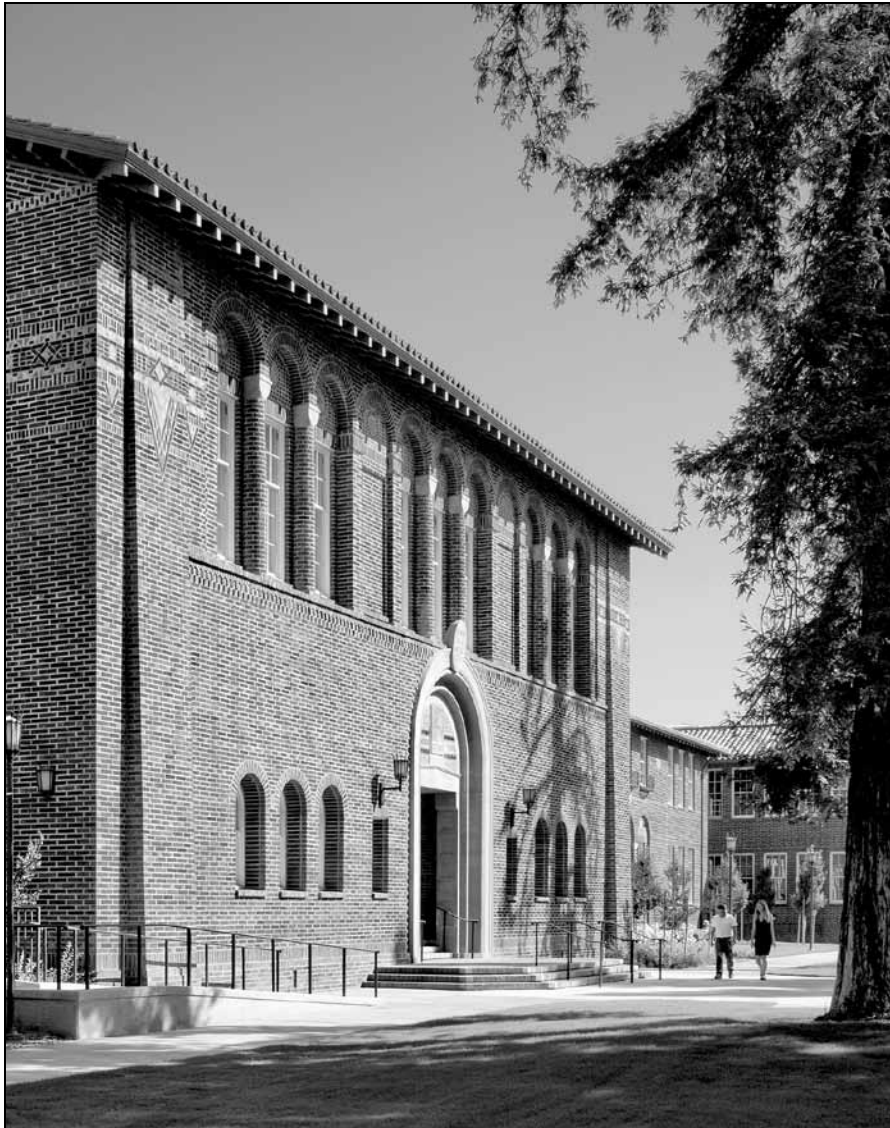


2012 – 2014 CATALOG

Fresno City College 2012-2014 Catalog



A Public California Community College

COLLEGE STATEMENT

This publication is intended to serve students and prospective students as a guide to program planning, institutional services and regulations for attendance at this institution. This catalog becomes effective with the Fall 2012 semester and ends with the Summer 2014 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	
The Mission of Fresno City College	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	9
The District	9
Student Right-to-Know and Campus	
Security Act	9
ACADEMIC CALENDAR	
Fall Semester 2012	10
Spring Semester 2013	10
Summer Semester 2013	10
Fall Semester 2013	10
Spring Semester 2014	11
Summer Semester 2014	11
ADMISSION AND REGISTRATION	
Admission of Students	12
General Admission	12
Provisional Admission	12
Readmission	12
Transfer Admission	12
International Admission	12
Summary of Admission Requirements	13
Application	13
Who Needs to Apply?	13
Residency	13
In-State	13
Out-of-State/International	13
Exemption from Nonresident Tuition	
(AB-540)	14
Matriculation	14
Matriculation Checklist	14
Matriculation Exemptions	15
Registration	15
Intra-District Transfer	15
Concurrent College Enrollment	15
Advising	15
Holds on Records and Registration	15
Assignment of Registration Dates	16
Waitlist Rules and Information	16
Assessment	16
Class Schedule Change	17
Community College-High School Enrichment	
Program	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

Table of Contents

Attendance.....	20	Removal from Academic Probation	28
Illness	21	Counseling for Probationary Students	28
Makeup Work	21	Academic/Progress Dismissal.....	29
Grading System	21	Circumstances for Appeal or Exception of	
Evaluative Grade Symbols	21	Academic Progress Dismissal	29
Non-evaluative Symbols	21	Readmission Following Academic/Progress	
I, Incomplete.....	21	Dismissal.....	29
W, Withdrawal	22	Honors and Awards.....	29
MW, Military Withdrawal	22	Leon S. Peters Honors Program	29
IP, In Progress	22	Dean's List.....	29
RD, Report Delayed.....	22	Honors at Graduation	29
P/NP, Pass/No Pass	22	Honor Societies.....	30
Grade Point Average (GPA)	22	CERTIFICATE AND DEGREE REQUIREMENTS	
Student Grade Review.....	22	Catalog Rights.....	31
Non-Credit Classes.....	23	Certificates	31
Final Examinations.....	23	Certificate of Achievement	31
Earning Course and Unit Credit.....	23	Certificate of Completion.....	31
Advanced Placement Program Credit (AP).....	23	Course Classification	31
Articulation with High Schools (2+2)	23	Graduation Requirements	31
College-Level Examination Program (CLEP).....	23	General Education for the AA/AS Degree	32
Cooperative Work Experience.....	24	Multiple Degrees.....	32
Credit by Examination.....	24	Requirements for the Associate in Arts for	
Credit for Military Service	25	transfer (AA-T) or Associate in Science	
Individual Study.....	25	for transfer (AS-T)	32
Travel-Study Credit.....	25	Requirements for AA and AS Degrees.....	33
Withdrawal/Dropping.....	25	Application for Associate Degree or Certificate	
Dropping (Withdrawal from) a Class.....	25	of Achievement.....	35
Withdrawal from College	26	TRANSFER INFORMATION AND REQUIREMENTS	
Dropping/Withdrawal Due to Extenuating		Preparation to Enter Four-Year Colleges	
Circumstances	26	or Universities	36
Reports to Students.....	26	Articulation	36
Final Grade Report	26	Articulation System Stimulating Inter-	
Certifications of Enrollment	26	Institutional Student Transfer (ASSIST)	37
Satisfactory Scholarship	26	Agreements with Other Campuses – Campus	
Academic Renewal.....	27	Specific.....	37
Alleviation of Substandard Grades	27	Lower Division Transfer Pattern (LDTP)	37
Alleviation by Repetition of a Course for		Transfer to California State University (CSU)	38
a Better Grade.....	27	Transfer Requirements to California State	
Academic Renewal Involving Other Colleges	27	University (CSU)	38
Alleviation of Substandard Grades		California State University (CSU) Admission	39
without Repetition.....	27	Lower Division Transfer Students.....	39
Repetition of Courses Successfully Completed.....	28	Upper Division Transfer Students.....	39
Probation and Dismissal	28	General Education Requirements for CSU	
Satisfactory Progress.....	28	Transfer Certification (CSU-GE)	39
Placement on Progress Probation.....	28	Fresno City College CSU General Education –	
Removal from Progress Probation	28	Breadth 2012-2014	39
Placement on Academic Probation	28		

U.S. History, Constitution, and American Ideals	41
California State University Transfer Course List (CSU)	41
Transfer to University of California (UC)	43
Transfer Requirements of the University of California (UC)	43
UC Transfer Admission Guarantee (Guaranteed Admission)	43
University of California Transfer Course List (UC)	43
Intersegmental General Education Transfer Curriculum (IGETC) to CSU and UC	45
Transfer Requirements of Private/Independent and Out-of-State Colleges and Universities	50
ADMINISTRATIVE POLICIES	
Student Conduct Standards	51
SCCCD Policy Statement	51
Student Assembly	51
Exercise of Free Expression	51
Student Protests and Demonstration	52
Student Publications	52
Computer/Networking Equipment Use Policy	52
No Smoking in Campus Buildings	52
Drug Abuse Policy	53
Academic Freedom	53
Academic Dishonesty	53
Cheating	53
Plagiarism	53
Authority and Disciplinary Actions	53
Student Rights	54
Removal from Class by Instructor	55
Grievance Policy for Students	55
Rights and Responsibilities	55
Open Enrollment	55
Student Enrollment Responsibilities	55
Parking Regulations	55
Statement of Nondiscriminatory Policy and Obligations	55
Declaración: Póliza de la No-Discriminación y las Obligaciones	56
Tsab Cai Tsis Pub Muaj Kev Ntxaug Thiab Tej Uas Yuav Tsum Tau Ua	56
Family Education Rights and Privacy Act	57
Sexual Harassment Policy	57
Change of Address or Telephone Number	57
Other Policies	57

STUDENT SUPPORT SERVICES

Bookstore	58
Refund Policy	58
CalWORKs	59
Child Development Center	59
College Relations	59
Counseling Department	59
Career Center	59
Transfer Center	60
Disabled Students Programs and Services (DSP&S)	60
District Police	61
Employment Resource Center	61
Extended Learning Center—Reading, Writing and Math Lab	61
Extended Opportunity Programs and Services (EOPS)	61
Financial Aid	62
Financial Aid and Scholarships	62
Coursework Repeatability	62
Return of Federal Financial Aid Based Upon Total Withdrawal	62
Financial Aid Satisfactory Progress	62
Asistencia financiera	62
Asistencia financiera y becas	62
Repetición de un curso	63
Devolución de la asistencia financiera federal luego del abandono total del curso	63
Avance satisfactorio para la asistencia financiera	63
Chaw Pab Nyiaj Kawm Ntawv (Financial Aid)	63
Chaw Pab Nyiaj Kawm Ntawv Thiab Lwm Yam Nyiaj Tau Los Ntawm Kawm Ntawv Zoo	63
Cov Hoob Uas Rov Qab Kawm Tau	64
Kev Muab Cov Nyiaj No Them Rov Qab Tuaj Thaum Koj Muab Cov Hoob Rho Tawm	64
Chaw Pab Nyiaj Qhov Kev Ncaj Ncees	64
Food Services	65
Health Services	65
Housing Information	65
Learning Resources Center	65
Academic Computer Lab	65
Library	65
Tutorial Services – LI-134	65
Writing and Reading Center – LI-134 and Mezzanine	66
Lost and Found	66
Psychological Services	66

6 Table of Contents

Public Information	66	AREAS OF STUDIES BY DIVISION	79
Special Student Programs.....	66	ASSOCIATE DEGREE AND CERTIFICATE	
IDILE Program.....	66	PROGRAMS TABLE.....	81
Puente Project.....	66	DIVISION INFORMATION	
Strengthening Young Men by Academic		Applied Technology Division.....	84
Achievement (SYMBAA)	67	Career & Technology Center	86
(USEAA) Academic Program	67	Business Division.....	87
Telephone and Mail Services.....	67	Fine, Performing, and Communication	
TRIO Programs	67	Arts Division	89
Student Support Services Program (SSSP).....	67	Health Sciences Division.....	90
Upward Bound Program	67	Humanities Division.....	91
STUDENT ACTIVITIES		Mathematics, Science, and Engineering	
Associated Students.....	68	Division.....	92
Organization of New Clubs	69	Social Sciences Division	94
Social Activities	69	DISTRICT COURSES AND PROGRAMS	
Athletics	69	Career & Technology Center	95
Publications	69	Reedley College	96
<i>About Ourselves</i>	69	ASSOCIATE DEGREE AND	
<i>IntenseCity</i>	69	CERTIFICATE PROGRAMS	97
<i>The Ram's Tale</i>	69	COURSE DESCRIPTIONS	
<i>The Rampage</i>	69	Repeating a Course.....	190
Forensics	70	Key to Graduation or Transfer Status	
Museum of Anthropology.....	70	Designations.....	190
Music Activities.....	70	Schedule of Classes.....	190
Theatre Arts and Dance	70	Course Credit Limitation	190
SPECIAL AREAS OF STUDY		Prerequisites/Corequisites/Advisories	190
Allied Health.....	71	Course Numbering System.....	191
Career & Technology Center	71	Course Classification System	191
Developmental Education Program	73	SCCCD Intra-District Articulated Courses,	
English as a Second Language (ESL)		Common Courses, and In-Lieu Courses	193
Program.....	74	Course Descriptions	196
Fire Academy.....	74	COLLEGE PERSONNEL	
Fresno City College Training Institute	74	State Center Community College District.....	311
Honors Program	74	Fresno City College.....	311
Police Academy	75	Faculty and Administration	312
ROTC Studies - U.S. Army and U.S. Air Force	75	Classified Professionals	320
Veterans Services	76	Emeritus Faculty	324
Weekend College.....	77	Emeritus Classified Professionals	329
Work Experience (Cooperative) Education	77	In Memoriam	330
Types of Cooperative Work Experience	77	INDEX	331
School Credit.....	77	Campus Map	Inside Back Cover
Transfer Credits	78		
Qualifications.....	78		
The Enrollment Process.....	78		

INTRODUCTION

Fresno City College is a college of the State Center Community College District, which operates within the broader mission of California's 112 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.

The Mission of Fresno City College

Fresno City College is a comprehensive community college offering innovative instructional programs in anticipation of and responsive to the life-long learning needs of our diverse population. Fresno City College provides a wide variety of quality services to support student success by engaging our students in achieving their educational goals. Moreover, we are dedicated to working collaboratively with our community to enhance the economic and social development of the region.

Fresno City College Vision Statement

Fresno City College is a premier learning institution that strives to prepare the members of our community to meet the challenges of an increasingly complex global environment.

Fresno City College Core Values

As a learner-centered institution, Fresno City College values an educational and cultural environment which promotes:

Success—the college community encourages and motivates students, faculty, and staff to identify and achieve their individual goals by providing quality instruction, programs, services, and processes.

Participation—the college community encourages active involvement in campus life and developing avenues of greater community participation.

Diversity—the college community encourages and respects individual differences.

Collegiality—the college community is committed to working as a team in an open, civil, collegial, and safe environment.

Innovation—the college community supports an environment in which individuals are free to explore new or alternative avenues toward advancing the college's mission.

Stewardship—the college community is committed to the optimal utilization of its resources consistent with strategic goals.

Fresno City College Ethics Statement

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

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

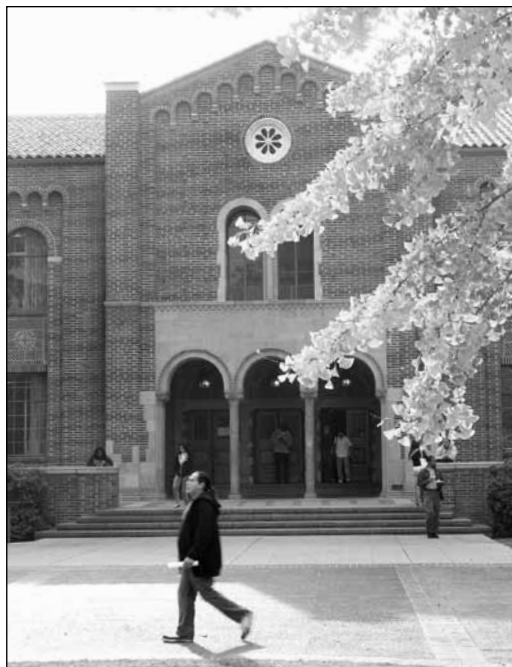
Civility: We adhere to standard conventions of civility and regard of others. We achieve an open working and learning environment when each community member feels secure enough to participate in the free exchange of ideas. We ensure an honest and supportive climate which serves the interests of the institution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

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

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

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

Adapted from Humber College Ethics Statement.



Fresno City College, California's first community college, was founded in 1910 with 20 students and three instructors. Now the college has over 19,000 students and over 700 faculty members.

