, UC, I)

## 23 WORLD HISTORY II, SINCE 1500

3 units, 3 lecture hours
ADVISORY: English 1A.
Economic, political, and social development in world history from around 1500 to the present. (C-ID HIST 160) (A, CSU-GE, UC, I)

## 25 HISTORY OF RELIGION IN THE UNITED STATES <br> 3 units, 3 lecture hours <br> ADVISORY: English 1A. <br> Survey of religion in the United States from the colonial period to the present. (A, CSU-GE, UC, I)

## 29 HISTORY OF MEXICO, COLONIAL TO CONTEMPORARY PERIOD

3 units, 3 lecture hours, (See also ChicanoLatino Studies 29)
ADVISORY: English 1A.
A social, economic and political survey of Mexican history from the colonial (1521) to the contemporary period. (A, CSU-GE, UC, I)

## 30 CALIFORNIA HISTORY

3 units, 3 lecture hours
ADVISORY: English 1A.
Growth and development of California politically, economically, and culturally from 1523 to the present, emphasizing the period since statehood. (A, CSU-GE, UC, I)

## 34 HISTORY OF THE AMERICAN CIVIL RIGHTS MOVEMENT

3 units, 3 lecture hours, (See also AfricanAmerican Studies 34)
ADVISORY: English 1 A.
History of the struggle for civil and human rights in American history, focusing on the African American movement. Legal, moral, ethical, religious and humanistic foundations of the Movement. Forms of discrimination, segregation and oppression and various forms of resistance to them. Efforts to protect human and civil rights in the United States. (A, CSU-GE, UC, I)

## HMONG

SEE FOREIGN LANGUAGES

## HONORS (HONORS)

## ANTHROPOLOGY 2H, HONORS CULTURAL ANTHROPOLOGY

3 units, 3 lecture hours, (Formerly Honors 2A)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Principles, methods, and concepts of cultural anthropology. The relationship between culture, society, and the individual. A cross-cultural, integrated analysis of human marriage and family, child rearing, personality development, kinship, social institutions, ideology, politics and social control, economics and ecological adaption, language, artistic expression, and cultural change. In addition, the Honors course takes a greater cross-disciplinary perspective, places greater emphasis on the use of anthropology on the understanding of the modern world, and more critically evaluates the methods and theory of anthropology. (C-ID ANTH 120) (A, CSU-GE-UC, I)

## ART 5H, HONORS ART HISTORY ANCIENT TO MEDIEVAL

## 3 units, 3 lecture hours, (Formerly Honors 5A)

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

A survey of the Western Art from prehistory to the Medieval period including Neolithic, ancient Near East, Egyptian, Greek, Roman, Islamic, Byzantine, Romanesque and Gothic cultures. Honors section will include additional readings of primary and secondary source material along with oral presentations and class discussions. (C-ID ARTH 110) (A, CSU-GE, UC, I)

## ART 6H, HONORS ART HISTORY RENAISSANCE

 TO MODERN3 units, 3 lecture hours, (Formerly Honors 6A)
ADVISORY: English 1AH. Meet the qualifications for consideration for acceptance into the Leon S. Peters Honors Program recommended. See Honors Program listing in the college catalog.

A survey of Western Art from the beginning of the Renaissance to the present. Major art styles and movements covered include Renaissance, Baroque, Neo-Classicism, Impressionism, Cubism, Surrealism, etc. Honors sections will include additional readings of primary and secondary source material, class discussions and oral presentations. (C-ID ANTH 120) (A, CSU-GE, UC, I)

## BIOLOGY 11AH, HONORS BIOLOGY FOR SCIENCE MAJORS I

## 5 units, 4 lecture hours, 3 lab hours

PREREQUISITE: Chemistry 1 A and Mathematics 103 , within the last five years recommended. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

The chemistry of life, the cell, cellular structure, metabolism, photosynthesis, aerobic and anaerobic respiration, mitosis, meiosis, Mendelian genetics, human genetics, molecular biology, biotechnology, and evolution. Intended for science majors and for pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors. Field trips, guest speakers, literature and scientific research, use of technology, and student presentations are included in this honors level course. (C-ID BIOL 190) (A, CSU-GE, UC, I)

## BUSINESS ADMINISTRATION 10H, HONORS INTRODUCTION TO BUSINESS

## 3 units, 3 lecture hours

ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

A survey in business providing a multidisciplinary examination of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization's policy and practices within the U.S. Demonstrates how these influences impact the primary areas of business including: organizational structure and design; leadership, human resource management, and organized labor practices; marketing; organizational communication; technology; and entrepreneurship; and legal, accounting, and financial practices; and therefore affect a business' ability to achieve its organizational goals in the U.S. economic system with enrichment and service learning activities and linkages to a Business Economics Honors colloquium. (C-ID BUS 110) (A, CSU, UC)

## COMMUNICATION 8H, HONORS GROUP COMMUNICATION

## 3 units, 3 lecture hours

ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog. Eligibility for English 1A recommended.

An introduction to group communication as a vehicle for solving problems, reaching decisions, and making recommendations on policy. Students will study and practice the theories, behaviors, and processes of group communication. Honors sections will also focus on a more in-depth analysis of group communication theory and its application. (A, CSU)

## ECONOMICS 40H, HONORS INTRODUCTION TO MICROECONOMICS

3 units, 3 lecture hours, (Formerly Economics 1BH)
PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog. Eligibility for English 1A recommended.

The "rree 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)

## HISTORY 1H, HONORS WESTERN CIVILIZATION TO 1648 <br> 3 units, 3 lecture hours, (Formerly Honors 1H) <br> ADVISORY: Meet the qualifications for consideration for accep-

 tance 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 <br> 1 unit, 1 lecture hour <br> 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 hourCOREQUISITE: 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

 COLLOOUIUM: PHI THETA KAPPA STUDY TOPICS1 unit, 1 lecture hour
COREQUISITE: Meet the qualifications for acceptance into the Honors Program. See Honors Program listing in college catalog. Interdisciplinary investigation of the annual study topic of Phi Theta Kappa International Honor Society. Topic determined by the Honors Study Topic Guide and drawn from the humanities, natural sciences and social sciences. (A, CSU)

## HUMANITIES 10H, HONORS CLASSICAL HUMANITIES

3 units, 3 lecture hours
PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

An integrated study of the art, music, literature, philosophy, and drama of Western civilization from the Greeks through the Renaissance. Honors sections may cover additional subject matter such as more extensive reading and research as well as additional writing. (A, CSU-GE, UC, I)

## HUMANITIES 11H, HONORS MODERN HUMANITIES

3 units, 3 lecture hours
PREREQUISITE: English 1A. Humanities 10 is not a prerequisite for this course. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.

An integrated study of the art, music, literature, philosophy, and drama of Western civilization from the seventeenth century to the present. Honors sections may cover additional subject matter such as more extensive reading and research as well as additional writing. (A, CSU-GE, UC, I)

## LINGUISTICS 10H, HONORS INTRODUCTION TO LANGUAGE

3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Examination of the nature of language, its historical development, its structural elements, the stages of language acquisition, and their applications in the world. Emphasis on systematic linguistic analysis of language systems and usage. Honors sections will cover additional subject matter such as cognitive linguistics, forensic linguistics, and computational linguistics. (A, CSU-GE, UC, I)

## MATHEMATICS 11H, HONORS ELEMENTARY STATISTICS

4 units, 4 lecture hours
PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration into the Honors Program recommended. See Honors Program listing in the college catalog.

Descriptive measures, probability, probability distributions, sampling distributions, central limit theorem, one and two sample hypothesis tests, estimation, correlation, regression and analysis of variance. Honors work challenges students to be more analytical through expanded assignments. (A, CSU-GE)

## PHILOSOPHY 1AH, HONORS THEORIES OF KNOWLEDGE AND REALITY

3 units, 3 lecture hours, (Formerly Honors 1P)
PREREQUISITE: English 1A or equivalent. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

An introduction to traditional and contemporary views on the nature of knowledge, truth, and thought; alternative views of God, the universe and human nature. Develops skills in philosophical analysis and logical thinking. Honors sections may also focus on an historical overview or a more in-depth study of a significant branch of philosophy e.g. philosophy of language or philosophy of mind. (C-ID PHIL 100) (A, CSU-GE, UC, I)

## PHILOSOPHY 1CH, HONORS ETHICS

## 3 units, 3 lecture hours

PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Reading and critical analysis of primary sources on moral theory. Examinations of ethical concepts such as good, evil, and moral obligation. Conditions necessary to ethical decision-making-conscience, moral rules, justice, and free will-may also be discussed. Honors sections may also involve a more in-depth study of a significant area of ethics or moral philosopher, and will require additional writing. (C-ID PHIL 120) (A, CSU-GE, UC, I)

## PHILOSOPHY 2H, HONORS CRITICAL REASONING AND ANALYTIC WRITING

3 units, 3 lecture hours
PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Principles and methods of good reasoning, with an emphasis on deductive logic, including formal techniques of sentential logic. Includes the identification of arguments, developing and assessing basic deductive and inductive reasoning, common fallacies, and application of each element to various areas of study and real world situations. Honors sections may also focus on an historical overview, or a more in-depth study of a significant branch of philosophy, e.g., environmental ethics or philosophy of race. (A, CSU-GE, UC, I)

## POLITICAL SCIENCE 2H, HONORS AMERICAN GOVERNMENT

3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Analysis of political and judicial institutions and processes, political ideology, political economy, the role of the media, civil rights, California state and local government. Satisfies the U.S. Constitution requirements and the national, state and local government requirements for transfer students. In addition Honors sections investigate in detail the original design of the American political system, including the values imbued in the Constitution, the construction of the federal system, and the legal responsibilities of the major actors, and contrast those features with the current conditions in American politics. Emphasis is given to explaining the differences between the two situations, and requiring students to suggest how access to the present system can be gained and used. (C-ID POLS 110) (A, CSU-GE, UC, I)

## PSYCHOLOGY 2H, HONORS GENERAL PSYCHOLOGY

3 units, 3 lecture hours, (Formerly Honors
7P and Psychology 7H)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Scientific study of behavior and mental processes. Topics include history, methodology, biopsychology, lifespan development, sensation and perception, consciousness and altered states, learning and memory, thought and language, intelligence, motivation and emotion, personality, psychopathology and therapy, stress and health, and social and cultural influences. The Honors section of this course places a greater emphasis on understanding the human being as an integrated physiological, social, and psychological organism and further enriches that perspective with data and theories from related disciplines. (C-ID PSY 110) (A, CSU-GE, UC, I)

## SOCIOLOGY 1AH, HONORS INTRODUCTION TO SOCIOLOGY

## 3 units, 3 lecture hours

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.

Basic concepts, theoretical approaches, and methods of sociology. Analysis and explanation of social systems, socialization, and self, institutions, stratification, inter/intra-group dynamics, multi-/cross-cultural relations, demography, deviance, collective behavior, social change, and global trends. The Honors section of this course places a greater emphasis on methods of conducting scientific research in the field of Sociology. Additional emphasis is placed on contemporary social issues as explored through supplemental readers or texts. (C-ID SOC 110) (A, CSU-GE, UC, I)

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)

## 11 ELDER CARE HUMAN SERVICES

3 units, 3 lecture hours, (See also
Sociology 10)
ADVISORY: Eligibility for English 1A recommended.
Instruction for the provision of human services to elders and their support systems. Emphasis on the application of social work theories and perspectives and integrative service provision for strengths based, empowerment client outcomes. (A, CSU)

## 18 ALCOHOL AND DRUG ABUSE

COUNSELING: PROFESSIONAL AND
PERSONAL GROWTH

## 2 units, 2 lecture hours

ADVISORY: 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

PREREQUISITE: Human Services 20. COREQUISITE: Human Services 24. Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

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 <br> 3 units, 3 lecture hours <br> ADVISORY: Eligibility for English 1A recommended.

Introduction to the social, economic, political, historical and philosophical components in the development of social welfare and social work in western society. Emphasis on knowledge base, value systems, and specific fields of social work practice. (A, CSU, UC)

## 24 FUNDAMENTALS OF INTERVIEWING AND COUNSELING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Principles of interviewing and counseling, both theory and practice. Focus on specific skills within a human service setting. Analysis of the dynamics between counselor and client. (A, CSU)

## 25 ASSERTIVENESS TRAINING

2 units, 2 lecture hours, (See also Women's Studies 25)
ADVISORY: Eligibility for English 1A recommended.
Becoming more effective and creative in expressing oneself in a courteous and dignified manner. Discovering the communication options available in various life situations. (A, CSU)

## 30 GROUP AND COMMUNITY SOCIAL SERVICES

3 units, 3 lecture hours
COREQUISITE: Human Services 20. ADVISORY: Eligibility for English 1A recommended.

Methods of human services and social work intervention with individual, group, and community; problem analysis and available services. (A, CSU)

40 ALCOHOL AND DRUG ABUSE COUNSELING: LAW AND ETHICS, PREVENTION, EDUCATION, OUTREACH AND REFERRAL
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Classification of drugs, legal solutions, restrictions, community prevention, outreach, screening techniques, intervention and referral, and crisis counseling. (Not open to students with credit in Human Services/ Sociology 41.) (A, CSU)

## 42 INTRODUCTION TO ALCOHOL AND DRUG COUNSELING

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
The history of alcohol and other mood changing drugs in the U.S.; myths and stereotypes of alcohol use; socio-cultural factors that contribute to the use of drugs; patterns and progression of alcoholism; and the dynamics of treatment. (A, CSU)

## 43 ALCOHOL AND DRUG ABUSE COUNSELING: CASE MANAGEMENT

## 3 units 3 lecture hours

PREREQUISITE: Human Services 42. ADVISORY: Eligibility for English 1A recommended.

Elementary techniques in the treatment of alcohol dependency for the individual and the family; student participation in counseling techniques in a group study experience. Bookkeeping, referral, consultation, and follow-up skills. (A, CSU)

## 44 DRUG USE: PHYSICAL AND

 PSYCHOLOGICAL EFFECTS
## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
The physical and psychological aspects of drug use, including abuse and addiction, physical and psychological dependencies, physiological effects of commonly used drugs, and treatment and prevention. Not open to students with credit in Human Services 45. (A, CSU)

## 60 INTRODUCTION TO CHILD WELFARE 3 units, 3 lecture hours, (See also Child Development 60)

ADVISORY: Eligibility for English 1A recommended. Introduction to the child welfare system. Exploration of the goals of child welfare including safety, a permanent family and well-being of every child. Emphasis on the practice of preventing, remedying, or ameliorating child maltreatment. (A, CSU)

## HUMANITIES (HUMAN)

## 10 CLASSICAL HUMANITIES

## 3 units, 3 lecture hours

PREREQUISITE: Eligibility for English 1A.
An integrated study of the art, music, literature, philosophy, and drama of human civilization from the Greeks through the Renaissance. (A, CSU-GE, UC, I)

## 10H HONORS CLASSICAL HUMANITIES

## 3 units, 3 lecture hours

PREREQUIIITE: Eligibility for English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

An integrated study of the art, music, literature, philosophy, and drama of human civilization from the Greeks through the Renaissance. Honors sections may cover additional subject matter such as more extensive reading and research as well as additional writing. (A, CSU-GE, UC, I)

## 11 MODERN HUMANITIES

3 units, 3 lecture hours
PREREQUIIITE: Eligibility for English 1A.
An integrated study of the art, music, literature, philosophy, and drama of the human civilization from the seventeenth century to the present. (A, CSU-GE, UC, I)

## 11H HONORS MODERN HUMANITIES

## 3 units, 3 lecture hours

PREREQUISITE: Eligibility for English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.

An integrated study of the art, music, literature, philosophy, and drama of human civilization from the seventeenth century to the present. Honors sections may cover additional subject matter such as more extensive reading and research as well as additional writing. (A, CSU-GE, UC, I)

## 42 CLASSICAL MYTHS

3 units, 3 lecture hours, (See also

## English 42)

PREREQUISITE: English 1A or equivalent.
Reading and critical analysis of basic mythic themes in literature, film, and the visual arts. The origin of myths in ritual, their development in western civilization, and their ultimate form and continued presence in the arts. (A, CSU-GE, UC, I)

INDIVIDUAL STUDY

## 49 (COURSE TITLE TO BE SELECTED)

1-3 units, minimum of 54 hours required
per unit
PREREQUISITE: To be determined by the faculty.
Creative or research project leading to a paper, report, 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 atter admission.)

INDUSTRIAL EDUCATION SEE APPLIED TECHNOLOGY (AT)

INDUSTRIAL TRAINING, CTC (ITCTC)

## 371 WAREHOUSE \& DISTRIBUTION CAREERS

2 lecture hours, 3 lab hours, (Repeats = 3), (Open Entry/Open Exit), (Formerly Industrial Training, VTC 71) COREQUIIITE: Industrial Training CTC 372.
Forklift and electric pallet jack safety and operation skills necessary for employment, inventory and warehouse procedures utilizing computer based program resulting in logistics certification, basic and applied mathematics, basic computer, reading and writing practice, warehouse equipment like strapping and manual pallet jack.

## 372 WAREHOUSE \& DISTRIBUTION CAREERS

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

INFORMATION SYSTEMS
SEE COMPUTER INFORMATION TECHNOLOGY (CIT)

## JAPANESE

SEE FOREIGN LANGUAGE

## JOURNALISM (JOURN)

## 1 INTRODUCTION TO MASS <br> COMMUNICATION

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
A survey of major mass mediums and their influence on the artistic and cultural expression of contemporary society. From books through the internet, and from pop culture to advertising, public relations, media law and ethics, a close examination of the historical and technological developments that have shaped the structures and practices of mass media as well as emerging trends in mass communication, audiences, and technologies. Students learn analytical skills to help become critical consumers/developers of media. (C-ID JOUR 100) (A, CSU-GE, UC, I)

## 2 INTERPRETING CURRENT EVENTS

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Discussion and analysis of important national and international events. Readings from newspapers, magazines and on-line news sources on interpreting and evaluating information in light of journalistic objectivity, propaganda, government censorship and the influence of various groups on news gathering. (A, CSU)

## 3 NEWSWRITING

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
News information gathering and writing for print media. Includes the basics of news writing, methods and practices, interviewing, feature writing, and emphasis on writing against deadlines. Ethical, policy and legal questions confronting reporters, their editors and publishers. (C-ID JOUR 110) (A, CSU)

## 4 WRITING FOR THE COLLEGE NEWSPAPER

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended and Journalism 3 (can be concurrent) or equivalent.

Writing articles for the school newspaper; writing for other journalism publications on a regular schedule throughout the semester; editing articles for the publications; gathering information from a variety of sources; synthesizing a story; preparing information for dissemination; handling ethical and legal aspects of communication. (C-ID JOUR 130) (A, CSU)

## 6 MAGAZINE PRODUCTION

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1 A recommended. For photographers, demonstrated ability to use a camera. For artists and designers, demonstrated ability in the field of art or graphics.

Introduction to magazine production with emphasis on developing, researching, interviewing and writing non-fiction articles. Includes complete presentation of stories, photos, design and layout. Students will edit and publish a magazine that can be adaptable for on-line publication. (A, CSU)

## 11A BEGINNING MEDIA WRITING PRACTICUM

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Journalism 3.
Students practice and refine beginning newsgathering, reporting, persuasion and writing skills by working as staff members of the college newspaper and other print and online student publications; focus of study is on basic news, feature and opinion stories. (C-ID JOUR 130) (A, CSU)

## 11B INTERMEDIATE MEDIA WRITING

PRACTICUM
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Journalism 11A.
Students practice and refine intermediate newsgathering, reporting, persuasion and writing skills by working as staff members of the college newspaper and other print and online student publications. Focus of study is on specialized and in-depth news, feature and opinion stories. (C-ID JOUR 131) (A, CSU)

## 11C ADVANCED MEDIA WRITING PRACTICUM <br> 3 units, 2 lecture hours, 3 lab hours <br> PREREQUISITE: Journalism 11B. <br> 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 <br> 3 units, 2 lecture hours, 3 lab hours <br> ADVISORY: Journalism 3.

Production of online newspaper. Students will get practical experience in writing for an online publication, including multimedia, using digital photography, video and audio clips for story enhancement. The course prepares students for future print and electronic media work. (A, CSU)

## 13 ADVANCED REPORTING AND WRITING <br> 3 units, 2 lecture hours, 3 lab hours <br> ADVISORY: Journalism 3.

Advanced reporting and news gathering techniques; emphasis on interviewing and research skills; investigative, special assignment and online reporting. (C-ID JOUR 210) (A, CSU)

## 14 MULTIMEDIA REPORTING

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Journalism 3.
Integrate print and broadcast techniques to produce multimedia pieces for the web and other electronic media. Multimedia storytelling incorporating writing, digital photography, video, audio and automation. (C-ID JOUR 120) (A, CSU)

## 15 BASIC EDITING FOR JOURNALISTS

## 3 units, 3 lecture hours

ADVISORY: Journalism 3 or concurrent enrollment, and eligibility for English 1A recommended.

Application of basic language skills to media writing and editing; covers news values and basic news writing and editing; grammar, word use, sentence construction, spelling, punctuation, and principles of effective writing as it applies to journalistic proofreading and copy editing; emphasizes the set of rules for understanding how language works; and communicating clearly, concisely, and coherently. (A, CSU)

## 16 RACE, GENDER AND THE MEDIA

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
A critical examination of the role of media in enabling, facilitating, or challenging the social construction of race and gender in our society. Using a variety of entertainment and news content in print, electronic, and the internet, an appreciation and evaluation of how the media influence everyday notion of race and gender and review the historical roles news and entertainment media have played in creating awareness about the experiences of women and ethnic minorities. (A, CSU-GE, UC, I)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

## 1-8 units

COREQUISITE: Journalism 11A, 11B, 11C, 11D or 14. Fall and Spring Semesters: Must be enrolled in at least one other course, including occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to journalism. Collaborative learning objectives established specific to journalism. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## LABORATORY ASSISTANT

## 159 LABORATORY ASSISTANT

1 unit, 3 lab hours
PREREQUISITE: Verification of eligibility by instructor and division dean.

Opportunity to work independently with and assist instructor in subject area. Student must register no later than the third week of a regular semester. (A)

LEARNING ASSISTANCE (LA)

## 1 TUTOR TRAINING

1 unit, 1 lecture hour, 1 lab hour
ADVISORY: Eligibility for English 1A recommended.
Concepts, principles, and methods of one-on-one and group tutoring with supervised practice. Designed for tutors working in college tutorial, math, and English learning centers, and for students employed or desiring future employment as educational or instructional aides or as teachers. (A, CSU)

## 2A TUTOR TRAINING: LEVEL I

1 unit, 2 lecture hours, 2 lab hours, (9 weeks)
ADVISORY: Eligibility for English 1A recommended.
Introductory course for writing and reading tutors. Designed to develop peer-tutoring skills for one-on-one sessions with tutees from varying educational backgrounds. Overview of tutorial theory and effective practices. Discussion of meta-cognitive activities for tutoring reading and writing. This course is open for writing tutors working in a tutorial environment. (A, CSU)

## 2B TUTOR TRAINING: LEVEL II

1 unit, 2 lecture hours, 2 lab hours, (9 weeks)
PREREQUISITE: Learning Assistance 2A.
This course provides instruction and guided practice in group tutoring dynamics and social and emotional intelligence with an emphasis on developmental reading and writing and English for Multilingual Students (EMLS). (A, CSU)

## 3 METHODS AND APPLICATION IN GROUP INSTRUCTION

1 unit, 2 lecture hours, ( 9 weeks)
PREREQUISITE: None.
This class explores theories and methods of learning and their effective application. It will specifically address learning through a multidisciplinary lens while promoting group interaction and engagement. All students hired as Extending the Class (ETC) Leaders for the Division of Library and Student Learning Support Services must complete this class during their first year of providing support. Enrolled students will receive instruction regarding the design, implementation, and evaluation of a collaborative and engaged Supplemental Instruction (SI) learning environment. Through experiential learning, ETC Leaders will have the opportunity to develop and strengthen their interpersonal, communication and critical thinking skills in preparation of furthering their academic and/ or professional careers. (A, CSU)

## LIBRARY SKILLS (LIBSKL)

## 1 INFORMATION COMPETENCY/RESEARCH

 SKILLS
## 1.5 units, 1.5 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Introduction to research skills for college students, including basic concepts of information, its organization, location, evaluation, and use. (A, CSU)

## LIBRARY TECHNOLOGY (LITEC)

## 51 INTRODUCTION TO LIBRARY SERVICE

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Explores the general organization and governance of various types of libraries, their mission, roles and materials; library service from past to present and its role in society; basic duties, ethics and values of the library paraprofessional. Foundation course for the program leading to a certificate in library technology. (A, CSU)

## 52A ORGANIZATION OF INFORMATION

3 units, 3 lecture hours, (Formerly Library Technology 52)
ADVISORY: Eligibility for English 1A recommended. Library Technology 51 recommended.

Cataloging of materials using Library of Congress and Dewey Decimal Classification systems. (A, CSU)

## 52B COLLECTION MANAGEMENT

1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended. Library Technology 51 recommended. Library Technology 52A recommended.

Library technical services, acquisition and processing of materials, collection maintenance and materials repair. (A, CSU)

## 54 LITERATURE AND SERVICES FOR YOUTH 3 units, 3 lecture hours <br> ADVISORY: Eligibility for English 1A recommended. Library Technology 51 recommended. <br> 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 <br> 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended. Library Technology 51 recommended.

Library services offered to the public, including readers' advisory, interlibrary loan, and the circulation of materials. (A, CSU)

## 56 INFORMATION TECHNOLOGY

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended. Library Technology 51 recommended.

Use and management of computers, computer networks, nonprint materials and emerging technologies used in libraries. Educating the users in their use. (A, CSU)

## 57 REFERENCE: PRINT AND ONLINE SOURCES

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended. Library Technology 51.

Library reference services, research methodologies, standard reference sources, utilization of print, non-print and electronic format sources; reference interview techniques and style; collection development issues related to library reference services. (A, CSU)

## 61 INFORMATION AND COMPUTER LITERACY

3 units, 3 lecture hours, (Formerly Library Skills 2)
ADVISORY: Eligibility for English 1A recommended. Library Technology 51 recommended.

In-depth research skills for college students, including the concept of information, its organization, location, evaluation, and use. General computer/technology concepts, email, and navigating the World Wide Web. (A, CSU)

## 62 MEDICAL RESOURCES AND LIBRARIES

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended. Library Technology 51 recommended.

Supports reference, communications, teamwork, foundations and technology competencies for library support staff. Surveys needs and uses of medical information for personal, corporate or academic use from print and online sources. (A, CSU)

## 63 LEGAL RESOURCES AND LIBRARIES

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended. Library Technology 51 recommended.

Use of legal research tools, especially printed and online resources. Provides an overview of the American legal system, the different areas of law, and the different sources of law. (A, CSU)

## LINGUISTICS (LING)

## 10 INTRODUCTION TO LANGUAGE <br> 3 units, 3 lecture hours <br> PREREQUISITE: None <br> Examination of the nature of language, its historical development, its structural elements, and the stages of language acquisition. Emphasis on systematic linguistic description of language knowledge and usage. (A, CSU-GE, UC, I)

## 10H HONORS INTRODUCTION TO LANGUAGE

3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Examination of the nature of language, its historical development, its structural elements, the stages of language acquisition, and their applications in the world. Emphasis on systematic linguistic analysis of language systems and usage. Honors sections will cover additional subject matter such as cognitive linguistics, forensic linguistics, and computational linguistics.(A, CSU-GE, UC, I)

## 11 INTRODUCTION TO LANGUAGE FOR EDUCATORS

3 units, 3 lecture hours
PREREQUISITE: None
Examination of the nature, history, development and acquisition of language and its structural elements. Emphasis on how language is used and learned. Contrastive analysis of English with other commonly spoken languages of the area. Special focus on the relationship between linguistic structure and the development of reading and writing. (A, CSU)

## MAINTENANCE MECHANIC (MMCTC)

## 370 FUNDAMENTALS OF WELDING AND MACHINE SHOP

5.55 lecture hours, 11.11 lab hours, (Repeats = 3), (Formerly MMCTC 70)
PREREQUISITE: None.
Basic gas, arc, MIG, TIG (mild steel only). Precision measurement, hand tools, engine lathe, drilling, milling.

## 371 FUNDAMENTALS OF HYDRAULICS AND PNEUMATICS

5.55 lecture hours, 11.11 lab hours, (Repeats = 3), (Formerly MMVTC 71) PREREQUISITE: None.
Hydraulic and pneumatic principles, pumps, actuators, valves, schematics, operating systems.