Fresno City College Institutional Student Learning Outcomes

Communication

Students will demonstrate effective communication and comprehension skills.

- Comprehend, analyze and respond appropriately to oral, written and visual information.
- Effectively communicate information through speaking, writing and other appropriate modes of expression.

Critical Thinking and Information Competency

Students will demonstrate critical thinking skills in problem solving across disciplines and in daily life.

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

Community and Global Awareness and Responsibility

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

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

Personal, Academic, and Career Development

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

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

History of Fresno City College

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

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

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

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

The District

Fresno City College is one of two colleges in the State Center Community College District. The district encompasses a 5,500 square mile area and 17 unified and high school districts.

The State Center Community College District office is located at 1525 E. Weldon, Fresno, CA 93704. The district is comprised of Fresno City College, Career and Technology Center and The Training Institute, Reedley College, Clovis Center, Madera Center, Oakhurst Center, and Willow International Center. 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 2007, 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 2007 to Spring 2010. 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 2008 to Spring 2010, are transfer students.

Completion Rate: 17.56%

Transfer Rate: 10.94%

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 2012

August 13	Instruction begins
September 3.....	Labor Day Holiday (Campus Closed)
October 12.....	Last day to withdraw from college or to be dropped from 18-week classes
November 12	Veterans Day Holiday (No Classes, Offices Open)
November 23-24	Thanksgiving Day Holidays (Campus Closed)
December 10-14	Final examinations
December 14.....	End of Fall Semester 2012
December 14.....	Last day for degree and certificate of achievement candidates to file application for December 2012 completion date
December 17-January 2	Winter recess

Spring Semester 2013

January 7.....	Instruction begins
January 21.....	Martin Luther King, Jr. Day Holiday (Campus Closed)
February 15	Lincoln's Day Holiday (Campus Closed)
February 18	Washington's Day Holiday (Campus Closed)
March 8.....	Last day to withdraw from college or to be dropped from 18-week classes
March 15.....	Last day for degree and certificate of achievement candidates to file application for May 2013 completion date
March 25-29.....	Spring recess (Classes reconvene April 1)
May 13-17	Final examinations
May 17	End of Spring Semester 2013
May 17	Graduation exercises

Summer Semester 2013

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 27	Memorial Day Holiday (Campus Closed)
May 28	Instruction begins for 4- and 10-week classes
June 10.....	Instruction begins for 8-week classes
June 17.....	Instruction begins for 6-week classes
June 21.....	Final examinations and end of 4-week classes
July 4	Independence Day Holiday (Campus Closed)
July 26.....	Final examinations; end of 6-week classes
August 2	Final examinations; end of 8-, and 10-week classes
August 2	Last day for degree and certificate of achievement candidates to file application for August 2013 completion date

Fall Semester 2013

August 12	Instruction begins
September 2.....	Labor Day Holiday (Campus Closed)
October 11.....	Last day to withdraw from college or to be dropped from 18-week classes
November 11	Veterans Day Holiday (No Classes, Offices Open)
November 28-29	Thanksgiving Day Holidays (Campus Closed)

Note: Evening classes observe the same holiday and examination schedule as day classes.

December 13.....Last day for degree and certificate of achievement candidates to file application for December 2013 completion date
 December 9-13 Final examinations
 December 13..... End of Fall Semester 2013
 December 25-January 1 Winter recess

Spring Semester 2014

January 6..... Instruction begins
 January 20..... Martin Luther King, Jr. Day Holiday (Campus Closed)
 February 14Lincoln’s Day Holiday (Campus Closed)
 February 17 Washington’s Day Holiday (Campus Closed)
 March 7..... Last day to withdraw from college or to be dropped from 18-week classes
 March 13.....Last day for degree and certificate of achievement candidates to file application for May 2014 completion date
 April 14-18 Spring recess (Classes reconvene April 21)
 May 12-16 Final examinations
 May 16End of Spring Semester 2014
 May 16 Graduation exercises

Summer Semester 2014

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 26Memorial Day Holiday (Campus Closed)
 May 27Instruction begins for 4- and 10-week classes
 June 9.....Instruction begins for 8-week classes
 June 16.....Instruction begins for 6-week classes
 June 20.....Final examinations and end of 4-week classes
 July 4 Independence Day Holiday (Campus Closed)
 July 25..... Final examination and end of 6-week classes
 August 1 Final examinations; end of 8- and 10-week classes
 August 1Last day for degree and certificate of achievement candidates to file application for August 2014 completion date



Fresno City College students enjoy the picturesque campus mall complete with mature landscaping, fountains and historic buildings.

Note: Evening classes observe the same holiday and examination schedule as day classes.

ADMISSION AND REGISTRATION

Admission of Students

Any graduate of an accredited high school may be admitted to Fresno City College. Also, any person having successfully completed the California High School Proficiency Exam (CHSPE) or the General Education Development test (GED) with scores of 45 overall and with no subtest lower than 35 may be admitted.

Upon completion of applicable admission requirements, registration materials are issued by the Admissions and Records Office. For dates relating to registration, check the calendars in this catalog or inquire at the college's office of Admissions and Records in the Student Services Building, lower level.

Students should complete all plans for entrance as early as possible and be familiar with the following: (1) general requirements of the college, (2) special requirements in the major field of study, (3) the general requirements of the college or university they may wish to attend in the future, and (4) the most desirable electives.

General Admission

A person who is at least 18 years old, with a high school diploma, or the equivalent (such as the California High School Proficiency Examination or GED) is eligible for admission to Fresno City College.

Provisional Admission

An applicant to a district college who is 18 years of age or older and is not a high school graduate may enroll as a provisional student for 12 semester units or more for one semester, with the stipulation that in order to enroll for subsequent semesters as a full-time student, he/she must earn a 1.75 GPA in the units attempted. This regulation does not apply to part-time students.

Readmission

Former students of Fresno City College returning after an absence of two or more semesters must make formal application for readmission. An official transcript of work taken at any other institution (including summer session and extension or correspondence courses) since the date of last enrollment at Fresno City College must be sent from the previous schools to the Fresno City College Records Office, 1101 East University Avenue, Fresno, CA 93741-0001.

Transfer Admission

Students who have previously attended another college are eligible to enroll at Fresno City College. Records for transfer students are evaluated with regard to the scholastic status system in use at Fresno City College at the time of enrollment. It is important to note that transcripts received with "work in progress" are not considered as complete.

International Admission

An application, official documents and detailed transcripts of record should be submitted to the International Students Office no later than two months prior to the beginning of the semester for which the student is being considered for admission: May 1 for fall semester and October 1 for spring semester. A student from another country is not admitted until notified of admission in writing by the International Students Office. It is required that international students achieve a minimum score of 500 on the Test of English as a Foreign Language (TOEFL) for regular standing. TOEFL scores below 500 may be approved by special action. When an international student arrives at Fresno City College, the student should report first to the International Students Office.

Yog koj paub txog kev kawm ntawv (Admission), thov mus cuag tau Counseling Department.

Si necesita información en español para su admisión a la universidad, favor de ponerse en contacto con el Departamento de Consejeros o la Oficina de Admisiones y Sección de Expedientes.

At the time of registration, each student must have evidence of health insurance and have complied with the district policy regarding tuberculosis testing and current measles immunization. It is also mandatory that each student successfully complete an English course during each semester at Fresno City College until graduation requirements have been met for program completion or for transfer purposes and that the student maintain 12 units or more each semester.

Health insurance payments must be initiated at the International Students Office, Student Services Building, lower level.

Summary of Admission Requirements

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

1. File a completed admission application prior to the deadline as specified in the catalog.
2. Request the last high school attended to send one transcript of work completed or attempted if high school was attended in the last two years. Transcript is to be an official copy sent directly from the previous school to:

Fresno City College
Admissions and Records Office
1101 East University Avenue
Fresno, CA 93741-0001
3. Have the GED scores or a copy of the CHSPE Certificate sent to the Admissions and Records Office if the GED test or the California High School Proficiency Examination (CHSPE) was taken in the last two years.
4. Request each college of attendance to send a complete transcript of work attempted whether or not credit was earned. Transcripts are to be official copies sent directly from the previous college to Fresno City College Admissions and Records Office.
5. Take a placement test: see Assessment, page 15.

Application

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 SCCC'D's colleges/centers.

Apply on-line at www.fresnocitycollege.edu for greatest convenience. Applications are also available from the Admissions Office at any college or center within SCCC'D, or from the counseling office at your local high school.

Who Needs to Apply?

If you have never attended a college or center within SCCC'D (*new or transfer student*) or have been away for two or more semesters (*returning former student*), you must complete an application for admission. Students currently enrolled within SCCC'D do not need to reapply for admission for the subsequent semester. Currently enrolled high school students must reapply each semester.

Residency

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

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

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

In-State

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

Out-of-State/International

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

Exemption from Nonresident Tuition (AB-540)

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

- Requirements:
 - The student must have attended a high school (public or private) in California for three or more years;
 - The student must have graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED or California High School Proficiency Exam or receive a completion certificate);
 - An alien student who is without lawful immigration status must file an affidavit with the college or university stating that he or she has filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.
- Students who are non-immigrants [for example, those who hold F (student) visas, B (visitor) visas, etc.] are *not* eligible for this exemption.
- The student must file an exemption request including a signed affidavit with the college that indicates the student has met all applicable conditions described above. Student information obtained in this process is strictly confidential unless disclosure is required under law.
- Students eligible for this exemption who are transferring to another California public college or university must submit a new request (and documentation if required) to each college under consideration.
- Nonresident students meeting the criteria will be exempted from the payment of nonresident tuition, but they will not be classified as California residents. They continue to be “nonresidents.”

Matriculation

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

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

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

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

As a partner in their success, students agree to:

- Complete the placement test and assessment process
- Declare a specific educational objective within a reasonable period of enrollment
- Participate in orientation session
- Participate in counseling-related activities develop and refine a Student Educational Plan

Matriculation Checklist (Steps to Success)

- APPLICATION/ADMISSION**
I have completed and submitted a Fresno City College application.
- FINANCIAL AID (optional)**
I have completed and submitted the FAFSA (Free Application for Federal Student Aid).
- ORIENTATION**
I have completed the new student orientation offered by Fresno City College.
- ASSESSMENT (Placement Test)**
I have completed the appropriate assessment tests:
 - English Reading/Writing
 - English as a Second Language (ESL)
 - Mathematics (basic math, algebra, or college level math)
- COUNSELING and ADVISEMENT**
I have met with a counselor for class selection, advising, and the development of a Student Educational Plan (SEP).

Yog koj xav paub txog kev pab cuam rau kev kawm 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.

REGISTRATION

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

FOLLOW-UP

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

Matriculation Exemptions

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

Assessment

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

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

Orientation

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

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

Counseling/Advising

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

Registration

A student will receive approval from the Admissions and Records Office to be admitted. This approval is in the form of specific preregistration and registration instructions emailed to the student SCCCD email account or given to the student after the student has completed all admission requirements. Registration materials are issued in March

through July for the summer/fall semester and in October through January for the spring semester. Information concerning registration procedures will accompany the notice of admission to college. Further information can be found in the class schedule.

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 a student is unable to register at his/her appointed time, a substitute may be appointed provided the proper procedure is observed; contact Admissions and Records Office for the specific procedure to follow.

Intra-District Transfer

Fresno City College students who plan to transfer to colleges or centers within the District for the ensuing semester will receive the same registration service and priority as currently enrolled students. It is advised that any transfer student see a counselor.

Concurrent College Enrollment

Students planning to attend Fresno City College and another college (other than Reedley College) 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 in the Student Services Building, for students who will be taking the majority of units at Fresno City College.

Reedley College offers a number of courses and programs not available at Fresno City College. Students may attend both colleges concurrently without following the procedure described above.

Students may contact their counselors for more specific information on procedures to be followed.

Advising

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

Holds on Records and Registration

Whenever students fail to pay debts or return property owned by any college in the district, students' records will be held. Failure to return library books or other college property or equipment, failure to pay fees or student loans, and failure to reimburse the college for checks written on insufficient fund accounts will result in a "monetary

Fresno City
College strives
to make
students
aware of
the varied
educational
programs that
are offered
and to provide
smooth access
to these
programs.

hold” being placed. Additionally, holds may be placed for academic or disciplinary reasons which will result in the student’s inability to register for subsequent classes.

Students whose records are held for monetary reasons shall not be allowed to (1) register for subsequent classes; (2) send or receive transcripts; or (3) receive other documents which relate to their records, including final grades or enrollment certification at any campus within the District. When the students have cleared their obligations, the “monetary hold” will be removed.

Assignment of Registration Dates

Registration priority for students is determined in accordance with the following criteria:

1. Students in special programs where priority registration is mandated by state code or Board policy, e.g., DSP&S, EOPS, Honors Program, Military/Veterans;
2. Currently enrolled students based on a graduated combination of units completed and grades achieved within the State Center Community College District;
3. Noncurrent students (new, transfer, and returning former students).

All students will be notified of their assigned registration appointment date by mail.

Consult the class schedule or contact the Fresno City College registration staff for details on starting dates for the groups listed above.

Wait List Rules and Information

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

1. Students may add their name to any available “WAIT LIST” up to the last day of registration prior to the beginning of the class. **Not all classes have wait lists.**
2. Students will be added to a “WAIT LIST” on a first come, first-serve basis.
3. Students cannot be placed on a “WAIT LIST” prior to their registration appointment date.
4. Students on a “WAIT LIST” will have first priority for any seats in a “full” class that may subsequently become available during the first 20% of the course PROVIDED that they attend each and every class meeting (for 18 week semester courses, this is the first 3 weeks of class).
5. A “WAIT LIST” will be available only for current class sections that are “full” (that is, the class has reached

its “maximum class size”). No “WAIT LISTS” will be available for “canceled” class sections or class sections that are not yet “full”. **Not all classes have wait lists.**

6. Students cannot remain on a “WAIT LIST” for a section of a course that will cause a time conflict with a course section already enrolled. Students will be dropped from their wait list.
7. Students cannot be placed on a “WAIT LIST” for a section of a course when already enrolled in another section of that same course.
8. Students should not be on more than one “WAIT LIST” for the same course.
9. The Admissions and Records Office will regularly monitor all classes with existing “WAIT LISTS” up to the start of the semester. When an open seat becomes available, the top eligible student on the wait list will be moved into the class and notified by email of the action.
10. On the first day of class, instructors will determine the number of openings available in the class, and then offer spaces to students who are on the “WAIT LIST” (providing they are present in the class) in the order in which their names appear on the list. Student is responsible for officially adding the class within published registration dates.
11. After the “WAIT LIST” for the class is exhausted, additional openings, if any, will be filled by the instructor in accordance with existing college and district policy.

Assessment

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

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

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

for classes so that a counselor can advise the student on the appropriate classes to take.

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

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

Students who plan to transfer to a baccalaureate institution prior to the completion of 60 transferable units at Fresno City College are encouraged to take the ACT (American College Test) or the SAT (Scholastic Aptitude Test) of the college board.

No placement examination is required as a condition for admission to the college. However, see page 15 for information about placement in English and math classes.

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

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

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

* Fees are subject to change without notice.

Class Schedule Change

Errors in registration should be rectified during the first week of each semester. Students are encouraged to discuss with their counselors program changes that affect their educational plans.

Community College-High School Enrichment Program

Current high school juniors and seniors may be admitted to the college through the Community College-High School Enrichment Program. High school students can obtain information from their high school counselor or from the college's College Relations office. Call 442-8225 for details.

In addition to the regular semesters, high school students are eligible for the summer session prior to their junior year and the summer session between their junior and senior years.

Student Fees

Enrollment Fee*

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

Nonresident and International Tuition

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

Regular and Summer Sessions

Each full unit taken:

International Student Tuition.....	\$235**
Nonresident Student Tuition.....	\$235**
Plus Enrollment Fee per unit	\$46**

** Note: Nonresident fees are computed each year in accordance with a state mandated formula and are therefore subject to change. Contact the College Business Office for current information. Fees are subject to change without notice.

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

All international students must also have proof of domestic health insurance coverage in the amount prescribed by

18 Admission and Registration

Board policy (which includes repatriation). Contact the International Students Office, Student Services Building, room 108.

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

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

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 \$17 health fee for each semester (fall and spring terms) and a \$14 health fee for the summer session. Off-campus students are required to pay a \$9 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, Madera Center, Clovis Center, and Willow International 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 \$17 per semester; summer semester is \$8. One-day permits may be purchased at walk- and drive-up dispensers and metered parking is also available. Enforcement for parking permits will begin the first day of class. Students requiring handicap parking should contact the Disabled Students Programs and Services Office.

Transcript Fee*

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

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

Associated Student Body Fee*

Students are encouraged to purchase an Associated Student Body (ASB) membership. The membership is \$5 per semester. The ASB card entitles the student to participate in or attend all activities sponsored by the ASB. The card can also be used for reduced admission to all college-sanctioned athletic home games (except playoffs), theatrical productions and music programs. Students who are ASB members and carry 12 units or more are eligible for Associated Student funded emergency loans, work programs and scholarships as available.

Associated Student Government Representation Fee*

Student Representation Fee

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

Use of Student Representation Fee

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

* Fees are subject to change without notice.

Right to Request a Waiver

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

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

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

Credit by Examination Fee*

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

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

Refund to Students

Refund or Reversal of Enrollment Fees and Tuition

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

Refunds shall be initiated upon receipt of a written request to the Business Office. Requests may also be made online at www.fresnocitycollege.edu/refunds.

Refund requests are subject to an audit of the student's record to verify balance. Credit balances may be carried forward to the new term in lieu of a refund. Balances greater than or equal to \$15 will remain on the account for three years and amounts less than \$15 will remain on the account for one year.

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

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

Summer/Short-Term Classes

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

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

*Number of actual class meetings:	10% Point (rounded down)	100% refund if withdrawal is on or before:
8	0.8 = 0	1st day of class
16	1.6 = 1	1st day of class
24	2.4 = 2	2nd day of class
38	3.8 = 3	3rd day of class

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

Refund of Health Fee

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

Refund of Parking Fee

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

Refund of Associated Student Body Membership

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

* Fees are subject to change without notice.

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:

Freshmanfewer than 30 units completed
Sophomore30 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).

Attendance

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

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

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

Illness

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

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

Grading System

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

Evaluative Grade Symbols	Grade Points per Unit
A Excellent	4.0
B Good.....	3.0
C Satisfactory.....	2.0
*D Passing, less than satisfactory	1.0
F Failing.....	0.0
P Pass	0.0
(A passing grade, satisfactory or better)	
NP No Pass.....	0.0
(Not a passing grade, less than satisfactory or failing)	
X Completion of non-credit course.....	0.0

** The "D" grade is passing but is not considered satisfactory for meeting the graduation requirements in Math, Reading, Writing, Communication, and Computer Literacy. In addition, the "D" grade is passing but is not con-*

sidered satisfactory for meeting many of the college degree, major, or course prerequisite requirements. Also, the "D" grade may not satisfy transfer requirements to four-year institutions.

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

Non-evaluative Symbols	Grade Points per Unit
I Incomplete	0.0
W Withdrawal.....	0.0
MW Military Withdrawal	0.0
IP In Progress	0.0
RD Report Delayed.....	0.0

I, Incomplete

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

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

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

An incomplete, *I*, grade will not affect the academic status of a student, but it will affect the progress status. An incomplete, *I*, grade must be replaced by the appropriate evaluative grade symbol no later than one full semester after it has been assigned (excluding summer), though an earlier limit may be specified by the course instructor. Students may not re-enroll in a course for which they have received an incomplete, *I*, grade during the time that the incomplete, *I*, grade is in effect.

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

W, Withdrawal

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

MW, Military Withdrawal

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

IP, In Progress

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

RD, Report Delayed

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

P/NP, Pass/No Pass

Most college courses allow students the option of a final course grade of *P, Pass, or NP, No Pass*, instead of traditional letter grades (*A, B, C, D, or F*). Some courses are graded only on a *Pass/No Pass* basis. In courses graded only on the *Pass/No Pass* basis or when a student elects this grading option, the grade of *P, Pass*, will be assigned if the student has passed the course with a grade equivalent of *A, B, or C*, and credit will be awarded for the unit value of the course. The grade of *NP, No Pass*, will be assigned if the student earns the grade equivalent of *D or F*, and no units of credit will be awarded for the course.

Neither the *P, Pass*, grade nor the *NP, No Pass* grade is included in the calculation of the grade point average at this institution.

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

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

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

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

Grade Point Average (GPA)

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

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.

- If a student wishes to appeal the decision, the student may submit a written grievance. See Student Grievance Procedure on page 55.

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.

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.

Earning Course and Unit Credit

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

Advanced Placement Program Credit (AP)

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

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

Exam Title	Scores Accepted	Equivalent FCC Course	Units Granted
Fine, Performing, and Communication Arts Division			
Music	3, 4 or 5	Music 12 or 13	3
Music Theory	3, 4 or 5	Music 1A	3

Humanities Division

English Comp/Lit	3, 4 or 5	English 1A & 1B	7
English Comp only	3, 4 or 5	English 1A	4
French, German or Spanish (Language part)	3, 4, or 5	French, German or Spanish 3/4	8
Spanish (Literature part)	3, 4, or 5	Spanish 5/6	6
French (Literature part)	3, 4, or 5	French 3/4	8

Mathematics, Science and Engineering Division

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

Social Sciences Division

American History	3, 4 or 5	History 11-12	6
European History	3, 4 or 5	History 2	3
Macroeconomics	3, 4, or 5	Economics 1A	3
Microeconomics	3, 4, or 5	Economics 1B	3
Psychology	3, 4, or 5	Psychology 2	3

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

Articulation with High Schools (2+2)

Fresno City College has entered into course-specific articulation agreements with a number of local high schools whereby students may earn college credit for articulated courses taken in high school once they have successfully completed 12 units of on-campus college classes.

Upon completion of one of these articulated courses at the high school, a certificate acknowledging that fact will be awarded. The certificate should then be turned in to the college's Office of Admissions and Records after completion of the necessary 12 units of college credit.

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

24 Academic Regulations

less conventional forms of education. Those who may have reached a college level of education in certain areas through home or correspondence study, on-the-job training, television courses, and/or other means may take certain CLEP examinations which are offered by the College Entrance Examination Board.

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

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

Exam Title	Minimum Score	Equivalent FCC Course	Units Granted
Business Division			
Financial Accounting	50	ACCTG 4A	4
Business Law	50	BA 18	4
Intro to Business Concepts	50	BA 10	3
Computer Concepts	50	CIT 15	3
Humanities Division			
American Literature	50	ENGL 48A & B	6
College Composition	50	ENGL 1A	3
Engl Comp (General) (1978 through April 1986)	500	ENGL 125	3
Engl Comp (General) (after May 1986 or before 1978)	390	ENGL 125	3
Engl Comp w/Essay	*600	None	
English Literature	50	ENGL 46AB	6
Humanities (General)	500	ENGL 45 & ART 6	6
Mathematics, Science and Engineering Division			
Mathematics (General)	500	MATH 101	5
Trigonometry	50	MATH 4A	4
Microbiology	50	BIOL 31	4
Biology	50	BIOL 1	4
Natural Sciences (Gen)	500	Natural Science	6
Social Sciences Division			
Afro-American History	50	AFRAM 1	3
American Government **	50	None	
American History I	50	HIST 11	3
American History II	50	HIST 12	3
Macroeconomics, Intro	50	ECON 1A	3
Microeconomics, Intro	50	ECON 1B	3
Sociology	50	SOC 1A	3

Psychology, General	50	PSY 2	3
Western Civilization I	50	HIST 1	3
Western Civilization II	50	HIST 2	3
Soc Sci & Hist (Gen.)	500	SOC SCI (Elective)	3

* Meets California State Teacher Certification (Proficiency) requirements.

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

Cooperative Work Experience

Work experience and field work credit may be earned in some designated courses. Refer to page 77 for details.

Credit by Examination

To be eligible for course credit by examination, a student must be enrolled at the college, have completed 12 units and be in good standing during the semester in which he/she applies for credit by examination. The student must be enrolled in at least one course in addition to the course to be challenged for credit by examination. Credit by examination will not be allowed if the student has received previous high school or college credit for the course, or if the student has already successfully completed, or is currently enrolled in, a course for which the course to be taken by exam is a prerequisite. Credit by examination is not allowed during the summer session. The college reserves the right to deny a credit by examination to any student. Units earned from credit-by-exam courses are not counted for financial aid or veterans benefits eligibility. No financial aid of any kind is available for credit by exam.

Only certain courses listed in the current catalog may be challenged for credit by examination. 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 to learn which courses may be taken credit by examination and to ascertain the proper procedure for credit by examination.

A student planning to transfer to another college or university should be aware of the policy of that institution regarding transferability of courses. Application for credit by examination approved by a full time instructor, 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.

An appropriate fee for the expense of this special service is charged for each course challenged and is payable by the end of the ninth week of the semester. Students 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 Admissions and Records by the instructor giving the examination and will be entered on the student's transcript in a manner which clearly indicates that the course grade and credit were earned by examination. A student who fails the examination may not attempt the course again by examination.

Credit for Military Service

Upon successful completion of 12 units at Fresno City College with "C" grades or higher, a veteran/service person who has completed at least one (1) year of active duty may submit for possible Fresno City College credits appropriate documents and transcripts representing completion of basic military training or credit earned in a serviceperson's opportunity college. A person who has completed Army basic training can receive one (1) semester hour in personal physical conditioning, one (1) in outdoor skills practicum, one (1) in marksmanship and one (1) in first aid. A person who has completed Navy basic training can receive one (1) semester hour in personal fitness/conditioning, one (1) in personal/community health and two (2) in first aid and safety. A person who has completed Air Force or Coast Guard basic training can receive one (1) semester hour in personal fitness/conditioning, one (1) in beginning swimming, one (1) in boating/seamanship and one (1) in personal health and first aid. A person who has completed Marine Corps basic training can receive three (3) semester hours in physical fitness/conditioning, two (2) semester hours in marksmanship, one (1) semester hours in outdoor skills; one (1) semester hour in personal health/hygiene, and one (1) semester hour in first aid.

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

Active duty reservists who have completed basic training, but served less than one year, are allowed a total of four (4) semester hours of elective credit which includes two (2) semester hours of physical education. These may be used to fulfill the PE requirement. To receive credit, the student must present a copy of his/her DD 214 or other appropriate documents citing pertinent data to the Admissions and Records Office or to the Veterans Certification Office.

Individual Study

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

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

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

Travel-Study Credit

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

Withdrawal/Dropping

Dropping (Withdrawal from) a Class

In registering for a class, 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. Errors in registration should be rectified during the first week of instruction.

It is the student's responsibility to drop a class in which she/he no longer wishes to be enrolled. A student may withdraw from a full-term (18 week) class through the last day of the ninth week of instruction (or 50 percent of a term,* whichever is less).

- There will be no entry on a student's record for drops during the first three weeks of a 16-18 week 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% point of a class and through the 50% point of a class.

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

Students may drop him/herself by the Web, in person at any college or center Admissions & Records office within the State Center District, or can request to be dropped by mailing or faxing a signed letter to the college.

**Term in this context means the duration of a course which differs from the length of a normal semester.*

Withdrawal from College

A student may withdraw from all of his/her classes, thereby withdrawing from the college through the last day of the ninth week of instruction (or 50 percent of a term*, whichever is less) by the Web or in person with the Admissions and Records office. The student may also mail or fax a signed letter of request postmarked by the 50% point to completely withdraw from his/her classes to the Admissions and Records Office (please include student identification and date of birth). Students are encouraged to discuss complete class withdrawals with an academic counselor. Upon submission of a withdrawal form, the student will be withdrawn from all of his/her classes and an entry of “W” will be recorded for each class in which the student was enrolled. The “Ws” will not be used in calculating grade point averages, but excessive “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 his/her designee. (CCR, Title 5, Section 55024.)

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

1. The extenuating circumstances must be fully documented and verified when appropriate. Petitions for medical withdrawals must be processed through the Health Services Office.
2. The petition for withdrawal must be submitted no later than the end of the semester immediately following the semester in which the extenuating circumstance occurred.
3. The student must petition to withdraw from all classes she/he is enrolled in (consult with Admissions & Records for certain exceptions that may apply).
4. The student’s instructor(s) will be consulted concerning the request for withdrawal.

5. Approved class withdrawals due to extenuating circumstances shall be recorded as a “W.” The “Ws” will not be used in calculating grade point averages, but excessive “Ws” will be used as a factor in progress probation and dismissal procedures.
6. Once final grades have been posted, the instructor of record must be consulted for an appropriate grade review.
7. Exceptions may be considered on a case-by-case basis upon appeal to the college’s Academic Standards Committee.

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

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 or the TouchTone telephone system at 229-9833. Grade reports will be withheld for those students who fail to return school equipment or who have any unpaid accounts.

Certifications of Enrollment

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

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

Full-time.....	12 units or more
Three quarter-time	9 to 11.5 units
Half-time.....	6 to 8.5 units
Limited.....	fewer than 6 units

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*.

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.

Alleviation of Substandard Grades

Substandard work, i.e., grades of *D*, *F*, or *NC/NP*, not reflective of a student's present level of scholastic performance, may be alleviated and disregarded in the computation of grade point averages. It is expected that students will alleviate substandard work by repeating, i.e., retaking the course(s) in which grades of *D*, *F*, or *NC/NP* are earned. Course work that is still appropriate for the student's present educational objectives may be alleviated only by repetition. Course work inappropriate for repetition may be alleviated without repetition by the student making formal application to the Academic Standards Committee through the Office of Admissions and Records. When academic work is alleviated, whether by repetition or without repetition, the permanent records shall be appropriately annotated in a manner to ensure that all entries are legible and that a true and complete record is maintained.

Alleviation by Repetition of a Course for a Better Grade

For the benefit of a better grade, students may repeat college courses in which they have received grades of *D*, *F*, or *NC/NP* by re-enrolling in the courses. Students may repeat courses in this way for a total of three attempts; an attempt includes all grades and drops resulting in a *W*. Students who wish to attempt courses more than three times in order to earn grades better than *D*, *F*, or *NC/NP* may do so only by petition to the college Academic Standards Committee through the Office of Admissions and Records. The grades in the courses which have been repeated are then recorded within brackets on the students' permanent records so that the substandard grades remain legible on the permanent records, although they are not used in the computation of the cumulative grade point

average. A statement is included on the permanent records explaining that bracketed course grades and unit values are not included in the computation of the cumulative grade point average. Students should be aware that other colleges or universities may not treat repeated courses in the same manner. Actions taken by the Academic Standards Committee of this college do not supersede the repetition policies of other educational institutions.

Academic Renewal Involving Other Colleges

If a student who has earned a grade of *D*, *F* or *NC/NP* in a course at this college repeats the course for a better grade at another college, the student must petition through the Office of Admissions and Records for the alleviation of the substandard grade.

If a student who has earned a grade of *D*, *F*, or *NC/NP* in a course at another college repeats the course for a better grade at this college, the student must request that a Fresno City College or Reedley College transcript showing course grade be sent to the college where the substandard grade was earned and petition for academic renewal (may be called by other names, e.g., grade forgiveness) at the other college. Be advised, some colleges require repetition of classes for grade change be done on their campus only. After the course record at the original college has been adjusted, the student must request that an amended transcript be sent to the Office of Admissions and Records at this college so that the cumulative transfer units and grade point average may be corrected.

Alleviation of Substandard Grades without Repetition

Substandard work, i.e., grades of *D*, *F*, or *NC/NP* not reflective of the student's present scholastic level of performance, may be alleviated without repetition only if the courses in which the substandard grades were earned are no longer appropriate for the student's present educational objectives or if the courses in which the substandard grades were earned or their equivalents are no longer available for repetition. Course work inappropriate for repetition may be considered for alleviation by the student making formal application to the college Academic Standards Committee through the Admissions and Records Office.

In this case, a student will be eligible for consideration for alleviation of substandard work without repetition when the student has met each of the following conditions:

1. A period of at least two years has elapsed since the work to be alleviated was recorded.
2. A student is pursuing an established program (associate degree or certificate program within the district).

3. A student has completed twelve or more semester units with at least a 3.00 GPA or 24 or more semester units with at least a 2.50 GPA or completed a total program with at least a 2.00 GPA. In determining eligibility for this provision, the college will consider the most recently completed semester first and then look to the total GPA of previous semesters in descending chronological order.
4. The amount of work to be alleviated shall not exceed the amount of work the student has successfully completed at a college in the district since the substandard work was recorded.