## 372 ELECTRICAL FUNDAMENTALS

5.55 lecture hours, 11.11 lab hours, (Repeats = 3), (Open Entry/Open Exit),
(Formerly MMVTC 72)
PREREQUISITE: None.
Electrical principles, $A C / D C$ circuits, motors, motor starters, relays, wiring, troubleshooting, schematic reading, test instruments, variable speed drives

## MANUFACTURING MECHANIC (MFGMCTC)

## 351 INTRODUCTION TO MANUFACTURING <br> 0.5 lecture hour, (Pass/No Pass)

PREREQUIIITE: 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)
PREREQUIIITE: 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)PREREQUIIITE: None.
An introduction to the equipment and peripheral devices used to interface with industrial controlling devices

## 352C JOB PREPARATION

1 lecture hour, (Pass/No Pass)
PREREQUIIITE: None.
Preparing resumes, portfolios, and improving employment-seeking skills.

```
352D TECHNICAL REPORT WRITING 1 lecture hour, (Pass/No Pass)
PREREQUIIITE: 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)

PREREQUIIITE: 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)
PREREQUIIITE: 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)
PREREQUIIITE: 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)

PREREQUIIITE: 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)
PREREQUIIITE: None.
Basic metallurgy and properties of metals, oxyacetylene welding and cutting processes, arc welding, and safety within the work environment.

## 354C ELECTRICAL FUNDAMENTALS

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

## MARKETING (MKTG)

## 1 RETAIL SALES AND CUSTOMER SERVICE FUNDAMENTALS

1 unit, 1 lecture hour
PREREQUIIITE: None.
Retail sales and customer service fundamentals for entry-level and incumbent workers. (A, CSU)

## 10 PRINCIPLES OF MARKETING

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Utilizing both traditional and contemporary approaches, this course explores marketing's role in creating profitable exchanges including the examination, analysis, reasoning, advocacy, and critique of planning, product development, pricing, distribution, and promotion Also researches and evaluates how consumer behavior, market research retailing, and current technologies are used to achieve organizationa 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 1 A recommended.
Explores the basic elements of retailing with an application of marketing concepts. Topics include retail formats, retail strategies, target market analysis, customer relationship management, personnel management, merchandise selection, current technologies, and career opportunities. (A, CSU)

## 17 VISUAL MERCHANDISING

## 3 units, 3 lecture hours, (See also Fashion Merchandising 28)

ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Modern display techniques, equipment, materials, and analysis of current display methods as they apply to creating a store's image. Laboratory exercises to include planning, executing, and evaluating a variety of displays including signage, cases, windows, and banners. (A, CSU)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

## 1-8 units

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors. ADVISORY: Eligibility for English 1A recommended.

Supervised employment extending the classroom based on occupational learning related to marketing. Collaborative learning objectives established specific to marketing. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 21 DIGITAL MARKETING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Examines digital marketing as astrategic 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)

## 301 RETAIL SALES AND CUSTOMER SERVICE FUNDAMENTALS

## 1 lecture hour

PREREQUISITE: None.
Retail sales and customer service fundamentals for entry-level and incumbent workers.

## MATHEMATICS (MATH)

## 3A COLLEGE ALGEBRA

4 units, 4 lecture hours
PREREQUISITE: Mathematics 103 or placement by multiple measures.

This is a college level course in algebra for majors in business, science, technology, engineering, and mathematics. Students will study polynomial, rational, radical, exponential, absolute value, and logarithmic functions; systems of equations; theory of polynomial equations; and analytic geometry. (A, CSU-GE)

## 4A TRIGONOMETRY

4 units, 4 lecture hours, (Formerly Mathematics 4)
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1 A recommended. Mathematics 102 recommended.

Angles, trigonometric and inverse trigonometric functions, right and oblique triangles, graphs, identities, trigonometric equations, vectors, polar coordinates, DeMoivre's Theorem, and applications. (C-ID MATH 851) (A, CSU-GE)

## 4B PRE-CALCULUS

## 4 units, 4 lecture hours

PREREQUISITE: Mathematics 4A or equivalent. ADVISORY: Eligibility for English 1A recommended.

Equations and inequities; polynomial, rational, exponential, logarithmic, trigonometric functions; graphing, analytic geometry, and conic sections; vectors; matrices; systems of equations; the binomial theorem, sequences, and series. (C-ID MATH 151) (A, CSU-GE, UC, I)

## 5A MATHEMATICAL ANALYSIS I

5 units, 5 lecture hours
PREREQUISITE: Mathematics 4B or equivalent. ADVISORY: Eligibility for English 1A recommended.

Introduction to differential and integral calculus, analytical geometry, differentiation and integration of functions, limits continuity, the Fundamental Theorem of Calculus, and applications of differentiation. (C-ID MATH 210 and C-ID MATH 900S $=$ MATH 5A + MATH 5B) (A, CSU-GE, UC, I)

## 5B MATHEMATICAL ANALYSIS II

## 4 units, 4 lecture hours

PREREQUIIITE: Mathematics 5A or equivalent. ADVISORY: Eligibility for English 1A recommended.

Applications and techniques of integration including logarithmic, exponential, trigonometric, and transcendental functions; conic sections; infinite series; differential equations; approximations. (C-ID MATH 220 and C-ID MATH 900S $=$ MATH 5A + MATH 5B) (A, CSU-GE, UC, I)

## 6 MATHEMATICAL ANALYSIS III

## 4 units, 4 lecture hours

PREREQUISITE: Mathematics 5B or equivalent. ADVISORY: Eligibility for English 1A recommended.

Solid analytic geometry; partial differentiation; integral calculus of multivariable functions; two and three dimensional vectors; vector valued functions; topics in vector calculus including Green's, Divergence, and Stoke's Theorems. (C-ID MATH 230) (A, CSU-GE, UC, I)

## 7 INTRODUCTION TO DIFFERENTIAL EQUATIONS

## 4 units, 4 lecture hours

PREREQUISITE: Mathematics 6 or equivalent. ADVISORY: Eligibility for English 1 A 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 1 A 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 10 A and Mathematics 102, or equivalent. ADVISORY: Eligibility for English 1A recommended.

Development of probability, statistics, geometry, measurement, motion geometry, and tessellations. Designed for elementary credential candidates. (A, CSU-GE, UC, I)

## 11 ELEMENTARY STATISTICS

4 units, 4 lecture hours
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.

Descriptive measures, probability, probability distributions, sampling distributions, central limit theorem, one and two sample hypothesis tests, estimation, correlation, regression and analysis of variance. (C-ID MATH 110) (A, CSU-GE, UC, I)

## 11H HONORS ELEMENTARY STATISTICS

4 units, 4 lecture hours
PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration into the Honors Program recommended. See Honors Program listing in the college catalog.

Descriptive measures, probability, probability distributions, sampling distributions, central limit theorem, one and two sample hypothesis tests, estimation, correlation, regression and analysis of variance. Honors work challenges students to be more analytical through expanded assignments. (A, CSU-GE)

## 21 FINITE MATHEMATICS

3 units, 3 lecture hours, (Formerly Mathematics 31)
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1 A 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 1 A 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 <br> 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)
PREREQUIIITE: Mathematics 201 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Angles; parallel lines; congruent and similar triangles; geometric constructions; right triangle trigonometry; application of formulas for perimeter, area, and volume of geometric figures; and inductive and deductive reasoning. (A)

## 103 FOUNDATIONS OF ALGEBRA

5 units, 5 lecture hours, (Formerly
Mathematics 3)
PREREQUISITE: Placement by multiple measures.
Simplify and solve polynomial, rational, and algebraic expressions and equations; linear, quadratic, exponential, and logarithmic functions; systems of equations and inequalities; radicals; graph functions and relations.(A)

## 201 ELEMENTARY ALGEBRA

5 units, 5 lecture hours, (Formerly
Mathematics 1 and 101)
PREREQUISITE: Mathematics 255 or designated math placement. ADVISORY: Eligibility for English 125 and 126 recommended.

Signed numbers, algebraic expressions, linear equations, exponents, polynomials, factoring, rational expressions and equations, graphing, inequalities, systems of equations, radicals, quadratic equations, and applications. Students not eligible for Mathematics 250 if Mathematics has been successfully completed.

## 203 SUPPORT FOR COLLEGE ALGEBRA

2 units, 2 lecture hours, (Pass/No Pass)
PREREQUISITE: Placement by multiple measures. COREQUISITE: Mathematics 3 A .

A review of the core prerequisite skills, competencies, and concepts needed in college algebra. Intended for majors in business, science, technology, engineering, and mathematics who are concurrently enrolled in MATH 3A, College Algebra. Review topics include: operations with integers, linear equations and inequal ities, properties of exponents and radicals, factoring polynomials, and identifying efficient strategies for solving and graphing equations.

## 211 PRE-STATISTICS

5 units, 5 lecture hours
PREREQUISITE: Mathematics 255 or equivalent. ADVISORY: Eligibility for English 125 and 126 recommended.

Pre-statistics, a non-STEM course, covers core algebra skills needed to understand the concepts, formulas, and graphs used in transfer-level statistics. Pre-statistics integrates numeracy, proportional reasoning, algebraic reasoning, and functions. This course develops conceptual and procedural tools that support the use of key mathematical concepts in statistics in a variety of contexts. This course DOES NOT MEET THE REQUIREMENTS for math, science, computer science, business, engineering, or education majors.

## 211S SUPPORT FOR STATISTICS

2 units, 2 lecture hours, (Pass/No Pass)
PREREQUISITE: Placement by multiple measures. COREQUISITE: Mathematics 11 or 42.

A review of the core prerequisite skills, competencies, and concepts needed in statistics. Intended for students who are concurrently enrolled in MATH 11, Elementary Statistics. Topics include concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand the basics of college-level statistics. Concepts are taught through the context of descriptive data analysis.

## 250 COLLEGE ARITHMETIC

3 units, 3 lecture hours, (Formerly
Mathematics 50)
PREREQUISITE: Mathematics 260B or placement score required for placement into Mathematics 260C. ADVISORY: Eligibility for English 125 and 126 recommended.

Arithmetic operations of common fractions and decimal fractions; ratio and proportions; percents; order of operations; the metric system; word problems and applications of arithmetic. Designed as a quick refresher of college arithmetic. Students not eligible for Mathematics 250 if Mathematics 260D has been successfully completed.

## 255 PRE-ALGEBRA

5 units, 5 lecture hours, (Formerly
Mathematics 55)
PREREQUISITE: Mathematics 250 or Mathematics 260D or a test score to place out of or above Mathematics 260D. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Designed to increase the student success in Elementary Algebra; ideal for students who have math anxiety or who do not feel ready for the fast pace of Mathematics 201. And introduction to selected topics that are often difficult for Mathematics 201 students (e.g., signed numbers, simplification, equations and inequalities, word problems, factoring, and graphing).

## 260A ARITHMETIC REVIEW: WHOLE NUMBERS

1.5 units, 5 lecture hours, ( 6 weeks), (Pass/

No Pass), (Formerly Mathematics 60A)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Review of arithmetic involving computing with whole numbers. Emphasis on word problems and applications of whole numbers.

## 260B ARITHMETIC REVIEW: FRACTIONS

1.5 units, 5 lecture hours, ( 6 weeks), (Pass/ No Pass), (Formerly Mathematics 60B)
PREREQUISITE: Mathematics 260A or appropriate placement score. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Review of arithmetic involving computing with fractions. Emphasis on word problems and applications of fractions.

## 260C ARITHMETIC REVIEW: DECIMALS

1.5 units, 5 lecture hours, ( 6 weeks), (Pass/

No Pass), (Formerly Mathematics 60C)
PREREQUISITE: Mathematics 260B or appropriate placement score. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Review of arithmetic involving computing with decimals. Emphasis on word problems and applications of decimals.

## 260D ARITHMETIC REVIEW: RATIOS, PROPORTIONS, PERCENTS, AND GEOMETRY

1.5 units, 5 lecture hours, ( 6 weeks), (Pass/ No Pass), (Formerly Mathematics 60D)
PREREQUISITE: Mathematics 260 C or appropriate placement score. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Review of arithmetic involving ration, proportion, and percents. Introduction to basic geometry topics. Emphasis on word problems.

## 277 ARITHMETIC FOR THE LEARNING DISABLED <br> 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 <br> 3 lecture hours <br> PREREQUIIITE: None. <br> 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 1 A 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 1 A 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 <br> SEE HEALTH INFORMATION TECHNOLOGY

## MILITARY SCIENCE (MILSC)

## 1 LEADERSHIP AND PERSONAL DEVELOPMENT

1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1 A recommended. Completion of Mathematics 201 recommended.

Effective leadership and communication; personal development; life skills; cultural understanding; goal setting; time management; stress management; and comprehensive fitness . Basic knowledge and comprehension of Army leadership dimensions; attributes and core leader competencies. (A, CSU, UC)

## 2 INTRODUCTION TO TACTICAL LEADERSHIP <br> 1 unit, 1 lecture hour <br> ADVISORY: Eligibility for English 1 A recommended. Completion of Mathematics 201 recommended. <br> 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 1 A recommended. Completion of Mathematics 201 recommended.

Leading teams in the complex operational environment. Terrain analysis; patrolling; and operation orders. Dynamics of adaptive leadership in the context of military operations. (A, CSU, UC)

## 50 FRESHMAN LEADERSHIP LABORATORY I <br> 1 unit, 3 lab hours, (Formerly Military Science 50A)

ADVISORY: Eligibility for English 1 A recommended. Completion of Mathematics 201 recommended.

Basic fundamentals of becoming an army officer and adapting to military life. Students will learn and embrace the Army values and warrior ethos while being introduced to the concept of professionalism within the U.S. Army. (A, CSU, UC)

## 55 FRESHMAN LEADERSHIP LAB II <br> 1 unit, 3 lab hours

ADVISORY: Eligibility for English 1 A recommended. Completion of Mathematics 201 recommended.

Hands-on leadership experience via application of field skills and tactical maneuvers in small units of up to platoon size (approximately thirty personnel). Focus is on development of creative problem-solving and resilience while learning individual and small-unit tactical drills. (A, CSU, UC)

## 60 SOPHOMORE LEADERSHIP LABORATORY I <br> 1 unit, 3 lab hours, (Formerly Military <br> Science 50B)

ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended.

Advanced knowledge and application of field skills and tactical maneuvers of squad sized elements. Focus is on team building, military communication, and virtual battle system. (A, CSU, UC)

## 65 SOPHOMORE LEADERSHIP LAB II

## 1 unit, 3 lab hours

ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended.

Advanced knowledge and application of field skills and tactical maneuvers of platoon sized elements. Upon implementation, students will be equipped with the knowledge and foresight to successfully complete the cadet summer training. (A, CSU, UC)

## MUSIC (MUS)

For information concerning course requirements for the major, see page 168.

## THEORY

## 1A MUSIC THEORY I

3 units, 3 lecture hours, (Fall only)
COREQUISITE: Music 7A. ADVISORY: Music 3 or the ability to read music as determined by testing. Eligibility for English 1A recommended.

Writing and analysis; fundamentals of music. Designed for the music major. Introduction to the notation and primary elements of tonal music with regard to music from Western history and non-Western cultures: Examples from music literature will demonstrate staff notation in treble and bass clefs, rhythm and meter; basic properties of sound; intervals; diatonic scales and triads; and diatonic chords. History and social context of the above concepts will be discussed. (C-ID MUS 120) (A, CSU, UC)

## 1AP MUSIC THEORY I-PLUS

3 units, 3 lecture hours, 1 lab hour
COREQUISITE: Music 7A. ADVISORY: Music 3. Eligibility for English 1 A recommended.

Course covers content of MUS 1 A with extra lab time and guided practice. Appropriate for students desiring extra support due to no prior music experience. Writing and analysis; fundamentals of music. Designed for the music major. Introduction to the notation and primary elements of tonal music with regard to music from Western history and non-Western cultures: Examples from music literature will demonstrate staff notation in treble and bass clefs, rhythm and meter; basic properties of sound; intervals; diatonic scales and triads; and diatonic chords. History and social context of the above concepts will be discussed. (A, CSU)

## 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 1 A recommended.

Writing and analysis; 2 voice counterpoint and fugue; chromatic harmony and forms of the 18th century; and reductive analysis. Emphasis on classical and early romantic periods. Designed for the music major. (C-ID MUS 140) (A, CSU, UC)

## 2B MUSIC THEORY IV

3 units, 3 lecture hours, (Spring only)
PREREQUISITE: Music 2A. COREQUISITE: Music 7D. ADVISORY: Eligibility for English 1A recommended.

Writing and analysis; late 19th and 20th century compositional practices including serial procedures and indeterminacy. Designed for the music major. (C-ID MUS 150) (A, CSU, UC)

## 3 MUSIC FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A recommended.
Fundamental theory of music: pitch, rhythm, meters, scales, keys, key signatures, intervals, rhythm, and scale dictation. Designed for the general student, the music major with limited music theory experience, the commercial music student, and the classroom teacher. (C-ID MUS 110) (A, CSU-GE, UC, I)

## 4 JAZZ THEORY

3 units, 3 lecture hours, (Fall only)
ADVISORY: Ability to read and notate music. Familiarity with basic scale and chord construction. Eligibility for English 1A recommended.

Chord, scale, and structural theory relating to the study, performance, and composition of jazz and contemporary music. (A, CSU, UC)

## 5 COMPUTER MUSIC PRODUCTION

3 units, 2 lecture hours, 2 lab hours
ADVISORY: Ability to read and play simple melodies on a keyboard. Basic computer skills. Eligibility for English 1A recommended.

Use of synthesizers, computers, sequencing and sound design software to compose, edit, and record music. Students will create and compose original music and personal arrangements in styles reflecting historical periods of popular music. (A, CSU, UC)

6 JAZZ ARRANGING AND COMPOSITION
3 units, 3 lecture hours, (Spring only)
ADVISORY: Ability to read and notate music in treble and bass clefs strongly recommended. Music 1 A or 3 or 4 recommended. Eligibility for English 1 A recommended.

Scoring and composing for jazz and popular vocal/instrumental combinations; emphasis on contemporary sound; projects will be performed. (A, CSU, UC)

## 7A EAR TRAINING I

1 unit, 1 lecture hour, 1 lab hour
COREQUISITE: Music 1A. ADVISORY: Eligibility for English 1A recommended.

Develops materials of Music Theory I through ear training, sight singing, analysis, and dictation. (C-ID MUS 125) (A, CSU, UC)

## 7B EAR TRAINING: LEVEL II

1 unit, 1 lecture hour, 1 lab hour
PREREQUISITE: Music 7A. COREQUISITE: Music 1B. ADVISORY: Eligibility for English 1A recommended.

Develops the materials of Music Theory II through ear training, sight singing, analysis, and dictation. (C-ID MUS 135) (A, CSU, UC)

## 7C EAR TRAINING: LEVEL III

1 unit, 1 lecture hour, 1 lab hour
PREREQUISITE: Music 7B. COREQUISITE: Music 2A. ADVISORY: Eligibility for English 1A recommended.

Develops the materials of Music Theory III through ear training, sight singing, analysis, and dictation. (C-ID MUS 145) (A, CSU, UC)

## 7D EAR TRAINING: LEVEL IV

1 unit, 1 lecture hour, 1 lab hour
PREREQUISITE: Music 7C. COREQUISITE: Music 2B. ADVISORY: Eligibility for English 1A recommended.

Develops materials of Music Theory IV through ear training, sight singing, analysis, and dictation. (C-ID MUS 155) (A, CSU, UC)

## 8 AUDIO ENGINEERING

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
A basic view of the digital recording studio as a sound storage, manipulation, and reproduction facility. Designed for the music major and the commercial music student. (A, CSU, UC)

## 8B AUDIO ENGINEERING II

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
An intermediate course in audio recording. It focuses audio engineering skills including preproduction, multi-track digital recording, large format mixing consoles, microphone placement, session procedures, outboard and digital effects, mixdown strategies, and basic mastering skills. (A, CSU)

## 8C AUDIO ENGINEERING III

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1 A recommended.
An advanced course in audio recording. It focuses on audio engineering skills including post production, mixing, effects, mastering, content creation for broadcast, product manufacture, studio design, business basics, and conducing sessions in a 24 track recording environment (A, CSU)

## 9 COMPOSITION

2 units, 2 lecture hours, (Spring only)
ADVISORY: Music 2A or the equivalent as determined by testing and examination of student's music theory and composition work. Eligibility for English 1A recommended.

Writing short musical compositions; emphasis on 20th century practices; compositions performed in recital. (A, CSU, UC)

## 93 COMMERCIAL SONGWRITING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The study of songwriting and concept development from initial idea to its realization in a musical style. Topics include: developing marketable ideas, analysis of target markets, characteristics of diverse musical styles, steps in adapting ideas to styles, song writing and arranging. (A, CSU)

## 111 THE MUSIC BUSINESS

3 units, 3 lecture hours, (Formerly
Music 11)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.

Survey of topics of importance to the music industry professional: Management, copyright, publishing, contracts, promotion, and career development. (A)

## 112 INTRODUCTION TO FINALE

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to read music and basic computer skills recommended.

Use of Finale music notation software program for the creation of musical scores and parts. (A)

## 150 PIANO TEACHING I

2 units, 2 lecture hours, 1 lab hour
PREREQUIIITE: Music 20.
Methods for teaching beginning and elementary piano students including a survey and comparison of piano books available for studio teaching. Practical suggestions for maintaining a private piano studio, (A)

151 PIANO TEACHING II
2 units, 2 lecture hours, 1 lab hour
PREREQUIIITE: Music 150.
Pedagogical techniques for teaching intermediate level piano students. Performance of solo and ensemble piano literature. (A)

HISTORY \& APPRECIATION

## 12 MUSIC APPRECIATION

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Middle Ages through the 21st century. Concert attendance required. Designed for the general student. (C-ID MUS 100) (A, CSU-GE, UC, I)

## 13 HISTORY OF MUSIC

3 units, 3 lecture hours, (Formerly Music
11)

PREREQUISITE: Ability to read music and understand basic musical terminology. ADVISORY: Eligibility for English 1 A recommended.

Music of western civilization from ancient to the present; emphasis on listening. Designed for the music major and the general student with a music background. Outside listening and concert attendance required. (A, CSU-GE, UC, I)

## 15 WORLD MUSIC SURVEY

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
An exploration of global cultures through music. Students discover the characteristics and social contexts of indigenous, historical, and popular music from cultures including African, American Indian, Central Asian, Latin American, Pacific Island, and South Asian/Indian. (A, CSU-GE, UC)

## 16 JAZZ HISTORY AND APPRECIATION

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Vocal and instrumental jazz music from the 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. Eligibility for English 1A recommended.

Study of the fundamentals of jazz improvisation: scales, modes, the blues, simple chord progressions, ear training, development of melodic ideas. (A, CSU, UC)

## 10B INTERMEDIATE/ADVANCED JAZZ IMPROVISATION

2 units, 1 lecture hour, 3 lab hours
PREREQUIIITE: Music 10A or equivalent as determined by audition. ADVISORY: Ability to read music, and to play an instrument at the intermediate/advanced level is recommended. Prior jazz improvisation experience recommended.

Study of intermediate and advanced concepts of jazz improvisation: altered scales, chordal extensions, alterations, and substitutions, and more complex jazz compositions. (A, CSU, UC)

## 18 BASIC CONDUCTING AND SCORE READING

2 units, 2 lecture hours, (Spring only)
PREREQUISITE: Music 1 A or 3 or the equivalent as determined by testing.

Fundamentals of conducting and score reading; standard patterns and baton technique; practice with recordings and large and small college ensembles. Designed for the music major and the commercial music student. (A, CSU, UC)

## 20 BEGINNING PIANO: LEVEL I

2 units, 1 lecture hour, 3 lab hours, (Formerly Music 20A)
ADVISORY: Eligibility for English 1A recommended.
Fundamentals, theory, and terminology; elementary piano techniques, scales, and keyboard harmony; easy compositions drawn from the repertoire of varying historical periods of classical music and different world cultures. Designed for the general student and the classroom teacher. Not in- tended for students who have had previous piano instructions. (A, CSU, UC)

## 21 BEGINNING PIANO: LEVEL II

2 units, 1 lecture hour, 3 lab hours, (Formerly Music 20B)
PREREQUISITE: Music 20 or the equivalent as determined by testing.

Progressively advancing solo and ensemble work. Baroque, classic, romantic, 20th century literature and world music literature as appropriate to the students development level. Artistic self-expression will be developed through fingering, harmonizing melodies, sight-reading, and duets. Designed for the general student and the classroom teacher. (A, CSU, UC)

## 24 BEGINNING VOICE: LEVEL I

2 units, 1.5 lecture hours, 2 lab hours, (Formerly Music 25A)
ADVISORY: Eligibility for English 1A recommended.
Beginning concepts of tone production and vocal technique using folk, musical theatre and entry level art songs drawn from a variety of historical periods and cultures. Designed for the student with little or no formal voice training. (A, CSU, UC)

## 25 BEGINNING VOICE: LEVEL II

2 units, 1.5 lecture hours, 2 lab hours, (Formerly Music 25B)
ADVISORY: Music 24 or the equivalent as determined by testing. Eligibility for English 1A recommended.

Progressively advancing solo and small ensemble work; Baroque, classic, romantic, 20th century literature and world music literature as appropriate to the students development level. Artistic self-expression will be developed through tone production and interpretation. Designed for both music majors and non music majors. (A, CSU, UC)

## 27 BEGINNING GUITAR: LEVEL I

2 units, 1.5 lecture hours, 2 lab hours, (Formerly Music 28A)
PREREQUIIITE: Own instrument required. ADVISORY: Eligibility
for English 1A recommended.
Classical and popular guitar playing styles, techniques, rhythms, theory, and note reading. Music from a variety of historical periods and cultures. Designed for the general student and classroom teacher. Not intended for guitarists who read music. (A, CSU, UC)

## 28 BEGINNING GUITAR: LEVEL II

2 units, 1.5 lecture hours, 2 lab hours, (Formerly Music 28B)
PREREQUISITE: Music 27 or ability to read music. Must have basic understanding of and playing skill in the classical guitar as determined by testing. Own instrument required.

Continuation and expansion of knowledge and techniques learned in Music 27. Classical, popular, and world music studied and performed. Artistic self-expression developed through scales, exercises, and repertoire with extended range, varied rhythms, and with multiple lines. Designed for the serious student of guitar. (A, CSU, UC)

## 322 SENIOR PIANO SKILLS

1 lecture hour, 3 lab hours
PREREQUISITE: Students must meet the minimum age requirement.

Builds skills in piano performance. Technical, stylistic and aesthetic elements of the performing repertory from the standard literature of piano solo and ensemble music. Weekly individual instruction: ensemble and solo performance required. Students are required to perform solo juries in front of faculty each semester.

## 326 SENIOR VOCAL SKILLS

1 lecture hour, 1-3 lab hours, (Repeats = 99)
PREREQUISITE: Students must meet the minimum age requirement.

Studies in technical, stylistic, and aesthetic elements of performing repertory from the standard vocal solo literature. Solo performance required. Artistic self-expression will be developed through performance of the standard literature for solo voice. Baroque, classic, romantic, 20th century and world music literature assigned as appropriate to the students development level. Weekly individual instruction and solo performance in recitals required. Semester final solo performance jury proficiency required. Audition Required.

## 327 SENIOR GUITAR SKILLS

1.5 lecture hour, 2 lab hours, (Repeats = 99)

PREREQUISITE: Students must meet the minimum age requirement.

Builds skills in guitar performance. Technical, stylistic and aesthetic elements of the performing repertory from the standard literature of guitar solo and ensemble music. Ensemble and solo performance required.

## 342A SENIOR BRASS SKILLS

1 lecture hour, 1-3 lab hours, (Repeats =99)
PREREQUISITE: Students must meet the minimum age requirement. ADVISORY: Ability to perform on an instrument or voice at intermediate/advanced level.

Provides a performance venue for students taking weekly individual private lessons in brass which will include historical and cultural investigation of brass solo and ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required.

## 342B SENIOR WOODWIND SKILLS

1 lecture hour, 1-3 lab hours, (Repeats =99)
PREREQUISITE: Students must meet the minimum age requirement. ADVISORY: Ability to perform on an instrument or voice at intermediate/advanced level.

Provides a performance venue for students taking weekly individual private lessons in woodwinds which will include historical and cultural investigation of woodwind solo and ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required.

## 342C SENIOR STRING SKILLS

1 lecture hour, 1-3 lab hours, (Repeats =99)
PREREQUISITE: Students must meet the minimum age requirement. ADVISORY: Ability to perform on an instrument or voice at intermediate/advanced level.

Provides a performance venue for students taking weekly individual private lessons in strings which will include historical and cultural investigation of string solo and ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required.

## 342D SENIOR PERCUSSION SKILLS

1 lecture hour, 1-3 lab hours, (Repeats =99)
PREREQUISITE: Students must meet the minimum age requirement. ADVISORY: Ability to perform on an instrument or voice at intermediate/advanced level.

Provides a performance venue for students taking weekly individual private lessons in percussion which will include historical and cultural investigation of percussion solo and ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required.

## 348 SENIOR LATIN JAZZ SKILLS

1 lecture hour, 3 lab hours, (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Study and performance of Latin jazz and Afro-Cuban music. Students will develop an awareness and appreciation of the music of Latin America and Cuba through artistic and cultural creation. Participation in concerts and jazz festivals required.

## INTERMEDIATE/ADVANCED ENSEMBLES AND INDIVIDUAL LESSONS

## 22 INTERMEDIATE/ADVANCED PIANO

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3), (Formerly Music 21)
PREREQUISITE: Music 21 or the equivalent as determined by testing.

Technical, stylistic and aesthetic elements of the performing repertory from the standard literature of piano solo and ensemble music. Weekly individual instruction: ensemble and solo performance required. Students are required to perform solo juries in front of faculty each semester. Please consult instructor regarding variable units. (C-ID MUS 160) (A, CSU, UC)

## 26 INTERMEDIATE/ADVANCED VOICE

## 1-2 units, 1 lecture hour, 1-3 lab hours,

(Repeats = 3)
PREREQUISITE: Music 25 or intermediate or advanced level ability as determined by testing. ADVISORY: Eligibility for English 1A recommended.

Studies in technical, stylistic, and aesthetic elements of performing repertory from the standard vocal solo literature. Solo performance required. Artistic self-expression will be developed through performance of the standard literature for solo voice. Baroque, classic, romantic, 20th century and world music literature assigned as appropriate to the students development level. Weekly individual instruction; designed to help transferring music majors pass vocal jury exams at four-year colleges and universities. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. Please consult instructor regarding variable units. Audition Required. (A, CSU, UC)

## 29 INTERMEDIATE/ADVANCED GUITAR

1-2 units, 1 lecture hour, 1-3 lab hours,
$($ Repeats $=3$ )
PREREQUISITE: Music 28 or the equivalent performance skills as determined by testing.

Studies in technical, stylistic and aesthetic elements of the performing repertory from the standard literature of solo and ensemble guitar music. Repertoire from varying historical periods of classical music and different world cultures. Weekly individual instruction. Designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. Students are required to perform solo juries in front of faculty each semester. Please consult instructor regarding variable units. Audition required. (C-ID MUS 160) (A, CSU, UC)

## 42A INTERMEDIATE/ADVANCED BRASS (BRASS CHOIR)

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3), (Formerly Music 42)
ADVISORY: Eligibility for English 1A recommended. Ability to perform on an instrument or voice at intermediate/advanced level as determined by audition

Provides a performance venue for music majors taking weekly individual private lessons in brass which will include historical and cultural investigation of 20th and 21st century brass ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1 -unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

## 42B INTERMEDIATE/ADVANCED WOODWINDS (WOODWIND CHOIR)

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3), (Formerly Music 43)
ADVISORY: Eligibility for English 1A recommended. Ability to perform on a woodwind instrument at a college level as determined by audition.

Provides a performance venue for music majors taking weekly required individual private lessons in woodwinds which will include historical and cultural investigation of 20th and 21st century woodwind ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1 -unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

## 42C INTERMEDIATE/ADVANCED STRINGS (STRING ORCHESTRA)

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3), (Formerly Music 44)
ADVISORY: Eligibility for English 1A recommended. Ability to perform on an instrument or voice at intermediate/advanced level as determined by audition.

Provides a performance venue for music majors taking weekly required individual private lessons in strings which will include historical and cultural investigation of 20th and 21st century string ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1 -unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

## 42D INTERMEDIATE/ADVANCED PERCUSSION (PERCUSSION ENSEMBLE)

1-2 units, 1 lecture hour, 1-3 lab hours,
(Repeats = 3), (Formerly Music 46)
ADVISORY: Eligibility for English 1A recommended. Ability to perform on an instrument or voice at intermediate/advanced level as determined by audition.

Provides a performance venue for music majors taking weekly required individual private lessons in percussion which will include historical and cultural investigation of 20th and 21st century percussion ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

## 49 ADVANCED LARGE ENSEMBLES

## 1 unit, 3 lab hours

ADVISORY: Ability to perform advanced level large ensemble music (as determined by audition) recommended. Eligibility for English 1A recommended.

Study of large ensemble literature (vocal or instrumental). Designed for music major or transfer students. Audition required. (A, CSU, UC) (C-ID MUS 160)

## 57 SOLO REPERTOIRE STUDIES I

1 unit, 3 lab hours
PREREQUISITE: Four semesters of Music 22, 26 , or 29 or the equivalent as determined by audition. ADVISORY: Advanced vocal or instrumental performance skills recommended. Eligibility for English 1A recommended.

Vocal and instrumental solo music of the Baroque and Classical periods. (A, CSU, UC)

## 59 ADVANCED CHAMBER ENSEMBLES

1 unit, 3 lab hours
ADVISORY: Ability to perform advanced level chamber music recommended. Audition required. Eligibility for English 1A recommended.

Study of vocal and instrumental chamber music, with emphasis on small ensembles. Designed for music major or transfer students. Audition required. (A, CSU, UC)

## 74A INTERMEDIATE/ADVANCED BRASS PERFORMANCE PRACTICES

1-2 units, 1 lecture hour, 1-3 lab hours
COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

Provides a performance venue for music majors taking weekly individual private lessons in brass which will include 17th and 18th century brass ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1 -unit. All others take 2 -units. (C-ID MUS 160) (A, CSU, UC)

## 74B INTERMEDIATE/ADVANCED WOODWIND PERFORMANCE PRACTICES

1-2 units, 1 lecture hour, 1-3 lab hours
COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

18th century woodwind ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AAT) 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 1 A 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. Eligibility for English 1A recommended

Study and performance of choral music for large ensemble. Repertoire is drawn from a variety of historical periods of classical music and different world cultures. Concert, festival, and tour participation required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

## 34 FRESNO CHORALE

1-2 units, 4-6 lab hours, (Repeats = 3),
(Formerly Music 31)
PREREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

Study and performance of small choral ensemble specializing in early music. Repertoire from the historical periods of the Middle Ages, Renaissance and Baroque will be explored. Opportunities for public performance. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

## 35 CITY SINGERS

2 units, 6 lab hours, (Repeats $=3$ ),
(Formerly Music 33)
ADVISORY: Audition and approval. Ability to perform advanced high school choral music or the equivalent performance skills. Eligibility for English 1A recommended.

Study and performance of choral music for small ensemble. Repertoire is drawn from a variety of historical periods of classical music and different world cultures. Concert, festival and tour participation required. (A, CSU, UC)

## 39A OPERA WORKSHOP - BAROQUE/ CLASSICAL

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Music 26 or the equivalent as determined by audition recommended. Eligibility for English 1A recommended.

The rehearsal, study, and performance of scenes and complete operatic works from the Baroque and Classical periods. (C-ID MUS 180) (A, CSU, UC)

## 39B OPERA WORKSHOP - ROMANTIC PERIOD

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Music 26 or the equivalent as determined by audition recommended. Eligibility for English 1A recommended.

The study, rehearsal, and performance of major Romantic and Modern operatic works. (C-ID MUS 180) (A, CSU, UC)

## 39C CLASSICAL MUSICAL THEATRE

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Music 26 or the equivalent as determined by audition recommended. Eligibility for English 1A recommended.

The study, rehearsal, and performance of classic musical theatre, review, or operetta. (A, CSU, UC)

## 39D CONTEMPORARY OPERA AND MUSICAL THEATRE

## 2 units, 1 lecture hour, 3 lab hours

ADVISORY: Music 26 or the equivalent as determined by audition recommended. Eligibility for English 1A recommended.

The study, rehearsal, and performance of contemporary opera and/ or musical theatre. Performance of new original works is included (A, CSU, UC)

## 40 CONCERT BAND

1-2 units, 4-6 lab hours, (Repeats $=3$ )
ADVISORY: Ability to perform advanced high school band music or the equivalent performance skills as determined by audition recommended. Eligibility for English 1A recommended.

Modern literature with an emphasis on compositions of composers from the 20th and 21st century will be performed and studied. Interpretation of a variety of band music drawn from various historical periods of classical music and different world cultures with awareness of self-expression. Performances at selected college events. Participation in all performances required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

## 41 JAZZ ENSEMBLE

$1-2$ units, $4-6$ lab hours, (Repeats $=3$ )
ADVISORY: Advanced high school band or jazz ensemble experience or the equivalent performance skills as determined by audition recommended. Eligibility for English 1A recommended.

Study and performances of a broad range of jazz ensemble literature. Repertoire from varying historical periods of jazz music and different world cultures. Participation in concerts and jazz festivals required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

## 46 SYMPHONY ORCHESTRA

1-2 units, 4-6 lab hours,
(Repeats $=3$ ), (Formerly Music
45)

ADVISORY: Ability to perform advanced high school band or orchestra music or the equivalent performance skills as determined by audition recommended. Eligibility for English 1A recommended.

Study and performance of orchestral literature of all eras. Repertoire from varying historical periods of classical music and different world cultures. Combines college students and community members. Participation in all performances is required (two or three each semester). Students working toward the Associate in Arts in Music for Transfer (AAT) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