Repetition of Courses Successfully Completed

The college catalog designates certain courses as repeatable for a specific number of times; otherwise, courses in which a student has received satisfactory grades, i.e., *A*, *B*, *C*, or *CR/P*, may not be repeated unless the student petitions the college Academic Standards Committee through the Office of Admissions and Records for permission to repeat the course. The Academic Standards Committee may grant permission for the student to repeat the course if one or more of the following conditions apply:

1. There has been a significant lapse of time since the course was last taken.
2. The previous grade was due, at least in part, to the result of extenuating circumstances beyond the student's control.
3. Course repetition is required as a special academic accommodation for a qualified Disabled Students Programs & Services student.

In the case of repetition of courses successfully completed, the grade earned when the course is repeated will not be counted in a student's cumulative units or grade point average.

Repetition of courses successfully completed is permitted by petition in instances when such repetition is necessary for a student to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. Students wishing to repeat courses under this condition must present written documentation or certification to the manager of the college Office of Admissions and Records/Vice President of Admissions and Records to verify that such course repetition is necessary to complete legally mandated training requirements. Such courses may be repeated any number of times, regardless of whether or not substandard work was previously recorded, and the grade

received each time shall be included in the calculation of the student's grade point average.

Probation and Dismissal

Satisfactory Progress

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

Placement on Progress Probation

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

Removal from Progress Probation

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

Placement on Academic Probation

A student shall be placed on academic probation when:

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

Removal from Academic Probation

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

Counseling for Probationary Students

Each student on probation will be provided counseling and guidance service, including regulation of the student's program according to individual aptitude and achievements as determined by the counseling office. Students subject to dismissal shall have all selected courses approved by a counselor prior to registration. In addition,

students who have completed 40 units or more and are on probation must have all selected courses approved by a counselor. A student on probation, whether academic or progress, may not carry more than 12 units without special approval of a counselor.

Academic/Progress Dismissal

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

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

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

Circumstances for Appeal or Exception of Academic Progress Dismissal

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

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

Readmission Following Academic/Progress Dismissal

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

Following the student's first dismissal, he/she will not be admitted to a district college until one semester has elapsed. If the student fails to maintain a grade point average of at least 2.0, or fails to complete more than fifty percent (50%) of the units in which the student enrolled during the first semester of attendance following his/her initial dismissal, the student shall be dismissed for a period of one year (second dismissal). If the student fails to

meet these academic and progress standards during the next semester in which he/she enrolls, the student will be dismissed again. This third dismissal shall be considered permanent. However, 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.

Honors and Awards*

Leon S. Peters Honors Program

The Leon S. Peters Honors Program at Fresno City College recognizes and meets the needs of academically gifted students. Students who qualify, and are accepted to enter the Honors Program, benefit from an enriched educational experience that consists of a specially selected curriculum set within the framework of the transfer programs of all University of California and California State University campuses. Special honors sections of regular classes usually have 25 or fewer students per section. They are taught by specially selected, experienced and highly qualified faculty. The entire program can be completed in four semesters. Entrance into the program is competitive. For additional details about the benefits, requirements, and curriculum, see the Honors Program section in this catalog, and consult with the Honors Program Coordinator, who can be reached by calling 442-8281.

Dean's List

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

Honors at Graduation

High Honors

To be recognized at commencement, 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.

Honor Societies*Alpha Gamma Sigma*

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

advisors. For additional information contact the Honors Program office at 442-8281.

Phi Theta Kappa

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

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



Each year at the end of the spring semester, the Dean's Medallion is awarded to seven students for their academic achievements, community service and leadership skills. The 2012 recipients pictured here represent each academic division at the college.

CERTIFICATE AND DEGREE REQUIREMENTS

Catalog Rights

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

1. The catalog in effect at the time of the student's graduation, or
2. The catalog in effect at the time the student began continuous enrollment leading to graduation.

For this regulation, a student shall be considered to have continuous enrollment if enrolled and active in any graded class at the census point (20%) of the semester. If a student misses 24 consecutive months, the student loses his/her original catalog rights and is not continuously enrolled.

Certificates

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

See page 81 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. The specific courses required for the certificate of achievement are identified in each occupational degree program where such certificates are awarded.

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 81 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 81 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 191, 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.

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

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

General Education for the AA/AS Degree

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

Following are the major areas of General Education:

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

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

Humanities. Courses in the humanities examine the philosophical, literary, aesthetic, and cultural expressions of humans. These courses develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them through artistic and cultural creation. They develop

aesthetic understanding and, through study of traditional and changing cultural perspectives, foster better informed value judgments. These courses also offer students the opportunity to explore their creativity and imagination and to move consciously towards an awareness of their capability for artistic self-expression. This category will include art history, literature and film, philosophy and morality, comparative religion, the fine and performing arts and language. When we ask who we are, and what our lives ought to mean, we are using the humanities.

Language and Rationality. Courses in language and rationality are those which develop for the student principles and applications of language that lead to logical thought, clear and precise expression, and critical evaluation of communication in any endeavor.

1. English Composition: Courses fulfilling this requirement include both expository and argumentative writing.
2. Communication and Analytical Thinking: Courses fulfilling these requirements include oral communication, mathematics, logic, statistics, computer language and programming, and related disciplines.

Multiple Degrees

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

Requirements for the Associate in Arts for transfer (AA-T) or Associate in Science for transfer (AS-T)

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an “associate degree for transfer”, a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students transfer-

ring to a CSU campus that does accept the AA-T or AS-T will be required to complete no more than 60 units after transfer to earn a bachelor's degree (unless the major is a designated "high-unit" major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

At the time of catalog publication, a student may earn an AA-T in Communication, Early Childhood Education, Psychology, Sociology and Theatre Arts. The details of these majors are listed in the catalog on pages 123, 126, 176, 181, 185. Please refer to the Fresno City College 2012-2014 Catalog Addendum at the Fresno City College website (<http://www.fresnocitycollege.edu/index.aspx?page=1854>) for requirements. Additional majors are being developed. Please see a counselor for more information.



All FCC students who have completed the requirements for an associate degree are invited to participate in the FCC Commencement Ceremonies at the end of the spring semester.

Requirements for AA and AS Degrees

Associate in Science Degree

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

Associate in Arts Degree

1. Sixty (60) units with at least 2.0 ("C") grade point average in all courses applicable to the associate degree.
2. Residence requirements:
 - (a) A minimum of twelve (12) degree applicable units in residence at district colleges or centers, with attendance during the last semester prior to meeting graduation requirements, or
 - (b) A total of forty-five (45) units in residence at district colleges or centers if not in attendance during the last semester prior to meeting graduation requirements.
3. At least eighteen (18) units in a discipline (major) or from related disciplines with a grade of "C" or better in each course.
4. Competence in writing, demonstrated by completion of English 1A or 1AH with a grade of 2.0, "C" or better.

(The course used to fulfill this requirement may also be used to fulfill area D, Part 1, below, of the general education requirement in language and rationality: composition.)

5. Competence in reading, demonstrated by
 - (a) Meeting the reading requirement for English 1A, 1AH eligibility by an appropriate placement test score.
 - (b) Completion of English 1A or 1AH with a grade of "C" or better.
6. Competence in oral communication, demonstrated by the completion of Communication 1, 2, 4, 8, or 25 with a grade of 2.0, "C" or better.
7. Competence in mathematics, demonstrated by
 - (a) An appropriate placement test score or
 - (b) Completion with a grade of 2.0, "C" or better one of the following classes: Mathematics 4A, 4B, 5A, 5B, 6, 7, 10A, 10B, 11, 21, 26, 42, 45, 102, 103.
8. Familiarity with computer concepts and computer use, demonstrated by completing with a grade of "C" (2.0) or better, one of the following:
 - (a) Applied Technology 10; Business & Technology 1, 2, 9, 10, 14, or 28; Computer Information Technology 12, 15, or 17; 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

34 Certificate and Degree Requirements

- (c) A college examination of computer literacy.
9. Awareness of lifetime physical and mental wellness, demonstrated by completion of Health 1, Psychology 2, Psychology 2H, Psychology 33, or Child Development 38/Psychology 38.
10. Two physical education and/or dance classes. Exceptions will be considered for those students who are veterans, P.O.S.T. program candidates, Basic Fire Academy graduates, or who submit a physician's statement certifying that they are not physically able to participate in physical education classes. Physical education courses that will meet this requirement are Physical Education 3-7, 9, 11-15C, 17, 23, 25, 29B-42B, 29C-42C, and 50-55.
11. Completion of one of the following courses on the principles of national, state, and local government, including the study of American institutions and ideals: Political Science 2, 2H, or 110.

(The course used to fulfill this requirement may also be used to satisfy area B, Part 1, below, of the general education requirement in social and behavioral sciences.)

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

A. Natural Sciences (3 units)

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

B. Social and Behavioral Sciences

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

1. Political Science 2, 2H, or 110

(The course used to fulfill this requirement may also be used to satisfy degree requirement 11, American institutions, above.)

2. Other Social and Behavioral Sciences

African-American Studies 1, 2, 4, 41

American Indian Studies 31, 32, 34
Anthropology 1, 2/2H, 3, 4, 20, 28
Asian-American Studies 1, 15
Business Administration 20
Chicano-Latino Studies 11, 12, 13, 14, 24, 28, 29, 30
Child Development 5, 39
Criminology 5
Economics 1A/1AH, 1B/1BH, 25
Geography 2, 4A, 4B, 20
History 1/1H, 2/2H, 3, 11, 12, 15, 17, 18, 21, 22, 25, 29, 30, 34
Human Services 20
Political Science 1, 5, 24, 25
Psychology 5, 15, 25, 36, 39
Sociology 1A/1AH, 2, 10, 14, 31, 32
Women's Studies 10, 24, 41, 43, 47

C. Humanities (3 units)

African-American Studies 3, 8, 13, 15, 17, 21, 22, 49
American Indian Studies 35
American Sign Language 1, 2, 3, 4, 5, 6, 7, 8
Architecture 10, 11, 20, 30
Armenian 1, 2, 3
Art 2, 3, 4, 5/5H, 6/6H, 7, 8, 9, 10, 11, 12A, 12B, 14, 15, 16, 17, 18, 19, 20, 21, 22B, 23, 28, 29, 31, 32A, 32B, 55
Chicano-Latino Studies 17, 18, 20, 21, 27
Chinese 1, 2, 3, 4, 5
Communication 12
Dance 13, 17, 20A, 20B, 27, 30
English 1B/1BH, 12, 14, 15A, 15B, 15C, 15D, 17, 20, 36, 42, 44A, 44B, 45, 46A, 46B, 47, 48A, 48B
Film 1, 2A, 2B, 3, 5, 6
French 1, 2, 3, 4
German 1, 2, 3, 4
Graphic Communications 39A, 40A
Hmong 1, 2
Humanities 10/10H, 11/11H, 42
Japanese 1, 2
Journalism 1, 2, 3, 6, 16
Latin American Studies 10

- Linguistics 10, 11
- Music 3, 5, 12, 13, 14, 16, 17, 20, 21, 24, 25, 26, 27, 28, 29, 30, 34, 35, 36, 39, 40, 41, 42A, 42B, 42C, 42D, 46, 48, 53, 90, 91, 92
- Philosophy 1A/1AH, 1B, 1C, 1D, 5, 6
- Photography 5, 6, 7, 15, 17, 18, 30, 32, 37, 40
- Portuguese 1, 2, 3, 4
- Russian 1, 2, 3, 4
- Spanish 1, 2, 3, 3NS, 4, 4NS, 5, 6, 7
- Swahili 1, 2
- Theatre Arts 12, 23, 25, 27A, 27B, 28, 30, 31, 32, 35, 36, 41, 42, 43, 44, 46
- Women's Studies 36

D. Language and Rationality

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

1. Composition

(The course used to fulfill this general 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, 61, 63, 64, 66, 67, 68

Computer Science 20, 40, 41

Criminology 13

Decision Science 21, 23

Electrical Systems Technology 51

English 3/3H, 40

Fashion Merchandising 10

Graphic Communications 5, 13, 14, 15, 16, 17, 18, 20, 22, 23, 30, 41, 51

Marketing 10

Math 102, 103, 4A, 4B, 11, 42 or any advanced math class

Philosophy 4

Political Science 13

Psychology 42

Sociology 1B

See a counselor for other courses which fulfill this requirement.

Application for Associate Degree or Certificate of Achievement

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



The Applied Technology Division at FCC provides a wide-range of vocational courses and programs to guide students from the classroom to employment. The hands-on approach provides valuable training and experience for students who are seeking job training skills.

TRANSFER INFORMATION AND REQUIREMENTS

Preparation to Enter Four-Year Colleges or Universities

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

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

Careful selection of courses at Fresno City College will prepare a student for transfer with junior standing to

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

In accordance with Executive Order No. 167 from the Chancellor's Office of the California State Universities, Fresno City College baccalaureate level courses are numbered 1 to 99. These courses are listed on page 41 of this catalog. The courses so designated by Fresno City College shall be accepted by any campus of the State University for elective credit toward its baccalaureate degrees. Students can complete the general education requirements for all of the California State Universities by following the appropriate pattern which follows. Completion of the general education requirements will be certified on the Fresno City College final transcript upon the student's request.

Fresno City College courses that transfer to the University of California campuses are listed on page 43. Students who plan to transfer to one of the UC campuses should consult the latest catalog of the university of their choice to determine lower division requirements.

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

Articulation

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

Fresno City College has developed numerous articulation agreements with California State University and

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

University of California campuses. These agreements may be viewed at www.assist.org or in the Fresno City College Transfer Center.

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

Articulation System Stimulating Inter-Institutional Student Transfer (ASSIST)

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

- **CSU Transferable Courses**

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

- **CSU GE-Breadth Certification Courses**

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

- **CSU US History, Constitution, and American Ideals Courses**

These lists identify courses from a community college that satisfy the US history, Federal Constitution, and California state and local government degree requirements.

- **IGETC for UC and CSU**

These are lists of courses from a community college that apply to the Intersegmental General Education Transfer Curriculum (IGETC) requirements.

- **UC Transferable Courses**

These agreements list courses from community colleges that transfer to all University of California campuses.

Agreements with Other Campuses– Campus Specific

- **By Major**

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

- **By Department**

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

- **For General Education/Breadth**

These agreements indicate the courses at a sending institution that satisfy the general education or breadth requirements at a receiving institution. See a counselor for assistance on how to use ASSIST.

Lower Division Transfer Pattern

Fresno City College's LDTP qualified courses are identified in the following descriptions in the catalog. Fresno City College's LDTP qualified courses are as follows:

LDTP Number	Fresno City College Course
TCSU AFAM 119	AFRAM 3, African-American Art
TCSU AFAM 119	AFRAM 8, African-American Creative Workshop
TCSU AFAM 119	AFRAM 13, African-American Music from Pre-Slavery to 1940
TCSU AFAM 119	AFRAM 15, African-American Music from 1940 to the Present
TCSU AFAM 119	AFRAM 17, African-American Literature
TCSU AFAM 219	AFRAM 1, African-American Culture
TCSU AFAM 219	AFRAM 2, Cultural Adaptation of the African-American
TCSU ANTH 110	ANTHRO 1, Biological Anthropology
TCSU ANTH 120	ANTHRO 2 or 2H, Cultural Anthology
TCSU ANTH 130	LING 10, Introduction to Language
TCSU ANTH 150	ANTHRO 4, Introduction to Archaeology
TCSU ART 110	ART 5 or 5H, Art History 1
TCSU ART 210	ART 7, Beginning Drawing
TCSU ART 230	ART 3, Two-Dimensional Art
TCSU BIOL 110	BIOL 5, Human Biology
TCSU BIOL SEQ A	BIOL 1/1H+BIOL 4+ BIOL 6, Principles of Biology, Zoology, Botany
TCSU BUS 110	ACCTG 4A or 4AH, Managerial Accounting
TCSU BUS 120	ACCTG 4B or 4BH, Financial Accounting
TCSU CHEM 110	CHEM 1A, General Chemistry

TCSU CHEM 120	CHEM 1B, General Chemistry and Qualitative Analysis	TCSU MUS 410	MUS 69, Wind Band
TCSU CHEM 130	CHEM 3A, Introductory General Chemistry	TCSU MUS 410	MUS 70, Community Orchestra
TCSU CHEM 140	CHEM 3B, Introduction to Organic and Biological Chemistry	TCSU MUS 410	MUS 76, College Philharmonic Orchestra
TCSU CHEM SEQ A	CHEM 1A+CHEM 1B, General Chemistry, Gen Chem and Qualitative Analysis	TCSU NAS 109	AMIND 31, American Indian Culture
TCSU CHEM SEQ B	CHEM 3A+CHEM 3B, Introductory Chemistry, Intro Organic & Biological Chemistry	TCSU NAS 109	AMIND 34, The American Indian in Contemporary Society
TCSU COMS 110	COMM 1, Introduction to Public Speaking	TCSU NUTR 110	FN 35, Nutrition and Health
TCSU COMS 120	COMM 25, Argumentation	TCSU NUTR 110	FN 40, Nutrition
TCSU COMS 130	COMM 2, Interpersonal Communication	TCSU NUTR 120	FN 1, Principles of Food Preparation
TCSU COMS 140	COMM 8, Group Communication	TCSU PHIL 120	PHIL 1C, Ethics
TCSU CJ 110	CRIM 1, Introduction to Criminology	TCSU POLS 110	POLSCI 2 or POLSCI 2H, Honors American Government
TCSU CSCI 110	CSCI 40, Programming Concepts and Methodology I	TCSU PSY 110	PSY 2H, Honors General Psychology
TCSU CSCI 110	CSCI 40J, Programming Concepts and Methodology in Java	TCSU SOC 110	SOC 1A, Introduction to Sociology
TCSU CSCI 120	CSCI 41, Programming Concepts and Methodology II	TCSU SPAN 130	SPAN 3, Intermediate Spanish
TCSU ECON 110	ECON 1A or 1AH, Introduction to Macroeconomics	TCSU SPAN 140	SPAN 4, High-Intermediate Spanish
TCSU ECON 120	ECON 1B or 1BH, Introduction to Microeconomics	TCSU SPAN SEQ B	SPAN 3 +4, Intermediate/High-Intermediate Spanish
TCSU ETHN 110	AMST 10, American Pluralism	TCSU STAT 110	DS 23, Business Statistics
TCSU GEOG 110	GEOG 1, Physical Geography	TCSU SW 110	HS 20, Introduction to Social Welfare
TCSU GEOG 120	GEOG 2, Cultural Geography		
TCSU HIST 130	HIST 11, History of the United States to 1877		
TCSU HIST 150	HIST 20, Comparative World Civilization to 1600		
TCSU IS 110	CIT 63, Beginning Java Programming		
TCSU IS 120	CIT 15, Computer Concepts		
TCSU MATH SEQ A	MATH 5A+MATH 5B, Mathematical Analysis		
TCSU MUS 130	MUS 1A, Music Theory I		
TCSU MUS 350	MUS 29, Intermediate/Advanced Guitar		
TCSU MUS 350	MUS 42D, Intermediate/Advanced Percussion		
TCSU MUS 360	MUS 29, Intermediate/Advance Guitar		
TCSU MUS 410	MUS 30, College Choir		
TCSU MUS 410	MUS 40, Concert Band		
TCSU MUS 410	MUS 46, Symphony Orchestra		
TCSU MUS 410	MUS 60, Symphonic Choir		
TCSU MUS 410	MUS 61, A Cappella Choir		
TCSU MUS 410	MUS 68, Symphonic Band		

Transfer to California State University (CSU)

Transfer Requirements to California State University (CSU)

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

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

California State University (CSU) Admission

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

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

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

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

Lower Division Transfer Students

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

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

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

Upper Division Transfer Students

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

- Has a college grade point average of 2.0 or better (2.4 for non-California residents) in all transferable college units attempted.
- Is in good standing at the last college or university attended, i.e., is eligible to re-enroll.
- Has completed or will complete prior to transfer at least 30 semester units (45 quarter units) of courses

equivalent to CSU general education requirements with a grade of "C" or better. The 30 units must include all of the general education requirements in communication in the English language (English composition, oral communication, and critical thinking) and at least one course of at least 3 semester units (4 quarter units) required in college-level mathematics.

General Education Requirements For California State University Certification (CSU-GE)

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

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

Fresno City College CSU General Education – Breadth 2012-2014

Area A: English Language Communication and Critical Thinking

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

- **Area A1, Oral Communication**
Communication 1, 2, 4, 8
- **Area A2, Written Communication**
English 1A/1AH

Transfer Information and Requirements

- **Area A3, Critical Thinking**

Communication 25
Criminology 13
English 3/3H
Philosophy 4, 6
Political Science 13

Area B: Scientific Inquiry and Quantitative Reasoning

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

- **Area B1, Physical Science**

Astronomy 10(L)
Chemistry 1A(L), 1B(L), 3A(L), 3B(L), 8A, 28A, 28B
Geography 1, 7(L), 8(L)
Geology 1(L), 1H(L), 2, 4, 5, 7, 8
Physical Science 7, 11
Physics 2A(L), 2B(L), 4A(L), 4B(L), 4C(L)

- **Area B2, Life Science**

Anthropology 1
Biology 1/1H(L), 3(L), 3H(L), 4(L), 5(L), 6(L), 7(L), 11A/11AH(L), 11B(L), 20(L), 21A(L), 21B(L), 22(L), 24(L), 31(L)

- **Area B3, Laboratory Activity**

Chemistry 29A, 29B

- **Area B4, Mathematics/Quantitative Reasoning**

Computer Science 26
Decision Science 21, 23
Mathematics 4A, 4B, 5A, 5B, 6, 10A, 10B, 11, 21, 26, 42, 45
Psychology 42

Area C: Arts and Humanities

Nine semester units minimum with at least one course each from C1 and C2.

- **Area C1, Arts**

African-American Studies 3, 8, 13, 15, 49
American Indian Studies 35
Art 2, 3, 4, 5/5H, 6/6H, 7, 9, 10, 11, 12A, 12B, 14, 15, 17, 55
Chicano-Latino Studies +17, 20, +27
Communication 12
Dance +17, 20A, +27, 30
Film 1, 2A, 2B, 6

Music 3, 12, 13, 14, 16, 17, 20, 21, 27, 28, 39, 46
Photography 5
Theatre Arts 12, 30, 31, 41, 44
+Only one course can be used to satisfy this area.

- **Area C2, Humanities**

African-American Studies 17, 21, 22
American Sign Language 1, 2, 3, 4, 5, 6, 7, 8
Armenian 1, 2, 3
Chicano-Latino Studies 21
Chinese 1, 2, 3, 4, 5
Cultural Studies 7/7H
English 1B/1BH, 12, 14, 17, 36, 40, 42, 44A, 44B, 45, 46A, 46B, 47, 48A, 48B
Film 1, 2A, 2B, 3
French 1, 2, 3, 4
German 1, 2, 3, 4
History 1/1H, 2/2H
Hmong 1, 2
Humanities 7/7H, 10/10H, 11/11H
Japanese 1, 2
Latin American Studies 10
Linguistics 10
Philosophy 1A/1AH, 1B, 1C, 1D, 5
Portuguese 1, 2, 3, 4
Russian 1, 2, 3, 4
Spanish 1, 2, 3, 3NS, 4, 4NS, 5, 6, 7, 12
Swahili 1, 2
Theatre Arts 31, 32
Women's Studies 36

Area D: Social Sciences

Nine semester units minimum from at least three disciplines:

- **Area D0, Sociology and Criminology**

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

- **Area D1, Anthropology and Archaeology**

Anthropology 2/2H, 3, 4

- **Area D2, Economics**

Economics 1A/1AH, 1B/1BH, 25

- **Area D3, Ethnic Studies**

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

- **Area D4, Gender Studies**

History 22

Journalism 16

Women's Studies 10, 47

- **Area D5, Geography**

Geography 2, 4A, 4B, 20

- **Area D6, History**

African-American Studies 4

Chicano-Latino Studies 29

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

- **Area D7, Interdisciplinary Social or Behavioral Science**

American Studies 10

Child Development 30, 39

Journalism 1

Psychology 39

- **Area D8, Political Science, Government & Legal Institutions**

Business Administration 20

Political Science 1, 2, 2H, 5

- **Area D9, Psychology**

Child Development 38, 39

Psychology 2/2H, 38, 39

Area E: Lifelong Learning and Self-Development

Three semester units minimum.

Child Development 38, 39

Health Science 1

Psychology 2/2H, 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. SWAHLI1/AFRAM 21, can be counted only once.

Some CSU campuses have restrictions on when courses in AREAS A and B4 must be completed prior to transfer.

Additional courses may be added to the Fresno City College CSU GE-Breadth. An updated CSU General Education Sheet may be obtained from the Counseling Center, the Transfer Center, the Fresno City College Website, or www.assist.org.

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

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

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

U. S. History, Constitution, and American Ideals

To graduate from a California State University a student must complete, with a "D" or better grades, a combination of courses which are identified as meeting the U. S. History, Constitution, and American Ideals requirements. Courses at Fresno City College which meet this requirement are: one course from History 11 or 12 combined with one course from Political Science 2 or 2H. These courses may also be used simultaneously to satisfy course requirements on the CSU GE-Breadth pattern. (See pages 39 and 40)

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/4AH, 4B/4BH, 19, 32A, 34, 51, 52, 53, 55, 56, 57, 58, 59, 70, 73

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

African-American Studies 1, 2, 3, 4, 5, 6, 8, 13, 15, 17, 21, 22, 36, 41, 49

Air Conditioning 19, 50, 51, 52, 53, 54, 55, 56, 57, 60A

American Indian Studies 31, 32, 34, 35

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

American Studies 10

Anthropology 1, 2/2H, 3, 4, 4L, 5, 6, 13, 20, 28, 30

Applied Technology 10, 11, 21, 40

Apprenticeship 19

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

Armenian 1, 2, 3

42 Transfer Information and Requirements

- Art** 2, 3, 4, 5/5H, 6/6H, 7, 8, 9, 10, 11, 12A, 12B, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22B, 23, 24A, 24B, 24C, 24D, 25, 28, 29, 31, 32A, 32B, 49, 55, 60
- Asian-American Studies** 1, 10, 15, 20, 25, 30
- Astronomy** 10
- Automotive Collision Repair Technology** 51, 53, 55
- Automotive Technology** 9, 19, 51, 51L, 52, 53, 54, 55, 56, 57, 58, 58A, 58B, 58C
- Automotive Technology – General Motors ASEP** 51, 51L, 52, 53, 54, 55, 56, 57
- Biology** 1/1H, 3/3H, 4, 5, 6, 7, 11A/11AH, 11B, 20, 21A, 21B, 22, 24, 31, 46, 47
- Building Safety and Code Administration** 10, 12, 14, 15, 16, 17, 18, 20, 22, 24, 27, 37, 47
- Business Administration** 5, 8, 10, 10H, 11, 13, 14, 18, 19, 20, 21, 22, 25, 27, 28, 30, 31, 32, 33, 34, 35, 37, 38, 40, 43, 44, 48, 50, 51, 52, 55, 56, 57, 58
- Business & Technology** 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 18, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 43
- Chemistry** 1A, 1B, 3A, 3B, 8A, 28A, 28B, 29A, 29B
- Chicano-Latino Studies** 11, 12, 13, 14, 17, 18, 20, 21, 22, 24, 27, 28, 29, 30, 33
- Child Development** 1, 3, 5, 6, 8A, 8B, 9, 10, 11, 12, 15, 16, 17A, 17B, 19, 20, 30, 37A, 37B, 38, 39, 40A, 40B, 42, 43, 45, 46, 47, 48, 53
- Chinese** 1, 2, 3, 4, 5
- Communication** 1, 2, 4, 8, 12, 20, 25, 26
- Computer Aided Drafting and Design** 14, 16, 22, 24, 26A, 28, 32, 36A, 40, 42
- Computer Aided Manufacturing** 1A, 1B, 10, 20
- Computer Information Technology** 12, 15, 17, 19, 20, 21, 23, 24, 26, 27, 28, 29, 31, 40, 45, 46, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58A, 58B, 58C, 58D, 58E, 58F, 60, 61, 63, 64, 66, 67, 68, 80, 81, 82, 85, 90, 93, 94
- Computer Science** 20, 26, 30, 40, 40J, 41
- Construction** 19, 50A, 50B, 51, 51A, 51B, 53, 53A, 53B, 55, 56, 57
- Counseling** 43, 48, 53, 54
- Criminology** 1, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 15, 16, 18, 19, 20, 21, 23, 24, 25, 36
- Cultural Studies** 7/7H, 10, 11
- Dance** 9, 10, 11, 12A, 12B, 13, 14, 15, 16, 17, 18, 20A, 20B, 21, 22, 25, 26, 27, 28, 30
- 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
- Drafting** 12, 19
- Economics** 1A/1AH, 1B/1BH, 25
- Education** 30
- Educational Aide** 1, 6, 7, 19
- Electrical Systems Technology** 19, 50, 51, 52, 53, 54, 55A, 55B, 55C, 56A, 56B, 56C, 57A, 57B, 57C, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 80, 81, 82A, 82B, 96A, 96B, 96C, 96D
- Engineering** 1A, 1B, 2, 4, 6, 8, 10, 11
- English** 1A/1AH, 1B/1BH, 3/3H, 12, 14, 15A, 15B, 15C, 15D, 17, 20, 36, 40, 42, 44A, 44B, 45, 46A, 46B, 47, 48A, 48B
- English as a Second Language** 67, 68
- Fashion & Textiles Studies** 20, 22, 24, 25, 26, 30
- Fashion Merchandising** 10, 14, 19, 21, 27, 28
- Film** 1, 2A, 2B, 3, 5, 6
- Fire Technology** 1, 2, 3, 4, 5, 8, 9, 13, 14
- Food and Nutrition** 1, 35, 40, 41, 42, 43, 45
- Food Service Management** 11, 15, 19, 25, 35, 38, 63
- French** 1, 2, 3, 4
- Geography** 1, 2, 4A, 4B, 7, 8, 10, 20, 30
- Geology** 1/1H, 2, 3, 4, 5, 7, 8, 9, 11
- German** 1, 2, 3, 4
- Graphic Communications** 5, 10, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 27, 28, 30, 31, 32, 33, 34, 39A, 40A, 41, 51
- Health Information Technology** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15
- Health Science** 1, 2,
- History** 1/1H, 2/2H, 3, 11, 12, 15, 17, 18, 20, 21, 22, 23, 25, 29, 30, 34
- Hmong** 1, 2
- Honors** 1A, 1C, 1D, 1E, 1F, 1G
- Human Services** 10, 18, 19A, 19B, 20, 24, 25, 30, 35, 40, 42, 43, 44
- Humanities** 7/7H, 10/10H, 11/11H, 42
- Individual Study** 49
- Interdisciplinary Studies** 1
- Interior Design** 7
- Japanese** 1, 2
- Journalism** 1, 2, 3, 4, 5, 6, 9, 15, 16, 19
- Latin American Studies** 10, 11
- Learning Assistance** 1
- Library Skills** 1, 2
- Library Technology** 51, 52A, 52B, 54, 55, 56, 57
- Linguistics** 10, 11
- Marketing** 10, 11, 12, 14, 17, 19, 21
- Mathematics** 4A, 4B, 5A, 5B, 6, 7, 10A, 10B, 11, 21, 26, 42, 45, 48A, 48B, 48C
- Medical Assisting** 1, 2, 4, 5, 6A, 6B, 19
- Military Science** 1, 2, 11, 12, 20, 21, 31, 32, 41, 42, 50A, 50B, 51A, 51B, 52A, 52B

Music 1A, 1B, 2A, 2B, 3, 4, 5, 6, 7A, 7B, 8, 9, 10A, 10B, 12, 13, 14, 16, 17, 18, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 34, 35, 36, 39, 40, 41, 42A, 42B, 42C, 42D, 46, 47, 48, 49, 53, 57, 59, 60, 61, 63, 64, 66, 67, 68, 69, 70, 71, 72, 73A, 73B, 73C, 73D, 74A, 74B, 74C, 74D, 75, 76, 77, 78, 90, 91, 92

Natural Science 1A

Nursing 19, 31, 32, 32A, 33, 35A, 35B, 41, 42, 42A, 45, 46, 51, 52, 52A, 53, 55, 56, 61, 62, 62A, 65, 66

Paralegal 1, 2A, 2B, 3, 4, 5, 6A, 6B, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

Philosophy 1A/1AH, 1B, 1C, 1D, 4, 5, 6

Photography 5, 6, 7, 12, 15, 17, 18, 19, 23, 26, 27, 30, 32, 37, 40, 45, 47

Physical Education 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15A, 15B, 15C, 17, 20, 23, 24, 25, 29A, 29B, 29C, 30A, 30B, 30C, 31A, 31B, 31C, 32A, 32B, 33A, 33B, 33C, 34A, 34B, 34C, 35B, 36A, 36B, 36C, 37A, 37B, 37C, 38A, 38B, 38C, 39A, 39B, 39C, 40A, 40B, 40C, 41A, 41B, 41C, 42A, 42B, 42C, 50, 51, 52, 53, 54, 55, 62

Physical Science 7, 11, 42

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

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

Portuguese 1, 2, 3, 4

Psychology 2, 2H, 5, 12, 15, 16, 25, 33, 36, 38, 39, 42, 45

Radiologic Technology 1A, 1B, 1C, 2A, 2B, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5A, 5B, 5C, 6

Real Estate 40, 41, 42, 43, 44, 45, 46, 47, 48, 49

Recreation 19, 20, 21, 23, 50

Respiratory Care 16, 17, 18, 19, 20, 21, 22, 23, 25

Russian 1, 2, 3, 4

Sociology 1A/1AH, 1B, 2, 5, 7, 10, 14, 31, 32

Spanish 1, 2, 3, 3NS, 4, 4NS, 5, 6, 7, 8, 9, 10, 11, 12, 13

Special Studies 47

Swahili 1, 2

Theatre Arts 12, 15C, 23, 25, 27A, 27B, 28, 30, 31, 32, 35, 36, 40, 41, 42, 43, 44, 45, 46, 48

Welding 1, 2A, 2B, 3A, 3B, 4A, 4B, 56

Wind Turbine Technology 1, 2, 3

Women's Studies 5, 7, 10, 24, 25, 30, 36, 41, 43, 44, 47

Work Experience 19

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

Transfer to University of California (UC)

Transfer Requirements of the University of California (UC)

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

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

UC Transfer Admission Guarantee (Guaranteed Admission)

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

University of California Transfer Course List (UC)

Courses from Fresno City College that are acceptable for transfer credit at the University of California follow.