## 47A JAZZ COMBO: NEW ORLEANS, SWING AND BOP

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended. Eligibility for English 1A recommended.

Performance and analysis of New Orleans, Swing and Bop jazz literature for the small jazz combo. Designed for the music major and the commercial music student. (C-ID MUS 180) (A, CSU, UC)

## 47B JAZZ COMBO: COOL AND MAINSTREAM

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended. Eligibility for English 1A recommended.

Study and performance of Cool and Mainstream jazz literature for the small ensemble. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

## 47C JAZZ COMBO: MODERN AND FUSION <br> 2 units, 1 lecture hour, 3 lab hours

ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended. Eligibility for English 1A recommended.

Study and performance of Modern and Fusion jazz literature for the small ensemble, with emphasis on original compositions. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

## 47D JAZZ COMBO: WORLD MUSIC

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended. Eligibility for English 1A recommended.

Study and performance of World Music literature for the small ensemble with emphasis on original compositions. (C-ID MUS 180) (A, CSU, UC)

## 48 LATIN JAZZ ENSEMBLE

2 units, 1 lecture hour, 3 lab hours, (See also Chicano-Latino Studies 18)
ADVISORY: Ability to perform on an instrument or voice at college level as determined by audition. Eligibility for English 1 A recommended.

Study and performance of Latin jazz and Afro-Cuban music. Students will develop an awareness and appreciation of the music of Latin America and Cuba through artistic and cultural creation Participation in concerts and jazz festivals required. (C-ID MUS 180) (A, CSU, UC)

## 53 LATIN JAZZ WORKSHOP

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level as determined by audition. Eligibility for English 1 A recommended.

Study and performance of contemporary jazz-based music based on Caribbean, Brazilian, other South American, and Afro-Cuban styles. Repertoire is drawn from historical multi-cultural perspectives. Participation in concerts and jazz festivals required. (C-ID MUS 180) (A, CSU, UC)

## 54 AFRO-LATIN ENSEMBLE

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level as determined by audition. Eligibility for English 1A.

Study and performance of traditional and contemporary music based on shared African and Caribbean influences and heritage. Participation in concerts is required. (C-ID MUS 180) (A, CSU, UC)

## 55 AFRO-CARIBBEAN ENSEMBLE

2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level as determined by audition. Eligibility for English 1A.

Study and performance of traditional and contemporary music based on shared African and Caribbean influences and heritage. Participation in concerts is required. (C-ID MUS 180) (A, CSU, UC)

## 60 SYMPHONIC CHOIR

1-2 units, 4-6 lab hours, (Repeats = 3)
ADVISORY: Audition. Ability to perform advanced high school choral music or the equivalent performance skills. Eligibility for English 1A recommended.

Study and performance of choral music, with emphasis on major choral works of the nineteenth and twentieth centuries and orchestral/ choral works. Participation in concerts and festivals required. Students working toward the Associate in Arts in Music for Transer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

## 63 CHAMBER SINGERS

## 2 units, 6 lab hours

ADVISORY: Audition and approval. Ability to perform advanced high school/collegial level choral music or equivalent performance skills. Eligibility for English 1A recommended.

Study and performance of choral chamber music, with emphasis on Renaissance and Classical works. Participation in concerts, festivals, and tours is required. (A, CSU, UC)

## 68 SYMPHONIC BAND

1-2 units, 4-6 lab hours, (Repeats = 3)
PREREQUISITE: Intermediate/advanced level skill on a band instrument recommended. Audition required. ADVISORY: Eligibility for English 1 A recommended.

Concepts of intonation, balance, blend, basic articulation and public performance. Rehearsal and performance of symphonic band literature with an emphasis on 19th and 20th century works. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (A, CSU, UC)

## 70 CONTEMPORARY JAZZ ENSEMBLE

1-2 units, 4-6 lab hours, (Repeats = 3)
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills (as determined by audition) are recommended. Eligibility for English 1 A recommended.

Study and performance of contemporary jazz ensemble literature. Participation in concerts and festivals required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

## 71 LAB JAZZ ENSEMBLE

1-2 units, 4-6 lab hours, (Repeats = 3)
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills (as determined by audition) are recommended. Eligibility for English 1A recommended.

Study and performance of jazz ensemble literature, with emphasis on traditional and mainstream composers. Participation in concerts and festivals required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

## 72 JAZZ COMPOSER'S ORCHESTRA

2 units, 1 lecture hour, 4 lab hours
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills (as determined by audition) are recommended. Eligibility for English 1A recommended.

Study and performance of complex, compositionally advanced and professional level modern jazz ensemble literature. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

## 76 COLLEGE PHILHARMONIC ORCHESTRA

1-2 units, 4-6 lab hours, (Repeats = 3)
ADVISORY: Ability to perform advanced high school band or orchestra music or the equivalent performance skills (as determined by audition during the first two weeks) recommended. Eligibility for English 1A recommended.

Study and performance of orchestral music, with emphasis on major works of the eighteenth and nineteenth centuries. Participation in all public performances is required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

## 90 JAZZ COMPOSERS WORKSHOP

## 2 units, 1 lecture hour, 4 lab hours

ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills recommended. Eligibility for English 1A recommended.

Performance and analysis of original literature for the jazz ensemble/ jazz orchestra, with an emphasis on artistic self-expression through student compositions. Repertoire is drawn from varying historical periods of jazz and world cultural influences. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

## 91 JAZZ COMPOSERS ENSEMBLE

2 units, 1 lecture hour, 4 lab hours
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills recommended. Eligibility for English 1A recommended.

Performance of original literature for contemporary jazz ensemble/ jazz orchestra, featuring non-standard ensemble groupings, non-traditional instrumentation, with an emphasis on artistic self-expression. Repertoire is drawn from varying historical periods of jazz and world cultural influences. (C-ID MUS 180) (A, CSU, UC)

## 92 VOCAL JAZZ ENSEMBLE

2 units, 1 lecture hour, 4 lab hours,
$($ Repeats $=3)$
ADVISORY: Advanced high school vocal experience or equivalent performance skills recommended. Eligibility for English 1 A recommended.

Rehearsal and performance of vocal jazz ensemble literature. Repertoire is drawn from varying historical periods of jazz and world cultural influences. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

## 339 SENIOR OPERA WORKSHOP

1 lecture hour, 3 lab hours, (Repeats = 99)
PREREQUISITE: Students must meet minimum age requirement. ADVISORY: Music 26 or the equivalent.

Builds skills in opera and music theatre performance. Technical, stylistic and aesthetic elements of the performing repertory from the standard literature of musical drama. Performance required.

## 340 SENIOR SKILLS CONCERT BAND

4 lab hours, (Repeats = 99)
PREREQUISITE: Ability to perform advanced high school band music or the equivalent performance skills as determined by audition recommended. Eligibility for English 1A recommended.

Modern literature with an emphasis on compositions of composers from the 20th and 21st century will be performed and studied. Interpretation of a variety of band music drawn from various historical periods of classical music and different world cultures with awareness of self-expression. Performances at selected college events. Participation in all performances required.

## 341 SENIOR JAZZ PERFORMANCE ENSEMBLE

4-6 lab hours, (Repeats = 99)
PREREQUISITE: Students must meet minimum age requirement.
Builds skills in jazz ensemble performance. Study of technical, stylistic and aesthetic elements of repertoire from all eras and styles of jazz ensemble literature. 3-4 performances per semester required. Auditions advised (for ensemble balance and placement within section.)

## 344 SENIOR CHORAL SKILLS

3 lab hours, (Pass/No Pass), (Repeats = 99)
PREREQUISITE: Students must meet minimum age requirement. Builds skills in choral singing. Basic singing skills, performance practice and ensemble work from all periods of standard choral literature will be studied. Participation in 1-2 semester performances will be required by students. Weekly sectionals also assigned during the semester.

## 375 SENIOR COMMUNITY ORCHESTRA

4 lab hours, (Repeats =99)
PREREQUISITE: Students must meet minimum age requirement. ADVISORY: Ability to perform advanced high school band or orchestra music or the equivalent performance skills (as determined by audition during the first two weeks) recommended.

Study and performance of orchestral music, with emphasis featuring senior student and community soloists. Community musicians are encouraged to participate. Participation in all public performances is required.

## NATIVE AMERICAN STUDIES

SEE AMERICAN INDIAN STUDIES

NATURAL SCIENCE (NATSCI)

## 1A INTEGRATED SCIENCE: PHYSICS AND CHEMISTRY <br> 4 units, 3 lecture hours, 3 lab hours <br> 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 <br> MEDICAL - SURGICAL NURSING <br> 4 units, 4 lecture hours, (Formerly <br> Registered Nursing 1) <br> PREREQUISITE: Acceptance into the Registered Nursing Program.

 COREQUISITE: Registered Nursing 32 and 32A.Introduction to registered nursing; the roles of the registered nurse, the nursing process, critical thinking, theoretical concepts and principles necessary to administer beginning level assessment and interventions (procedures) for adults. (A, CSU)

## 32 FOUNDATIONS AND INTRODUCTION TO MEDICAL - SURGICAL NURSING CLINICAL <br> 2 units, 6 lab hours, (Formerly Registered Nursing 2)

PREREQUIIITE: Registered Nursing 32A. COREQUIIITE: 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 <br> 2 units, 6 lab hours <br> PREREQUISITE: Acceptance into the Registered Nursing Program. COREQUISITE: Registered Nursing 31. <br> 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)

## 331 TRANSCULTURAL HEALTHCARE, INTERNATIONAL

1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended.
Cultural and spiritual concepts as they relate to the application of nursing care in an international setting. Intended for study abroad. (A, CSU)

## 35A PHARMACOLOGY A: INTRODUCTION TO PHARMACOLOGY <br> 1 unit, 1 lecture hour <br> COREQUISITE: Registered Nursing 31, 32, and 32A. <br> 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 heath 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 CLINICAL <br> 2 units, 6 lab hours <br> 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 THEORY

2.5 units, 2.5 lecture hours, (Formerly Registered Nursing 5)
PREREQUISITE: Registered Nursing 31, 32, 32A, 33, and 35A with a grade of "C" or better. COREQUISITE: Registered Nursing 46.

Family centered nursing approach to the child bearing cycle, birth, the neonate, and family bonding; physiology of pregnancy, labor, and recovery. (A, CSU)

## 46 NURSING CARE OF THE CHILDBEARING FAMILY CLINICAL

1.5 units, 4.5 lab hours, (Formerly

Registered Nursing 6)
PREREQUISITE: Registered Nursing 31, 32, 32A, 33 and 35A with a grade of "C" or better. COREQUISITE: Registered Nursing 45.

Clinical application of the principles and practices of nursing care of the child bearing family surrounding the ante-, intra-, and postpartum physical and psychosocial adaptations. (A, CSU)

## 51 NURSING CARE OF THE ADULT WITH COMPLEX HEALTH PROBLEMS

3 units, 3 lecture hours
PREREQUISITE: Registered Nursing 35B, 41, 42, and 42A with a grade of "C" or better. COREQUISITE: Registered Nursing 52, 52A and 53.

Synthesize and correlate nursing knowledge and skills in providing care to adults who have complex, multi-system illnesses. Focus will be for the registered nursing students to predict client needs and priorities, and evaluate outcomes on care. (A, CSU)

## 52 NURSING CARE OF THE ADULT AND OLDER ADULT WITH COMPLEX HEALTH PROBLEMS CLINICAL

2 units, 6 lab hours
PREREQUISITE: Registered Nursing 35B, 41, 42, and 42A with a grade of "C" or better. COREQUISITE: Registered Nursing 51, 52A, and 53.

Nursing care of the adult and older adult client with complex health problems in the acute hospital setting and community based support agencies. (A, CSU)

## 52A NURSING CARE OF THE ADULT AND OLDER ADULT WITH COMPLEX HEALTH PROBLEMS SKILLS

0.5 unit, 1.5 lab hours

PREREQUISITE: Registered Nursing 41, 42 and 42 A with a grade of "C" or better. COREQUIIITE: 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 52 A.

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 52 A with a grade of "C" or better. COREQUISITE: Registered Nursing 61 and 62.

Advanced nursing skills performance in a simulated clinical environment for the advanced nursing student caring for critically ill clients. (A, CSU)

65 NURSING CARE OF THE CLIENT WITH BEHAVIORAL AND EMOTIONAL DISORDERS
2 units, 2 lecture hours, (Formerly
Registered Nursing 9)
PREREQUISITE: Registered Nursing 35B, 51, 52, and 53 with a grade of "C" or better. COREQUISITE: Registered Nursing 66.

Theoretical concepts comprising a comprehensive overview of functional and dysfunctional human behavior, therapeutic communication, age related problems, treatment modalities, delivery of mental health care services, mental health legislation, and the role and responsibilities of the psychiatric/mental health nurse. (A, CSU)

66 NURSING CARE OF THE CLIENT WITH BEHAVIORAL AND EMOTIONAL DISORDERS CLINICAL
2 units, 6 lab hours, (Formerly Registered Nursing 10)
PREREQUISITE: Registered Nursing 35B, 51, 52, and 53 with a grade of "C" or better. COREQUISITE: Registered Nursing 65.

Clinical application of the nursing principles and practices of clients with emotional and behavioral disorders in the acute care and community settings. (A, CSU)

## 101 TRANSITION TO FRESNO CITY COLLEGE REGISTERED NURSING PROGRAM

1.5 units, 1.5 lecture hours

COREQUISITE: Registered Nursing 102.
Required for all students entering the Fresno City College Registered Nursing Program as an advanced placement student including LVN to RN and transfer students from other nursing programs. Focus on the theory and application of concepts of physical assessment, the nursing process, critical thinking, and the relationship of homeostatic mechanisms to fluids and electrolytes and nursing competencies in the professional roles of clinician, teacher, leader and advocate. (A)

## 102 TRANSITION TO FRESNO CITY COLLEGE REGISTERED NURSING PROGRAM SKILLS

1-2 units, 3-6 lab hours
COREQUISITE: Registered Nursing 101.
Required for all students entering the Fresno City College Registered Nursing Program as an advanced placement student including LVN to RN and transfer students from other nursing programs. Focus on skills acquisition and validation prior to entering the hospital setting. (A)

## 105 MEDICATION MATH

0.5 unit, 0.5 lecture hour, (Pass/No Pass), (Formerly Registered Nursing 23)
COREQUIIITE: Acceptance into the Registered Nursing Program.
Calculation of medication dosages, including review of mathematical concepts. (A)

107 INTRODUCTION TO NURSING PROCESS 0.5 unit, 0.5 lecture hour, (Pass/No Pass), (Formerly Registered Nursing 25)
COREQUISITE: Acceptance into the Registered Nursing Program. Introduction to the nursing process and development of nursing care plans. (A)

## 201 NCLEX-RN REVIEW

2 units, 2 lecture hours, (Pass/No Pass)
COREQUISITE: Registered Nursing 61.
Review and preparation for National Council Licensure Exam for Registered Nursing (NCLEX-RN). Includes test format, content review, and test-taking strategies.

## 202 SUCCESS STRATEGIES FOR RN STUDENTS

1 unit, 1 lecture hour, (Pass/No Pass)
PREREQUISITE: Acceptance into the nursing program.
Study and test-taking skills for the student nurse. Assessment of learning styles and development of strategies for student success, including application of critical thinking in Registered Nursing.

## 203 RN REFRESHER COURSE

3 units, 3.5 lecture hours, 13.5 lab hours, (9
weeks), (Pass/No Pass)
PREREQUISITE: RN License or NCLEX-RN eligible.
Didactic review, hospital based practice, and application of professional nursing skills for registered nurses and foreign educated nurses planning to return to the workforce.

## 204 INTRODUCTION TO THE NURSING PROFESSION

1.5 units, 3 lecture hours, ( 9 weeks), (Pass/

No Pass)
PREREQUISITE: Acceptance of application into the Fresno City College RN program.

Introduction to the Registered Nursing program and the Registered Nursing profession for the pre-nursing student.

## 205 CARE OF THE CHILDBEARING AND PARENTING FAMILY THEORY

1 unit, 1 lecture hour
PREREQUISITE: None.
Theoretical concepts and integration of the nursing process as it relates to the nursing care of childbearing and parenting families.

## 206 CARE OF THE CHILDBEARING AND PARENTING FAMILY SIMULATION

0.5 unit, 1.5 lab hours

PREREQUISITE: None.
Application in a simulated setting of the principles and practices of nursing care for childbearing and parenting families.

## 207 PERIOPERATIVE NURSING

1.5 units, 1 lecture hours, 2 lab hours, (Pass/No Pass)
PREREQUISITE: Registered Nursing 42A.
Introduction to perioperative nursing care for inpatient and/or outpatient clients with exposure to the roles of the circulating nurse, scrub nurse, PACU nurse, and ancillary services.

## PARALEGAL (PLEGAL)

Courses required for paralegal degree/certificate are offered regularly. Some elective courses are scheduled less frequently than others.

## 1 INTRODUCTION TO PARALEGALISM

## 3 units, 3 lecture hours

COREQUISITE: Business Administration 20. ADVISORY: Eligibility for English 1A recommended.

Overview of paralegal profession, including historical development, employment, ethics, job responsibilities, litigation process, legal analysis, and legal research and writing. (A, CSU)

## 2A LEGAL RESEARCH AND WRITING I <br> 3 units, 3 lecture hours <br> PREREQUISITE: Paralegal 1 <br> 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 <br> 3 units, 3 lecture hours <br> PREREQUISITE: Paralegal 2A. <br> 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
PREREQUIIITE: 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 167W and 168R 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 <br> 3 units, 3 lecture hours <br> PREREQUIIITE: English 1A. <br> An introduction to philosophical thinking on the nature of knowledge, truth, and reality. (C-ID PHIL 100) (A, CSU-GE, UC, I))

## 1AH HONORS THEORIES OF KNOWLEDGE AND REALITY

3 units, 3 lecture hours, (Formerly
Honors 1P)
PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

An introduction to philosophical thinking on the nature of knowledge, truth, and reality. Honors sections may also focus on an historical overview or a more in-depth study of a significant branch of philosophy e.g. philosophy of language or philosophy of mind. (C-ID PHIL 100) (A, CSU-GE, UC, I)

## 1B SOCIAL AND POLITICAL PHILOSOPHY

## 3 units, 3 lecture hours

PREREQUISITE: English 1A.
An introduction to social and political philosophies; inquiry into views of human nature and human happiness, inquiry into the best form of society or government. (A, CSU-GE, UC, I)

## 1C ETHICS

3 units, 3 lecture hours
PREREQUIIITE: English 1A.
Reading and critical analysis of primary texts on moral theory. Examinations of ethical concepts such as good, evil, moral obligation. Conditions necessary to ethical decision-making, conscience, moral rules, justice, and free will. (C-ID PHIL 120) (A, CSU-GE, UC, I)

## 1CH HONORS ETHICS

## 3 units, 3 lecture hours

PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Reading and critical analysis of primary sources on moral theory. Examinations of ethical concepts such as good, evil, and moral obligation. Conditions necessary to ethical decision-making-conscience, moral rules, justice, and free will-may also be discussed. Honors sections may also involve a more in-depth study of a significant area of ethics or moral philosopher, and will require additional writing. (C-ID PHIL 120) (A, CSU-GE, UC, I)

## 1D WORLD RELIGIONS

3 units, 3 lecture hours, (Formerly
Philosophy 10)
PREREQUISITE: English 1A.
Basic beliefs and practices of Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam. (A, CSU-GE, UC, I)

## 2 CRITICAL REASONING AND ANALYTIC WRITING

## 3 units, 3 lecture hours, (Formerly Philosophy 4)

PREREQUISITE: English 1A.
Principles and methods of good reasoning, with an emphasis on deductive logic, including formal techniques of sentential logic. Includes the identification of arguments, developing and assessing basic deductive and inductive reasoning, common fallacies, and application of each element to various areas of study and real world situations. (A, CSU-GE, UC, I)

## 2H HONORS CRITICAL REASONING AND ANALYTIC WRITING

## 3 units, 3 lecture hours

PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Principles and methods of good reasoning, with an emphasis on deductive logic, including formal techniques of sentential logic. Includes the identification of arguments, developing and assessing basic deductive and inductive reasoning, common fallacies, and application of each element to various areas of study and real world situations. Honors sections may also focus on an historical overview, or a more in-depth study of a significant branch of philosophy, e.g., environmental ethics or philosophy of race. (A, CSU-GE, UC, I)

## 3A ANCIENT PHILOSOPHY

3 units, 3 lecture hours
ADVISORY: English 1A.
An introduction to ancient philosophy with an emphasis on Greek thought from the Pre-Socratic philosophers to Aristotle. (A, CSU-GE)

## 3B MODERN PHILOSOPHY

3 units, 3 lecture hours
ADVISORY: English 1A.
Addresses 16th through 18th century philosophy with emphasis on broad epistemological and/or metaphysical developments of empiricism and rationalism in philosophical thought from Descartes to Kant and may include approximate precursors and successors. (C-ID PHIL 140) (A, CSU-GE, UC, I)

## 5 PHILOSOPHY OF RELIGION

3 units, 3 lecture hours
PREREQUISITE: English 1A.
The philosophical, critical, scrutiny of some of the issues arising from the monotheistic classical tradition. For example: the nature of God; the existence of God; experience of God; the relation between faith and reason; the problem of evil; free will; immortality. (A, CSU-GE, UC, I)

## 6 SYMBOLIC LOGIC

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Deductive systems of logic, including syllogistic logic as well as propositional and predicate symbolic logic. (C-ID PHIL 210) (A, CSU-GE, UC)

## PHOTOGRAPHY (PHOTO)

## 5 INTRODUCTION TO PHOTOGRAPHY

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Non-lab beginning photography course introducing the basic principles, practices, and aesthetics of image making using digital or film cameras. Survey of photography's historical and contemporary role in our multicultural society. Emphasis on: using the camera, light, and visual language for expressing ideas photographically. Students must provide their own basic camera. (A, CSU-GE, UC)

## 6 DIGITAL IMAGING FUNDAMENTALS

3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Theories and practices of manually adjustable digital cameras; technical and creative use of manual camera controls and capture. Topics include: automatic vs. manual shooting modes, camera menus, exposure control, depth of field, motion control, basic flash, white balance, file formats, capture workflow, and camera care as well as the legal and ethical issues of photography. Image processing involving tonal range, organization and color adjustment using Adobe Lightroom. (A, CSU, UC)

## 12 BEGINNING PHOTOSHOP

3 units, 2 lecture hours, 3 lab hours, (Formerly Photography 22)
ADVISORY: Eligibility for English 1A recommended.
Introduction to Photoshop including a variety of problem solving lessons and projects using: digital image capture, organization, basic tone and color adjustments, basic retouching, and printing techniques. (A, CSU, UC)

## 15 PHOTOGRAPHY AND VISUAL LITERACY 3 units, 3 lecture hours

ADVISORY: Photography 12.
The nature and character of photography; its use for communication and expression. Visual literacy and photography as a universal language. How concept, design, and creation of the photographic image are utilized in our culture. (A, CSU, UC)

## 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. (A, CSU, UC)

## 23 ADVANCED PHOTOSHOP

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 12 or Graphic Communications 31 or equivalent.

Advanced techniques for computer enhanced still photograph image capture, processing, and output technologies. Use of Adobe Photoshop as primary software to complete real world assignments and produce a portfolio of digital photography. (A, CSU, UC)

## 26 LIGHTING PRINCIPLES

3 units, 2 lecture hours, 3 lab hours,
(Formerly Photography 24 and 35)
PREREQUISITE: Photography 6 or equivalent. ADVISORY: Photography 12.

Photographic lighting qualities, characteristics, and styles. Using studio lighting techniques, tabletop still life subjects will be photographed to emphasize problem solving and personal expression. (A, CSU)

## 30 EDITORIAL PHOTOGRAPHY

## 3 units, 2 lecture hours, 3 lab hours

COREQUISITE: Photography 6. ADVISORY: Photography 12.
Theories and practices of photography in the field of mass communication. Photography as it is applied to: newspapers, magazines, public relations, websites, business and publishing applications. Emphasis on communication of ideas, storytelling, and social reportage using the power of photographs as a force in communication. Close consideration of the legal and ethical aspects of photography. (C-ID JOUR 160) (A, CSU)

## 32 COMMERCIAL PORTRAITURE

3 units, 2 lecture hours, 3 lab hours,
(Formerly Photography 23 and 25)
PREREQUISITE: Photography 6 or equivalent. ADVISORY: Photography 12.

Studio and environmental commercial portraiture. Emphasis on style and the psychology of body language, lighting, composition, and facial expression. Portrait subjects include: individuals, couples, groups, and weddings. (A, CSU)

## 40

## PROFESSIONAL PHOTOGRAPHIC PRACTICES

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 12 or equivalent.
Theories and practices of picture selection for portfolios and other visual environments such as publishing, gallery presentations, annual reports, websites, magazines, commercial clients or visual media of any kind. Topics include advanced theory in communication with emphasis on visual language, legal and ethical considerations, organization and design in developing a professional portfolio strategy to be successful in both traditional and online marketplaces. (A, CSU)

## 45 ADVANCED PROJECTS

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 18 or 23 or 26 or 30 or 32 or 47.
Limited enrollment course open only to those students who have completed the prerequisite for their proposed project. Projects must emphasize advanced approaches not covered in the prerequisite courses. Students will research their topic and present their work and findings to the class. Independent study contract between instructor and student required. (A, CSU)

## 49 MULTIMEDIA PHOTOJOURNALISM 3 units, 2 lecture hours, 3 lab hours <br> PREREQUISITE: Photography 6.

This is an advanced visual journalism course that puts an emphasis on multimedia storytelling using different assets such as still, video, and web based media. The course will focus on re-imagining storytelling, teaching the student to use factual information as their inspiration to build stories. (A, CSU)

## 57 APPLIED COLOR AND ALTERNATIVE PHOTOGRAPHIC MEDIA

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Graphic Communications 31 or Photography 12. ADVISORY: Photography 23.

Developing a personal vision by seeing and working with digital media using various media and methods for creating photographic images. Contemporary digital processes will be used and combined for representational and non-representational images. Color Theory and Color Management in the photographic medium and its relationship to alternative media. (A, CSU, UC)

## 267 INTRO TO AERIAL MULTIMEDIA

0.5 unit, 1 lecture hour, 2 lab hours, (9 weeks)
ADVISORY: Photography 6.
This course is an introduction to Aerial still and motion image capture. Both Photography and Video elements will be explored. Safety, regulations, industry applications, storytelling, and software output are part of the presented points of the coursework.

## 277 AERIAL MULTIMEDIA II <br> 3 units, 2 lecture hours, 3 lab hours

PREREQUISITE: Photography 267. Students must be able use both hands to operate and read data on the controller. Students must be able to visually see in flight drone as needed.

Intermediate uses of unmanned aerial vehicles for digital imaging This hands-on course covers high resolution video capture, aerial imaging, intelligent mission planning, for image capture, editing, mapping and related uses.

## 323 ADVANCED PHOTOSHOP

2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Retakes $=4$ )
PREREQUISITE: Photography 12 or Graphic Communications 31.

Advanced techniques for computer enhanced still photograph image capture, processing, and output technologies. Use of Adobe Photoshop as primary software to complete real world assignments and produce a portfolio of digital photography.

## PHYSICAL EDUCATION (PE)

## general activity counses

## 3 ARCHERY

1 unit, 3 lab hours, (Formerly Physical Education ACT 14)
ADVISORY: Eligibility for English 1A recommended.
Techniques of shooting, correct use of equipment, and safety procedures. Events include target archery, tournament rounds, and competitive shooting. (A, CSU, UC)

## 4 BADMINTON

1 unit, 3 lab hours, (Formerly Physical Education ACT1)
ADVISORY: Eligibility for English 1A recommended.
Strokes, rules, etiquette, and strategy. Singles and doubles game experience. (A, CSU, UC)

## 4B INTERMEDIATE BADMINTON

1 unit, 3 lab hours
PREREQUISITE: Physical Education 4.
An expanded approach to the fundamental badminton strokes and strategies obtained in beginning badminton. Students will build upon their knowledge of the game of badminton, and be able to successfully compete with peers of their skill level. (A, CSU-GE)

## 5 BASKETBALL

1 unit, 3 lab hours, (Formerly Physical Education ACT 5A)
ADVISORY: Eligibility for English 1A recommended. Basic skills, rules, strategy, offense and defense. Tournaments according to skill level of students. (A, CSU, UC)

## 6 FITNESS AND HEALTH

1 unit, 3 lab hours, (Formerly Physical Education ACT 15A)
ADVISORY: Eligibility for English 1A recommended. Class explores various activities to develop posture, strength, flexibility, endurance and relaxation. (A, CSU, UC)

## 7 GOLF

1 unit, 3 lab hours, (Formerly Physical Education ACT 10)
ADVISORY: Eligibility for English 1A recommended. Grip, stance, and swing fundamentals. Instruction on the short game basics. Swing evaluation for each student. Instruction on golf etiquette, equipment and the rules of golf. (A, CSU, UC)

## 8 BASIC SELF DEFENSE

1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Theory and techniques of self defense and personal safety. Mental and physical aspects of basic self defense. Content includes recognizing and avoiding dangers, and skills and strategies for employing physical defense when necessary. (A, CSU, UC)

## 9 CIRCUIT TRAINING

1 unit, 3 lab hours, (Formerly Physical

## Education ACT 17A)

ADVISORY: Eligibility for English 1A recommended.
Designed to test individuals, assign an exercise program and retest to note progress. Emphasis on individual training. Use of weightifiting 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)

## 12B INTERMEDIATE SWIMMING

1 unit, 3 lab hours
PREREQUIIITE: Physical Education 12.
Intermediate drills and conditioning workouts for experienced swimmers. (A, CSU-GE)

## 13 TENNIS

1 unit, 3 lab hours, (Formerly Physical Education ACT 7)
ADVISORY: Eligibility for English 1A recommended.
Strokes, rules, etiquette and game strategy for singles and doubles. (A, CSU, UC)

## 13B INTERMEDIATE TENNIS

1 unit, 3 lab hours
PREREQUIIITE: Physical Education 13. Experience playing competitively at the high school junior varsity or varsity level may satisfy prerequisite. ADVISORY: Eligibility for English 1A recommended.

An expanded approach to the fundamental tennis strokes and strategies obtained in beginning tennis. Students will build upon their knowledge of the game of tennis, and be able to successfully compete with peers of their skill level. (A, CSU, UC)

## 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. Safe methods of lifting and the use of equipment. (A, CSU, UC)

## 17 HATHA YOGA

1 unit, 3 lab hours, (Formerly Physical
Education ACT 28)
ADVISORY: Eligibility for English 1A recommended.
Fundamental exercises for flexibility, strength, relaxation, and improvement of concentration drawn largely from the Hatha Yoga tradition. (A, CSU, UC)

## 27 HIGH-INTENSITY CARDIO INTERVAL TRAINING

## 1 unit, 3 lab hours

ADVISORY: Eligibility for English 1A recommended.
Designed to improve cardiovascular fitness by running pre-determined intervals on a regulation running track. The intervals will vary from 50-200 meters. (A, CSU, UC)

## 70 FITNESS AEROBICS

1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Designed to provide a total body workout that develops aerobic endurance, increases range of motion and muscular strength, and improves flexibility. (A, CSU, UC)

## 71 SOCCER

1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Basic skills, rules, strategy, offense and defense. Tournaments according to skill level of students. (A, CSU, UC)

## 72 SPINNING FOR FITNESS

1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Designed to improve overall physical fitness and health through the use of stationary spin bikes. Proper spin techniques and safety practices are demonstrated. Suitable for all genders and fitness levels. ( $\mathrm{A}, \mathrm{CSU}, \mathrm{UC}$ )

PREPROFESSIONAL COURSES

## 18A SPORTS MEDICINE LAB A

2 units, 6 lab hours, (Formerly Physical Education 19)
ADVISORY: Eligibility for English 1A recommended.
Supervised employment extending the classroom based on occupational learning related to Physical Education and Sports Medicine. Collaborative learning objectives established specific to the particular occupational field. One hundred (100) hours per semester. Orientation hours may be required. (A, CSU)

## 18B SPORTS MEDICINE LAB B

2 units, 6 lab hours
ADVISORY: Eligibility for English 1A recommended.
Supervised employment extending the classroom based on occupational learning related to Physical Education and Sports Medicine. Collaborative learning objectives established specific to the particular occupational field. One hundred (100) hours of lab per semester. Orientation hours may be required. (A, CSU)

## 20 ATHLETIC TRAINING

4 units, 3 lecture hours, 3 lab hours, (Formerly Physical Education PRE 32)
ADVISORY: Eligibility for English 1A recommended. (A background in science is preferred).

Taping, treating, prevention, and evaluating athletic injuries. Emergency first aid. (A, CSU, UC)

## 23 LIFEGUARD TRAINING

3 units, 2 lecture hours, 3 lab hours, (Formerly Physical Education PRE 31A)
PREREQUISITE: Intermediate swimming test: freestyle, elementary backstroke, breaststroke, and sidestroke. ADVISORY: Eligibility for English 1 A recommended.

Lifeguarding and water safety techniques. Red Cross Certification available. (A, CSU, UC)

## 24 SPORTS OFFICIATING

## 2 units, 2 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Understanding and interpreting the rules and mechanics of officiating one or more of the following activities: baseball, basketball, football, flag football, soccer, softball, track and volleyball. (A, CSU, UC)

## 26 SPORTS PSYCHOLOGY

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
The study and application of psychological principles and foundations to sport and exercise. Promote concepts and applied principles of sport and exercise psychology. (A, CSU, UC)

## 28 FOUNDATIONS OF COACHING

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to the profession of athletic coaching. Theories and practices that provide the foundation to coaching. Includes coaching philosophies, communication skills, motivational techniques, principles for training, and program management. (A, CSU, UC)

## 62 INTRODUCTION TO KINESIOLOGY

3 units, 3 lecture hours, (Formerly Physical Education 22 and Physical Education PRE 35)
ADVISORY: Eligibility for English 1A recommended.
Nature and scope of physical education and its sub-disciplines. Historical background, philosophy, curriculum, current problems, issues, and career options. (C-ID KIN 100) (A, CSU, UC)

## INTERCOLLEGIATE ACTIVITY COURSES

Medical clearance resulting from a physical examination by the college's team physician is required prior to a student's first enrollment in any intercollegiate activity course.

## 29B COMPETITIVE BADMINTON

3 units, 9.5 lab hours, (Repeats $=2$ )
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

## 29C OFF-SEASON CONDITIONING FOR BADMINTON

1 unit, 3 lab hours, (Repeats = 2 )
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for badminton players. (A, CSU, UC)

## 30B COMPETITIVE BASEBALL

3 units, 9.5 lab hours, (Spring), (Repeats = 2), (Formerly Physical Education INT 41)

ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

## 30C OFF-SEASON CONDITIONING FOR BASEBALL <br> 1 unit, 3 lab hours, (Repeats = 2$)$ <br> ADVISORY: Eligibility for English 1A recommended. <br> Off-season conditioning activities for baseball players. (A, CSU,

## 31B COMPETITIVE BASKETBALL

3 units, 9.5 lab hours, (Fall and Spring),
(Repeats = 2), (Formerly Physical Education INT 40)
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

## 31C OFF-SEASON CONDITIONING FOR BASKETBALL <br> 1 unit, 3 lab hours, (Repeats $=2$ ) <br> ADVISORY: Eligibility for English 1A recommended. <br> Off-season conditioning activities for basketball players. (A, CSU, <br> UC)

## 32B COMPETITIVE CROSS COUNTRY

3 units, 9.5 lab hours, (Fall), (Repeats $=2$ ),
(Formerly Physical Education INT 48)
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

## 33B COMPETITIVE FOOTBALL

3 units, 9.5 lab hours, (Fall), (Repeats $=2$ ), (Formerly Physical Education INT 42) ADVISORY: Eligibility for English 1A recommended. Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

## 33C OFF-SEASON CONDITIONING FOR FOOTBALL

1 unit, 3 lab hours, (Repeats $=2$ )
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for football players. (A, CSU, UC)

## 34B COMPETITIVE GOLF

3 units, 9.5 lab hours, (Repeats = 2), (Formerly Physical Education INT 46) ADVISORY: Eligibility for English 1 A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

## 34C OFF-SEASON CONDITIONING FOR GOLF 1 unit, 3 lab hours, (Repeats $=2$ ) <br> ADVISORY: Eligibility for English 1A recommended. <br> Off-season conditioning activities for golfers. (A, CSU, UC)

## 35B CHEER AND STUNT

2 units, 6 lab hours, (Repeats $=3$ ), (Formerly Physical Education PRE 38)
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to participate in cheer and stunt on the college level. Prospective participants should confer with the instructor before enrollment. (A, CSU, UC)

## 36B COMPETITIVE SOCCER

3 units, 9.5 lab hours, (Fall), (Repeats = 2), (Formerly Physical Education INT 39)
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

36C OFF-SEASON CONDITIONING FOR SOCCER
1 unit, 3 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for soccer players. (A, CSU,
UC)

## 37B COMPETITIVE SOFTBALL

3 units, 9.5 lab hours, (Spring), (Repeats = 2), (Formerly Physical Education INT 36)

ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

## 37C OFF-SEASON CONDITIONING FOR SOFTBALL

1 unit, 3 lab hours, (Repeats $=2$ )
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for softball players. (A, CSU,
UC)

## 38B COMPETITIVE TENNIS

3 units, 9.5 lab hours, (Spring), (Repeats $=$
2), (Formerly Physical Education INT 44)

ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

38C OFF-SEASON CONDITIONING FOR TENNIS
1 unit, 3 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for tennis players. (A, CSU,
UC)
39B COMPETITIVE TRACK AND FIELD 3 units, 9.5 lab hours, (Spring), (Repeats = 2), (Formerly Physical Education INT 43)

ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment.

## 39C OFF-SEASON CONDITIONING FOR TRACK AND FIELD

1 unit, 3 lab hours, (Repeats = 2 )
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for track and field team members. (A, CSU, UC)

## 40B COMPETITIVE VOLLEYBALL

3 units, 9.5 lab hours, (Fall), (Repeats = 2), (Formerly Physical Education INT 37) ADVISORY: Eligibility for English 1 A recommended. Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

## 40C OFF-SEASON CONDITIONING FOR

 VOLLEYBALL1 unit, 3 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for volleyball players. (A, CSU,
UC)

## 41B COMPETITIVE WRESTLING

3 units, 9.5 lab hours, (Fall), (Repeats = 2), (Formerly Physical Education INT 45)
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

## 41C OFF-SEASON CONDITIONING FOR WRESTLING <br> 1 unit, 3 lab hours, (Repeats = 2) <br> ADVISORY: Eligibility for English 1A recommended. <br> Off-season conditioning activities for wrestlers. (A, CSU-GE, UC)

## 42B COMPETITIVE WATER POLO

3 units, 9.5 lab hours, (Repeats $=2)$
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

## 42C OFF-SEASON CONDITIONING FOR WATER POLO

1 unit, 3 lab hours, (Repeats =2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for water polo players. (A, CSU, UC)

## 43B COMPETITIVE SWIMMING AND DIVING 3 units, 9.5 lab hours, (Repeats $=2$ ) ADVISORY: Eligibility for English 1A recommended. Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU)

## 43C OFF-SEASON CONDITIONING FOR SWIMMING \& DIVING <br> 1 unit, 3 lab hours, (Repeats =2) <br> ADVISORY: Eligibility for English 1A recommended. <br> Off-season conditioning activities for swimmers and divers. (A, CSU, UC)

## 44B COMPETITIVE SAND VOLLEYBALL <br> 3 units, 9.5 lab hours, (Repeats =2) <br> ADVISORY: Eligibility for English 1A recommended. <br> Designed primarily for students possessing the desire, ability and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of each sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU-GE)

## 44C OFF-SEASON CONDITIONING FOR SAND VOLLEYBALL

1 unit, 3 lab hours, (Repeats =2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for sand volleyball players.
(A, CSU-GE, UC)

## 45 PERFORMANCE TRAINING AND

 CONDITIONING TECHNIQUES FOR INTERCOLLEGIATE ATHLETICS$0.5-2$ units, 2-6 lab hours, (Repeats $=3$ )