Accounting 4A/4AH, 4B/4BH

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

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

African-American Studies 1, 2, 3, 4, 5, 6, 13, 15, 17, 21, 22, 36, 41, 49

Transfer Information and Requirements

- American Indian Studies** 31, 32, 34, 35
- American Sign Language** 1, 2, 3, 4, 6, 7, 8
- American Studies** 10
- Anthropology** 1, 2/2H, 3, 4, 4L, 6, 13, 20, 28, #30
#Variable topics; evaluation completed by individual campuses after admission.
- Architecture** 10, 11, 20, 30
- Armenian** 1, 2, 3
- Art** 2, 3, 4, 5/5H, 6/6H, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24A, 24B, 24C, 24D, 25, 27, 28, 29, 31, 55, 60
- Asian-American Studies** 1, 10, 15, 20, 25, 30
- Astronomy** 10
- Biology** 1/1H, °3/3H, 4, 5, 6, 7, 11A/11AH, 11B, 20, 21A, 21B, 22, 31
°No credit for 3 if taken after 1 or 1H.
- Business Administration** 10/10H, *18, 20, *21
*18 and 21 combined: maximum credit, 1 course
- Chemistry** *1A, 1B, *3A, 3B, 8A, 28A, 28B, 29A, 29B
*1A and 3A combined: maximum credit, 1 course.
- Chicano-Latino Studies** 11, 12, 13, 14, 17, 18, 20, 21, 22, 24, 27, 28, 29, 30
- Child Development** 30, 38, 39
- Chinese** 1, 2, 3, 4, 5
- Communication** 1, *4, 8, 12, *25
*4 and 25 combined: maximum credit, 1 course.
- Computer Information Technology** *12, *15, 60, 61, 63, 64, 66, 67, 68
*12 and 15 combined: maximum credit, 1 course.
- Computer Science** 20, 26, 40, 40J, 41
- Criminology** 1, 5, 13
- Cultural Studies** 11
- Dance** *9, 10, 11, 12A, 12B, 13, 14, 15, 16, 17, 18, 20A, 20B, 21, 22, 25, 27, 28, 30
*Any or all of these PE Activity courses combined; maximum credit, 4 units.
- Decision Science** 21, *23
*23, Math 11, 42 and Psychology 42 combined: maximum credit, 1 course.
- Economics** 1A/1AH, 1B/1BH
- Education** 30
- Engineering** 1A, 1B, 2, 4, 6, 8, 10
- English** 1A/1AH, 1B/1BH, 3/3H, 12, 14, 15A, 15B, 15C, 15D, 17, 20, 36, 40, 42, 44A, 44B, 45, 46A, 46B, 47, 48A, 48B
- Fashion and Textiles Studies** 20
- Film** 1, 2A, 2B, 3, 5, 6
- Food and Nutrition** 35, 40
- French** 1, 2, 3, 4
- Geography** *1, 2, 4A, 4B, *7, 8, 10, 20
*1 and 7 combined: maximum credit, 1 course.
- Geology** 1/1H, 2, 3, 4, 5, 7, 8, 9
- German** 1, 2, 3, 4
- Health Science** 1, 2
- History** 1/1H, 2/2H, 3, 11, 12, 15, 17, 18, 20, 21, 22, 23, 25, 29, 30, 34
- Hmong** 1, 2
- Honors Studies** #1A, *1C
#Variable topics; evaluation completed by individual campuses after admission.
*1C must be taken concurrently with PHIL 1AH, HUMAN 10H, HUMAN 11H, HIST 1H, HIST 2H, ENGL 1BH, ENGL 3H, ART 5H or ART 6H for credit.
- Human Services** 10, 20
- Humanities** 10/10H, 11/11H
- Individual Study** #49
#Variable topics; evaluation completed by individual campuses after admission.
- Japanese** 1, 2
- Journalism** 1, 16
- Latin American Studies** 10, #11
#Variable topics; evaluation completed by individual campuses after admission.
- Linguistics** 10
- Mathematics** 4B, 5A, 5B, 6, 7, *10A, *10B, °11, 21, 26, °42, 45
*10A and 10B combined: maximum credit, 1 course.
°11, 42, Decision Science 23, and Psychology 42 combined: maximum credit, 1 course.
- Military Science** *1, *2, *11, *12
*Any or all of these courses and Aerospace Studies 1A, 1B, 2A, 2B, 3 combined: maximum credit, 8 units.
- Music** 1A, 1B, 2A, 2B, *3, 4, 7A, 7B, 9, 12, 13, 14, 16, 17, 18, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 34, 35, 36, 39, 40, 41, 42A, 42B, 42C, 42D, 46, 48, 49, 53, 90, 91, 92
*No credit for 3 if taken after 1A.
- Natural Science** 1A
- Philosophy** 1A/1AH, 1B, 1C, 1D, 4, 5, 6
- Photography** 5, 17
- Physical Education** +3-17, 20, 23, *24, 25, *29A-42A, +29B-42B, +29C-42C, +50, +51, +52, +53, +54, +55, 62
*Any or all of these courses combined: maximum credit, 8 units.
+ Any or all of these PE Activity courses combined; maximum credit, 4 units.
- Physical Science** 7, *11
*No credit if taken after a college level course in Physics or Astronomy.
- Physics** *2A, *2B, *4A, *4B, *4C
*2A and 2B and 4A, 4B, 4C combined: maximum credit, 1 series. Deduct credit for duplication of topics.
- Political Science** 1, 2/2H, 5, 13, 24

- Portuguese** 1, 2, 3, 4
- Psychology** 2/2H, 5, 15, 16, 25, 33, 36, 38, 39, *42, 45
*42, Math 11, 42 and Decision Science 23 combined:
maximum credit, 1 course.
- Russian** 1, 2, 3, 4
- Sociology** 1A/1AH, 1B, 2, 10, 14, 32
- Spanish** 1, 2, *3, *3NS, +4, +4NS, 5, 6, 7, 8
*3 and 3NS combined: maximum credit, 1 course
+4 and 4NS combined: maximum credit, 1 course
- Special Studies #47**
#Variable topics; evaluation completed by individual
campuses after admission.
- Swahili** 1, 2
- Theatre Arts** 12, 15C, 25, 27A, 27B, 28, 30, 31, 32, 35,
36, *41, *42, 43, 44, 46
*41 and 42 combined: maximum credit, 1 course.
- Women's Studies** 10, 24, 30, 36, 41, 47

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

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

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

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

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

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

Area 1 – English Composition

CSU—Three courses required, one each from 1A, 1B, and 1C (nine semester units minimum);

UC—Two courses required, one each from Group 1A and 1B (six semester units minimum).

1A English Composition

One course, three semester units.

**English 1A/1AH, Reading and Composition4

1B Critical Thinking — English Composition

One course, three semester units.

**English 3/3H, Critical Reading and Writing3

1C Oral Communication

(CSU only: One course, three semester units)

Communication 1, Intro to Public Speaking ...3

**Communication 4, Persuasion3

Communication 8, Group Communication3

**Communication 25, Argumentation3

Area 2 – Mathematical Concepts and Quantitative Reasoning

One course required (three semester units minimum).

Computer Science 26, Discrete Mathematics
for Computer Science4

Decision Science 21, Finite Mathematics3

Math 4B, Pre-calculus4

Math 5A, Mathematical Analysis I5

Math 5B, Mathematical Analysis II4

Math 6, Mathematical Analysis III4

**Math 10A, Structure and Concepts in
Mathematics I3

**Math 10B, Structure and Concepts in
Mathematics II3

**Math 11, Elementary Statistics4

Math 21, Finite Mathematics3

Math 26, Elementary Linear Algebra3

**Math 42, Statistics for the Behavioral
Sciences4

**Psychology 42, Statistics for the Behavioral
Sciences4

Area 3 – Arts and Humanities

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

3A Arts

African-American St 3, African-American Art...3

African-American St 13, African-American
Music from Pre-Slavery to 1940.....3

African-American St 15, African-American Music from 1940 to Present.....	3	English 17, African-American Literature	3
American Indian St 35, American Indian Art...	3	English 36, Women in Literature.....	3
Art 2, Art Appreciation	3	English 42, Classic Myths	3
**Art 5/5H, Art History 1	3	English 44A, World Literature to the Renaissance	3
**Art 6/6H, Art History 2	3	English 44B, World Literature Since the Renaissance	3
Art 55, Intro to Asian Art.....	3	English 45, Contemporary World Literature....	3
Chicano-Latino St 20, Chicano Art	3	English 46A, English Literature to 1800	3
Dance 30, Dance Appreciation	3	English 46B, English Literature from 1800 to Present.....	3
Film 6, Film Genres.....	3	English 47, Introduction to Shakespeare.....	3
**Music 3, Music Fundamentals	3	English 48A, Intro to American Literature to World War I.....	3
Music 12, Music Appreciation	3	English 48B, Intro to American Literature from World War I to the Present	3
Music 13, History of Music.....	3	Film 1, Introduction to Film Studies	3
Music 14, Opera Appreciation	3	Film 2A, History of Cinema 1895-1960	3
Music 16, Jazz History and Appreciation	3	Film 2B, History of Cinema 1960-Present	3
Music 17, History of Rock.....	3	Film 3, Film and Culture.....	3
Theatre Arts 30, Theatre Appreciation.....	3	French 2, High-Beginning French	4
Theatre Arts 31, Theatre History and Dramatic Lit I	3	French 3, 4, Intermediate French	4-4
Theatre Arts 32, Theatre History and Dramatic Lit II.....	3	German 2, High-Beginning German.....	4
3B Humanities		German 3, 4, Intermediate German.....	4-4
African-American St 17, African-American Literature	3	**History 1/1H, Western Civilization to 1648.....	3
African-American St 22, High-Beginning Swahili.....	4	**History 2/2H, Western Civilization Since 1648.....	3
American Sign Language 2, High-Beginning American Sign Language	4	Hmong 2, High-Beginning Hmong.....	4
American Sign Language 3, 4, Intermediate American Sign Language	4-4	**Humanities 10/10H, Classical Humanities.....	3
American Sign Language 7, Deaf History.....	3	**Humanities 11/11H, Modern Humanities	3
American Sign Language 8, American Sign Language Literature/Folklore.....	3	Japanese 2, High-Beginning Japanese.....	4
Armenian 2, High-Beginning Armenian	4	Latin American Studies 10, Latin American Literature	3
Armenian 3, Intermediate Armenian	4	Linguistics 10, Intro to Language.....	3
Chicano-Latino St 21, Chicano Literature	3	**Philosophy 1A/1AH, Theories of Knowledge and Reality.....	3
Chinese 2, High-Beginning Chinese	4	Philosophy 1B, Social and Political Philosophy	3
Chinese 3, 4, Intermediate Chinese	4-4	Philosophy 1C, Ethics.....	3
Chinese 5, Chinese Short Stories and Culture ..	3	Philosophy 1D, World Religions	3
**English 1B/1BH, Intro to the Study of Literature.....	3	Philosophy 5, Philosophy of Religion.....	3
English 12, The Bible as Literature.....	3	Portuguese 2, High-Beginning Portuguese	4
English 14, Folklore	3	Portuguese 3,4, Intermediate Portuguese	4

Russian 2, High-Beginning Russian.....4
 Russian 3, 4, Intermediate Russian..... 4-4
 Spanish 2, High-Beginning Spanish.....4
 **Spanish 3, 4, Intermediate Spanish..... 4-4
 **Spanish 3NS, 4NS, Spanish for Spanish
 Speakers..... 4-4
 Spanish 5, The Short Story: Mexico,
 Spain, and the U.S.....3
 Spanish 6, The Short Story: Latin America3
 Spanish 7, Advanced Spanish: Comp and
 Grammar3
 Swahili 2, High-Beginning Swahili4
 Women's Studies 36, Women in Literature.....3

Area 4 – Social and Behavioral Sciences

At least three courses from at least two different disciplines (nine semester units minimum).