ADVISORY: Eligibility for English 1A recommended. Resistance training for intercollegiate athletics. (A, CSU, UC)

## 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 1 A 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 1A recommended.

Mechanics, thermal physics, oscillations, and waves. Designed primarily for life science and related majors. (C-ID PHYS 105 and PHYS $100 \mathrm{~S}=\mathrm{PHYS} 2 \mathrm{~A}+2 \mathrm{~B})(\mathrm{A}, \mathrm{CSU}-\mathrm{GE}, \mathrm{UC}, \mathrm{I})$

## 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 $100 \mathrm{~S}=$ PHYS 2A + 2B) (A, CSU-GE, UC, I)

## 4A PHYSICS FOR SCIENTISTS AND ENGINEERS <br> 4 units, 3 lecture hours, 3 lab hours

COREQUISITE: Mathematics 5B. ADVISORY: Eligibility for English 1A recommended.

Classical mechanics and mechanical waves. Designed primarily for physics, engineering, and related majors. (C-ID PHYS 205 and PHYS $200 \mathrm{~S}=$ PHYS 4A $+4 \mathrm{~B}+4 \mathrm{C})(\mathrm{A}, \mathrm{CSU}-\mathrm{GE}, \mathrm{UC}, \mathrm{I})$

## 4B PHYSICS FOR SCIENTISTS AND

 ENGINEERS4 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 4A + 4B + 4C) (A, CSU-GE, UC, I)

## 4C PHYSICS FOR SCIENTISTS AND ENGINEERS

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Physics 4A. Physics 4 B is not a prerequisite. COREQUIITE: 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 $+4 B+4 C)(A, C S U-G E, U C, I)$

## 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, ideologies, systems, and discipline subfields. (C-ID POLS 150) (A, CSU-GE, UC, I)

## 2 AMERICAN GOVERNMENT

3 units, 3 lecture hours
PREREQUISITE: Eligibility for English 1A. ADVISORY: English 1 A.

Analysis of political and judicial institutions and processes, political ideology, political economy, civil rights, California state and local government. Satisfies the U.S. Constitution requirements and the national state and local government requirements for transfer students. (C-ID POLS 110) (A, CSU-GE, UC, I)

## 2H HONORS AMERICAN GOVERNMENT

3 units, 3 lecture hours
PREREQUISITE: Eligibility for English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Analysis of political and judicial institutions and processes, political ideology, political economy, the role of the media, civil rights, California state and local government. Satisfies the U.S. Constitution requirements and the national, state and local government requirements for transfer students. In addition Honors sections investigate in detail the original design of the American political system, including the values imbued in the Constitution, the construction of the federal system, and the legal responsibilities of the major actors, and contrast those features with the current conditions in American politics. Emphasis is given to explaining the differences between the two situations, and requiring students to suggest how access to the present system can be gained and used. (C-ID POLS 110) (A, CSU-GE, UC, I)

## 3 INTRODUCTION TO POLITICAL THEORY AND THOUGHT

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A.
Examination of various theoretical approaches to politics and of basic political problems and proposed solutions. Analysis of selected political theories and of the relevance of theory to contemporary problems. (C-ID POLS 120) (A, CSU-GE, UC, I)

## 5 COMPARATIVE GOVERNMENT

3 units, 3 lecture hours
ADVISORY: Political Science 2 and eligibility for English 1A, and Mathematics 260D.

Comparative analysis of different kinds of political systems; their history, political institutions, processes and policies; the environments in which they occur and their consequences. (C-ID POLS 130) (A, CSU-GE, UC, I)

## 13 LEGAL AND JUDICIAL REASONING

 units, 3 lecture hoursADVISORY: 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
PREREQUISITE: Psychology 2 or 2H and Psychology 42 or Mathematics 42 or Mathematics 11. ADVISORY: English 1A or 1AH.

Survey of psychological research methods. Emphasis placed on research design, descriptive techniques, experimental procedures, and the characteristics of valid assessment tools. Focus on the collection, analysis, interpretation, and reporting of research data. Cultural considerations and the ethics of research with humans and animals included. Designed for psychology majors and others who require familiarity with such research techniques. (C-ID PSY 200) (A, CSU, UC)

## 1A FUNDAMENTALS OF RADIOLOGIC TECHNOLOGY <br> 6 units, 6 lecture hours <br> 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

 LABORATORY1 unit, 3 lab hours
PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1A, 1C, and 1D. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Demonstration and practice in positioning of the chest, abdomen, upper and lower extremities, and shoulder girdle. (A, CSU)

## 1C CLINICAL ORIENTATION LABORATORY

3 units, 9 lab hours, (Formerly Radiologic Technology 3A)
PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1A, 1B, and 1D. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Practice of the applicable rules and regulations of the clinical facility. Assist with basic radiographic procedures. (A, CSU)

## 1D NURSING PROCEDURES IN RADIOLOGIC TECHNOLOGY

## 3 units, 3 lecture hours

PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1A, 1B, and 1C. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.

Procedures and methods pertaining to X-ray, emergency patients, and surgical procedures. (A, CSU)

## 2A RADIATION BIOLOGY

6 units, 6 lecture hours
PREREQUISITE: Radiologic Technology 1A, 1B, 1C and $1 D$. 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 1 D . 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

 TECHNOLOGY12 units, 36 lab hours
PREREQUISITE: Radiologic Technology 3. COREQUIIITE: Radiologic Technology 4A and 4C.

Advanced radiographic exposure and positioning; procedures in medical-surgical conditions. (A, CSU)

## 4C ADVANCED RADIOGRAPHIC POSITIONING LABORATORY-CRANIUM <br> 1 unit, 3 lab hours <br> PREREQUISITE: Radiologic Technology 3. COREQUIIITE: Ra-

 diologic 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

 TECHNOLOGY12 units, 36 lab hours
PREREQUISITE: Radiologic Technology 4A, 4B, and 4C. COREQUIIITE: 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)

## 106 CONCENTRATED CLINICAL RADIOLOGIC TECHNOLOGY

4 units, 13 lab hours
PREREQUISITE: Radiologic Technology 5A, 5B, and 5C.
Concentrated clinical experience to develop proficiency in all aspects of diagnostic radiography. (A)

## REAL ESTATE (RE)

Certain real estate courses offered by the college presently meet the course requirements imposed by the California Department of Real Estate in order to take the real estate salesperson and/or broker examination. However, these courses are not intended as licensing test preparation courses. The course requirements applicable to these examinations may be viewed at the California Department of Real Estate website www. dre.ca.gov.

## 40 REAL ESTATE PRINCIPLES

3 units, 3 lecture hours, (Formerly
Real Estate 50)
ADVISORY: Eligibility for English 1A recommended.
California real estate history, real property descriptions, public and private restriction terminology, agency and contracts, forms, licensure, and careers in real estate. (A, CSU)

## 41 REAL ESTATE PRACTICE

3 units, 3 lecture hours, (Formerly
Real Estate 51)
PREREQUISITE: Real Estate 40 or hold a license as a real estate salesperson or broker in California.

Day-to-day operations affecting brokers and sales persons, listings, advertising and marketing techniques. (A, CSU)

## RECREATION (REC)

## 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

## 1-8 units

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to recreation. Collaborative learning objectives established specific to recreation. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

## 20 INTRODUCTION TO RECREATION

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Educational opportunities; federal, state, and local relationships; planning programs; finance, and leadership. (A, CSU)

## 21 RECREATION LEADERSHIP

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Theoretical and philosophical basis for leadership. Social dynamics of participation in recreation activities. (A, CSU)

## 23 OUTDOOR RECREATION

3 units, 2 lecture hours, 3 lab hours
COREQUIIITE: Recreation 20.
History, development, principles and trends of organized camping, nature and conservation, and outdoor recreation. Laboratory and field trips, including camping and hiking activities. Practical skills in firecrafts, outdoor cooking, and backpacking. Leadership training in camp counseling. Required for recreation majors. (A, CSU)

RESPIRATORY CARE PRACTITIONER (RCARE)

## 16 PATIENT ASSESSMENT

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Acceptance into the Respiratory Care Program.
Basic cardiopulmonary assessment of patients with acute and chronic issues through the use of diagnostic tools and techniques. (A, CSU)

## 16B DIAGNOSTIC METHODS

3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Respiratory Care 16. COREQUIIITE: Respiratory Care 17 and 20.

Diagnostic tools and techniques to obtain quantiative information for patient assessment. (A, CSU)

## 17 RESPIRATORY CARE PHARMACOLOGY

3 units, 3 lecture hours
PREREQUISITE: Respiratory Care 16. COREQUISITE: Respiratory Care 16B and 20. ADVISORY: English 1A.

Concepts and principles of pharmacology agents required in the practice of respiratory care including medications, dosages, route of administration, delivery devices, therapeutic efficacy, and adverse reactions. (A, CSU)

## 18 PHYSIOLOGY OF THE RESPIRATORY SYSTEM

## 3 units, 3 lecture hours

PREREQUISITE: Respiratory Care 16B, 17, and 20. COREQUISITE: Respiratory Care 21.

Physiological principles of the cardiopulmonary system including: gas diffusion, transport of oxygen and carbon dioxide, mechanics and neural control of ventilation, pulmonary blood flow and perfusion, acid-base regulation, and hemodynamics. (A, CSU)

## 20 INTRODUCTION TO RESPIRATORY CARE

5.5 units, 5 lecture hours, 2 lab hours

PREREQUISITE: Respiratory Care 16. COREQUIIITE: Respiratory Care 16B and 17. ADVISORY: English 1A.

Selected modalities for respiratory care with the physical, mechanical, and scientific principles associated with all attendant equipment. (A, CSU)

## 21 APPLICATIONS AND PROCEDURES IN RESPIRATORY CARE

10 units, 9 lecture hours, 3 lab hours
PREREQUISITE: Respiratory Care 16B. COREQUIIITE: Respiratory Care 18.

Selected therapeutic and diagnostic modalities for respiratory care, with the physical, mechanical and scientific principles associated with all attendant equipment. Mechanical ventilation (theory and applications), sustained maximal inspiration, pulmonary function testing and chest physiotherapy. Supervised clinical performance in area hospitals. (A, CSU)

## 21B SIMULATION LAB SKILLS

1 unit, 3 lab hours
PREREQUISITE: Respiratory Care 18 and 21. COREQUISITE: Respiratory Care 22 and 24 .

Therapeutic and diagnostic modalities with use of simulation equipment to prepare the student for supervised clinical rotations in the intensive care unit. 1 (A, CSU)

## 22 CLINICAL APPLICATIONS AND VENTILATOR MANAGEMENT IN RESPIRATORY CARE I

8 units, 2 lecture hours, 18 lab hours
PREREQUISITE: Respiratory Care 18 and Respiratory Care 21. COREQUISITE: Respiratory Care 21B and Respiratory Care 24.

Fully supervised clinical experience of the student respiratory care practitioner with didactic concentration on management of patients requiring ventilator support. (A, CSU)

## 23 CLINICAL APPLICATIONS IN RESPIRATORY CARE II

8 units, 2 lecture hours, 18 lab hours
PREREQUISITE: Respiratory Care 21B, 22 and 24 . COREQUISITE: Respiratory Care 25.

Fully supervised clinical experience of the student respiratory care practitioner, in the intensive care setting. Selected computer clinical simulations for exit-testing are integrated with a computer-based research paper. Fulfills the computer literacy graduation requirement for Respiratory Care Practitioner majors only. (A, CSU)

## 24 NEONATAL AND PEDIATRIC DISEASES

2 units, 2 lecture hours
PREREQUISITE: Respiratory Care 18 and 21. COREQUISITE: Respiratory Care 21 B and 22.

Pathology, etiology, and management of neonatal and pediatric disorders, including normal and abnormal fetal development. (A, CSU)

## 25 RESPIRATORY DISEASE

2 units, 2 lecture hours, (Spring)
PREREQUISITE: Respiratory Care 21B and 24. COREQUISITE: Respiratory Care 23.

The pathology, etiology and management of respiratory diseases and trauma. (A, CSU)

## RETAILING FASHION

SEE FASHION MERCHANDISING

## SOCIAL SERVICE

SEE HUMAN SERVICES (HS)

## SOCIOLOGY (SOC)

## 1A INTRODUCTION TO SOCIOLOGY

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
Basic concepts, theoretical approaches, and methods of sociology. Analysis and explanation of social structure, culture, socialization, the self and social interaction, group dynamics, institutions, deviance, stratification, social change, social problems, and global dynamics. (C-ID SOCI 110) (A, CSU-GE, UC, I)

## 1AH HONORS INTRODUCTION TO SOCIOLOGY

3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.

Basic concepts, theoretical approaches, and methods of sociology. Analysis and explanation of social structure, culture, socialization, the self and social interaction, group dynamics, institutions, deviance, stratification, social change, social problems, and global dynamics. Places a greater emphasis than SOC 1A on methods of conducting scientific research in the field of sociology. Additional emphasis is placed on contemporary social issues as explored through supplemental readers or texts. (C-ID SOCI 110) (A, CSU-GE, UC, I)

## 1B CRITICAL THINKING ABOUT SOCIAL PROBLEMS

3 units, 3 lecture hours
ADVISORY: English 1A and Sociology 1A or 1AH.
An identification and analysis of contemporary social problems including causes, consequences and possible solutions. Explanation of theoretical perspectives used to explain social problems. Consideration of sociological methods of research and analysis. Application of critical thinking skills, specifically taught in the course, designed to result in heightened critical thinking ability as well as strengthened social awareness. (C-ID SOCI 115) (A, CSU-GE, UC)

## 2 AMERICAN MINORITY GROUPS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Overview of sociological, institutional, demographic, and social-psychological aspects of ethnicity and race. Examination of non-dominant groups in the United States. (C-ID SOCI 150) (A, CSU-GE, UC,

## 5 SOCIOLOGY OF RAPE

3 units, 3 lecture hours, (See also Women's Studies 5)
ADVISORY: Eligibility for English 1A recommended.
A micro and macro overview of rape including the history of rape, a study of what creates a rape culture, social and psychological characteristics and pathology of rapists, sociological impact upon and psychology of the survivor. Includes examination of various forms of sexual assault such as acquaintance rape, marital rape, male rape, gang rape and child sexual assault. The sociological foundation and history of current laws and their execution are also explored. (A, CSU, UC)

## 7 DOMESTIC VIOLENCE: ABUSE WITHIN THE FAMILY

3 units, 3 lecture hours, (See also Women's Studies 7)
ADVISORY: Eligibility for English 1A recommended.
A micro and macro study of the historical and contemporary problem of domestic violence. Overview of the battered spouse syndrome, characteristics of the survivor and the batterer, therapeutic approaches and development of legislation. Various forms of domestic violence such as child abuse, elder abuse, and violence in same gender relationships are also studied. (A, CSU, UC)

## 10 INTRODUCTION TO AGING STUDIES

3 units, 3 lecture hours, (See also Human Services 10), (Formerly Sociology 22)
ADVISORY: Eligibility for English 1A recommended. Overview of social, economic, biological and psychological functions of aging. Exploration of issues of the aged with emphasis on consumerism, housing, health, leisure time, family roles, retirement, widowhood and sexuality. (A, CSU-GE, UC, I)

## 14 SOCIOLOGY OF THE MEXICAN AMERICAN COMMUNITY

3 units, 3 lecture hours, (See also ChicanoLatino 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 <br> 3 units, 3 lecture hours <br> ADVISORY: Eligibility for English 1A recommended. <br> 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: Iove, courtship, mate selection, sexuality, family planning, pregnancy and childbirth, sexually transmitted diseases, family conflict, conflict resolution, communication skills, divorced families, step-families, aging and widowhood. (C-ID SOCI 130) (A, CSU-GE, UC)

## SPANISH

SEE FOREIGN LANGUAGES

## SPECIAL STUDIES

## 47 (COURSE TITLE TO BE SELECTED)

$0.5-5$ units, $0-5$ lecture hours, $0-15$ lab
hours, 9 lecture hour equivalents per $1 / 2$
unit of credit
ADVISORY: Eligibility for English 1A recommended.
Current topics of importance and concern in a designated subject field or on topics not covered in the regular curriculum or which need to be covered in greater depth than is possible within the regular offerings. Designed for transfer credit. Some topics may be repeatable. Units and hours to be determined. (A, CSU, UC approved as variable topics; evaluation completed by individual campuses after admission.)

## 177 (COURSE TITLE TO BE SELECTED)

0.5-10 units, 0-10 lecture hours, 0-30 lab hours, 9 lecture hour equivalents per $1 / 2$ unit of credit, (Formerly Special Studies 77) PREREQUISITE: To be determined.
Current topics of importance and concern in a designated subject field or on topics not covered in the regular curriculum or which need to be covered in greater depth than is possible with the regular course offerings. Designed for degree applicable, nontransfer credit. Some topics may be repeatable. Units and hours to be determined. (A)

## 277 (COURSE TITLE TO BE SELECTED)

0.1-15 units, 0-15 lecture hours, 0-45 lab
hours, 9 lecture hour equivalents per $1 / 2$
unit of credit, (Formerly Special Studies 77) PREREQUISITE: To be determined.
Current topics of importance and concern in a designated subject field or on topics not covered in the regular curriculum or which need to be covered in greater depth than is possible with regular offerings. Designed for nondegree, nontransfer credit. Units and hours to be determined.

## 377 (COURSE TITLE TO BE SELECTED)

1-40 lecture hours, 1-40 lab hours, (Pass/No Pass), (Open Entry, Open Exit), (Formerly Special Studies 77)
PREREQUISITE: To be determined.
Current topics of importance and concern in a designated subject field or on topics not covered in the regular curriculum or which need to be covered in greater depth than is possible with the regular offerings. Designed for noncredit. 0 unit, lecture hours and lab hours to be determined.

SPEECH (SPEECH)
SEE COMMUNICATIONS

SUPERVISED TUTORING (ST)
FORMERLY BASIC STUDIES AND INDIVIDUALIZED LEARNING

## 300 SUPERVISED TUTORING <br> Lab hours arranged, (Repeats = 3), <br> (Formerly Supervised Tutoring 100) <br> PREREQUIIITE: 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

 INTERPRETATION3 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)<br>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 1 A 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 <br> 1 unit, 3 lab hours <br> PREREQUIIITE: Thearre Arts 23. <br> 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 <br> 1 unit, 3 lab hours <br> PREREQUIIITE: Theatre Arts 29A. <br> Topics in advanced technical theatre beyond the scope of TA29A. Students may specialize in one or more of the following areas (with instructor approval): Scenery, Properties, Costumes, Make Up, Lighting, Sound, Special Effects. (A, CSU, UC)

## 30 THEATRE APPRECIATION

## 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
An introduction to the Theatre with emphasis on the theatre as an exciting artistic and social experience. Designed for the general student. (C-ID THTR 111 AND THTR 112) (A, CSU-GE, UC, I)

## 31 THEATRE HISTORY AND DRAMATIC LITERATURE I

3 units, 3 lecture hours, (Formerly Theatre
Arts 32A)
ADVISORY: Eligibility for English 1A recommended.
Survey of the Theatre history and dramatic literature of Western culture from Ancient Greeks through 18th Century. The history and development of theatre and drama are studied in relationship to cultural, political and social conditions of the time. (C-ID THTR 113) (A, CSU-GE, UC, I)

## 32 THEATRE HISTORY AND DRAMATIC LITERATURE II <br> 3 units, 3 lecture hours, (Formerly Theatre Arts 32B) <br> ADVISORY: Eligibility for English 1A recommended. <br> Survey of the theatre history and dramatic literature of Western culture from 19th century to the present. (A, CSU-GE, UC, I)

## 35 COSTUME CRAFTS

3 units, 3 lecture hours, (Formerly Theatre Arts 35A)
ADVISORY: Eligibility for English 1A recommended.
Techniques used for costume and costume accessory construction. (A, CSU, UC)

## 36 COSTUME DESIGN

3 units, 3 lecture hours, (Formerly Theatre Arts 35B)
ADVISORY: English 1A recommended.
Introduction to the creation of costumes for the stage. The study of costume history, design and basic construction techniques. Fabrics and their various uses will be investigated. (C-ID THTR 174) (A, CSU, UC)

## 38 <br> SCRIPT ANALYSIS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Principles, theories and techniques of play script analysis for theatrical production. Fully explore an in-depth methodology of reading, analyzing and understanding play scripts in a variety of genres and styles intended for production. Investigate techniques used to determine how to read a play for its' structure, scrutinizing the playwright's methods of creating theatre through plot, character and imagery, and understanding what scripts "mean" to the professional theatre artist and theatre-goer as distinct from other forms of literature. (C-ID THTR 114) (A, CSU, UC)

## 39A INTERMEDIATE CREW PRACTICUM I

1 unit, 3 lab hours
PREREQUISITE: Theatre Arts 23.
Allows students to explore more advanced or different positions as part of a theatrical stage crew. (A, CSU, UC)

## 39B INTERMEDIATE CREW PRACTICUM II

1 unit, 3 lab hours
PREREQUISITE: Theatre Arts 39A
Leadership roles on a theatrical crew. (A, CSU, UC)

## 40 PERFORMANCE PRACTICUM

3 units, 1 lecture hour, 6 lab hours,
(Repeats = 3)
ADVISORY: Eligibility for English 1A recommended.
Rehearsal and performance of plays for public presentation. Credit given for the performance of acting roles, stage management, direction or assistant direction of a Fresno City College theatre production. Participation in a Fresno City College theatre production required. (C-ID THTR 191) (A, CSU)

## 41 BEGINNING ACTING

3 units, 3 lecture hours, (Formerly Theatre Arts 31A)
ADVISORY: Eligibility for English 1A recommended.
Apply basic acting theory to performance and develop the skills of interpretation of drama through acting. Special attention is paid to skills for performance: memorization, stage movement, vocal production, and interpretation of text. Not open to students enrolled in Theatre Arts 42. (C-ID THTR 151) (A, CSU, UC)

## 42 BEGINNING ACTING FOR THEATRE MAJORS <br> 3 units, 2 lecture hours, 4 lab hours <br> ADVISORY: Eligibility for English 1A recommended. <br> Designed for theatre arts majors stresses acting technique, character building, scene and monologue performance, and scene analysis from selected plays from Modern Realism. Not open to students currently enrolled in Theatre Arts 41. (C-ID THTR 151) (A, CSU, UC)

## 43 INTERMEDIATE ACTING

3 units, 3 lecture hours, (Formerly Theatre Arts 31B)
PREREQUISITE: Theatre Arts 41 or 42. ADVISORY: Eligibility for English 1A recommended.

Improvisation, body movement, character development; class exercises to develop voice for the stage, classical and contemporary, monologues and scene study with class performance. (C-ID THTR 152) (A, CSU, UC)

## 44A ACTORS WORKSHOP

3 units, 2 lecture hours, 3 lab hours, (Formerly Theatre Arts 38A and 38B, 38, and 44)
PREREQUISITE: Theatre Arts 41 or 42. ADVISORY: Theatre Arts 43. Eligibility for English 1A recommended.

Skill development for actors with intermediate acting experience. Explores elements of performance styles, scene work of classical and contemporary materials and auditioning techniques. (A, CSU-GE, UC)

## 44B ACTORS WORKSHOP 2

3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Theatre Arts 44A. ADVISORY: Eligibility for English 1A recommended.

Skill development for actors with advanced acting experience. Explores elements of performance styles, scene work of classical and contemporary materials and auditioning techniques. Memorization skills required. (A, CSU, UC)

## 45 KENNEDY CENTER AMERICAN COLLEGE THEATER FESTIVAL TOPICS

2 units, 2 lecture hours, 4 lab hours, (9
weeks), (Repeats = 3)
PREREQUISITE: Student must either be selected by Kennedy Center American College Theater Festival adjudicators for participation in the festival, or be approved by the instructor to attend.

Preparation of theatre students for attendance at the Kennedy Center American College Theater Festival. Participation in master classes and participation/attendance at adjudication/competition events. (A, CSU)

## 46 VOICE FOR THE ACTOR

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Principles of the use of voice and speech for stage performance including Standard American Speech (IPA), diaphragmatic breath control, relaxation techniques, enunciation, articulation, projection, vocal characterization, vocal energy imagination and visualization in creating artistic and authentic self expression. (A, CSU, UC)

## 48A TEASERS I

0.5 unit, 0.25 lecture hour, 2 lab hours (Formerly Theatre Arts 48)
ADVISORY: Eligibility for English 1A recommended.
Creation, rehearsal and performance of new plays for public presentation. Participation in a Fresno City College theatre production of Teasers is required. (A, CSU)

## 48B TEASERS II

0.5 unit, 0.25 lecture hour, 2 lab hours, (Formerly Theatre Arts 48)
ADVISORY: Eligibility for English 1A recommended.
Techniques for collaborative work on the creation, rehearsal and performance of new plays for public presentation. Participation in a Fresno College production of Teasers is required. (A, CSU)

## 49 INTRODUCTION TO THEATRE DESIGN <br> 3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.
A survey of scenery, sound, costumes, makeup, properties, theatrical equipment and construction techniques through demonstration, and laboratory experience. Information is application to all formal theatrical applications. (A, CSU)

## 200 MOVEMENT FOR THE PRODUCTION THE LITTLE PRINCE

2 units, 1 lecture hour, 3 lab hours
COREQUISITE: Theatre Arts 40.
Prepare students for character movement and/or dance for production.

## 346 SENIOR MUSICAL PERFORMANCE SKILLS

 3 lab hours, (Unlimited Repeats), (Pass/No Pass)PREREQUISITE: Students must meet the minimum age requirements to audition for "New Wrinkles."

Skill-building in musical theatre such as chorus, small ensemble, and/or solo singing. Intended to help students considering auditioning and performing in the annual "New Wrinkles" production at Fresno City College.

## 347 SENIOR MUSICAL THEATRE SKILLS <br> 3 lab hours, (Unlimited Repeats), (Pass/No <br> Pass) <br> PREREQUISITE: Students must meet the minimum age requirements to audition for "New Wrinkles." <br> Skill-building in musical theatre such as dancing and/or acting. Intended to help students considering auditioning and performing in the annual "New Wrinkles" production at Fresno City College.

## 348 SENIOR PLAY PRODUCTION

1 lecture hour, 9 lab hours, (16 weeks),
(Unlimited Repeats), (Formerly Theatre
Arts 80)
ADVISORY: Thearre Arts 347.
Organize, write, cast, rehearse, and perform a major seniors' musical variety show for public performance.

## VOCATIONAL ENGLISH AS A SECOND LANGUAGE (VESL)

## 167W APPLIED ADVANCED WRITING FOR COLLEGE AND CAREERS <br> 4 units, 4 lecture hours, (Formerly Vocational English as a Second Language 269W)

PREREQUISITE: English for Multi-Lingual Students 265W, or designated score on the placement test, or completion of Vocational English as a Second Language 265W. Use of language other than English as primary language.

Advanced writing, grammar, critical thinking and study skills applied to tasks for various career fields. Emphasis on a broad range of professional communication genres. Acquisition and application of syntactic, lexical and grammatical rules. Course content includes: problem solving, teamwork, critical thinking, organizational and research skills, self-editing and the use of technological resources. (A)

## 168R APPLIED ADVANCED READING FOR COLLEGE AND CAREERS

4 units, 4 lecture hours, (Formerly Vocational English as a Second Language 269R)
PREREQUISITE: English for Multi-Lingual Students 265R, or designated score on the placement test, or completion of Vocational English as a Second Language 265R. Use of language other than English as primary language.

Advanced reading, vocabulary, critical thinking and study skills applied to tasks for a variety of career fields. Reading strategies reinforced through the use of workplace materials and other texts. Acquisition and effective use of workplace vocabulary. Course content includes: teamwork, problem solving, critical thinking, organizational and research skills, self-editing, and the use of technological resources. (A)

## 180RW APPLIED ADVANCED READING AND WRITING FOR COLLEGE AND CAREERS

## 3 units, 3 lecture hours

PREREQUISITE: Vocational English as a Second Language 265R and 265W.

Advanced reading, vocabulary, writing, grammar, critical thinking and study skills applied to tasks for various career fields. Reading strategies reinforced through the use of workplace materials and other texts. Emphasis on a broad range of professional communication genres, as well as acquisition and application of syntactic, lexical and grammatical rules. Course content includes: problem solving, teamwork, critical thinking, organizational and research skills, self-editing and the use of technological resources. (A)

## 265R APPLIED INTERMEDIATE READING FOR COLLEGE AND CAREERS 4 units, 4 lecture hours, (Pass/No Pass), (Formerly Vocational English as a Second Language 266R)

PREREQUISITE: English for Multi-Lingual Students 264R or designated score on the placement test. Use of language other than English as primary language.

Intermediate reading, vocabulary, critical thinking and study skills applied to tasks for a variety of career fields. Reading strategies reinforced through use of workplace materials and other texts. Acquisition and effective use of workplace vocabulary. Course content includes: teamwork, problem solving, critical thinking, organizational and research skills, self-editing and the use of technological resources.

## 265W APPLIED INTERMEDIATE WRITING FOR COLLEGE AND CAREERS <br> 4 units, 4 lecture hours, (Pass/No Pass), (Formerly Vocational English as a Second Language 266W)

PREREQUISITE: English for Multi-Lingual Students 264W or designated score on the placement test. Use of language other than English as primary language.

Intermediate writing, grammar, critical thinking and study skills applied to tasks for various career fields. Focus on a broad range of professional communication genres. Acquisition and application of appropriate syntactic and semantic elements. Course content includes: problem solving, teamwork, critical thinking, organizational and research skills, self-editing and use of technological resources.

WELDING TECHNOLOGY (WELD)

## 1 EXPLORING WELDING/METALS

3 units, 2 lecture hours, 3 lab hours, (Formerly Industrial Education 5)
ADVISORY: Eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

An introduction to oxyacetylene and plasma cutting. Shielded metal arc welding (SMAW) and gas metal arc welding (GMAW) in the flat and horizontal positions, along with other methods of joining steel together. An emphasis is placed on safety and developing good manipulative skills. (A, CSU)

## 2A INTRODUCTION TO WELDING TECHNOLOGY

6 units, 4 lecture hours, 6 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

Oxyacetylene cutting, shielded metal arc, gas metal arc (MIG), Flux Cored Arc Welding (FCAW) and gas tungsten arc (TIG) welding. An emphasis on good manipulative welding skills for joining steel, stainless steel and aluminum. Use of various electrodes. An introduction to the electrode and base metal classification system. (A, CSU)

## 2B ADVANCED MULTI-PROCESS WELDING

5 units, 3 lecture hours, 7 lab hours
PREREQUISITE: Welding Technology 2A.
Vertical and overhead welding with the shielded metal arc process leading to the American Welding Society (AWS) Structural Welding Code 3G and 4G Unlimited Certification Test. Advanced welding skills with gas metal arc (MIG), fluxed cored (FCAW) and gas tungsten arc (TIG). (A, CSU)

## 3A WELDING DESIGN AND FABRICATION

5 units, 3 lecture hours, 7 lab hours
PREREQUISITE: Computer Aided Drafting and Design 16 and Welding 2B. ADVISORY: Drafting 12 recommended.

Design and fabrication of metal projects by welding. Manufacturing processes, production techniques, and material cost estimation. (A, CSU)

## 3B INTERMEDIATE WELDING DESIGN AND FABRICATION

5 units, 3 lecture hours, 7 lab hours
PREREQUISITE: Welding 3A.
A continuation of Welding 3 A in the design, construction, and finishing of welded projects. (A, CSU)

## 3C CUSTOM METAL FABRICATION

## 2.5 units, 8 lab hours

PREREQUISITE: Welding 3B.
This course is a continuation of Weld 3B and allows students to use the skills learned in the previous class to fabricate custom projects. (A, CSU)

## 4A HEAVY PLATE, STRUCTURAL STEEL AND WELDING CERTIFICATION

5 units, 3 lecture hours, 7 lab hours
ADVISORY: Welding 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 1 A and Mathematics 201 or Applied Technology 130 recommended.

Shielded metal arc, gas metal arc welding, gas tungsten arc, and flux cored arc welding processes on different piping systems. Fit up and assemble joint configurations used in pressure vessel, power systems, cross country and refinery applications. Certification procedures in accordance with API, AWS, and ASME codes. (A, CSU)

## 56 BLUEPRINT READING FOR WELDERS

2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

Basic fundamentals of blueprint reading and welding symbol interpretation as required by the welding trade. (A, CSU)

## WOMEN'S STUDIES (WSTS)

## 5 SOCIOLOGY OF RAPE

3 units, 3 lecture hours, (See also
Sociology 5)
ADVISORY: Eligibility for English 1A recommended.
A micro and macro overview of rape including the history of rape, a study of what creates a rape culture, social and psychological characteristics and pathology of rapists, sociological impact upon and psychology of the survivor. Includes examination of various forms of sexual assault such as acquaintance rape, marital rape, male rape, gang rape and child sexual assault. The sociological foundation and history of current laws and their execution are also explored. (A, CSU, UC)

## 7 DOMESTIC VIOLENCE: ABUSE WITHIN THE FAMILY

3 units, 3 lecture hours, (See also Sociology 7)
ADVISORY: Eligibility for English 1A recommended.
A micro and macro study of the historical and contemporary problem of domestic violence. Overview of the battered spouse syndrome, characteristics of the survivor and the batterer, therapeutic approaches, and development of legislation. Various forms of domestic violence such as child abuse, elder abuse, and violence in same gender relationships are also studied. (A, CSU, UC)

## 10 CHANGING ROLES OF WOMEN

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The traditional and changing roles of women in Western society, including the effects of these roles on women as individuals, in their personal relationships, and their status in society. The contributions and contrasting perspectives of minority/ethnic women are an integral part of the course content. (C-ID SJS 120) (A, CSU-GE, UC, I)

## 22 HISTORY OF AMERICAN WOMEN

3 units, 3 lecture hours, (See also
History 22)
ADVISORY: English 1A.
Women in American history: social, political, and economic actions and reactions of American women; racial, ethnic, religious, geographic, and class differences. (A, CSU-GE, UC, I)

## 24 LA CHICANA AND LATINA <br> 3 units, 3 lecture hours, (See also <br> Chicano-Latino Studies 24)

ADVISORY: Eligibility for English 1A recommended.
A sociological analysis of Mexican American women in contemporary society. Special emphasis placed on her role in the family, church, education, economics, and politics. (A, CSU, UC)

## 25 ASSERTIVENESS TRAINING

2 units, 2 lecture hours, (See also Human Services 25)
ADVISORY: Eligibility for English 1A recommended.
Becoming more effective and creative in expressing oneself in a courteous and dignified manner. Discovering the communication options available in various life situations. (A, CSU)

ASIAN-AMERICAN WOMEN
3 units, 3 lecture hours, (See also AsianAmerican Studies 30)
ADVISORY: Eligibility for English 1A recommended.
This course examines the historical, social, and cultural experiences of Asian American women from the late 1800s to the present. Topics includes: immigration and settlement; labor participation; dating and marriage; family and career choices; inter-generational relations; participation in labor market; media portrayals; violence against women; globalization and work; and movements for social change. (A, CSU-GE, UC, I)

## 36 WOMEN'S LITERATURE

3 units, 3 lecture hours, (See also
English 36)
PREREQUISITE: English 1A or equivalent.
Survey of literature by women in fiction, drama, poetry, biography, and essay. Covers multicultural and international literature from classical to contemporary periods, in addition to feminist and gender theory. (A, CSU-GE, UC, I)

## 41 AFRICAN-AMERICAN WOMEN'S STUDIES

3 units, 3 lecture hours, (See also African-
American Studies 41)
ADVISORY: Eligibility for English 1A recommended.
Analyzes the social, political, and cultural history of African American women in the United States from an interdisciplinary perspective including the complex ways that ethnicity, class and gender have shaped African American women's lives and the strategies they have used to empower themselves and their communities. (A, CSU, 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

## State Center Community College District

## Board of Trustees

Richard M. Caglia
Magdalena Gomez
Deborah J. Ikeda
Bobby Kahn
John Leal
Eric Payne
Annalisa Perea

## Administration

Dr. Paul Parnell
Chancellor
Jerome Countee
Vice Chancellor,
Educational Services and
Institutional
Effectiveness
Cheryl Sullivan
Vice Chancellor, Finance
and Administration
Christine Miktarian
Vice Chancellor, Operations and Information Services

Julianna Mosier
Vice Chancellor, Human Resources

Fresno City College
Administration
Dr. Carole S. Goldsmith
President
Omar Gutierrez
Vice President of Administrative Services
Dr. Lataria Hall
Vice President of Student Services
Don Lopez
Vice President of Instruction
Robert Pimentel
Vice President of Educational Services and Institutional Effectiveness

Instructional Deans
Dr. Becky Barabe
Dean of Instruction, Applied Technology, Career and Technology Center and Workforce Development Divisions

Donna G. Cooper
Dean of Instruction, Student Success and
Learning Division
Shirley McManus
Dean of Instruction,
Math, Science and Engineering Division
Dr. Margaret E. Mericle
Dean of Instruction,
Social Sciences Division

Gurminder Sangha
Dean of Instruction, Educational Services and Pathway Effectiveness
Lorraine Smith
Dean of Instruction,
Allied Health, Physical Education, and Athletics Division

Neil Vanderpool
Dean of Instruction,
Fine, Performing, and
Communication Arts Division
Tabitha Villalba
Dean of Instruction, Academic Services and Humanities Pathways Division

Dr. Timothy J. Woods
Dean of Instruction, Business Division

## Student Services Deans

Monica Cuevas
Dean of Student Services,
Counseling and Guidance
Sean Henderson
Dean of Student Services, EOPS

## Faculty and Administration

Adams, Darren (2013)
Electrical Systems Technology
Adams, Elizabeth (2017) Engineering
B.S., Boise State University
M.S., University of Hawaii

Ph.D., Arizona State University
Allen, Nathan (2011)
Mathematics
A.A., Reedley College
B.A., M.A., California State University, Fresno
Al-kuhlani, Mufadhal (2018)
Biology
B.S., University of Kansas

Ph.D., University of California, Merced
Alvarado, Samuel L. (2004)
Counselor, Disabled Students Programs
\& Services
B.A., M.S., California State University, Fresno
Anderson, Lydia (1997)
Business Administration,
Marketing
A.A., Reedley College
B.S., M.B.A., California State University, Fresno
Anderson, Sasha (2008)
Mathematics
B.A., University of California, Santa Barbara
M.A., California State University, Fresno

Antonio, Estefana (2013)
Child Development Coordinator
B.S., M.A., California State University,

Fresno
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

Baker, Brian (2012)
Computer Information Technology B.A., M.S., California State University, Fresno

Balakian, Amber (2015)
Entrepreneurship/Business
Administration
B.A., University of California, San Diego
M.A., Harvard University

Baldwin, William (2017)
Nursing
A.S., Fresno City College
B.S., M.S.N., Grand Canyon University

Balogh, David (2001)
Physics
B.S., M.S., Brigham Young University

Bane, Leigh Ann (2016)
Reading
B.S., Oklahoma State University
M.A., California State University, Fresno

Barabe, Becky (2017)
Dean of Instruction, Applied
Technology, Career and Technology Cen-
ter and Workforce Development Divisions
B.A., University of California, Berkeley
M.A., Fresno Pacific University

Ed.D., Concordia University, Portland
Bascom, Brandon (2014)
Music
B.M., Brigham Young University
M.M., Manhattan School of Music
M.M., University of Michigan
D.M.A, University of lowa

Bedolla, Delmy J. (2019)
Respiratory Care
A.A., Reedley College
A.S., Fresno City College
B.A., University of California, Riverside
M.A., Fresno Pacific University

Begley, Polly (2000)
Communication
B.A., M.A., San Diego State

Benas, Rebecca (2015)
English
B.A., University of Washington
M.A., California State University, Bakersfield

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

Bezerra-Nader, Rosemarie (1990)
Developmental Mathematics
B.A., California State University, Fresno
M.A., Fresno Pacific College

Bibayoff, Natalie (2017)
Human Services
A.A., Fresno City College
B.A., California State University, Long Beach
M.S.W., University of California, Los

Angeles
Ed.D., California State University, Sacramento
Blackerby-Slater, Laurel (2001)
Mathematics
B.S., University of California, Davis
M.A., Fresno Pacific University

Blodgett, Ryan (2008)
Counselor, Disabled Students Programs
\& Services
B.A., M.A., California State University,

Fresno
Bluth, Gary (1991)
Physical Education
B.A., M.A., San Francisco State

Bolen, Gennean (2001)
English
B.A., Oral Roberts University
M.A., California State University, Fresno

Ed.D., Alliant International University
Boyd, Sean (2018)
Geography
B.A., California State University, Fresno

Boyle, Anna (2014)
English
B.A, M.A., California State University,

Fresno
Brady, Christopher P. (2018)
Commercial Music
A.A., Los Medanos College
B.A., Brigham Young University
M.A., University of California, Los Angeles

Brandl, Jeremy (2011)
Mathematics
B.A., M.A., California State University, Fresno

```
Brito, Simone (2016)
    Biology
    B.S., M.S., Universidade Estadual Paulista
Brotsis, William (2007)
    Fire Technology
    A.A., Fresno City College
    B.A., Fresno Pacific College
Cacossa, Peter (2018)
    Fire Academy Coordinator
    B.S., United States Military Academy of West
    Point
Caetano, Heidi (2008)
    Dental Hygiene
    A.S., Fresno City College
    B.S., California Polytechnic University, San
    Luis Obispo
    M.A.Ed., Fresno Pacific University
Caeton, Daniel (2016)
    English
    B.A., University of California, Berkeley
    M.A., California State University, Fresno
Callahan, Kevin (2015)
    Police Academy Coordinator
    B.S., California State University, Sacramento
    Master of Advance Study, University of
    California, Irvine
Camacho, Brett P. (2005)
    Welding Technology
    B.S., M.S., California Polytechnic University,
    San Luis Obispo
Camacho, Tammy (2011)
    Applied Technology
    B.S., M.S., California Polytechnic, San Luis
    Obispo
Campos, David (2017)
    English
    B.A., California State University, Fresno
    M.F.A., University of California, Riverside
Cantu, Gerald C. (2019)
    Philosophy
    A.A., Bakersfield College
    B.A., University of California, Berkeley
    Ph.D., University of California, Irvine
Carrigan, Janel (2012)
    Business Administration
    B.A., Pepperdine University
    M.B.A., National University
Brito, Simone (201
Biology
B.S., M.S., Universidade Estadual Paulista
Brotsis, William (2007)
Fire Technology
A.A., Fresno City College
B.A., Fresno Pacific College
Cacossa, Peter (2018)
Fire Academy Coordinator
B.S., United States Military Academy of West Point
Caetano, Heidi (2008)
Dental Hygiene
A.S., Fresno City College
B.S., California Polytechnic University, San Luis Obispo
M.A.Ed., Fresno Pacific University
Caeton, Daniel (2016)
English
Inersity of California, Berkeley
- I.A., Cak
Callahan, Kevin (2015)
Police Academy Coordinator
Master of Advance Study, University of California, Irvine
Camacho, Brett P. (2005)
Welaing Technology
San Luis Obispo
Camacho, Tammy (2011)
保 Technology
B.S., M.S., California Polytechnic, San Luis Obispo
Campos, David (2017)
English M.F.A., University of California, Riverside
Cantu, Gerald C. (2019)
Philosophy
A.A., Bakersfield College
B.A., University of California, Berkeley
Ph.D., University of California, Irvine
Carrigan, Janel (2012)
Business Administration
B.A., Pepperdine University
M.B.A., National University
```

Carroll, Jean (2001)
English for Multi-Lingual Students
B.A., California State University, Fresno
M.A., University of South Florida

Caviglia, Tony (1999)
Physical Education
A.A., Chabot College B.A., California

Polytechnic, San Luis Obispo
M.A., University of Southern California

Cazares, Ernesto (2018)
Counselor
A.S., Fresno City College
B.S., California State University, Fresno
M.S., National University

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.F.A., California State University, Fresno

Chandler, Donna (2001)
Librarian
A.A., University of Maryland
B.A., M.L.S., San Jose State University

Chavez, Kenneth R. (1988)
Counselor
B.A., California State University, Fresno
M.S., National University

Cherry, Rebecca (2019)
Chemistry
B.S., M.S., University of Colorado, Denver

Cho, John (2001)
Asian-American Studies
B.A., M.A, California State University, Fresno

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
Cole, Michael (2009)
Philosophy
B.A., University of California, Los Angeles

Ph.D., University of California, Santa Barbara

Cooper, Donna G. (2018)
Dean of Instruction, Student Success \& Learning
B.S., Judson College
M.A., Ed.D., California State University, Fresno

Cooper, Kevin (2009)
Music
B.M., Ithaca College
M.M., D.M.A., University of Southern California
Coronel, Maria (2007)
Spanish
A.A., Imperial Valley College
B.A., M.A., California State University, San Diego
Corsepius, Nicholas C. (2019) Chemistry B.S., Ph.D., University of Maryland College Park

Cox, Melody (2016) Nursing
A.A., El Camino Community College B.S.N., California State University, Long Beach M.S.N., Gonzaga University

Crawford, Kathleen (1999) History
B.A., California State University, Fresno
M.A., University of California, Los Angeles

Crocket, Karen (1998)
English
B.A., M.A., California State University, Fresno

Crooks, Elizabeth, (2015)
Medical Assisting
B.A., State University of New York at Plattsburgh
M.A., Alliant University

Cuevas, Monica (2014)
Dean of Students, Counseling and
Guidance
B.A., California State University, Fresno
M.S., National University

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

Dancy, Karen (2008)
Business \& Technology
B.S., California Polytechnic University,

Pomona M.B.A., DeVry University
Davey, Jonathan (2011)
Culinary Arts
A.O.S., Le Cordon Bleu
B.S., Brigham Young University

Davies, Karen (2008)
English
B.A., University of California, San Diego
M.F.A., Brown University

Davis, Theophilus (2005)
Welding Technology
A.S., Austin Community College

Day, Diana (2009)
Respiratory Care
A.S., Tulsa Junior College
B.S., M.B.A., University of Phoenix

DeAnda, Carolyn (2010)
Photography
Deasy, Sara P. (2019)
Photography
A.A., Fresno City College B.A., M.A., California State University, Fresno
De Freitas, Diane (2008)
Economics
A.A., American River
B.S., M.A., California State University,

Hayward
DeKlotz, Olena (2013)
English
B.A., Pedagogical College, Kyiv, Ukraine
M.A., University of Ukraine
M.A., California State University, Fresno

DeKruif, Linda (1998)
Women's Studies, Psychology
B.A., M.A., California State University,

Fresno
Denis-Arrue, Nuria M. (2005)
Biology/Microbiology
B.A., M.A., California State University,

Fresno
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

Duarte, Caleb (2018)
Art, Sculpture
B.F.A., San Francisco Art Institute
M.F.A., School of the Art Institute of Chicago

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
Edwards, Sarah (1998)
Health Information Technology
A.A., Reedley College
B.A., California State University, Fresno
B.S., Loma Linda University
M.A., Fresno Pacific University

Eizadiboroujeni, Farrokh (2019)
Communication Arts
B.A., M.A., California State University,

Fresno
Epperson, Tamara (2010)
Accounting
B.S., California State University, Fresno
M.F.A., National University

Erickson, Mark (2016) Industrial Mechanic
Erven, 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 B.S., M.A., California Coast University

Fisher, Jessica (2015)
Adaptive English
A.A., Fresno City College
B.A., M.S., California State University, Fresno
Fletcher, Alex (2018)
Physical Education
A.A., Fresno City College
B.A., University of Lethbridge
M.A., Fresno Pacific University

Fletcher, Eric (1999)
Communication, Forensics B.A., M.A., California State University, Fresno

Florence, Christine A. (2009)
Nursing
A.D.N., DeAnza College
B.S.N., M.S.N./Ed., University of Phoenix

Ford, Kiersti R. (2019)
Geology
B.S., M.S., California State University, Fresno

Forestiere, Marc C. (1996)
Computer Information Technology
B.S., California State University, Sacramento
M.A., Fresno Pacific College

Garcia-Lupian, Sonia (2008)
Counselor
B.A., M.S.W., California State University, Fresno

Gaxiola, Thomas J. (2001)
Director of EOPS/CARE
B.S., M.A., California State University, Fresno

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

Goishi-Bessey, Lilli (2019)
Student Health Services Coordinator B.S., D.N.P., California State University, Fresno
M.S., Fresno Pacific University

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

Goodson, Cheryl (2015)
Education
B.A., M.A., California State University,

Fresno
Gose, Kristine (2001)
Child Development
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

Guffy, L. Zay (2004)
Developmental English
A.A., Fresno City College
B.A., M.F.A., California State University, Fresno
Gutierrez-Osborne, Virginia (2005)
Biology
B.A., M.A., California State University, Los Angeles
M.A., California State University, Fresno

Gutierrez-Sauceda, Nancy M. (2005)
Sociology
B.A., California State University, Fresno
M.A., University of Wisconsin

Guzman, Juan (2013)
English
B.A., M.F.A, California State University,

Fresno
Hall, Lataria (2018)
Vice President of Student Services
A.A., College of the Sequoias
B.S., M.S., California State University,

Fresno
Ed.D., Northcentral University, Prescott
Hao, Jian-Min (2006)
Dance
B.F.A., Central Beijing Dance Academy
M.F.A., 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)
Decision Science
B.A., California State University, Fresno
M.B.A., National University

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)
Dean of Student Services, EOPS
B.A., M.A., California State University, Fresno
Henkle, Charles (2017)
Coordinator, Police Academy
B.S., California State University, Fresno

Hentzler, Jerry (1999)
Adaptive Ornamental Horticulture
B.S., Kansas State University

Hernandez, Maria (2013)
Automotive Technology
A.S., Fresno City College

Hernandez, Nicholas R. (2019)
Political Science
B.A., San Francisco State University
M.A., California State University, Fresno

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

Hodges, Cynthia (1990)
American Sign Language
B.S., Gallaudet College
M.S., University of Arizona

Holland, Nancy (2001)
Business Administration/
Marketing
A.S., College of the Sequoias
B.A., California State University, Fresno
M.S., Chapman University

Hood, Brett (2006)
Nursing
B.S., California State University, Fresno
M.B.A., National University

Howard, Jeanice (2013)
Dental Hygiene
A.S., Fresno City College
B.A., M.A., Fresno Pacific University

Hsiao, John (2018)
English
B.A., M.A., California State University, Long Beach

Hubbard, Greg (2006)
Photography
A.A., Butte Community College
B.A., California State University, Sacramento
M.A., California State University, Fresno

Huneault-Schultze, Sylvie (2001)
English for Multi-Lingual Students
A.A., Cape Cod Community College
B.A., University of Massachusetts, Boston
M.A., Monterey Institute of International

Studies
Hwang, Won Hoi (2019)
Geology/GIS
B.S., Konkuk University
M.S., Marshall University

Ph.D., Virginia Polytechnic Institute and State University
Jamison, Gregory (1997)
Mathematics
B.A., M.A., California State University, Fresno
Jauregui, Enrique (2000)
SLO/Assessment Coordinator
B.A., M.A., California State University, Fresno
Jeffcoach, Daniel (2017)
Biology
B.S., Cal Poly, San Luis Obispo
M.S., California State University, Fresno

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, Mikki
Director of Financial Aid
M.B.A., California State University, Fresno

Jones, Tiffany (1997)
Mathematics
B.A., M.A., California State University, Fresno

Joseph, James (1999)
Political Science
B.A., M.A., California State University,

Fresno
Ph.D., University of California, Riverside
Kamimoto, Martin S. (1996)
Automotive Technology
A.S., Fresno City College
B.S., M.S., California State University, Fresno
Kawagoe, Jodi (2015)
Chemistry
B.S., Iowa State University
M.A., University of North Carolina at Chapel

Hill
Kelley, Monique (2001)
Accounting
B.A., Morris Brown College
M.P.A., Georgia State University

Kerfoot, Mark (2015)
Physics
B.S., California State University, Sacramento
B.A., University of California, Davis

Ph.D., University of California, Merced
Keysaw, Paul (2006)
Physical Education
B.A., M.A., California State University,

Bakersfield
Khal, Christopher (2019)
Kinesiology, Health and Sports Medicine
B.S., California State University, Fresno
M.A., Fresno Pacific University

Khan, Kherstin (2011)
Communication
B.A., M.S., California State University,

Fresno
Kirby, James (2008)
Human Services
A.A., Ventura College
B.A., M.S.W., California State University, Fresno
Kirk, Karla (2011)
African-American Studies
B.A., M.A., Fresno Pacific University

Kobashigawa, Linda (2015) Librarian
B.A., California State University, Fresno
M.L.S., University of California, Los Angeles

Lane, Russel K. (2019)
Electrical Systems Technology
A.A., Fresno City College
B.S., University of Phoenix
M.B.A., California State University, Fresno

Leach, Rachel L. (2019)
Biology
B.S., M.S., California State University, Fresno

Lee, Bryan (2015)
Air Conditioning
B.S., Western Governors University

Lewallen, Jennifer (2017)
Communication Arts
B.A., University of California, Santa Barbara
M.A., Pepperdine University

Ph.D., University of Missouri
Lewallen, Robert (2017)
Air Conditioning
A.A., A.S., Fresno City College
B.S., California State University, Fresno

Lewis, Deborah (2007)
Child Development
A.A., Fresno City College
B.A., National University
M.A., California State University, Fresno

Linder, Colby (2001)
Biology
B.A., M.A., California State University, Fresno
Loftis, Darlene (1991)
High Tech Center
B.A., California State University, Fresno
M.A., Fresno Pacific College

Lopez, Donald F. (1995)
Vice President of Instruction
B.S., M.B.A., California State University, Fresno
Lozano, Alicia (2008)
Nursing
L.V.N., Clovis Adult School
A.D.N., Fresno City College B.S.N., M.S.N., California State University, Fresno

Lucckesi, Paul (2018)
Music
B.A., California State University, Fresno
M.A., Sam Houston State University

Luna, Cynthia (2001)
Communication
A.A., Moorpark College
B.A., M.A., California State University, Fresno
Mac Leod, Susan (2019)
Biology
A.A.S., Lichtenberg-Oberstufengymnasium
B.S., Freie Universitat Berlin
M.A., City College of New York

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
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
Martinez, Brandi (2019)
Nursing
B.A., B.S., M.S., California State University, Fresno
Martinez, Ernie
Director of Student Activities
Ph.D., Alliant University
Martinez, Robert II (2000)
Electrical Systems Technology
B.S., California State University, Fresno

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
McCollam-Martinez, Christina (2017)
Theatre Arts Scenic/Lighting Design A.A., Sierra College
B.A., California State University, Stanislaus
M.F.A., University of California, Davis

McCollough, Mark D. (1999)
Computer Aided Design/Computer Aided
Manufacturing CAD/CAM
A.A., Hartnell College
B.A., California State University, Long Beach

McDonald, Travis (2015)
Mathematics
B.A., M.A., California State University,

Fresno
McLeod, Todd (2001)
Computer Information Technology
B.A., University of California, Santa Cruz
M.B.A, California State University, Fresno

McManus, Shirley (1992)
Dean of Instruction, Mathematics, Science
and Engineering Division
B.S., M.A., California State University,

Fresno
McMichael, John (2016)
Humanities
B.A., The Master's College
M.A.T., Fuller Theological Seminary M.Div., Golden Gate Baptist Theological Seminary
M.A., Ph.D., University at Albany, SUNY

Melton, Christopher (2019)
Chemistry
B.A., B.S., Francis Marion University

Ph.D., University of California, Davis
Mendoza, Matthew (2019)
Respiratory Care
A.S., San Joaquin Valley College
A.S., Reedley College
B.S., California State University, Fresno
M.S., Northeastern University

Mericle, Margaret E. (1999)
Dean of Instruction, Social
Sciences Division
A.B., Ohio University
M.A., Ph.D., State University of New York at Stony Brook
Miller, Bruce A. (1996)
Electrical Systems Technology
A.A.S., Ferris State College, Michigan
B.S., California State University, Fresno

Miller, Mary Beth (2001)
Child Development
B.S., M.A., California State University, Fresno

## 2019-2020 Fresno City College Catalog

Mimura, Stacie (2014)
Communication Arts
B.A., M.A., California State University, Fresno

Minar, Cynthia "Jill" (2000)
Anthropology/Archaeology
B.A., California State University, Long Beach
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
Air Force Academy
M.S., West Coast University

Moses, John (1999)
English
A.B., Albright College
M.A., Kutztown State College

Ph.D., Miami University
Mosette, Mary Beth (2017)
Director CalWORKs
B.S., Southeast Missouri State University
M.A., California State University, Fresno

Munoz, Shana (2001)
English
A.A., Santa Rosa J. College B.A., M.A., California State University, Fresno
Mushibe, Eliud (2018)
Chemistry
B.S., University of Nairobi
M.S., University of Botswana

Ph.D., Binghamton University
Natal, Lori (2008)
Counselor
A.A., Fresno City College B.A., M.S., California State University, Fresno

Navarro, Bernard M. (2005)
Sociology
A.A., Fresno City College
B.A., California State University, Fresno
M.A., Ph.D., University of Oregon

Nelson, Gretchen (2009) Nursing
B.S.N., Washington State University
M.N., University of California at Los Angeles

Nelson, Rebecca (2007)
Business \& Technology
A.A., Reedley College
B.A., Fresno Pacific University
M.B.A., National University

Norton, Kristen (2019)
English
B.A., M.Ed., Texas Christian University
M.F.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
O'Neil, Terrence (2017)
Criminology
B.S., M.S., California State University,

Fresno
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

Parish, Max G. (2019)
Philosophy
A.S., Reedley College
B.A., University of Illinois, Springfield
M.A., Ph.D., University of Oklahoma

Parker, Joshua (2015)
Biology
B.S., California State University, Stanislaus
M.S., Ph.D., University of 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
Pimentel, Robert (2018)
Vice President of Educational Services
and Institutional Effectiveness
A.A., West Hills College
B.A., Ed.D., California State University,

Fresno
M.A., California State University, Bakersfield

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

Porteous, Scott (2001)
Biology
B.A., M.A., California State University, Fresno

Potter, Sally (2013)
English for Multi-Lingual Students
B.A., M.A., California State University, Fresno

Prandini, Kellen (2016)
Anthropology
B.A., Loyola Marymount University
M.A., San Francisco State University

Preston-Smith, Julie (2002)
Counselor
B.A., University of California, Irvine M.S., California State University, Long Beach

Priewisch, Alexandra (2017)
Geology
B.S., M.S., University of Mainz, Germany

Ph.D., University of New Mexico
Putman, Dale (2018)
Maintenance Mechanic
A.A., Fresno City College
B.S., California State University, Fresno

Quintana, Monique (2019)
English
A.A., Fresno City College
B.A., M.F.A., California State University, Fresno
Radnejad, Forouzandeh (2005) Counselor
B.A., Esfahan University, Iran M.S., California State University, Fresno

Ragsdale, Michael (2017)
Physical/Natural Science
B.S., M.S., California State University, Fresno

Ramirez, Graciela (1996)
Counselor
B.A., M.A., California State University, Fresno
Ramos, Loretta (1994)
Communication
B.A., University of Southern California
M. A., California State University, Fresno
J.D., San Joaquin College of Law

Razee, Alan (2008)
Communication
B.A., California Polytechnic University, San Luis Obispo
M. A., Ph.D., University of Washington

Reitz-Robinson, Stephanie (2008)
Director of Nursing
A.S., Fresno City College
B.S., California State University, Dominguez

Hills
M.H.A., Chapman University

Ph.D., University of Phoenix
Reyes, Jesus (2011)
Physical Education
A.A., Mt. San Antonio College
B.A., San Diego State University
M.A., St. Mary's College

Reynoso, Bernardo (2018)
Director of TriO Programs
B.A., California State University, Fresno

Riley, David (2001)
Electrical Systems Technology
B.S., M.S., California State University,

Fresno
Risch, Krystin (2017)
Communication Arts
B.A., M.A., California State University, Fresno

Rivera, Ricardo (2016)
Art
B.F.A., M.F.A., San Francisco Art Institute

Roblee, Kieran (2016)
Physical Education
A.A., Santa Barbara City College,

Fresno City College
B.A., California State University
M.A., Fresno Pacific University

Rosendahl, Douglas (2017)
Auto Collision Repair Technology
Rubalcaba, Jacquelyn (2015)
Counselor for Deaa and Hard of Hearing
and other Disabilities
B.A., M.S., California State University,

Fresno
Rutishauser, Brian (1999)
History
B.A., University of Dayton
M.A., Ph.D., Ohio State University

Ryan, James (1991)
Mathematics
A.A., Chabot College
B.S., M.S., California Poolytechnic State

University, San Luis Obispo
Ryska, Kelsey S. (2019)
Mathematics
B.A., Fresno Pacific University
M.S., California Polytechnic State University,

San Luis Obispo
Saiz, Sallie (2014)
English
A.A., Fresno City College
B.A., M.A., M.F.A., California State Univer-
sity, 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

Sandhu, Sukhchain (2017)
Nursing
B.S., M.E., Punjabi University, Patiala
B.E., M.A., Panjab University, Chandigarh
M.S., California State University, Fresno

Sangha, Gurminder (2019)
Dean of Instruction, Educational Services
and Pathway Effectiveness
A.S., Fresno City College
B.S., M.B.A., California State University,

Fresno
Santos, Geraldine (1999)
Counselor
B.A., M.A., California State University, Fresno
Santos, Jeannie (2009)
English
B.A., M.A., California State University, Fresno
Sause, James (2000)
Computer Information
Technology
B.S., California State University, Fresno
M.B.A., National University

## 2019-2020 Fresno City College Catalog

Scheidt, Richard (1997)
Physical Education
B.S., San Francisco State University
M.A., California State University, Fresno

Schmalle, Robert C. (2005)
Business Administration/
Business Law
A.A., Fresno City College
B.A., Fresno Pacific University
J.D., San Joaquin College of Law

Scott, Daniel J. (2005)
Communication/Assistant
Forensics Coach
A.A., Fresno City College.
B.A., California Polytechnic University, San Luis Obispo
M.A., California State University, Fresno

See, Charles (2015)
Automotive Collision Repair (CTC)
A.A., Fresno City College

Semien, Kenneth (2005)
Counselor
B.S., Mcneese State University, Louisiana
M.S., National University, Fresno

Shirey, Melinda (2006)
Business \& Technology
B.A., M.A., Fresno Pacific University

Shoemaker, David M. (2018)
Counselor/Coordinator, Transter Center
Shultz, Joseph (1996)
Radiologic Technology
B.S., California State University, Fresno
M.Ed., National University

Silva, Leslie (2001)
Counselor, Disabled Students
Programs and Services
A.A., Kings River Community College
B.A., M.S., California State University,

Fresno
Siroky, Allen (1999)
History
B.A., Rocky Mountain College
M.A., Trinity College

Ph.D., City University of New York
Slater, Emilee
Director, College Relations and Outreach
B.A., M.A., Fresno Pacific University

Slaton, Rebecca L. (1991)
Psychology
B.A., California State University, Fresno
M.S., Ph.D., University of California, Santa

Cruz
Smith, Lorraine M. (2005)
Dean of Instruction, Allied Health, Physi-
cal 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.F.A., University of Nebraska

Spomer, Kalisha (2019)
Counselor
B.A., California State University, Long Beach
M.S.W., California State University, Fullerton

Staebler, Diane (2013)
Biology
B.A., M.A., California State University, Fresno

Stavytska-Barba, Marina (2015)
Chemistry
A.S., Merced College
B.S., East Ukrainian National University
B.S., California State University, Stanislaus

Ph.D., University of California, Merced
Steeley, Jodie (2016)
Director of Distance Education
A.A., Modesto Junior College
B.A., California State University, Stanislaus
M.A., California State University, Sacramento

Ph.D., Capella University
Stenger, Kristen (2017)
Food \& Nutrition
B.S, M.S., University of Nebraska-Lincoln

Stewart, Richard (2001) Biology
A.A., College of the Sequoias
B.A., M.A., California State University, Fresno

Stewart-Magee, Kevin (2015)
Art
B.F.A., Ohio State University
M.F.A., California State University, Fullerton

Strait, Laura (2016)
Mathematics
B.A., M.A., California State University,

Fresno
Stricker, Terrelyn Rhymes (1984)
Accounting, Decision Science
B.S., M.B.A., California State University,

Fresno
Tackett, Patrick (2017)
Counselor, Disabled Students Programs \& Services
B.A., C.A.S., M.S., M.F.A., California State

University, Fresno
Takeda, Michael (2014)
English
B.A., Sonoma State University
M.A., Fresno Pacific University

Tannen, Jeffery (2008)
English
B.A., M.F.A., California State University, Fresno

Tarazi, Teresa (2000) English
B.A., M.A., California State University, Fresno