4A Anthropology and Archaeology

** Anthropology 2/2H, Cultural Anthropology3
 Anthropology 3, Archaeology and
 World Prehistory.....3
 Anthropology 4, Introduction to Archaeology...3

4B Economics

** Economics 1A/1AH, Intro to Macroeconomics .3
 ** Economics 1B/1BH, Intro to Microeconomics...3

4C Ethnic Studies

African-American St 1, African-American
 Culture.....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
 Americans3
 Chicano-Latino St 11, Intro to
 Chicano-Latino Studies.....3
 Chicano-Latino St 12, Mexican American
 History.....3
 History 34, History of the American Civil Rights
 Movement3
 Journalism 16, Race, Gender and the Media...3

4D Gender Studies

History 22, History of American Women.....3
 Journalism 16, Race, Gender and the Media...3
 Women's St 10, Changing Roles of Women.....3

Women's Studies 47, Introduction to Lesbian
 & Gay Studies.....3

4E Geography

Geography 2, Cultural Geography3
 Geography 4A, 4B, World Geography 3-3
 Geography 20, Geography of California.....3

4F History

African-American St 4, African Civilization3
 Chicano-Latino St 29, History of Mexico,
 Colonial to Contemporary Period3
 History 3, History of Ancient Rome3
 History 11, History of the United States
 to 18773
 History 12, History of the United States
 Since 1877.....3
 History 15, History of the British Isles.....3
 History 18, History of Ancient Greece3
 History 20, World History I, to 16003
 History 21, United States Civil War3
 History 22, History of American Women.....3
 History 23, World History II, since 1500.....3
 History 25, History of Religion in the United
 States3
 History 29, History of Mexico, Colonial to
 Contemporary Period3
 History 34, History of the American Civil Rights
 Movement3

4G Interdisciplinary, Social & Behavioral Sciences

American St 10, American Pluralism:
 A Search for Common Ground in a
 Multicultural Society.....3
 Child Development 30, Child, Family, and
 Community3
 Child Development 39, Child Growth
 and Development3
 Journalism 1, Introduction to Mass
 Communication3
 Psychology 39, Child Growth and
 Development3

4H Political Science, Government & Legal Institutions

Political Science 1, Modern Politics.....3
 ** Political Science 2/2H, American
 Government3

Political Science 5, Comparative Government	3	Physical Science 7, Environmental Science	3
4I Psychology		** Physical Science 11, Intro Physical Science	3
Child Development 38, Lifespan Development	3	** Physics 2A(L), General Physics 1	4
Child Development 39, Child Growth and Development	3	** Physics 2B(L), General Physics 2	4
** Psychology 2/2H, General Psychology	3	** Physics 4A(L), 4B(L), 4C(L), Physics for Scientists and Engineers	4-4-4
Psychology 38, Lifespan Development	3	5B Biological Sciences	
Psychology 39, Child Growth and Development	3	Anthropology 1, Biological Anthropology	3
4J Sociology & Criminology		** Biology 1/1H(L), Principles of Biology	4
Human Services 10, Introduction to Aging Studies	3	** Biology 3/3H(L), Introduction to Life Science	4
Sociology 1A/1AH, Intro to Sociology	3	Biology 4(L), Principles of Zoology	5
Sociology 2, American Minority Groups	3	Biology 5(L), Human Biology	4
Sociology 10, Introduction to Aging Studies	3	Biology 6(L), Principles of Botany	5
Area 5 – Physical and Biological Sciences		Biology 11A/11AH(L), Biology for Science Majors I	5
<i>At least two courses, one Physical Science and one Biological Science (seven to nine semester units minimum). One course must have a lab component (indicated by “L”).</i>		Biology 11B(L), Biology for Science Majors II	5
5A Physical Sciences		Biology 20(L), Human Anatomy	4
Astronomy 10(L), Basic Astronomy	3	Biology 21A, Human Anatomy and Physiology I (L)	4
** Chemistry 1A(L), 1B(L), General Chemistry	5-5	Biology 21B, Human Anatomy and Physiology II (L)	5
** Chemistry 3A(L), Intro General Chemistry	4	Biology 22(L), Human Physiology	5
Chemistry 8A, Elementary Organic Chemistry	3	Biology 31(L), Microbiology	5
Chemistry 28A/29A(L), Organic Chemistry I	3-2	Area 6 – UC Requirement in Language Other than English	
Chemistry 28B/29B(L), Organic Chemistry II	3-2	<i>Proficiency equivalent to two years of high school study in the same language with “C” or better grades (at Fresno City College one course required if not met by high school foreign language).</i>	
** Geography 1, Physical Geography	3	African American Studies 21, Beginning Swahili	4
** Geography 7(L), Physical Geography - Earth Surface	4	African American Studies 22, High-Beginning Swahili	4
Geography 8(L), Physical Geography - Weather/Climate	4	American Sign Language 1, Beginning American Sign Language	4
Geology 1/1H(L), Physical Geology	4	American Sign Language 2, High-Beginning American Sign Language	4
Geology 2, Historical Geology	3	American Sign Language 3, Intermediate American Sign Language	4
Geology 4, Geology of California	3	American Sign Language 4, High-Intermediate American Sign Language	4
Geology 5, Introduction to Oceanography	3	Armenian 1, Beginning Armenian	4
Geology 7, Natural History of Dinosaurs	3	Armenian 2, High-Beginning Armenian	4
Geology 8, Geology of Moons and Planets	3		

Armenian 3, Intermediate Armenian	4
Chinese 1, Beginning Chinese	4
Chinese 2, High-Beginning Chinese	4
French 1, Beginning French	4
French 2, High-Beginning French	4
French 3, Intermediate French	4
French 4, High-Intermediate French	4
German 1, Beginning German	4
German 2, High-Beginning German.....	4
German 3, Intermediate German.....	4
German 4, High-Intermediate German.....	4
Hmong 1, Beginning Hmong.....	4
Hmong 2, High-Intermediate Hmong	4
Japanese 1, Beginning Japanese	4
Japanese 2, High-Beginning Japanese.....	4
Portuguese 1, Beginning Portuguese	4
Portuguese 2, High-Beginning Portuguese	4
Portuguese 3, Intermediate Portuguese	4
Portuguese 4, High-Intermediate Portuguese ..	4
Russian 1, Beginning Russian.....	4
Russian 2, High-Beginning Russian.....	4
Russian 3, Intermediate Russian.....	4
Russian 4, High-Intermediate Russian	4
Spanish 1, Beginning Spanish.....	4
Spanish 2, High-Beginning Spanish.....	4
** Spanish 3, Intermediate Spanish.....	4
** Spanish 3NS, Spanish for Spanish Speakers ..	4
** Spanish 4, High-Intermediate Spanish	4
** Spanish 4NS, Spanish for Spanish Speakers ..	4
Spanish 7, Advanced Spanish: Composition and Grammar	3
Swahili 1, Beginning Swahili	4
Swahili 2, High-Beginning Swahili	4

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

One course from each group (six semester units minimum). This requirement is NOT part of IGETC, but may be completed prior to transfer. CSU campuses have the discretion whether to allow courses to satisfy the CSU United States History, Constitution and American Ideals (AI) graduation requirement to count in both Areas 3B/4 and to meet the AI graduation requirement.

Group 1:

Political Science 2, 2H, American Government

Group 2:

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

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

The following information is taken from the University of California's website at www.universityofcalifornia.edu.

U.C. Berkeley

IGETC is acceptable for all majors in the College of Letters and Science. The Haas School of Business and the Colleges of Engineering, Environmental Design and Chemistry have extensive, prescribed major prerequisites. In general, IGETC is not appropriate preparation for majors in these colleges. Although IGETC satisfies breadth requirements for most majors in the College of Natural Resources, specific lower division major requirements must still be satisfied; check with the college or visit the ASSIST website for more information.

U.C. Davis

IGETC works well for students planning for Bachelor of Arts majors with few units of lower-division preparation. Bachelor of Science degrees and high-unit majors often have many courses of lower-divisions preparation. In these cases, the UC Davis GE pattern is the best choice.

Students in the College of Engineering who have satisfied IGETC are still required to complete two upper-division general education courses at UC Davis.

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

The School of Engineering and the School of Natural Sciences do not recommend IGETC.

U.C. Riverside

The Marian and Rosemary Bourns College of Engineering (BCOE) accepts completion of IGETC as satisfying the majority of the college's breadth requirement for transfer students. Some additional breadth coursework may be required after enrollment (For more information, see the Bourns College of Engineering Breadth Requirements). However, prospective students are strongly encouraged to focus on preparation coursework for their desired major, such as mathematics, science and other technical preparation coursework. Strong technical preparation is essential for success in the admission process and, subsequently, in all coursework at Bourns. The College of Natural and Agricultural Sciences does not accept IGETC, although course taken to satisfy IGETC may be applied toward the college's breadth pattern. The College of Humanities, Arts, and Social Sciences and the School of Business Administration accepts IGETC.

U.C. San Diego

IGETC is accepted by John Muir, Earl Warren, Sixth and Thurgood Marshall colleges only. Students completing IGETC are welcomed at Eleanor Roosevelt and Revelle colleges; however, they must fulfill the specific general education requirements of those colleges. At UCSD, all majors are available to students in each college, so students who choose IGETC will not be restricted in their choice of major as a result.

U.C. Santa Barbara

Students who transfer into the College of Letters and Science and the College of Creative Studies may use IGETC to substitute for general education requirements. Students planning to transfer into a major in computer science or the biological or physical sciences must be careful to complete lower-division major prerequisites to ensure competitiveness and make normal, timely progress through

the major. Transfer students in the College of Engineering are encouraged to focus on the preparation for their major rather than on general education courses, but may also use IGETC to substitute for general education requirements. As part of their general education, all students in the College of Engineering are required to complete a depth requirement. Students who wish to satisfy the depth requirement prior to transfer must complete a yearlong sequence in the history of world civilization, history of Western civilization, history of the United States, history of Western philosophy or history of Western art. Students may want to choose courses for IGETC that will concurrently satisfy the depth requirement. Students may also complete the depth requirement with upper-division coursework after transferring.

U.C. Santa Cruz

Transfer students intending to pursue any major in the physical and biological sciences or the Jack Baskin School of Engineering should not follow IGETC because it will not provide them with enough lower-division preparation for their majors.

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

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

ADMINISTRATIVE POLICIES

Student Conduct Standards

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

State Center Community College District (SCCCD) Policy Statement

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

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

1. prevents other students from pursuing their authorized curricular or co-curricular interests;
2. interferes with or disrupts faculty and administrators who are fulfilling their professional responsibilities;

3. prevents classified employees from fulfilling their prescribed duties;
4. disrupts presentations by authorized guests; or
5. deliberately endangers the safety of persons, or the security of college property.

Student Assembly

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

Exercise of Free Expression

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

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

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

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

Student Protests and Demonstrations

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

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

Student Publications

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

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

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

Computer/Network Equipment Use Policy

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

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

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

Each student is expected to abide by the District's Acceptable Use Policy (www.scccd.edu/index.aspx?page=142). The District is the sole determiner of the interpretation and application of the Acceptable Use Policy. It is understood that if a student violates any of the above rules, he/she is subject to removal from the computer facility as well as discipline as a student.

No Smoking in Campus Buildings

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

Drug Abuse Policy

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

Academic Freedom

General Principles

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

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

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

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

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

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

Academic Dishonesty

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

Cheating

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

Plagiarism

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

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

Authority and Disciplinary Actions

A student enrolled in courses offered by any college or center of the State Center Community College District assumes an obligation to conduct him/herself in a manner

compatible with the college's function as an educational institution. A student may be disciplined, utilizing the procedures set out in Administrative Regulation 5520, for any of the following causes which must be related to college attendance or activity:

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

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

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

Student Rights

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

Removal from Class by Instructor

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

Grievance Policy for Students

Students who reasonably believe a college decision or action has adversely affected his or her status, rights, or privileges may file a student grievance form and submit it to the Office of the Vice President of Student Services Office (Student Services Building, Room 224). Students are expected to make a reasonable effort to resolve matters informally with either the person whom the student has a grievance and then that person's supervisor or a college administrator, if necessary. Student grievance forms are located in the Office of the Vice President of Student Services.

Rights and Responsibilities

Open Enrollment

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

Student Enrollment Responsibilities

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

Parking Regulations

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

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

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

Students may pick up a copy of the complete parking regulations at Campus Police, Calaveras and Weldon, or at the College Business Office, Administration Building, room 109.

Statement of Nondiscriminatory Policy and Obligations

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

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

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

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

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

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

Declaración: Póliza de la No-Discriminación y las Obligaciones

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

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

Fresno City College reconoce su obligación de proveer accesibilidad total al programa a través de Fresno City College para personas discapacitadas. 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 provisiones 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 nees rau kev tuaj nkag kawm ntawv thiab kev ua hauj-lwm nyob hauv college tej programs thiab lwm yam rau txhua tus, nrog rau kev kawm hauj lwm nyob hauv tsev kawm ntawv. Yog xav paub txog txoj cai vaj-huam sib luag no, muaj kev tsis txaus siab los sis xav tau ib daim ntawv qhia txog txoj cai ntawm kev tawm suab txog tej kev tsis txaus siab thaum raug neeg ntxub ntxaug ntawd no, mus cuag tau rau:

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

lwm nyob rau hauv tsev kawm ntawv nqib siab no li.

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

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

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

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

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

The law authorizes the release of directory information in the absence of student objection. Please contact the Vice President of Student Services for this information. Directory information includes name, address, telephone number, date and place of birth, major field of study, participation in activities, dates of attendance, degrees and awards, and last institution attended. Objection, if any, to the release of this information may be made known in writing by filing the proper form at the Admissions and Records Office. Such objection shall be in force until changed by the student.

Sexual Harassment Policy

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

are concerned and will take action to eliminate sexual harassment. Engaging in sexual harassment is conduct which may subject the harasser to disciplinary action.

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

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

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

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

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

Change of Address, Telephone Number

Students who have a change of address or telephone number are required to officially notify the college by clicking "Update Address, Telephone" on WebAdvisor or submitting an "Address Change" form at www.fresnocitycollege.edu/forms-online.

Other Policies

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

STUDENT SUPPORT SERVICES

Fresno City College is a community college that cares about students' success. As a FCC student, you will find a 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 textbooks, supplies and other articles of interest to the college community. Regular business hours are 7:30 a.m. to 7:00 p.m. Monday through Thursday and from 7:30 a.m. to 3:30 p.m. Friday. During the first and second weeks of each semester, hours are extended. The Bookstore is also open during the summer on a shortened day schedule but is not open in the evening hours.



The Associated Student Government at Fresno City College provides all students the opportunity to gain leadership experience and valuable student club participation with various activities and community service projects throughout the academic year.

Refund Policy

1. A receipt is required. Students must present their current cash register receipt with the correct dollar amount of the merchandise during the stated refund period. No refund will be given without the original receipt. Students have 5 working days from the date on the receipt to return textbooks and 30 days for non-textbook items.
2. All sales are final on scantrons, tradebooks/novels, study aides and various electronics and software (if opened).
3. A full refund is given when a class has been cancelled by the College and textbook(s) are in the same conditions as initially bought. In other cases, there may be a 10% handling/restocking charge.
4. Refunds will be issued in the same manner as paid (if paid with a credit/debit card – refund will be made to credit/debit card, not cash.)
5. Textbook condition: Books must be in new condition, clean, free of all marks and erasures. Soiled, creased or marked books will be considered a “used” book and will be refunded at the used price (75% of new book price). Wrapped, loose-leaf textbooks, e-books or boxed merchandise are non-refundable once opened.
6. Used textbooks are sold “as is.” Because these books have been used by other customers prior to sale, the Bookstore cannot guarantee the life expectancy of any used books. Used textbooks must be returned in salable condition.
7. Access codes are non-returnable if opened or if codes are exposed.

8. No refunds will be given during the last four weeks of instruction of any term.
9. The bookstore reserves the right to make the decision on the condition or salability of the merchandise.

Personal checks are accepted with valid I.D. and student identification number. There is a \$25 service charge for all returned checks. Checks not clearing will result in a hold on student records. The bookstore also accepts VISA, MasterCard, Discover Card, and American Express. Text books can be ordered on-line at <http://mycampushub.com>. Shipments cannot be mailed to P.O. boxes. For further information, call 442-8261.

CalWORKs

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

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

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

If you are interested in the CalWORKs program or want to inquire about eligibility for CalWORKs benefits, telephone Workforce Development at 442-8286.

Child Development Center

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

Development Center webpage via the FCC website (www.fresnocitycollege.edu), and click the Child Development Center link for enrollment and other information.

College Relations

High school and community outreach services as well as new student orientation are coordinated through the College Relations office. College Relations specialists regularly visit high schools, businesses and community agencies to advise prospective students regarding college planning. Call 442-8225 for more information.

Counseling Department

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

The Fresno City College counseling staff believe their primary responsibility is to assist all students in realizing their full potential. Students can develop personal initiative and responsibility for planning their future only to the extent to which they have knowledge about themselves and the goals they have set.

The Fresno City College Counseling Department provides complete counseling and guidance services. Analyzing individual interests and abilities, making educational and career choices, improving study habits and skills, resolving personal problems, and adjusting to college life are among the services. 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 of the registration period to obtain current information regarding their planned program and any catalog revisions. Counseling sessions and workshops are available without charge.

The Counseling Department and Career Center is located on the upper level of the Student Services Building. Call 442-8226 for more information.

Career Center

The Career Center, a component of Counseling, is located on the upper level of the Student Services Building. It serves as a resource center for students, counselors, and faculty. The Center offers information on thousands of occupations and provides assistance with career planning. Trained staff members are available to provide guidance and direction in the use of materials and services.

Student Support Services

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

The Career Center also houses a collection of California college catalogs as well as catalogs for out-of-state colleges, college handbooks, and indexes to programs of study in the U.S.

To help students with program planning, the Center maintains files of major sheets for over 600 majors. These sheets outline courses required for both Fresno City College majors and CSU, Fresno transfer majors.

In a changing job market, knowledge of the world of work and career planning skills are essential. The Career Center is an excellent place to start gathering information and exploring possibilities for the future. Most services are free to current students. For more information, visit the Career Center or call 442-8291.

Transfer Center

The Transfer Center assists students with the transition from Fresno City College to a baccalaureate level college or university. The center provides a variety of informational resources and services for students. The center coordinates transfer activities and academic advising with the nine campuses of the University of California, the 23 campuses of the California State University, and provides information on public and private colleges and universities.