```
Teeple, John (2011)
    Geography
    B.A., M.A., University of Kansas
Temmerman, Simon (2011)
    Mathematics
    B.A., M.A., California State University,
    Fresno
```

Thepphavong, Khamphon (2014)
Counselor
A.A., Fresno City College
B.A., M.A., California State University,
Fresno
Thomas, Fred (2017)
Dental Hygiene
A.A., A.S., Fresno City College
B.S., California State University, Fresno
M.S.A., California State University, Bakers-
field
Thurston, Gerald (2003)
Communication
B.A., M.A., California State University,
Fresno
Tibstra, Robert (2017)
Biology
A.A., Cabrillo College
B.S., M.S., California State University,
Fresno
Trelawny, Dillon (2016)
Physics/Astronomy
B.S., James Madison University, Harrison-
burg, VA
M.S., California State University, Fresno
Trevino, Julio (2013)
English
B.A., M.F.F., California State University,
Fresno
Trezza, Mark J. (2004)
Political Science
B.A., University of California, Davis
M.A., California State University, Sacra-
mento
Tuttrup, Richard J. (2000)
Accounting
B.A., California State University, Long Beach
M.B.A., California State University, Fresno

Ugwu-Oju, Dympna (1994)
Journalism
B.A., Briarcliff College
M.S., Syracuse University

Ph.D., California State University, Fresno and University of California, Davis

Uvarov, Catherine (2016)
Chemistry
B.S., Ph.D., University of California, Davis

Valentino, Mary Ann (2004)
Psychology
B.A., San Diego State University

Ph.D., California School of Professional Psychology

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
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)
Dean of Instruction, Academic Services
and Humanities Pathways Division
B.A., M.F.A., California State University, Fresno
Vinicor, Melinda (2009)
Sociology
B.A., Pepperdine University
M.A., San Jose State University

Visveshwara, Nicola A. (2019)
Nursing
B.S., University of Southern California
B.S., California State University, Hayward
M.S., Marymount University

Vogel, Pamela (2014) Nursing
B.S., St. Louis University
M.S., Southern IIlinois University

Voth, Joseph (2015) English B.A., M.F.A., California State University, Fresno

Vue, Kau (2017)
Political Science
B.A., M.A., California State University,

Fresno
M.A., University of California, Merced

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
Wells, Bobbie (2017)
Disabled Students Programs \& Services
M.S., California State University, Fresno

Wen, Julie (1990)
Developmental Mathematics
B.Ed., National Taiwan Normal University
M.A., California State University, Fresno
M.A., Fresno Pacific College

Wengerd, Bethany (2008)
Anthropology
B.A., California State University, Fresno
M.A., California State University, Fullerton

Williams, Forrest (2007)
Psychology
B.A., M.A., California State University, Chico

Williams, Jacqueline (2017)
English
B.A., M.F.A., California State University, Fresno

Williams, 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
Willis, Karen N. (2019)
Mathematics
A.S., Fresno City College
B.A., M.A., California State University, Fresno

Wilson, Elisha (2018)
Music Theory
B.A., M.A., California State University, Fresno

Woods, Matthew (2015)
Mathematics
B.A., M.A., California State University, Fresno

Woods, Timothy (2010)
Dean of Instruction, Business Division B.A., University of California, Riverside M.A., California State University, Fresno Ph.D., Walden University

Wright, Brian L. (2019)
Electrical Systems Technology
B.S., M.S., California State University,

Fresno
Yang, David (2013)
Mathematics
B.A., M.A., California State University,

Fresno Ph.D., University of California, San Diego
Yang, Jim (2016)
Mathematics
B.A., M.A., California State University, Fresno

Yang, Mai (2007)
Librarian
B.A., California State University, Fresno
M.A., University of Illinois, Urbana

Yang, Shou (2014)
EOPS Counselor
B.A., M.S., California State University, Fresno

Yang, Victor Bee (1999) Counselor
B.S., University of Nebraska at Omaha M.S., National University

Yates, Seth (2010) Chemistry
B.A., Fresno Pacific University
M.S., California State University, Fresno

Ybarra, Kerry (2007)
Philosophy/Humanities
B.A., California State University, Fresno
M.A., California State University, San Francisco
M.A., University of Colorado, Boulder

Zamora, Kenneth C. (1992)
Architecture
A.A., College of the Sequoias
B. Arch., B.S., California Polytechnic University, San Luis Obispo
Zendejas, Frank (2016) Electrical Systems Technology B.S., California State University, Fresno Ph.D., University of California, Berkeley
Zierfuss-Hubbard, Pammella (2018) Director of Athletics
B.A., California State University, Sacramento
M.A., University of San Francisco
M.B.A., University of Alaska, Fairbanks

## Classified Professionals

| Erica Abbs | Gurpreet Bhogal |
| :--- | :--- |
| Administrative Assistant | Administrative Assistant |
| Aaron Acevedo | Stephanie Bisbee |
| Financial Aid Specialist | Nursing Skills Laboratory Technician |
| Norrma Aguilar | Jocelyne Bonilla |
| Financial Aid Analyst | Early Childhood Education |
| Enrique Alameda | Associate |
| Science Laboratory Coordinator | Kathleen Bonilla |
| Stephanie Alaniz | Public Information Officer |
| Administrative Assistant | Michael Bourbonnais |
| Horacio Alaniz, Jr. | IT Customer Support Technician |
| Custodian | William Bowlin |
| Jose Alcorta | Senior IT Customer Support Technician |
| Custodian | Kevin Boyce |
| Justina Alvarado | Textbook Purchasing Specialist |
| Senior Admissions and Records Assistant | Anthony Bravo |
| Frank Anaya, III | Outreach Specialist |
| Career Technical Education Laboratory | Kathy Braze |
| Technician | Program Assistant - Career Technical |
| Kristie Andersen | Cristina Bremer |
| Senior Administrative Services Technician | Director of Marketing and |
| Thomas Andrews | Communications |
| Utility Worker | Richard Briones |
| Ivy Arana | Custodian |
| Bookstore Shipping and Receiving | Rose Brownell |
| Specialist | Outreach Specialist |
| Joanna Arenas | Eleanor Bruce |
| Administrative Assistant | Budget Technician |
| Jamien Armstrong | Kristi Bryan |
| Senior Library Technician | Admissions \& Records Assistant I |
| Moses Avila | Melanie Bryant |
| Audio Visual Technician | Office Assistant II |
| Carrie Baize | Marissa Butler |
| Administrative Assistant | Office Assistant II |
| Arthur Baylon | Lisa Cartwright |
| Custodian | Office Specialist |
| Virginia Beamer | Victoria Castro |
| Administrative Assistant | Science Laboratory Coordinator |
| Joshua Beaulieu | Frances Catlapp |
| Career Technical Education Laboratory | Office Specialist |
| Technician |  |
|  |  |

Robert Cawley
Audio-Visual Technician
Dee Cetin-Berber
Senior Research and Planning Analyst
David Chacon
Custodian
Fennyann Chan
Admissions and Records Specialist
Karine Chatard
Instructional Administrative Assistant
David Clacher
Financial Aid Analyst
Cindy Clark
Office Specialist
Joyce Clark
Administrative Assistant
Nathan Clark
IT Customer Support Technician
Nileen Clark
Curriculum Assistant
Terri Clement
Early Childhood Education
Associate
Cory Condry
Arts Laboratory Technician
Mike Coppedge
Lead Accounting Technician
Alicia Cowan
Office Assistant II
David Cowan
Print Services Technician
Melody Critchfield
Budget Technician
Kendra Cronk
Senior Sign Language Interpreter
Jered Crump
Custodian
Sylvia Cuevas
Financial Aid Manager
Christopher Cupp
Bookstore Sales Associate

## 2019-2020 Fresno City College Catalog

| Lilia Danielyan Program Assistant - Career Technical |
| :---: |
| Naira Danielyan Evaluator |
| Steve DaSilva Horticulture Program Specialist |
| Daneillie Davis Program Assistant - Student Services |
| Elizabeth Davitian Budget Technician |
| Kristen Del Rosario Senior Sign Language Interpreter |
| Julian Delgado <br> IT Customer Support Technician |
| Cindy DeSutter Instructional Assistant |
| Larry Dickson Utility Worker |
| Marta Diliberto Instructional Administrative Assistant |
| Andrew Doris Athletic Equipment Manager |
| Mary Doyle <br> Print Media \& Communications Manager |
| Tabitha Dubois <br> Sign Language Interpreter Coordinator |
| Cynthia Dunn Job Placement Coordinator |
| Theresa Ervin Budget Technician |
| Kathleen Ervine <br> Early Childhood Education Specialist |
| Anthony Estrada Custodian |
| George Falcon Custodian |
| Leslie Farrell Financial Aid Assistant |
| Beth Fields Office Specialist |
| Daniel Fierro Custodian |

Maile Glover Martin
Senior Program Specialist - Student Services

Heather Golden Veterans Services Specialist
Angelica Gonzales Early Childhood Education Associate
Sabrina Gray Office Assistant II

Alvin Greathouse Custodian
Nancy Gross Instructional Administrative Assistant

Ricco Guajardo Career Technical Education Laboratory Technician
Omar Gutierrez Vice President of Administrative Services

Maria Handy Library Operations Coordinator
Aaronn Hansen Senior IT Customer Support Technician
Charlotte Harmon Senior Library Technician
Sara Arvizu Hawkins Office Assistant I

Wilhemina Henderson Office Assistant II
Virginia Her Accounting Technician
Gavino Heredia Program Assistant - Student Services
Tamara Herman Office Specialist

Abel Hernandez Custodian
Andres Hernandez Director of Admissions and Records

Monica Hernandez PE/Athletic Equipment Assistant
Randal Hernandez Help Desk Technician
Sheng Herr Budget Technician
Kellie Higashida
Office Assistant III
Barbara Hinkle
Program Assistant - Career Technical

Lavell Hopkins
Custodian
Josefa Huckeba
Program Assistant - Student Services
Linda Jackson
Senior Library Technician
Fidel Jauregui
Custodian
Dale Jimenez
Accounting Technician
Donnie Johnson
Athletic Equipment Manager
Susan Johnson
Senior Program Specialist - Career
Technical
Marvin Jordan, II
Custodian
Sarina, Karr
Office Assistant II
Aarne Kela
Piano Accompanist
Kaylee Kelly
Sign Language Interpreter
Israel Kinlow
Financial Aid Specialist
Cathleen Kozielski
Budget Specialist
Charles Kralowec
Research and Planning Analyst
Renee Kubo
Senior Library Technician
Christopher Lang
Theatre Technical Manager
Joseph Lescoulie
Senior IT Customer Support Technician
Melissa Llanes
Executive Assistant
Priscilla Lockhart
Admissions and Records Assistant I

| John Loera Evaluator | Patricia Martinez Instructional Assistant |
| :---: | :---: |
| Stephanie Lopez Pedrosa <br> Senior Admissions and Records Assistant | Tiffany Martinez Early Childhood Education Specialist |
| Benjamin Lozano <br> Digital Media and Graphic Designer | Mary Mathos Financial Aid Specialist |
| John Luna Custodian | Mary Mattern Early Childhood Education |
| Rita Luna | Specialist |
| Office Specialist | Keelin McCabe |
| Brittany Lusk | Executive Assistant |
| Science Laboratory Coordinator | Samantha McGregor |
| Crystyn Lynch | Admissions and Records Assistant II |
| Office Assistant II | Shannon McKibben |
| Linda Lyness | Executive Assistant |
| Payroll Technician | Mark McNiff |
| Mayra Machain Budget Technician | Senior Program Specialist - Student Services |
| Tamara Maddox <br> Business Office Manager | Barbara Mendoza Textbook Purchasing Specialist |
| Javier Madrigal Sign Language Interpreter | Tamra Miller Administrative Assistant |
| Sunnie Mahavong <br> Admissions and Records Specialist | Jeannie Morgan Budget Technician |
| Rosemary Mahoney <br> Senior Admissions and Records Assistant | Jennifer Mtunga Box Office Manager |
| Delia Makel Digital Media and Graphic Designer | Jose Munoz Custodian |
| Josephine Mancillas-Llanos Scholarship Specialist | Haneen Musleh Sign Language Interpreter |
| Eleni March Evaluation Specialist | Jennifer Nassar <br> Accounting Technician |
| Janine Marklund Outreach Specialist | Elvira Navarro-Arellano <br> Program Specialist - Student Services |
| Christopher Martin <br> Senior IT Customer Support Technician | Nathan Newsom Custodian |
| Nora Martin Accounting Technician | Debra Nichols Web Content Engineer |
| Sean Martin <br> Lead Audio-Visual Systems Specialist | Laurie Nichols Program Assistant - Student Services |
| Beatriz Martinez <br> Sign Language Interpreter | Mark Nichols Senior IT Customer Support Technician |
| Luis Jauregui Martinez Custodian | Susan Nitzel Professional Development Coordinator |

## 2019-2020 Fresno City College Catalog

| Kelli O'Rourke Senior Curriculum Analyst | Charles Record Custodian |
| :---: | :---: |
| Francisco Olvera Custodian | Alana Reed Budget Technician |
| Christopher Orr Custodial Manager | Edwin Reed Custodian |
| Emelita Pacada <br> Admissions and Records Assistant II Alemario Padua | Hilda Reyna <br> Senior Program Specialist - Student Services |
| Budget Specialist | Michael Richards |
| Cynthia Peek | Lead Custodian |
| Tutorial Assistant | Erica Riggs |
| Denee Perea | Financial Aid Specialist |
| Program Assistant - Student Services | Melody Riversmith |
| Darlen Perez | Office Specialist |
| Sign Language Interpreter | Andrew Rocha |
| Joshua Petersen | IT Customer Support Technician |
| Senior Library Technician | Heather Rodriguez |
| Maria Petrogonas | Financial Aid Assistant |
| Early Childhood Education Associate | Sarah Rodriguez Admissions and Records Assistant II |
| Channie Phantharath Evaluator | Amanda Romero Office Assistant I |
| Amanda Phillips Evaluator | Ryan Rooks IT Customer Support Technician |
| Henry Polanco, Jr. Custodian | Roy Rosa Financial Aid Specialist |
| Nicole Pondexter Office Specialist | Dwight Samuel Custodian |
| Ronald Potter, Jr. Utility Worker | Miguel Sanchez Custodian |
| Stephanie Powers-Puahi Administrative Assistant | Penny Sandlin Instructional Administrative Assistant |
| Tanya Pryor Budget Specialist | Delfina Sandoval Program Assistant - Career Technical |
| Carlos Puente, Jr. Custodian Manager | Suzanne Sankey <br> Automotive Parts Technician |
| Kim Quesada Executive Assistant to the President Jeanette Quiroz | Jeffrey Santellano Instructional Computer Laboratory Technician |
| Financial Aid Specialist | Frances Santillan |
| Carol Rains-Heisdorf Senior Research and Planning Analyst | Custodian |

Janet Santillan
Bookstore Merchandise Purchasing Specialist
Roland Schreiner Systems Administrator
Lorraine Sepeda Job Developer
Kimeka Simmons Sign Language Interpreter
Anthony Slade Custodian
Emilee Slater Director of College Relations and Outreach

Phila So Office Assistant II
Eddie Standifer II Custodian

Amy Strobel Senior Sign Language Interpreter
Mark Tabay Student Communications Specialist
Gina Tarvin Accountant
Bobbie Tello-Perez Admissions and Records Specialist
Meng Thao PE/Athletic Equipment Assistant
Pamela Tibbet Special Program Specialist - Student Services
Andrea Torrez Office Specialist
Robert Torrez Assessment Coordinator
Scot Unruh Custodian

Ruthann Van Buren Office Specialist
Teng Vang Senior Budget Analyst

Majru Varughese
Science Laboratory Coordinator
Jessica Vasquez
Sign Language Interpreter
Luis Villanueva
Custodian
Joel Villar
Career Technical Education Laboratory Technician

Alberto Villegas-Villagomez
Utility Worker
Lisa Vincent
Outreach Specialist
Ashley Watkins
Athletic Trainer
Jill Webb
Piano Accompanist
Leah Whitaker
Office Specialist
Chelsey White
Sign Language Interpreter

Maria Wiget
Instructional Assistant
Artie Williams Lead Custodian

Phyllis Willis
Administrative Assistant
Jonathan Wilson
Academic Technology Systems Specialist
Nancy Withrow
Senior Admissions and Records Assistant
Daniel Wong
Arts Laboratory Technician
Janice Wong
Senior Program Specialist - Student
Services
Sara Woody
Print Services Technician
Mary Beth Wynn Job Developer
Moua Xiong
Senior Library Technician

Toupheng Xiong DSP\&S Mobility Driver
Houa Yang Senior Program Specialist - Student Services

John Yang Senior Program Specialist - Student Services

Neng Yang Custodian

Pa Nhia Yang Early Childhood Education Associate

Pao Yang Mail Room Worker

Amy Yocupicio Administrative Services Technician

Ramon Zapata Career Technical Education Laboratory Technician

## Emeritus Faculty

| Aguilar, Luis E. $1985-2014$ <br> Automotive Collision Repair (CTC) | Badertscher, Lynn 1994-2017 <br> Communication | Brennan, Jennifer A. 2004-2014 Nurse |
| :---: | :---: | :---: |
| Albright, Linda S. 1981-2009 Nurse | $\begin{aligned} & \text { Bates, Robyn L. } \\ & \text { 1990-2015 } \\ & \text { Art } \end{aligned}$ | Brewer, Melinda 2001-2019 Child Development |
| Alvarez, Manuel E. 1971-1992 Electronics | Beck, Allen 1974-2008 Anthropology | Brooks, Walter 1970-2008 Counselor |
| Amaro, Arthur N. 1973-2011 <br> Chicano-Latino Studies, Sociology | Bell, Calvin 1968-1984 Counselor | Brown, Martin D. 1974-1990 Associate Dean of Instruction, Health Arts |
| Andersen, L. LeGrand 1974-1999 <br> Vocal Music | Bell, Edward 1979-1986 Auto Mechanics | and Sciences <br> Brown, Richard S. 1964-1986 |
| Andreen, Kristi 2000-2011 <br> Respiratory Therapy | Bengel, Earl <br> 1968-1997 <br> Engineering | Geology Brunetti, Pat A. 1982-2004 |
| Andrews, Robert N. 1971-1996 <br> Automotive Technology, Industrial Education | $\begin{aligned} & \text { Bertolani Jr., William J. } \\ & \text { 1987-2016 } \\ & \text { Criminology } \end{aligned}$ | Nurse Bruns, Paul M. 1958-1990 |
| Angarano, Angelo P. <br> 1968-1984 <br> Philosophy, English | $\begin{gathered} \text { Bigham, Craig } \\ \text { 1999-2019 } \\ \text { Mathematics } \end{gathered}$ | Chemistry <br> Bugay, Elnora 1995-2016 |
| Arakelian, Charlotte A. <br> 1983-2018 <br> Counselor | Bill, Gerald M. <br> 1970-2008 <br> Sociology | Nursing Byrd, Ronald F. 1968-2001 |
| Arredondo, Alfred V. <br> 1975-2008 <br> Counselor | $\begin{aligned} & \text { Bingham, Isabell H. } \\ & \text { 1970-1982 } \\ & \text { Home Economics } \end{aligned}$ | Librarian <br> Byrns, Dennis C. 1995-2011 |
| Arroyo, Robert F. 1969-1999 <br> Associate Dean of Students, Director, EOP\&S | $\begin{aligned} & \text { Blackburn, Norma D. } \\ & \text { 1961-1979 } \\ & \text { Legal Secretaryship } \end{aligned}$ | Fire Technology Campbell, Lynn 2001-2017 |
| Arth, Raymond G. 1977-2010 Photography | Bolt, Sandra B. <br> 1999-2018 <br> Business \& Technology | English <br> Carlisle, Elizabeth 2005-2007 |
| Atkinson, Dennis. C. 1990-2008 <br> Automotive Technology | Boucher, Richard 1964-1996 Electronic Technology | $\begin{gathered} \text { Speech } \\ \text { Castagna, Paula } \\ \text { 1992-2011 } \end{gathered}$ |
| Azamber, Eugene C. 1966-2001 <br> Business Administration, Management | $\begin{aligned} & \text { Bourdet, Malcolm L. } \\ & \text { 1957-1990 } \\ & \text { Physical Education } \end{aligned}$ | Mathematics <br> Cerda, Ricarda 2000-2017 |
| Baber, Roberta <br> 1986-2011 <br> Computer Information Technology | $\begin{gathered} \text { Boyd, Robert } \\ \text { 1996-2017 } \\ \text { Philosophy } \end{gathered}$ | Food \& Nutrition <br> Chaney, Lisa <br> 2014-2018 <br> Coordinator, Health Services |

Cheney, Judith
1999-2016
Dental Hygiene
Chow, Richard
1968-1991
Reprographics, Industrial Education
Christian, Peter C.
1958-1981
English
Christl, Richard I.
1970-2011
Dean of Instruction, Applied Technology Division
Cleveland, Sandra
1976-2007
Nursing
Colby, Camilla
1969-2007
Spanish
Cole, Wayne
1990-2011
English
Contreras, Luis A.
1999-2019
English
Cornwell, Gerald D.
1961-1990
Business
Covington, Jeanette A.
1982-2014
Learning Disabilities, English
Crider, Andrew B.
1998-2012
Director of Career \& Technology Center
Culp, Robbey C.
1995-2010
Chemistry
Cummings, John H.
1996-2011
Vice President, Admissions and Records
Curry, Ruth
1981-1998
Philosophy, English, Humanities
Dana, Michael E.
1990-2018
Music
Davy, Thelma L. 1965-1973
English

Deeter, Gary
1981-2008
Music
DeKoning, Richard M.
1958-1982
Dratting, Mathematics, Architecture, Industrial Education
Demanett, Paula 2000-2019
Librarian
Denver, Monta
1986-2019
Dental Hygiene
DePry, Ronald N. 1970-1993
Biology
Dickie, David R. 1965-1996
Drafting, Industrial Education
Discont, Conrad M.
1963-1994
English, Humanities, Speech
Dose, Kenneth D.
1971-1999
Physical Education
Dotts, John
1981-1996
Industrial Education, Construction,
Mathematics
Dougherty, Sara 1955-1981
Physical Education
Douty, Douglas A. 1984-2012 Electronic Technology
Doyland, Russell A.
1961-1983
Accounting
Drake, Carolyn C.
1978-2013
Dean of Instruction, Health Sciences
Division
Draper, C. Dean
1960-1987
Art
Dzerigian, Steven V.
1987-2008
Photography

Eckenrod, Sherian H. 1979-2003
Associate Dean of Instruction,
Business Division
Edison, James S.
1997-2019
Coordinator, Police Academy
Edman, Leland M. 1975-1991 Administration of Justice
Eischen, Clifford 1964-1998 Business Administration, Management
Elgin, Judy A.
1987-2010
Business and Technology
Elgorriaga, Carmen
1970-1994
English, Spanish
Elizondo, Tonatiuh 1993-2019 Automotive Mechanics (CTC)
Elliott, Jacqueline 1995-2006 Art
Emerling III, Fred M. 1984-2013 Counselor
Emerzian, Janice M. 1975-2017 Director of Disabled Students Programs \& Services
Engel, Kathleen
1980-2008
Nursing
Engstrom, Dale 2001-2016 Music
Estrada, Gonzolo 1965-1984 English
Estrada, Joan E. 1964-1989 Accounting
Ewing, James 1990-2013 English

| Farley, Lee | Gonzales, Paul | Hayden, Layne E. |
| :---: | :---: | :---: |
| 1981-2015 | 1989-2007 | 1999-2007 |
| Dean of Students, EOPS | Radiologic Technology | Automotive Collision Repair |
| Farrington, Gerald | Graham, Ronald J. | Hendrickson, David H. |
| 1970-2003 | 1987-2005 | 1958-1984 |
| History, Political Science | Criminology | Geography, History |
| Ferguson, Phillip | Granata, Charity | Hendry, Harold T. |
| 1972-1982 | 1985-2018 | 1966-1984 |
| Mathematics | Communication Arts | Business Administration |
| Fischer, Laurene J. | Green, M. Fred | Hibler, Edward B. |
| 1965-1995 | 1962-1984 | 1961-1978 |
| Business Administration, | Engineering | Psychology |
| Computer Information Technology | Grover, Stanford C. | Hickman, Katherine |
| Fox, Robert E. | 1966-1977 | 2001-2016 |
| 1980-2009 | Counselor | Criminology |
| Vice President of Students | Grover, Stephen C. | Hildreth, Sonya |
| Franz, James J. | 1984-2015 | 2007-2010 |
| 2000-2008 | Mathematics | Dean of Student Services, Counseling and |
| Economics | Guglielmino, Rosemarie Spight | Guidance |
| Frese, Joan | 1989-2017 | Hill, Jack |
| 1995-2016 | English | 1956-1980 |
| Computer Information Technology | Gunn, Donald L. | Marketing, Advertising |
| Fries, Bobby | 1971-1992 | Himes, Daniel J. |
| 1965-1991 | Theatre Arts, Speech | 1987-2017 |
| Health Education, Track | Hald, Kenneth | Electrical Systems Technology |
| Fuller, Pauline M. | 1949-1972 | Hiroyasu, Shaw |
| 1977-2013 | Biological Sciences | 1975-1996 |
| Counselor | Halls, Thomas H. | Automotive Mechanics, Industrial Education |
| Gaither, Loren F. | 2001-2019 | Hoff, Nancy |
| 1964-1996 | Photography | 1981-2007 |
| Mathematics | Hallstone, Kenneth | Nursing |
| Gaona, Venancio Garcia | 1968-2002 | Holford, Susan |
| 1969-1999 | Psychology | 2001-2017 |
| Spanish | Handley, Richard | Human Services, Sociology |
| Garoupa, Clifford | 1955-1980 | Holstein, George C. |
| 1997-2019 | Associate Dean of Instruction, | 1955-1966 |
| Sociology | Occupational Education | Dean of Admissions \& Records |
| Gartman, Grace | Hanson, William F. | Honda, Lorence |
| 1989-2005 | 1946-1978 | 1997-2018 |
| Tutorial Resources | Director, Vocational Training Center | Music |
| Gennity, Joseph M. | Harmon, Beverlee Jill | Hostetler, Robin L. |
| 1996-2019 | 1990-2012 | 1979-2011 |
| Biology | Counselor | Geography |
| Gibbs, Richard R. | Haroutunian, Vahack | Jansen, Janice R. |
| 1966-1994 | 1971-1996 | 1975-2004 |
| Economics, Psychology | Mathematics | Physical Education, Dance |
| Glenn, Marilyn R. | Harriet, Sydney H. |  |
| 2002-2014 | 1970-2012 |  |
| Counselor | English, Speech |  |


| Jeanis, Dorothy I. |
| :--- |
| 1969-1995 |
| Business Administration, Management |
| Jimenez, Joaquin |
| 1988-2004 |
| District Associate Dean of Financial Aid |
| Johal, Sarbjit |
| 1999-2018 |
| Political Science |
| Johnston, H. Bruce |
| 1966-1996 |
| Biology |
| Kadingo, Carol J. |
| 1984-2018 |
| Physical Education |
| Kane, Linda |
| 1999-2015 |
| Disabled Student Programs and Services |
| Keen, Derl W. |
| 1975-2001 |
| Child Development |
| Keller, Charles F. |
| 1977-2013 |
| Adaptive Physical Education |
| Kennedy, Harry L. |
| 1984-2005 |
| Journalism, English |
| Khoury, Alexis |
| 1990-2008 |
| English |
| Kim, Daniel E. |
| 1989-2014 |
| Coordinator, Institutional Research |
| Kimura, Robert H. |
| 1963-1984 |
| Chemistry |
| King, Charles G. |
| 1958-1990 |
| Electronic Technology, Industrial Education |
| Airt, Ceramics |
| Klein, Kenneth A. |
| 1989-2005 |
| Aiology |
| Architectural Drafting |

1969-1995
Business Administration, Management
oaquin
1988-2004
District Associate Dean of Financial Aid
Johal, Sarbjit
1999-2018
Political Science
Johnston, H. Bruce
1966-1996
Biology
Kadingo, Carol J.
1984-2018
Physical Education
, Linda
1999-2015
Disabled Student Programs and Services
Keen, Derl W.
1975-2001
Child Development
Keller, Charles F.
1977-2013
Adaptive Physical Education
Kennedy, Harry L. 1984-2005
Journalism, English
Khoury, Alexis 1990-2008
English
Kim, Daniel E. 1989-2014 Coordinator, Institutional Research
Kimura, Robert H.
1963-1984
Chemistry
King, Charles G.
Electronic Technology, Industrial Education
Kirkhart, Jerry L.
-

Kizziar, Robert
1999-2012
Art, Ceramics

Architectural Drafting

Koshear, Jeannine
2005-2019
Geography
Krauter, Larry 2008-2017
Photography
Kriesel, L. Anne 1974-1990
Counseling (Enabler)
Krueger, Rodney L. 1965-1991
Art
Kuiper, H. Peter 1968-1993
Speech, English, Philosophy
Kulbeth, Jean
1997-2013
Dental Hygiene
Lane, W. Keith
1968-2005
Business Administration/Marketing
Larson, Donald G. 1964-1999
History
Lasher, Ivan Ward 1971-1992
Associate Dean of Students, Admissions and Records

Latham, S. E.
1963-1983
Sociology
Leatham, Leneve S.
1959-1974
Marketing, Mathematics
Leon, Godfrey R.
1972-1990
Automotive Technology, Industrial Education
LeValley, Aina D.
1961-1972
Vocational Nursing
Lewis, Kristin
1995-2017
English
Leyden, Francis J. 1948-1975
Geology

Liberty, Susan
1976-1999
Director, Fine and Performing Arts,
Developmental Education, Honors
Liddle, Lee D. 1989-2007
Business \& Technology
Lindley, Edward V. 1984-2010 Chemistry
Lindsey, Cecil 1976-2011
Electronic Technology
Lindstrom, Richard 1994-2016 Director, Police Academy
Liscano, Tanya 1974-2001 Librarian

Locker, Theodore A. 1965-1990 English
Lopez, Bradley 1975-2013 Health Science
Lopez, Matthew 1971-1991 Welding
Lopez, Rachel G. 1990-2015 English
Luck, Emory F. 1984-2004 Physical Education
Luckenbach, Roger 1998-2012 Biology
Lund, Edward L. 1988-2008 Counselor, Disabled Students Programs \& Services
Machado, Gayle 1996-2012 Mathematics
Makofske, James P. 1989-2017 Accounting, Computer Information Technology

## 2019-2020 Fresno City College Catalog

| Marks, William A. 1959-1992 Industrial Education, Air Conditioning | Merlier, Christiane M. 1984-2008 <br> ESL, French |
| :---: | :---: |
| Marshall, Thomas A. 1962-1987 <br> Psychology | Meserve, Peter 2001-2018 Geography |
| Martin, Lawrence 1957-1981 <br> Accounting, Native American Studies | Meyer, Kent R. 1962-1987 Accounting |
| Martin, Merle 1950-1980 Dean of Students | Miller, Mary E. <br> 1960-1984 <br> Secretarial Science |
| Martin, Sheila 1990-2018 Business \& Technology | Moller, Richard T. 1968-1990 Mathematics |
| $\begin{aligned} & \text { Maruko, Eiji } \\ & \text { 1976-1997 } \\ & \text { Music } \end{aligned}$ | Moncibais, Gordon 2011-2016 Fire Technology |
| Mascarenas, Timothy E. 1971-2004 <br> Automotive Technology | Mooneyham, David E. 2003-2019 <br> Maintenance Mechanic (CTC) |
| Mateo-Laeno, Mary Ann 1990-2007 <br> Child Development | Moore, Bessie M. 1971-1984 <br> Vocational Nursing |
| Mattox, Jack V. 1966-2001 Health Science | Moore, Joseph Jr. 1966-1999 <br> History, Political Sciences |
| McCarthy, John R. 1951-1977 <br> Health Education | Moore, Marilyn 1984-2013 Child Development |
| McClain, Mary Jane 1999-2011 <br> Medical Assisting Surgical Technology | Moorehouse, Richard L. 1974-1993 <br> Director, Dental Hygiene Program |
| $\begin{aligned} & \text { McCormack, Ethel } \\ & \text { 1930-1961 } \\ & \text { Secretarial Science, Dean, Business Division } \end{aligned}$ | Moran, Charles L. 1959-1989 Botany, Biology |
| McCully, Brian J. 1989-2015 Paralegal | Morgan, Carl H. 1955-1973 <br> Physics, Mathematics |
| $\begin{aligned} & \text { McCully, Clyde C. } \\ & \text { 1967-1986 } \\ & \text { President } \end{aligned}$ | $\begin{aligned} & \text { Muldoon, Marcia } \\ & \text { 1995-2006 } \\ & \text { English } \end{aligned}$ |
| McHenry, James A. 1965-2001 Biology | Munshower, Donald 1984-2003 <br> Counselor |
| $\begin{gathered} \text { Mendez, Linda } \\ \text { 1999-2018 } \\ \text { Counselor } \end{gathered}$ | Murphy, Connie J. <br> 1984-2007 <br> 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
Nitzsche, Eric J. 1996-2019 Construction

Ogden, Gordon L. 1975-1994 Director, Health Sciences

Ohanian, Gregory 1999-2015 Physics, Engineering
Okkerse, Victor J. 1959-1984 Secretarial Science
Olson, Kenneth E. 1990-2012 Electronic Technology, Automated Technologies
Osborne, Leon 1959-1995 Art
Ostrander, Theodore E. 1989-2018 Mathematics

Owens, Kenneth B.
1963-1999
Art
Parks, John L.
1996-2009
Air Conditioning
Pauls, Albert N.
1963-1990
Secretarial Science
Paulson, Richard S.
1955-1984
Speech
Paz, Isias E.
1971-1996
Spanish, German
Peart, Gilbert M.
1958-1977
Marketing
Perkins, Alvan E.
1964-1990
Counselor
Pool, June E.V.
1956-1984
Vocational Nursing
Poole, Thomas Craig
1999-2019
Geology
Porter, Ralph W.
1971-2003
Biology
Putnam, Marlene S .
1984-2001
Business \& Technology
Quercia, Olga
1996-2014
Music
Quinn, Charles T. 1970-2003
Theatre Arts, Speech
Quintana, Frank M. 1970-2006
Associate Dean of Instruction, Fine,
Performing, and Communication Arts
Division
Racki, David
1985-2013
Librarian

Rail, Lester DeWayne
1971-2000
Director, Arts, Honors \& Student Success
Ramay, Morris W.
1972-2000
Respiratory Care
Ramon, Frank
1972-2010
Director, Financial Aid
Rawate, Prabhu
1990-2005
Chemistry
Reid, Birt
1973-2007
Counselor
Reynolds, Jr., William A.
1957-1978
French
Reznik, Zwi
1990-2010
Mathematics
Richardson, Robert L.
1968-2005
Counselor
Ritter, James J.
1984-2002
Maintenance Mechanic (CTC)
Rios, Cruz F.
1976-1986
Automotive Mechanics
Roach, Darlene
1985-2012
Counselor
Roberts, Michael 1992-2015
English
Rohrer, Martha J.
1976-1981
Home Economics
Rooks, Clay
1999-2019
English
Rose, Bronwen Wendy
1984-2003
Native American Studies
Ross, James Edward
1971-2002
Mathematics

Rowe, Andrew F.
1962-1990
Mathematics
Ruston, James R. 1967-1995
English, Speech
Ryan, Judy L.
1988-2015
English
Ryska, John W.
1965-1982
Counselor
Sabbatini, LeRoy A. 1976-1999
Automotive Collision Repair
Saddler, James 1990-2008
English
Safer, Joseph
1963-1985
Data Processing
Sakata, Kenneth
1981-2003
Cabinetmaking Technology
Sall, Gerald
1977-2007
CTC Counselor
Salrin, Ralph E.
1961-1986
Accounting
Sample, Brooke 1990-2016 Instructor, Disabled Students Programs and Services
Sandau, Richard R. 1959-1983
English
Santos, Richard 1994-2019
Linguistics, English for Multi-Lingual
Students
Sausen, Barbara
1981-2008
Mathematics
Scambray, Terry A. 1967-2001
English

| Scheid, Anne F. | Smith, Shannon | Takeuchi, Leo S. |
| :---: | :---: | :---: |
| 1991-2015 | 1958-1980 | 1959-1992 |
| Art | Flight Science, Industrial Education | Associate Dean of Instruction, |
| Schneider, Dennis | Solwazi, Kehinde | Technical \& Industrial Division |
| 1981-2011 | 1970-2011 | Taylor, Mary A. |
| Business Administration/Marketing | African-American Studies | 1975-2011 |
| Scott, Ronald A. | Sorensen, Royal | Nursing |
| 1990-2018 | 1976-1978 | Temple, Donald |
| Physical Education | Microbiology | 1990-2016 |
| Scott, Rueben A. | Sosa, Luis R. | Decision Science/Computer |
| 1971-2005 | 1977-1993 | Information Technology |
| English, Philosophy | Sociology, Human Services | Terry, Blair |
| Scott, William F. | Spencer, Lowell | 1974-2001 |
| 1967-1984 | 1948-1978 | Accounting |
| Geography | Music | Tessler, Brian |
| Seaberg, William | Spolsdoff, John | 1999-2018 |
| 1980-1998 | 2000-2008 | Physical Education |
| Associate Dean of Instruction, Learning | Director, Student Success \& Honors | Thiessen, Jolene |
| Resources | Stanley, Vance | 2001-2018 |
| Seely, Irene 0. | 1972-1999 | Business \& Technology |
| 1989-2009 | Physical Education | Thomas, Pamella |
| Biology | Statham, Yolanda A. | 1984-2013 |
| Shelley, Deborah | 1964-1984 | English |
| 2008-2018 | English | Tognazzini, Eugene A. |
| Biology | Stilwell, Shirley B. | 1984-2011 |
| Shepard, James H. | 1962-1984 | Mathematics |
| 1987-2005 | Physical Education | Toomasian, John |
| Art | Stephenson, Wendell | 1961-1995 |
| Shine, G. Dennis Jr. | 1999-2019 | History |
| 1968-1993 | Philosophy | Tucker, James |
| Economics, Business Administration | Stokle, J. Gerald | 2006-2011 |
| Shirley, W. Delton 1968-2001 | 1967-1999 <br> Associate Dean of Instructio | Dean of Instruction, Library and Student Learning Support Services |
| Biology | Social Science Division | Valencia, Richard |
| Simba, Ceroasetta | Stone, Carol J. | 1976-2007 |
| 1997-2013 | 1990-2010 | Sociology |
| English | Home Economics | Van Gerpen, Maurice |
| Smith, Bernice V. | Stubblefield, Gertrude | 1959-1999 |
| 1972-1978 | 1930-1960 | Political Science |
| Librarian | Secretarial Science | Van Vleet, Patricia N. |
| Smith, Bonnie | Susnick, Ruthford | 1991-2017 |
| 1996-2019 | 1999-2010 | Linguistics, English for Multi-Lingual |
| Computer Information Technology | Automotive Mechanics CTC | Students |
| Smith, Dorothy E. | Syvertson, William A. | Velasquez, Sarah |
| 1965-1978 | 1990-2015 | 2007-2017 |
| Nursing | Business Administration/Marketing | Political Science |
|  |  | Vinicor, Donald J. 1970-1997 |
|  |  | Chemistry |

Waddle, Carl D.
1965-1997
Associate Dean of Instruction,
Humanities, and Health Sciences \& the Arts
Wall, Kenneth G.
1979-2002
Construction
Walzberg, Laura Ann
1985-2014
Nursing
Wash, Dennis C.
1974-1996
Air Conditioning, Industrial Education
Waters, Rosemary
1972-2009
Biology
Watson, Donald G.
1968-2005
Counselor
Watts, Ann 2008-2016
Director of Calworks

Wayte, William R.
1968-1999
Physical Education
Weinschenk, Franz A.
1954-1980
Associate Dean of Instruction, Humanities
Weidenhoefer, Hans
1948-1984
Director of Athletics, Physical Education
Whitt, C. Thomas
1969-2001
Criminology
Wilson, Vernon L.
1976-1988
Radiologic Technology
Woodman, Joseph B.
1948-1976
Auto Mechanics
Woodruff, Jr., Elbert N. 1971-1984 English

Woods, MaryAnn 1989-1999 Medical Assisting, Health Information Technology
Wosika, Kathleen A. 1975-2012 Art
Wrzalinski, Eugene S. 1984-2003
Environmental Technology
Yarbrough, Thomas 1997-2014
Engineering
Yates, Susan 1984-2013
Athletic Director, Physical Education
Young, Nain T. 1962-1984 Registered Nursing
Zepeda-Esparza, Josephine 1969-1995 English, Spanish

## In Memoriam

Dr. Ward Lasher
Associate Dean of Admissions \& Records
Renato Martinez
Spanish Instructor
William F. Templer
Physical Geography, Earth Science Instructor

## 2019-2020 Fresno City College Catalog

## Emeritus Classified Professionals

| Aeikens, Patricia 1983-2016 Accounting Technician I | Bischel, Steve 1973-2007 Custodian | Dodd, Sherri 1990-2019 Accounting Technician |
| :---: | :---: | :---: |
| Aguilar, Yolanda 2001-2011 Student Services Specialist | Bogdanoff, Gerald <br> 1980-2004 <br> Electronics/Microcomputer Technician | Echols, Katherine 1970-2018 Student Services Specialist |
| Anderson, Robin 1979-2011 Department Secretary | Bravo, Juan 1988-2014 Custodial Manager | Ediger, Patricia 2006-2013 Department Secretary |
| Andrews-Boock, Sharon 1988-2008 Administration Aide | Brooks, Edward 1977-2010 Custodian | Ediger, Stanley 2006-2014 Educational Advisor |
| Archuleta, Irene 1990-2004 Administrative Aide | Caldwell, Carmen 1979-2008 Department Secretary | Estrada, Ruthina 1987-2013 Administrative Aide |
| Baiz, Edward 2006-2018 General Utility Worker | Carr, William 1999-2010 Financial Aid Assistant II | Faith, Linda 2001-2010 Department Secretary |
| Barber, Joan 1974-2007 Office Assistant III | Chernekoff, Ellen 2002-2017 Early Childhood Education Associate | Fischer, Judi 1992-2019 Bookstore Sales Associate |
| Barile, Howard 2001-2018 Accounting Technician I | Christiansen, Argilia 1977-2003 Textbook Purchasing Clerk | Flanders, Veronica 2007-2015 Department Secretary |
| Barlow, John 1991-2011 Custodian | Collins, Sheila 1993-2017 Early Childhood Education Specialist | Flores, Delfina 1977-2007 Student Services Specialist |
| Barnett, Karin 2003-2011 Textbook Purchasing Clerk | Cook David 2006-2018 Printing Trades Technician | Fouquette, Brenda 1988-2012 Library/Learning Resources Assistant II |
| Barrett, Jeffrey 2004-2019 Theatre Technical Director | $\begin{aligned} & \text { Cox, James } \\ & \text { 1992-2010 } \\ & \text { Athletic Equipment Manager } \end{aligned}$ | Garachana, Sandra 1982-2018 Administrative Aide |
| Battcher, Shirley 1999-2011 Office Assistant II | Culbertson, Christine 1987-2014 Early Childhood Education Specialist | Gerety, Cheryl 1990-2012 Office Assistant III |
| Belk, James 1982-2004 Library/Learning Resources Assistant III | Day, Charlezsette 1989-2016 Job Developer | Greene, Jr., Homer 1991-2017 Educational Advisor |
| Bennett, Judith 1991-2016 College Relations Specialist | Delaney, Theresa 1997-2017 Library Technical Services | Greenwood, Phyllis 1990-2010 Department Secretary |
| Biddy, Delores 1977-2015 Office Assistant III | Assistant |  |

Guillen, Guillen
2006-2011
Custodian
Hagler, Linda
1992-2008
School Relations Specialist
Haney, Loretta
1972-2018
Assessment Coordinator
Harris, Elizabeth
1980-2005
Administrative Assistant
Harris, Linda
1990-2015
Textbook Purchasing Clerk
Harrison, Richard
1990-2015
Print, Media \& Communications Manager
Hendricks, Debra
2006-2014
Administrative Aide
Jimenez, Jess
1997-2004
Athletic Equipment Manager
Johnson, Cathie
1989-2015
Financial Assistant I
Kilgore, Richard
1992-2011
Instructional Technician - Art
Kohl, Mona
2001-2014
Administrative Aide
Komaki, Hiro
1975-2005
Graphic Artist
Kroeker, Jay
1970-2004
Audio Visual Maintenance Specialist
Larsen, Dale
2002-2007
Financial Aid Assistant
La Voie, Charles
1990-2013
Micro-Computer Resource Technician

Man

| Lippmann, Frances 1992-2015 <br> Admissions and Records Manager | Myers, Doris <br> 1988-2009 <br> Office Assistant III |
| :---: | :---: |
| Linn, Carolyn 1991-2004 Administrative Aide | Nelson, John 1985-2017 Athletic Trainer |
| Livengood, Robert 1982-2005 <br> Instructional Technician-Automotive | Pelham-Wiley, Emma 1987-2003 <br> Nursing Skills Resource Assistant |
| Lopes, Susan 2000-2016 Office Assistant III | $\begin{aligned} & \text { Peterson, Sandra } \\ & \text { 2007-2012 } \\ & \text { Department Secretary } \end{aligned}$ |
| Lopez, Rosa 1982-2017 Evaluator | Pinley, Lisa 2000-2014 <br> Evaluator |
| Mallory, Lynn 1980-2016 <br> Administrative Assistant | Pisching, George 1990-2008 Graphic Artist |
| Mangum, Pearl 1990-2019 <br> Instructional Administrative Assistant | Points, Susan $1987-2011$ <br> Duplicating Operations Technician |
| McCollum, Debra 2002-2019 <br> Phone Communications Operator II | Rackin, Marilyn 1975-2007 <br> Secretary to the President |
| McSwain-Tennent, Holly 1997-2005 <br> Administrative Aide | Ragasa, Erlinda 2001-2016 <br> Accounting Technician I |
| Mena, Salvador 1973-2007 Educational Advisor | $\begin{aligned} & \text { Ramirez, Judith } \\ & \text { 1992-2014 } \\ & \text { Educational Advisor } \end{aligned}$ |
| Mendoza, Linda 1993-2013 <br> Office Assistant III | Reid, Ora 1985-2010 Custodian |
| Miller, Donna <br> 1985-2003 <br> Business Facilities Assistant | Rice, Mary 1998-2012 <br> Student Services Specialist |
| Miller, Toni 0. <br> 1973-2004 <br> Educational Advisor | Riegel, Rhea 2001-2012 <br> Institutional Research Coordinator |
| Moorer, Lewis <br> 1983-2008 <br> Lead Custodian | Rivera, Donna 1973-2009 <br> Assistant Bookstore Manager |
| Murrietta, Leticia 1974-2014 <br> Administrative Aide | Roe, Franklin 1998-2010 Job Development |


| Rogers, Phyllis | Taylor, Gail | Vennard, Michael |
| :--- | :---: | :---: |
| 2000-2016 | 1997-2011 | $1992-2005$ |
| Office Assistant II | Administrative Aide | Instructional Technical-Reprographics |
| Rothford, Jim | Supersad, Pearl | Wilk, Woody |
| 2003-2018 | $1972-2011$ | $1985-2009$ |
| Athletic Equipment Manager | Department Secretary | News Writer/ Sports |
| Ruby, Michelle | Uribes, Regina | Willingham, Tandy |
| 1990-2016 | 1999-2011 | $1982-2004$ |
| Assessment Coordinator | College Relations Specialist | Library/Learning Resources Assistant III |
| Sanchez, Silvia | Van Dyken, Robert | Willis, Carole |
| 1973-2019 | 2003-2014 | $1999-2004$ |
| Office Specialist | Custodian | Office Assistant I |
| Slevkoff, Hazel | Van Galder, Ann | Whisenhunt, Lydia |
| 1970-2006 | $1996-2016$ | $1969-2010$ |
| Curriculum Assistant | Office Assistant III | Secretary to the President |
| Stovall, Deborah | Vargas, Sandra | Whittle, Oscar |
| 1995-2017 | $1973-2011$ | $1987-2013$ |
| Bookstore Sales Clerk III | Campus Business Assistant | Custodian |
| Sullivan, Francis |  |  |
| 1975-2003 |  |  |
| Theatre Manager |  |  |

## INDEX

## A

AA /AS Degree, General Education for the......................................................... 36
AA and AS Degree Requirements ............................................................. 37,111
AA-T and AS-T Requirements ........................................................................... 37
AB-540, Exemption from Nonresident Tuition ..................................................... 12
About Ourselves, Student Publication.................................................................. 59
Academic Calendar ............................................................................................. 10
Academic Computer Lab ..................................................................................... 72
Academic Credit, Units of................................................................................... 20
Academic Dishonesty.......................................................................................... 60
Academic/Progress Dismissal............................................................................ 33
Academic Freedom....................................................................................................
Academic Limitations, Veterans ...................................................................... 83
Academic Probation .............................................................................................. 32
Academic/Progress Dismissal, Readmission Following................................... 33
Academic Regulations................................................................................... 20
Academic Renewal ................................................................................................ 30
Academic Renewal - Alleviation of Substandard Grades
without Repetition .............................................................................................
Academy Programs, Admission to .................................................................... 101
Accounting Courses......................................................................................... 252
Accounting Programs........................................................................................ 128

Accreditation...................................................................Inside Front Cover
Activities, Social........................................................................................... 76
Adaptive Ornamental Horticulture Skills Program ......................................... 180
Address Change..................................................................................... 64
Administration and Faculty........................................................................ 449
Administration, Fresno City College.................................................................. 448
Administration, State Center Community College District................................. 448
Administration of Justice Courses...................................................................... 253
Administration of Justice for Transfer, Criminology....................................16, 172
Administration of Justice Programs ............................................................... 129
Administrative Policies.......................................................................................... 58
Admission Guarantee, University of California.............................................. 51
Admission Requirements, Summary of....................................................... 12
Admission and Registration ....................................................................... 11
Admission of Students ....................................................................................... 11
Admission, General.................................................................................. 11
Admission to the Academy Programs.......................................................... 101
Adult Correctional Officer Core Program, Administration of Justice ..... 129
Advanced Culinary Arts Program, Culinary Arts. ..... 178
Advanced Photovoltaic Technician Program, Electrical Systems Technology ..... 184
Advanced Placement Exams (AP). ..... 24
Advanced Placement Program Credit (AP) .....  25
Advertising Program, Marketing. ..... 219
Advising, Matriculation. ..... 13, 14
Advisories/Prerequisites/Corequisites ..... 247
Aerospace Studies Courses. ..... 282
African-American Studies Courses. ..... 283
African-American Studies Program ..... 131
Agreements with Other Campuses - Campus Specific .....  .41
Air Conditioning Courses. ..... 387
Air Conditioning Programs ..... 284
Air Force and Army (U.S.) ROTC Studies. ..... 82
Alcoholism and Drug Abuse Counseling Option Program, Human Services. ..... 205
Alleviation of Substandard Grades without Repetition. ..... 32
Allied Health. ..... 78, 111, 131
Allied Heath Courses. ..... 284
Allied Health, Physical Education and Athletics Division. .....  .97
Alpha Gamma Sigma. .....  34
Alternative Fueled Vehicle (AFV) Program, Automotive Technology ..... 141
American Indian Studies Courses ..... 285
American Indian Studies Program. ..... 132
American Sign Language Courses ..... 374
American Sign Language, Emphasis in Liberal Arts Program ..... 213
American Sign Language Studies Program. ..... 133
American Studies Courses. ..... 286
Android Application Developer Program, Computer Information Technology ..... 167
Anthropology Courses ..... 286
Anthropology/Criminology, Emphasis in Liberal Arts Program ..... 213
Anthropology/Economic/Geography Emphasis in Liberal Arts Program ..... 214
Anthropology, Museum of ..... 77
Anthropology Programs ..... 134
Anthropology for Transfer. ..... 134
Anthropology-Archeology Programs. ..... 135
Archaeological Technician Program, Anthropology-Archeology. ..... 135
Appeal or Exception of Academic Progress Dismissal ..... 33
Appeal Procedure, Reclassification ..... 13
Apple iOS Developer Program, Computer Information Technology ..... 167
Application for Associate Degree or Certificate of Achievement ..... 39
Applied Music Courses. ..... 411
Applied Technology Courses ..... 288
Applied Technology Division ..... 98
Apprenticeship Programs/Courses. ..... 100
Architectural Contract Documents, Basic Program, Architecture. ..... 137
Architecture Courses. ..... 289
Architecture Programs. ..... 136
Areas of Study by Division .....  .85
Armenian Courses ..... 375
Army and Air Force (U.S.) ROTC Studies .....  82
Art Courses ..... 291
Art Programs ..... 138
Art Space Gallery ..... 104
Art, Studio Arts for Transfer ..... 113, 139
Articulated Courses, SCCCD Intra-District. ..... 298
Articulation. ..... 40
Articulation System Stimulating Inter-Institutional
Student Transfer (ASSIST) ..... 41
Asian-American Studies Courses ..... 295
Assembly, Student. ..... 58
Assessment, Matriculation ..... 14
Assignment of Registration Dates ..... 15
ASSIST. ..... 41
Associate Degree and Certificate Programs. ..... 128
Associate Degree and Certificate Programs (List of) ..... 87
Associate Degree, Application for. ..... 39
Associate Degrees for Transfer ..... 111
Associate Degree for Transfer, Requirements. ..... 37
Associate in Arts Degree Requirements. ..... 37
Associate in Arts for Transfer, Anthropology. ..... 112, 134
Associate in Arts for Transter, Communication. ..... 115, 163
Associate in Arts for Transfer, Elementary Teacher Education ..... 117, 182
Associate in Arts for Transfer, English ..... 118, 191
Associate in Arts for Transfer, History. ..... 120, 203
Associate in Arts for Transfer, Journalism ..... 120, 209
Associate in Arts for Transfer, Music ..... 122, 223
Associate in Arts for Transfer, Philosophy ..... 123, 232
Associate in Arts for Transfer, Political Science ..... 124, 235
Associate in Arts for Transfer, Psychology ..... 125, 235
Associate in Arts for Transfer, Sociology. ..... 125, 240
Associate in Science for Transfer, Spanish ..... 126, 241
Associate in Arts for Transter, Studio Arts ..... 113, 139
Associate in Arts for Transfer, Theatre Arts ..... 127, 242
Associate in Science Degree, Requirements ..... 37
Associate in Science for Transfer, Administration of Justice. ..... 116, 172
Associate in Science for Transfer, Biology ..... 113, 146
Associate in Science for Transfer, Business Administration. ..... 114, 147
Associate in Science for Transfer, Early Childhood Education. ..... 115, 159
Associate in Science for Transfer, Geology ..... 119, 198
Associate in Science for Transfer, Mathematics ..... 122, 221
Associate in Science for Transfer, Nutrition and Dietetics. ..... 123, 196
Associate in Science for Transfer, Physics. ..... 124, 234
Associated Student Body Fee. ..... 18
Associated Student Body Membership Refund ..... 19
Associated Student Government Representation Fee. ..... 18
Associated Students ..... 75
Astronomy Courses. ..... 296
Athletics ..... 76
Attendance .....  21
Authority and Disciplinary Actions. ..... 60
Auto Collision Repair Program, Career \& Technology Center ..... 100
Automotive Collision Repair, CTC Certificate of Completion ..... 100
Automotive Collision Repair, CTC Courses. .....  78
Automotive Collision Repair Courses. .....  297
Automotive Collision Repair Technology Courses. .....  296
Automotive Collision Repair Technology Programs .....  141
Automotive Mechanics, CTC Certificate of Completion. ..... 100
Automotive Mechanics, CTC Courses ..... 78, 305
Automotive Mechanics Courses, Automotive Technology ..... 305
Automotive Technology Courses ..... 298
Automotive Technology: General Motors ASEP Program Courses . .....  305
Automotive Technology Programs. ..... 141
Awards and Honors ..... 33
B
Badminton, Competitive ..... 430
Baseball, Competitive. ..... 430
Basic Architectural Contract Documents Program, Architecture ..... 137
Basic Architectural Design Program, Architecture. ..... 137
Basic Architectural Office Practice Program, Architecture ..... 137
Basic Architectural Skills 1 Program, Architecture ..... 137
Basic Architectural Skills 2 Program, Architecture ..... 138
Basic Culinary Arts Program, Culinary Arts ..... 178
Basic Digital Architecture Program, Architecture. ..... 138
Basic Fire Academy Program, Fire Technology ..... 192
Basic Police Academy Program, Administration of Justice ..... 129
Basketball, Competitive. ..... 430
Biology Courses. ..... 306
Biology Department. ..... 106
Biology Programs ..... 145
Biology for Transfer ..... 113, 146
Biomedical Tech Program, Electrical Systems Technology ..... 185
Board of Trustees, State Center Community College District ..... 448
Bookstore ..... 65
Brass Performance Program, Music ..... 225
Breadth CSU General Education ..... 47
Business Administration Courses ..... 308
Business Administration Programs ..... 147
Business Administration for Transfer. ..... 114, 147
Business Administration, Management Programs ..... 149
Business Division ..... 102
Business Finance and Accounting Program,
Business Administration Management. ..... 149
Business Finance and Investments Program,
Business Administration Management. ..... 150
Business \& Technology Courses. ..... 311
Business \& Technology Programs ..... 152
Business Office English Program, Business \& Technology ..... 155
Business Office Math Fundamentals Program, Business \& Technology ..... 155
C
CAD (2D) Technician Program, Computer Aided Drating and Design ..... 165
CAD Technician I Program, Computer Aided Dratiting and Design ..... 166
Calendars, Academic. ..... 10
California State University (CSU) Admission ..... 46
California State University/Fresno City College General Education Breadth ..... 47
California State University, Lower Division Transer Students ..... 46
California State University Transfer Course List ..... 49
California State University, Transfer Requirements to ..... 46
California State University, Upper Division Transfer Students ..... 47
CalWORKs ..... 65
Campus Security Act and Student Right-to-Know ..... 9
Career \& Technology Center ..... 78, 98, 109
Career \& Technology Center and Workforce Development Division ..... 98
Career Employment Center ..... 72
Catalog Rights. ..... 35
Certificate and Degree Programs (List of) ..... 87
Certificate and Degree Requirements. ..... 35
Certificate of Achievement. ..... 35
Certificate of Achievement, Application for ..... 39
Certificate of Completion ..... 35
Certificates ..... 35
Certifications of Enrollment ..... 33
Certification of General Education (CSU-GE) ..... 47
Change, Class Schedule ..... 16
Change of Address, Telephone Number ..... 64
Chassis Technician Program, Automotive Technology ..... 142
Chassis Technician I Program, Automotive Technology ..... 143
Chassis Technician II Program, Automotive Technology ..... 143
Cheating ..... 60
Chemistry, Certificate In Program ..... 157
Chemistry Courses ..... 317
Chemistry Department ..... 106
Chemistry Program ..... 157
Chicano-Latino Studies Courses ..... 319
Chicano-Latino Studies Program ..... 157
Child Development Center ..... 66
Child Development Courses ..... 321
Child Development, Early Childhood Education for Transfer ..... 117, 159
Child Development Programs ..... 158
Child Nutrition Program, Food Service Management ..... 197
Child Welfare Program, Child Development. ..... 160
Chinese Courses ..... 375
C-ID ..... 41
Circumstances for Appeal or Exemption of Academic or Progress Dismissal. ..... 33
Cisco CCNA Preparation Program, Electrical Systems Technology ..... 185
Civil Engineering Program ..... 188
Class Schedule Change ..... 16
Classes, Non-Credit .....  .20
Classified Professionals ..... 459
Classroom to Worksite Collaboration, Business Division ..... 102
Clerical Program, School to Work ..... 221
Clerical Training Program, Business \& Technology ..... 156
Clovis Community College ..... 110
Clubs ..... 75
Clubs, Organization of New. ..... 75
Co-Curricular Activities, Business Division. ..... 103
College-Level Examination Program (CLEP) ..... 26
College Personnel ..... 448
College Relations ..... 66
College Sanctioned Accouterments at Graduation ..... 34
College Statement ..... 2
Commercial Music Programs ..... 229
Commercial Photography Program ..... 234
Communication Arts Department ..... 104
Communication Courses ..... 324
Communication for Transfer. ..... 115, 163
Communication Skills for Professionals Program, Communication. ..... 164
Composition and Reading Department ..... 105
Computer Aided Drafting and Design (CADD) Courses ..... 325
Computer Aided Drafting and Design Programs ..... 164
Computer Aided Manufacturing Courses ..... 326
Computer Aided Manufacturing Programs,
Computer Aided Drating and Design. ..... 166
Computer Applications Software Program, Business \& Technology ..... 155
Computer Information Technology (CIT) Courses ..... 327
Computer Information Technology Programs ..... 167
Computer Lab, Academic (LRC). ..... 71
Computer/Network Equipment Use Policy ..... 59
Computer Science Courses ..... 331
Computer, Software Engineering Program ..... 188
Computerized Accounting for the Workplace Program, Accounting ..... 129
Concurrent College Enrollment ..... 16
Conduct Standards, Student. ..... 58
Construction - Carpentry Courses ..... 332
Construction Program ..... 171
Contents, Table of ..... 3
Cooperative Work Experience Education .....  83
Core Values, Fresno City College .....  7
Corequisites/Prerequisites/Advisories ..... 247
Correctional Science Option Program, Criminology ..... 173
Counseling Courses. ..... 334
Counseling Department. ..... 66
Counseling for Probationary Students. ..... 33
Course and Unit Credit, Earning. ..... 23
Course Classification. ..... 35
Course Classification System. ..... 248
Course Credit Limitation ..... 247
Course Descriptions. ..... 247, 252
Course Identification Numbering Systems (C-ID) .....  41
Course Numbering System ..... 248
Course, Repeating a ..... 30,31
Course Repetition. ..... 30
Courses Related in Content. ..... 31
Coursework Repeatability, Financial Aid. ..... 68
Credit by Examination ..... 28
Credit by Examination Fee ..... 19
Credit for Military Service ..... 29
Criminology, Administration of Justice for Transfer ..... 116, 172
Criminology Courses. ..... 335
Criminology Option Program, Criminology. ..... 174
Criminology Programs ..... 172
Cross Country, Competitive ..... 430
Cultural Studies Emphasis in Liberal Arts Program ..... 214
Culinary Arts, Advanced Program ..... 178
Culinary Arts, Basic Program ..... 178
Culinary Arts, Intermediate Program ..... 178
Culinary Arts Programs. ..... 178
Cyber Technician Specialist Program, Computer Information Technology ..... 167
Cybersecurity Program, Computer Information Technology. ..... 168
D
Dance. ..... 77, 104
Dance Courses ..... 337
Dance Program ..... 178
Dean's List. ..... 34
Deans, Instructional Fresno City College ..... 448
Deans, Student Services Fresno City College ..... 448
Debate (Forensics). .....  .76
Decision Science Courses ..... 340
Degree/Certificate Requirements ..... 35
Degrees, Multiple ..... 37
Demonstrations and Protests, Student ..... 59
Dental Hygiene Courses ..... 341
Dental Hygiene Program ..... 179
Design/Technical Theatre Studies Program, Theatre Arts ..... 243
Developmental Education Program ..... 80
Developmental Education Curriculum ..... 80
Developmental Services Courses ..... 343
Dietary Aide Program, Food and Nutrition ..... 195
Dietetic Service Supervisor Program, Food and Nutrition. ..... 195
Digital Architecture Basic Program, Architecture. ..... 138
Digital Media Option Program, Graphic Communications ..... 200
Digital Photography Program ..... 234
Digital Video Option Program, Graphic Communications ..... 200
Disabled Students, Course Repetition ..... 31
Disabled Students Programs and Services (DSP\&S) ..... 67
Disciplinary Actions and Authority. ..... 60
Dishonesty, Academic ..... 60
Dismissal and Probation ..... 32
Dismissal, Academic/Progress ..... 33
Distance Education. ..... 20
District Courses and Programs ..... 109
District, The. .....  9
District Police. ..... 67
Divisions. ..... 97
Allied Heath, Physical Education, and Athletics ..... 97
Applied Technology ..... 98
Business ..... 102
Career \& Technology Center and Workforce Development ..... 98
Fine, Performing, and Communication Arts ..... 104
Humanities ..... 105
Math, Science, and Engineering ..... 106
Social Sciences. ..... 108
Division, Areas of Study by ..... 85
Drafting Courses. ..... 346
Dropping a Class ..... 16
Dropping (Withdrawal) ..... 29
Dropping/Withdrawal Due to Extenuating Circumstances ..... 29
DSP\&S. ..... 67
Drug Abuse Policy ..... 59
Drug Abuse and Alcoholism Counseling Option Program, Human Services ..... 205
Dual Enrollment/High School Enrichment Admission ..... 11
E
Early Childhood Education Program, Child Development ..... 159
Early Childhood Education for Transfer, Child Development ..... 115, 159
Early Childhood Paraprofessional Program, Child Development ..... 160
Early Intervention Program, Child Development. ..... 161
Early Intervention Assistant Program, Child Development ..... 161
Earning Course and Unit Credit. .....  23
Economics Courses ..... 346
Economics Program ..... 181
Economics for Transfer Program. ..... 181
Education Courses ..... 347
Education, Elementary Teacher Education for Transfer. ..... 117, 182
Education Paraprofessional Program, Education. ..... 183
Education Programs ..... 182
Educational Benefits for Veterans and Dependents. .....  82
Elder Care Program, Human Services ..... 206
Electrical Engineering Program ..... 189
Electrical Systems Technology Courses ..... 347
Electrical Systems Technology Programs ..... 184
Elementary Teacher Education for Transfer, Education ..... 117, 182
Emergency Medical Technician 1 Program ..... 194
Emergency Medical Technician 1 Refresher Program ..... 194
Emeritus Classified Professionals ..... 460
Emeritus Faculty. ..... 453
Emission Technician Program, Automotive Technology . ..... 143
Emission Technician Program I, Automotive Technology ..... 143
Emission Technician Program II, Automotive Technology ..... 143
Employment and Career Center ..... 66
Engineering: Civil Program ..... 188
Engineering: Computer, Software Program. ..... 188
Engineering Courses. ..... 351
Engineering: Electrical Program. ..... 189
Engineering: Mechanical, Aerospace and Manufacturing Program ..... 190
Engineering and Physical Science Department ..... 107
English Associate in Arts Degree ..... 105
English Courses ..... 352
English for Multi-Lingual Students (EMLS) Courses ..... 356
English for Multi-Lingual Students (EMLS) Program. ..... 81
English for Transfer ..... 118, 191
English Placement (Assessment) .....  14
English Support Center ..... 72
Enrollment, Concurrent College .....  .16
Enrollment Fee ..... 17
Enrollment Fees, Refund or Reversal. ..... 19
Enrollment, Full-Time ..... 20
Enrollment, Open ..... 62
Enrollment Responsibilities, Student.. ..... 62
Entrepreneurial Ventures Program, Business Administration ..... 148
EOPS. ..... 68
Ethics Statement, Fresno City College. .....  7
Examinations, Final ..... 21
Exceptions of Academic Program Dismissal ..... 33
Exemption from Nonresident Tuition(AB-540). ..... 12
Exercise of Free Expression. ..... 58
Extended Opportunity Programs and Services (EOPS). ..... 68
Extending the Class (ETC). ..... 72
Excused Withdrawal (EW) ..... 22
Extenuating Circumstances, Withdrawal/Dropping ..... 29
F
Facility Controls Program, Electrical Systems Technology ..... 185
Faculty \& Administration. ..... 449
Emeritus Faculty ..... 429
In Memoriam ..... 472
Fall Semester 2019 ..... 10
Family Child Care Program, Child Development. ..... 162
Family Education Rights and Privacy Act. ..... 64
Fashion Merchandising Courses. ..... 359
Fashion Merchandising Program, Marketing ..... 192, 219
Fees, Student ..... 17
Associated Student Body Fee ..... 18
Associated Student Government Representation Fee. ..... 18
Credit by Examination Fee ..... 19
Enrollment Fee. ..... 17
Health Fee. ..... 18
Instructional Materials Fee ..... 18
Nonresident and International Tuition. ..... 17
Parking Fee ..... 18
Transcript Fee ..... 18
Field Biologist Program, Biology ..... 146
Film Courses ..... 360
Final Examinations. ..... 21
Final Grade Report ..... 33
Finance and Accounting (Business) Program, Business Administration Management ..... 150
Finance and Investments (Personal) Program, Business Administration Management ..... 150
Financial Aid. ..... 68
Financial Aid, Return of Aid Based Upon Total Withdrawal. ..... 68
Financial Aid and Scholarships ..... 68
Financial Aid Coursework Repeatability ..... 68
Financial Aid Satisfactory Progress ..... 68
Fine Art Photography Program ..... 234
Fine, Performing, and Communication Arts Division ..... 104
Fire Academy .....  81
Fire Academy, Basic Program, Fire Technology. ..... 192
Fire Technology, CTC ..... 101
Fire Technology Courses ..... 360
Fire Technology Programs ..... 192
Firefighter II Program, Fire Technology ..... 194
Food and Nutrition Courses. ..... 372
Food and Nutrition Programs ..... 144
Food Service Management Courses ..... 373
Food Service Management Programs ..... 197
Food Services ..... 71
Football, Competitive ..... 431
Foundations for the Office Professional, Business \& Technology ..... 156
Foreign Languages Courses. ..... 375
Foreign Language Department ..... 105
Foreign Languages Emphasis in Liberal Arts Program. ..... 215
Forensic Evidence Option Program, Criminology ..... 175
Forensics (Debate). ..... 76
Free Expression, Exercise of. ..... 58
French Courses ..... 375
Fresno City College CSU General Education - Breadh ..... 47
Fresno City College Map. ..... Inside Back Cover
Fresno City College Administration ..... 448
Fresno City College History .....  8
Fresno City College Programs Not Offered at Reedley College ..... 109
Full-Time Enrollment ..... 20
G
General Activities Courses, Physical Education ..... 427
General Admission ..... 11
General Education for the AA and AS Degree ..... 36
General Education Requirements for CSU-GE ..... 47
General Motors ASEP Program, Automotive Technology Courses ..... 258
General Motors ASEP Program, Automotive Technology ..... 144
Geography Courses ..... 378
Geology. ..... 107
Geology Courses ..... 380
Geology for Transter ..... 119, 198
German Courses ..... 376
Global Studies Courses. ..... 381
Golf, Competitive ..... 431
Grade Point Average (GPA) ..... 23
Grade Report, Final ..... 33
Grade Review, Student ..... 23
Grade Symbols. ..... 21
Grading System ..... 21
Graduation, Sanctioned Accouterments at. ..... 34
Graduation, Honors at ..... 34
Graduation Requirements ..... 35
Graphic Communications Courses. ..... 381
Graphic Communications Programs ..... 199
Graphic Design Program, Graphic Communications. ..... 199
Grievance Policy for Students .....  62
Guitar Majors Program, Music ..... 224
Guitar Performance Program, Music ..... 225
H
Harassment Policy, Sexual ..... 64
Heath Care Career Programs ..... 97
Health Fee. ..... 18
Heath Fee, Refund ..... 19
Heath Information Technology Courses ..... 385
Heath Information Technology Program ..... 201
Health Science Courses ..... 387
Healh Services ..... 71
Heating, Ventilation, and Air Conditioning Courses ..... 387
Heating, Ventilation, and Air Conditioning Programs. ..... 202
High Honors. ..... 34
High School Enrichment/Dual Enrollment Admission ..... 11
High Tech Adaative Program. ..... 180
Highest Honors ..... 34
History \& Appreciaion Music Courses ..... 410
History Courses ..... 389
History/Political Science Emphasis in Liberal Arts Program ..... 216
History for Transfer. ..... 120, 203
History of Fresno City College .....  8
Hmong Courses ..... 376
Holds on Records and Registration. ..... 16
Honor Societies ..... 34
Honors and Awards ..... 33
Honors at Graduation ..... 34
Honors Certificate Program. ..... 204
Honors Courses ..... 391
Honors Program. ..... 33, 81
Honors Program Commendation ..... 205
Housing Information .....  .71
Human Relations and Communications Program,
Business Administration Management ..... 151
Human Resource Management and Human Relations Program, Business Administration Management ..... 151
Human Resource Management Assistant Program, Business Administration ..... 148
Human Services Courses. ..... 35
Human Services Programs ..... 205
Humanities Associate in Arts Degree. ..... 105
Humanities Courses ..... 397
Humanities Division ..... 105
HVAC Technology I Program, Heating, Ventilation, and Air Conditioning ..... 203
HVAC Technology || Program, Heating, Ventilation, and Air Conditioning ..... 202
HVAC Technology III Program, Heating, Ventilation, and Air Conditioning ....... 202
HVAC Wireless Control I Program, Heating,
K
K
Ventilation, and Air Conditioning. ..... 203
Hybrid Electric Vehicle (HEV) Program, Automotive Technology ..... 144
|
IDLLE Program. ..... 73
Illness .....  21
In Memoriam. ..... 459
In Progress (IP) ..... 22
Incomplete (I) ..... 22
Individual Study ..... 29
Individual Study Courses. ..... 397
Industrial Arts and Technology Program ..... 208
Industrial Automation 1 Program, Electrical Systems Technology ..... 186
Industrial Controls Program, Electrical Systems Technology ..... 186
Industrial Training Certificate, CTC ..... 100
Industrial Training,, CTC Courses ..... 79, 397
Infant and Toddler Specialist Program, Child Development. ..... 162
Information Security I Program, Computer Information Technology ..... 168
Information Security || Program, Computer Information Technology. ..... 168
In-State Residency ..... 12
Instructional Deans ..... 448
Institutional Student Learning Outcomes, Fresno City College .....  8
Instructional Materials Fee ..... 18
Instrumental Music Program. ..... 223
Intercollegiate Activity Courses, Physical Education ..... 430
Intermediate/Advanced Ensembles and Individual Lessons
Music Courses. ..... 413
Intermediate Culinary Arts Program, Culinary Arts. ..... 178
International Admission ..... 11
Internationa//Out-of-State Residency. ..... 12
International Tuition (Fees). ..... 17
Intersegmental General Education Transfer Curiculum (IGETC) ..... 52
Intra-District Transfer. ..... 17
Introduction. .....  .7
Introduction to Industrial Controls Program, Electrical
Systems Technology ..... 186
J
Japanese Courses ..... 376
Jazz Performance Program, Music. ..... 226
Journalism Courses ..... 398
Journalism for Transfer ..... 120, 209
Journalism Programs. ..... 209
Juvenile Correctional Officer Core Program, Administration of Justice. ..... 130
Key to Graduation or Transfer Status Designations. ..... 247
Kinesiology Programs ..... 210
Kinesiology for Transfer Program ..... 120
L
Laboratory Assistant Course ..... 399
Large Performing Organizations Music Courses ..... 415
Law Enforcement Option Program, Criminology ..... 176
Law Program ..... 212
Learning Assistance Courses ..... 399
Learning Resources Center (LRC). ..... 71
Legal Office Professional Programs, Business \& Technology ..... 154
Legally Mandated Training .....  31
Leon S. Peters Honors Program. ..... 33
Letters Department. ..... 105
Liberal Arts Program, Emphasis in American Sign Language ..... 213
Liberal Arts Program, Emphasis in Anthropology/Criminology ..... 213
Liberal Arts Program, Emphasis in
Anthropology/Economics/Geography ..... 214
Liberal Arts Program, Emphasis in Cultural Studies ..... 214
Liberal Arts Program, Emphasis in Foreign Languages. ..... 215
Liberal Arts Program, Emphasis in History/Political Science ..... 216
Liberal Arts Program, Emphasis in Social Sciences ..... 216
Liberal Arts Program, Emphasis in Spanish. ..... 217
Liberal Arts Programs ..... 212
Library ..... 72
Library Skills Courses. ..... 400
Library Technology Courses. ..... 400
Library Technology Programs ..... 217
Linguistics Courses ..... 401
Linguistics/English for Multi-Lingual Students Department. ..... 105
Lost and Found .....  .72
Low Voltage Program, Electrical Systems Technology . ..... 186
LVN to RN Upgrade Program, Registered Nursing. ..... 231
M
Madera Community College Center ..... 110
Mail Services and Telephone. .....  74
Maintenance Mechanic, CTC ..... 100
Maintenance Mechanic CTC Courses ..... 79
Makeup Work. ..... 21
Management and Supervision Program, Business
Administration Management. ..... 151
Manufacturing Mechanic Courses. ..... 402
Manufacturing Mechanic Certificate of Completion, CTC ..... 100
Manufacturing Mechanic CTC Courses. .....  79
Manufacturing Technician Program. ..... 218
Map, Fresno City College. ..... Inside Back Cover
2019-2020 Fresno City College Catalog
Marketing Courses ..... 402
Marketing Programs ..... 218
Marketing, Fashion Merchandising Programs. ..... 219
Marketing, Retail Marketing Program. ..... 220
Math Lab ..... 67
Math, Science, and Engineering Division. ..... 106
Math Support Center. ..... 72
Mathematics and Computer Science Department ..... 107
Mathematics Courses. ..... 403
Mathematics for Transfer ..... 122, 221
Matriculation .....  .13
Matriculation Exemptions. ..... 14
Mechanical, Aerospace and Manufacturing Engineering Program ..... 190
Medical Assistant-Clinician Programs ..... 222
Medical Assisting Courses ..... 407
Medical Coding Program, Health Information Technology. ..... 202
Medical Office Assistant Program, Business \& Technology ..... 156
Medical Office Professional Programs, Business \& Technology ..... 155
Memoriam, In. ..... 459
Metal Fabrication Option Program, Welding Technology ..... 243
Microcomputer Software Specialist Program,
Computer Information Technology ..... 169
Microsoft Certified Specialist Program, Computer Information Technology. ..... 169
Microsoft Office Foundations Program, Business \& Technology. ..... 156
Microsoft Word Program, Business \& Technology. ..... 156
Military Service, Credit for .....  29
Military Science Courses ..... 407
Military Withdrawal (MW). ..... 22
Mission of Fresno City College. .....  7
Multiple Degrees ..... 37
Museum of Anthropology. ..... 77
Music Activities. ..... 77
Music, Applied Courses ..... 414
Music Courses ..... 412
Music for Transfer ..... 122, 223
Music, History and Appreciation Courses ..... 413
Music, Intermediate/Advanced Ensembles and Individual Lessons Courses ..... 415
Music, Large Performing Organization Courses ..... 416
Music Programs.. ..... 223
Music Theory Courses ..... 411
Music Theory Program ..... 226
N
Natural Science Courses ..... 418
Network/Computer Equipment Use Policy ..... 59
Network/Computer Technician Program, Computer Information Technology ..... 169
Networking/Computer Technician Program,
Electrical Systems Technology. ..... 187
Newspaper, College (The Rampage) .....  76
Non-Credit Classes. ..... 20
Nondiscriminatory Policy and Obligations, Statement of ..... 62
Non-evaluative Symbols ..... 22
Nonresident Tuition (Fees) ..... 17
Nonresident Tuition Exemption ..... 12
Nursing, Registered Courses. ..... 419
Nursing, Registered Program ..... 230
Nutrition and Dietetics for Transfer, Food \& Nutrition. ..... 123, 146
0
Oakhurst Community College Center ..... 110
Office Professional I Program, Business \& Technology. ..... 152
Office Professional II Program, Business \& Technology. ..... 153
Office Professional - Executive Assistant Emphasis Program, Business \& Technology ..... 153
Office Professional - Legal Office Emphasis Program, Business \& Technology ..... 154
Office Professional - Medical Office Emphasis Program, Business \& Technology ..... 154
Open Enrollment .....  .62
Organization of New Clubs ..... 75
Other Policies. ..... 64
Out-of-State Colleges/Universities, Transfer Requirements. ..... 57
Out-of-State/International Residency. ..... 12
P
Paralegal Courses ..... 422
Paralegal Program. ..... 232
Paraprofessional Education Program, Education. ..... 160, 183
Parking Fee. ..... 18
Parking Fee, Refund ..... 19
Parking Regulations ..... 62
Pass/No Pass (P/NP) .....  23
Pep and Cheer Course ..... 431
Percussion Performance Program, Music. ..... 226
Personal Finance and Investments Program,
Business Administration Management ..... 151
Personal Sales Program, Marketing ..... 221
Peters, Leon S., Honors Program. ..... 33
Phi Theta Kappa. .....  34
Philosophy Associate in Arts Degree. ..... 105
Philosophy Courses ..... 424
Philosophy Department. ..... 105
Philosophy for Transfer. ..... 123, 232
Photo and Videotape Policy. ..... 73
Photography Courses ..... 425
Photography Programs ..... 233
Photojournalism Program, Photography ..... 234
Photovoltaic Technician (Advanced) Program, Electrical Systems Technology ..... 184
Physical Education Courses. ..... 427
Physical Science Courses ..... 433
Physics ..... 107
Physics Courses ..... 433
Physics for Transfer ..... 124, 234
Piano Majors Program, Music ..... 225
Piano Performance Program, Music ..... 227
Pipe and Structural Steel Certification Option Program, ..... 244, 245
Placement Test (Assessment) ..... 14
Plagiarism. ..... 60
Police Academy ..... 82
Police, District. ..... 67
Policies, Other. ..... 64
Policy Statement, State Center Community College District. ..... 58
Political Science Courses., ..... 433
Political Science for Transfer ..... 124, 235
Portuguese Courses ..... 376
Post Basic Supervisor Program, Administration of Justice ..... 130
Powertrain Technician Program, Automotive Technology ..... 144
Powertrain Technician Program I, Automotive Technology ..... 144
Powertrain Technician Program II, Automotive Technology ..... 144
Pre-Academy Training Option Program, Criminology ..... 177
Pre-Allied Health Registered Nursing Option Program, Allied Health. ..... 131
Pre-Law in Interdisciplinary Studies Program ..... 212
Prehospital Paramedic Care Program, Fire Technology. ..... 194
Preparation in Microsoft Office Program, Computer Information Technology ..... 170
Preparation to Enter Four-Year Colleges or Universities ..... 40
Preprofessional Courses, Physical Education ..... 429
Prerequisites/Corequisites/Advisories ..... 247
Pre-Social Work Option Program, Human Services ..... 207
Privacy Act and Family Education Rights ..... 64
Private/Independent College/Universities, Transfer Requirements of. ..... 57
Probation and Dismissal ..... 32
Probation Core Course Program, Administration of Justice. ..... 130
Professional Photography Programs. ..... 233
Programs, Associate Degree and Certificates ..... 128
Progress/Academic Dismissal. ..... 33
Progress Probation,
Placement on ..... 32
Removal from ..... 32
Protests and Demonstrations, Student ..... 59
Proxy Registration, Registration Substitutes. ..... 17
Psychology Courses. ..... 434
Psychology for Transfer ..... 125, 236
Psychology Programs ..... 275
Psychological Services .....  73
Public Health for Transfer Program, Allied Health ..... 111, 132
Public Information. ..... 73
Public Safety Dispatcher Program, Administration of Justice. ..... 130
Publications, Student ..... 59,76
Puente Project ..... 73
R
Radiologic Technology Courses ..... 436
Radiologic Technology Program ..... 237
Rampage, Student Publication ..... 75
Reading and Writing Center ..... 72
Reading, Writing and Math Lab ..... 67
Readmission Following Academic/Progress Dismissal ..... 33
Real Estate Courses ..... 438
Reclassification ..... 13
Records, Holds. ..... 17
Recreation Courses ..... 438
Recreation Leadership Program ..... 238
Reedley College ..... 110
Refund of Associated Student Body Membership ..... 19
Refund or Reversal of Enrollment Fees and Tuition ..... 19
Refund of Health Fee ..... 19
Refund of Parking Fee ..... 19
Refund Policy, Bookstore ..... 65
Refund to Students ..... 19
Registered Nursing Courses ..... 419
Registered Nursing Program ..... 228
Registration. ..... 15
Registration Requirement Definitions ..... 16
Registration Holds. ..... 16
Registration, Proxy ..... 17
Registration Substitutes ..... 17
Related in Content, Courses ..... 31
Related Content Groups ..... 31
Removal from Academic Probation ..... 32
Removal from Class by Instructor ..... 61
Removal from Progress Probation. ..... 32
Repeating a Course ..... 247
Repetition of Courses, Designated as Non-Repeatable. ..... 30
Repetition of Courses, Designated as Repeatable ..... 31
Report Delayed (RD). ..... 22
Reports to Students ..... 33
Requalification - Basic Course Program, Administration of Justice. ..... 131
Requirement Definitions ..... 16
Requirements for AA and AS Degrees ..... 37
Requirements for the Associate Degrees for Transfer. ..... 37
Residency. ..... 12
Residential Construction Wiring Program, Construction ..... 172
Resources for American Indian Needs (RAIN) ..... 73
Respiratory Care Practitioner Courses ..... 438
Respiratory Care Practitioner Program ..... 239
Responsibilities and Rights, Enrollment .....  62
Retail Management Program, Marketing ..... 220
Retailing Program, Marketing. ..... 221
Returning Student Admission. ..... 12
Reversal of Enrollment Fees and Tuition ..... 19
Rights, Catalog. ..... 35
Rights, Student. ..... 61
Rights and Responsibilities. ..... 62
ROTC Studies, U.S. Army and U.S. Air Force ..... 82
S
Satisfactory Progress ..... 32
Satisfactory Progress, Financial Aid. ..... 68
Satisfactory Scholarship ..... 23
SCCCD Intra-District Articulated Courses. ..... 251
Schedule Change, Class ..... 16
Schedule of Classes. ..... 247
Scholarships and Financial Aid .....  68
School To Work, Clerical Program ..... 180
School To Work, Workability Program. ..... 181
Sexual Harassment Policy. ..... 64
Sign Language Interpreting Preparation Certificate of Achievement ..... 105
Sign Language Interpreting Preparation Program. ..... 240
Small Business Management Program,
Business Administration Management ..... 152
Smoking, No in Campus Buildings ..... 59
Soccer, Competitive ..... 431
Social Activities. ..... 76
Social Science Division. ..... 108
Social Sciences Emphasis in Liberal Arts Program. ..... 204
Social Work (Pre) Option Program, Human Services ..... 208
Sociology Courses. ..... 439
Sociology for Transfer ..... 125, 240
Softball, Competitive. ..... 431
Spanish Associate in Arts Degree ..... 105
Spanish Courses. ..... 377
Spanish Emphasis in Liberal Arts Program ..... 207
Spanish Programs. ..... 241
Spanish for Transfer ..... 126, 241
Special Areas of Study ..... 78
Special Education Assistant Program, Education ..... 183
Special Education Paraprofessional, Education ..... 183
Special Student Programs. ..... 73
Special Studies Courses ..... 441
Sports Medicine Program, Physical Education. ..... 237
Spring Semester 2020 ..... 10
SSSP ..... 74
State Center Community College District Board of Trustees ..... 448
State Center Community College District Administration. ..... 448
State Center Community College District Policy Statement. ..... 58
Statement of Nondiscriminatory Policy and Obligations ..... 62
STC Basic Supervisor Program, Administration of Justice. ..... 131
Steps to Success, Matriculation ..... 14
Strengthening Young Men by Academic Achievement (SYMBAA) ..... 74
String Performance Program, Music. ..... 227
Student Activities ..... 75
Student Assembly ..... 58
Student Body Fee ..... 18
Student Conduct Standards. ..... 58
Student Enrollment Responsibilities. ..... 62
Student Fees ..... 17
Student Grade Review. ..... 23
Student Grievance Policy ..... 62
Student Learning Outcomes, Institutional. .....  8
Student Protests and Demonstrations ..... 59
Student Publications. ..... 59
Student Right-To-Know and Campus Security Act. .....  9
Student Rights. ..... 61
Student Services Deans ..... 448
Student Support Services ..... 65
Student Support Services Program (SSSP). ..... 74
Studio Art Program, Art ..... 140
Studio Arts for Transter, Art. ..... 113, 139
Summary of Admission Requirements ..... 12
Summer Semester 2020 ..... 10
Summer Units Allowed. ..... 20
Supervised Tutoring Courses ..... 441
SYMBAA ..... 74
System Support Specialist Program, Computer
Information Technology ..... 170
T
Table of Contents. .....  3
Telephone and Mail Services ..... 74
Telephone Number Change ..... 64
Tennis, Competitive ..... 431
Tier Requirements, Registration ..... 15
Theatre Arts. ..... 104, 242, 441
Theatre Arts Courses. ..... 441
Theatre Arts and Dance ..... 77
Theatre Arts for Transfer ..... 127, 242
Theatre Arts Programs ..... 242
Theory Music Courses ..... 408
3D CAD/CAMProgram, Computer Aided Dratting and Design ..... 166
3D CAD Technician Program, Computer Aided Drafting and Design. ..... 165
Tobacco Free Campus ..... 59
Track and Field, Competitive ..... 431
Transcript Fee ..... 18
Transcript Requests ..... 19
Transfer Admission ..... 12
Transfer to California State University (CSU). ..... 46
Transfer Center ..... 66
Transfer Course List, CSU ..... 49
Transfer Course List, UC ..... 50
Transfer Information and Requirements ..... 40
Transfer, Intra-District ..... 17
Transfer Requirements to California State University (CSU) ..... 46
Transfer Requirements of Private/Independent and Out-of-State College and Universities ..... 57
Transfer Requirements to University of California (UC) ..... 50
Transfer Status Designations or Key to Graduation. ..... 247
Transfer to University of California (UC) ..... 50
Travel-Study Credit ..... 29
TRIO Programs ..... 74
Tuition Refund. ..... 19
Tutorial Services. ..... 72
21st Century Work Competencies Program, Business Administration ..... 148
2 CAD Technician Program, Computer Aided Drafting and Design. ..... 165
U
U.C. Berkley IGETC Recommendations ..... 57
U.C. Davis IGETC Recommendations ..... 57
U.C. Irvine IGETC Recommendations ..... 57
U.C. Los Angeles IGETC Recommendations ..... 57
U.C. Merced IGETC Recommendations. ..... 57
U.C. Riverside IGETC Recommendations. ..... 57
U.C. San Diego IGETC Recommendations ..... 57
U.C. Santa Barbara IGETC Recommendations. ..... 57
U.C. Santa Cruz IGETC Recommendations ..... 57
Unit and Course Credit, Earning. ..... 23
Units of Academic Credit. ..... 20
University of California Admission Guarantee ..... 51
University of California Transfer Requirements. ..... 50
University of California Transfer Course List ..... 51
Upward Bound Program ..... 74
U.S. History, Constitution, and American Ideals. ..... 49
USEAA Academic Program ..... 74
V
Veterans Services. ..... 82
Videotape and Photo Policy ..... 73
Vision Statement, Fresno City College. .....  7
Visual Communications Program, Graphic Communications ..... 201
Vocal Majors Program, Music. .....  224
Vocal Performance Program, Music. ..... 227
Vocational English as a Second Language (VESL) Courses ..... 444
Volleyball, Competitive ..... 432
W
Wait List Rules and Information ..... 17
Water Polo, Competitive ..... 432
Web Design Program, Graphic Communications ..... 201
Web Developer Program, Computer Information Technology. ..... 170
Web Page Development Program, Computer Information Technology ..... 170
Welding Design \& Fabrication Program ..... 245
Welding Multi-Process Program ..... 246
Welding Technology Courses. ..... 445
Welding Technology Programs ..... 243
Who Needs to Apply. ..... 11
Withdrawal (W) ..... 22
Withdrawal for Extenuating Circumstances (EW) ..... 22
Withdrawal from a Class ..... 16
Withdrawal from College. ..... 29
Withdrawing from College. ..... 16
Withdrawa/Dropping ..... 29
Withdrawal/Dropping Due to Extenuating Circumstances ..... 29
Women's Studies Courses. ..... 446
Women's Studies Program ..... 246
Woodwind Performance Program, Music. ..... 227
Workability Program, School to Work ..... 181
Work Experience. (Cooperative) Education ..... 83
Work Experience Education, Applied Technology Division ..... 98
Work Experience, General Course ..... 447
Wrestling, Competitive. ..... 432
Writing and Reading Center ..... 72
Writing and Reading Lab ..... 67

Notes

Notes


Campus Buildings:
I Building A
2 Old Administration Building (OAB)
3 Cafeteria/Student Lounge/
Staff Dining Room (C)
4 Gymnasium (G)
5 Practice Gym (PG)
6 Veterans Peace Memorial
7 Student Center/Bookstore (SC)
8 Business Education (BE)/
Design Science Middle College HS (BE)
9 Social Sciences (SO)
10 Student Services (ST)

II Forum Hall (FH)
12 Library (LI)
13 Tutorial Center (LI)
4 Media Center (LI)
5 Assessment Center/
Career and Employment Center (LI)
16 Language Arts (LA)
7 Art/Home Economics (AH)
Speech/Music (MS)
19 Applied Technology (T-100)
20 Applied Technology (T-200)
21 Applied Technology (T-300)

22 Applied Technology (T-400)
23 Applied Technology (T-500)
2 Applied Technology (T-600)
25 CalWORKs (T-200)
6 Theatre Arts (TA)
7 Humanities/Faculty Offices (FO)
8 Math/Science (S)
9 Health Sciences (HS)
State Center Community College
District Board Room (DO)
31 District Police Office (PD)
32 District Operations

33 Child Development Center (CDC)
34 Ratcliffe Stadium (RS)
35 Soccer Field (SF)
36 Physical Performance Center (PPC)
37 Fieldhouse (F)
38 Police Academy (PA)
39 Euless Ball Park (EU)
40 Football Practice Field
41 Ratcliffe Portables (RP)

would


[^0]:    The Marlan and Rosemary Bourns College of Engineering

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

[^1]:    * AT 40 can be substituted for BT 23.
    ** EST 57A and EST 57B may be substituted for CIT 45.

[^2]:    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)

[^3]:    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)

[^4]:    25 FOOD AND BEVERAGE PURCHASE AND CONTROL
    2 units, 2 lecture hours, (Formerly Food
    Services 66)
    ADVISORY: Eligibility for English 1A recommended. A working knowledge of basic arithmetic is recommended.

    Food purchasing policies and procedures with respect to budget. Basic marketing functions and selection of food products for commercial and institutional food service operations. Emphasis on developing standard purchase specification for various food service operations and on procedures for buying, receiving, storing and inventory management. (A, CSU)

[^5]:    2 HIGH-BEGINNING AMERICAN SIGN
    LANGUAGE,
    4 units, 4 lecture hours, (Formerly
    American Sign Language 1B)
    PREREQUISITE: American Sign Language 1 or two years high school American Sign Language or equivalent. ADVISORY: Eligibility for English 1A recommended.

[^6]:    323 VIDEO EDITING - ADOBE PREMIERE PRO 2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
    ADVISORY: Graphic Communications 27, 32, 320B, 327, or 332.
    Eligibility for English 1A recommended.
    Digital video editing techniques using Adobe Premiere Pro.

[^7]:    347 INTRODUCTION TO FOUR DIMENSIONAL DESIGN
    3 lecture hours, (Pass/No Pass), (Open
    Entry/Open Exit), (Repeats = 99)
    ADVISORY: Eligibility for English 1A recommended.
    Fundamental principles and foundational competencies for digital artists and designers.

[^8]:    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)