The Transfer Center Program supportive services include but are not limited to:

- Transfer advising by counselors and university representatives;
- University of California Transfer Admission Guaranteed (TAG) Programs for early admissions after completing a series of major preparatory courses to: 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 a 2.8 and will complete 60 University of California units—the University of California provides admission priority to students applying from California community colleges (See Transfer Center counselor for updates and deadlines);
- Assistance with the college/university application and transfer procedures including housing, scholarship and financial aid;

- Sponsor tours and fieldtrips to various colleges and universities;
- Host the annual Transfer Day in September;
- Offer transfer application workshops;
- Offer computer/Internet access to university applications and research.

The Transfer Center is located on the upper floor of the Student Services Building. For more information, or to schedule a counseling appointment, call (559) 442-8290.

Disabled Students Programs and Services (DSP&S)

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

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

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

Each student with a disability 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.)

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

1. Special classes
2. On campus mobility assistance

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

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

District Police

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

Employment Resource Center

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

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

Extended Learning Center—Reading, Writing and Math Lab

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

Extended Opportunity Programs and Services (EOPS)

EOPS is a state-supported project that provides a comprehensive program of services for low-income and academically disadvantaged students. The project includes academic counseling, personal advisement, special instruction, summer readiness, career guidance, tutorial assistance, academic mentoring, financial aid, college transfer counseling, book grants, emergency loans, vocational internships, CARE (a program for single head of household parents) 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 or transfer success.

Students are identified as eligible by the project staff, contacted and provided an orientation, which specifies student and program mutual responsibilities. EOPS mandated services such as educational plan development, progress review session, tutorial participation and end-of-term evaluation are specified.

Participants must enroll in 12 units and maintain a minimum of 8 units throughout each semester including the classes specifically designated for his/her major. Once selected, the EOPS student continues to receive top priority for continuing EOPS assistance as long as he/she maintains adequate academic progress and meets all program requirements.

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

Financial Aid

Financial Aid and Scholarships

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

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

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

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

Students must apply by March 2 of each year prior to the fall semester if they wish to be considered for the Cal Grant program. Those students applying for the fall semester will be given priority, if eligible, for other state and federal programs if their application is processed and received by the Financial Aid Office by April 15 of each year. For more information, call 442-8245.

Coursework Repeatability

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

Return of Federal Financial Aid Based Upon Total Withdrawal

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

Financial Aid Satisfactory Progress

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

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

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

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

Asistencia financiera

Asistencia financiera y becas

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

- Becas PELL federales
- Programa Federal Work Study
- Becas Federal Supplemental Educational Opportunity Grant
- Beca Academic Competitive Grant
- Préstamos federales directos para estudiantes

- Exención del cargo de inscripción de la Junta de Gobernadores
- Becas Cal Grant
- Programa Extended Opportunity Programs and Services (EOPS)
- Becas de la Oficina de Asuntos Indígenas
- Obras becas institucionales y no institucionales

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

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

Los estudiantes deben inscribirse antes del 2 de marzo de cada año antes del semestre de otoño si quieren ser tenidos en cuenta para el programa de la beca Cal Grant. A los estudiantes que presenten su solicitud para el semestre de otoño se les dará prioridad, si son elegibles, para otros programas estatales y federales si su solicitud se procesa y recibe en la Oficina de Asistencia Financiera antes del 15 de abril de cada año. Para obtener más información, llame al 442-8245.

Repetición de un curso

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

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

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

Avance satisfactorio para la asistencia financiera

Para ser elegible para participar en los programas de asistencia financiera para estudiantes en virtud del Título IV otorgados por el Departamento de Educación de los EE.UU. y por State Center Community College District,

los estudiantes deben mantener un avance académico satisfactorio en un programa orientado a conseguir un título o un certificado en el college o un pase para transferencia a una institución de cuatro años.

Los estudiantes deben mantener al menos un 2.0 y completar como mínimo el 67 por ciento de las unidades iniciadas cada semestre de conformidad con la Política de Avance Académico Satisfactorio para la Asistencia Financiera. Los estudiantes dejarán de ser elegibles para obtener asistencia financiera una vez que hayan intentado el 150 por ciento de las unidades requeridas necesarias para su objetivo educativo. Además, tampoco se podrán proporcionar fondos para un estudiante por más de 30 unidades de clases de recuperación. El estudiante debe estar inscrito en un programa elegible en Fresno City College, y las clases de recuperación deben ser necesarias para que el estudiante prosiga con un programa de educación pos-secundaria elegible.

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

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

Chaw Pab Nyiaj Kawm Ntawv (Financial Aid)

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

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

- Qhov Nyiaj Tsoom Fwv Muab Pab (Federal PELL Grants)

- Qhov Nyiaj Tsoom Fwv Them Ua Hauj Lwm (Federal Work Study)
- Qhov Nyiaj Pab Ntxiv Rau Kev Kawm Ntawv (Federal Supplemental Educational Opportunity Grants)
- Qhov Nyiaj Tau Los Ntawm Kev Kawm Tau Ntawv Zoo (Academic Competitive Grant)
- Qhov Nyiaj Txais Los Ntawm Tsoom Fwv (Federal Direct Student Loans)
- Qhov Kev Zam Tsis Kom Yus Them (Boards of Governors Enrollment Fee Waiver)
- Qhov Nyiaj Pab Los Hauv Xeev California (Cal Grants)
- Qhov Nyiaj Pab Rau Kev Kawm Ntawv Los Hauv Koom Haum EOPS Los (Extended Opportunity Programs and Services (EOPS))
- Qhov Nyiaj Tau Los Hauv Cov Neeg Indian Lub Koom Haum Los (Bureau of Indian Affairs Scholarships)
- Qhov Nyiaj Tau Los Ntawm Lwm Cov Koom Haum Los

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

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

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

Cov Hoob Uas Rov Qab Kawm Tau

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

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

Thaum ib tug neeg kawm ntawv muab nws cov hoob rho tawm txog 60 feem 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 Qhov Kev Ncaj Ncees

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

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

Tag nrho cov neeg kawm ntawv uas raug txiav tsis pab nyiaj rau lawv lawm ces yuav tsis muaj feem nkag tau rau qhov qhoos kas pab nyiaj no lawm vim lawv kawm tsis tau ntawv los sis kawm tsis tau qhab nias zoo muaj cai sau ntawv tuaj foob qhov kev txiav txim no tau. Pab neeg saib xyuas qhov kev foob (The Financial Aid Appeal 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 dining center offers an inviting atmosphere to share ideas or study. Fast food is available at the Campus Café, which features cooked-to-order breakfast and lunch items. Gourmet coffees, juices, baked pastries and snack items are also available. The Campus Café is open for breakfast, lunch and dinner Monday through Thursday and breakfast and lunch on Friday.

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

Taher Food Services offers catering services for campus functions.

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

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

Health Services

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

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

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

Housing Information

A list of housing accommodations in private homes and apartments for men and women may be secured by contacting the Director of Student Activities in the College Center. There are also a few homes which will provide

room and board to students who are interested in working. The college assumes no responsibility for contracts made between landlords and students. Call 265-5711 for more information.

Learning Resources Center (LRC)

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

Academic Computer Lab – LI-118

The Academic Computer Lab has over 70 computers for all Internet and research needs. Some computers are loaded with course specific software. A vend-card copying and printing service is available. For more information call 442-8208.

Library

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

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

Tutorial Services – LI-134

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

course so students should check tutor availability with the Tutorial Center receptionist.

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

Writing and Reading Center – LI-134 and Mezzanine

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

Lost and Found

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

Psychological Services

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

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

Public Information

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

produced by the Public Information Office, using the most advanced techniques in desktop publishing.

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

Special Student Programs

IDILE Program

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

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

Puente Project

The Puente Project at Fresno City College provides students with accelerated writing instruction, sustained academic counseling, and mentoring by professionals from the community. Students participate in the program for two consecutive semesters. The program consists of English 125, English 126, and Counseling 43 the first semester and English 1A and Counseling 54 the following semester. The course content of the Puente classes has a Chicano/Latino emphasis. Throughout both semesters, Puente students also maintain contact with their assigned Puente mentor.

The purpose of the Puente Project is to increase the number of Fresno City College Puente students who transfer to four-year colleges and universities. Puente students participate in extra-curricular activities and field trips that promote transfer opportunities. Success at Fresno City College and the continued pursuit of higher education is greatly emphasized. The Puente Project is open to all students. For information call 442-4600, ext. 8644.

Strengthening Young Men by Academic Achievement (SYMBAA)

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

USEAA Academic Program

USEAA (pronounced “you see ah”) Academic Program at Fresno City College was established in the fall of 1999 to serve the needs of Southeast Asian-American students in higher education. The program has a special emphasis on the Southeast Asian-American culture and experience and is designed to prepare students for transfer success to four-year colleges or universities. However, USEAA is open to all students from diverse backgrounds and ethnicities who are eligible for English 125 and 126.

USEAA students participate in various activities that promote student success. They take English 125, English 126, and Counseling 147A in the fall semester and English 1A and Counseling 48 in the spring semester; English 1A is a transferable course. English instructors teach the effective development of college reading, writing, and composition skills in stimulating classroom environments. Students also receive personalized academic, career, and personal counseling from USEAA counselors to assist in planning their education.

USEAA promotes an environment that motivates students to learn, develop, grow, and achieve. The USEAA office is located above the bookstore, 2nd floor, room 223, (559) 442-4600, ext. 8639, or email: graciela.ramirez@fresnocitycollege.edu.

Telephone and Mail Services

Telephone calls will not be transmitted to students. In cases of extreme emergencies, please call the District Police Department. Pay telephones are available for out-going calls around the campus. Mail should not be addressed to students in care of the college.

TRIO Programs

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

Student Support Services Program (SSSP)

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

Upward Bound Program

The FCC Upward Bound program is an intensive pre-college enrichment program designed to help first generation, economically disadvantaged high-school students improve their academic performance, and prepare for college. The long term goal is to pursue careers that require a bachelors’ degree or higher. The program provides tutorial and instructional sessions conducted at partnering high schools, FCC Saturday Empowerment Sessions, and FCC Summer School. Upward Bound program office is located in SC-216. (559) 499-6031.

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, executive and legislative vice presidents, president pro tempore, student trustee and 16 senators.

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

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

Organization of New Clubs

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

Social Activities

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

Athletics

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

Fresno City College is a member of the Central Valley Conference in most sports and competes in the Bay Valley Conference for cross country, wrestling and women's golf, and competes in the Coast Conference for Women's Badminton.

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

Publications

About Ourselves

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

IntenseCity

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



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

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

The Ram's Tale

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

The Rampage

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

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

Forensics

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

Museum of Anthropology

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

Music Activities

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

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

Theatre Arts and Dance

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

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



The Music Department provides a broad range of experience for students in the classroom and on stage with concerts and recitals. The college choral group pictured here performs in the newly renovated Auditorium in the Old Administration Building.

SPECIAL AREAS OF STUDY

Allied Health

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

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

Career & Technology Center

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

CTC is located at 2930 E. Annadale Avenue, Fresno. For a complete listing of classes, call (559) 486-0173.

AUTOMOTIVE COLLISION REPAIR (ACRCTC)

371 FUNDAMENTALS OF WELDING TECHNOLOGY AND WORKING SHEET METAL

5 lecture hours, 25 lab hours, (10 weeks), (300 total hours), (Repeats = 3)

PREREQUISITE: None.

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

372 BODY WORK TECHNOLOGY

5 lecture hours, 25 lab hours, (10 weeks), (300 total hours), (Repeats = 3)

PREREQUISITE: None.

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

373 AUTOMOTIVE REFINISHING TECHNOLOGY

5 lecture hours, 25 lab hours, (10 weeks), (300 total hours), (Repeats = 3)

PREREQUISITE: None.

Review of the following: compressed air technology, refinishing materials and fasteners, repairing plastics, refinishing equipment technology, vehicle surface preparation and masking, refinishing procedures, color matching and custom painting, and paint problems and final detailing.

AUTOMOTIVE MECHANICS (AMCTC)

371 ENGINE REPAIR

10 lecture hours, 20 lab hours, (20 weeks), (600 total hours), (Repeats = 3), (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

10 lecture hours, 20 lab hours, (30 weeks), (900 total hours), (Repeats = 3), (Formerly AMVTC 72)

Basic skills necessary for an entry level job. Competency-based similar to those operations performed by automotive shop professionals. Prepares students to take the ASE certification tests.

INDUSTRIAL TRAINING (ITCTC)

371 WAREHOUSE AND DISTRIBUTION CAREERS

3 lecture hours, 6 lab hours, (12 weeks), (108 total hours), (Repeats = 3), (Formerly ITVTC 71)

Forklift driving, basic computer operation, inventory control, cash register operation, strapping equipment and warehouse procedures.

372 WAREHOUSE AND DISTRIBUTION CAREERS

3 lecture hours, 6 lab hours, (12 weeks), (108 total hours), (Repeats = 3)

PREREQUISITE: None.

Forklift safety and operation skills necessary for employment, inventory and warehouse procedures utilizing computer based program, applied mathematics, warehouse equipment like strapping and pallet jack.

MAINTENANCE MECHANIC (MMCTC)

370 FUNDAMENTALS OF WELDING AND MACHINE SHOP

10 lecture hours, 20 lab hours, (10 weeks), (300 total hours), (Repeats = 3), (Formerly MMVTC 70)

Basic gas, arc, and short arc (mild steel only). Precision measurement, hand tools, engine lathe, drilling, milling.

371 FUNDAMENTALS OF HYDRAULICS AND PNEUMATICS

10 lecture hours, 20 lab hours, (10 weeks), (300 total hours), (Repeats = 3), (Formerly MMVTC 71)

Pumps, actuators, valves, schematics, compressors.

372 ELECTRICAL FUNDAMENTALS

10 lecture hours, 20 lab hours, (10 weeks), (300 total hours), (Repeats = 3), (Formerly MMVTC 72)

Electrical principles, AC/DC circuits, motors, motor starters, relays, wiring, troubleshooting, schematic reading, test instruments.

MANUFACTURING MECHANIC (MFGMCTC)

351 INTRODUCTION TO MANUFACTURING

9 lecture hours, (1 week), (Pass/No Pass), (Repeats = 3)

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

9 lecture hours, (2 weeks), (Pass/No Pass), (Repeats = 3)

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

2.25 lecture hours, 6.75 lab hours, (2 weeks), (Pass/No Pass), (Repeats = 3)

PREREQUISITE: None.

An introduction to the equipment and peripheral devices used to interface with industrial controlling devices.

352C JOB PREPARATION

2.25 lecture hours, 6.75 lab hours, (2 weeks), (Pass/No Pass), (Repeats = 3)

ADVISORY: Completion of Manufacturing Mechanic CTC 352B.

Preparing resumes, portfolios, and improving employment-seeking skills.

352D TECHNICAL REPORT WRITING

2.25 lecture hours, 6.75 lab hours, (2 weeks), (Pass/No Pass), (Repeats = 3)

ADVISORY: Completion of Manufacturing Mechanic CTC 352B.

Identify and write various types of reports; analyze data, and record information that are associated with production work.

353A FLUID POWER FUNDAMENTALS

9 lecture hours, (1 week), (Pass/No Pass), (Repeats = 3)

PREREQUISITE: None.

Fundamentals of fluid power; physics principles pertaining to fluid power; various differences in hydraulics and pneumatics; characteristics of liquids and gases; how and why the fluid power industry was started.

353B PNEUMATIC FUNDAMENTALS

2.25 lecture hours, 6.75 lab hours, (2 weeks), (Pass/No Pass), (Repeats = 3)

ADVISORY: Completion of Manufacturing Mechanic CTC 353A.

Theory and application in the operation, service, and function of hydraulic systems including design and application of systems in industrial environments.

353C HYDRAULIC FUNDAMENTALS

2.25 lecture hours, 6.75 lab hours, (2 weeks), (Pass/No Pass), (Repeats = 3)

ADVISORY: Completion of Manufacturing Mechanic CTC 353A.

Theory and application in the operation, service, and function of hydraulic systems including design and application of systems in industrial environments.

354A POWER TRANSMISSION

9 lecture hours, (1 week), (Pass/No Pass), (Repeats = 3)

PREREQUISITE: None.

Study and application of power transmission through chains, belts, gear trains and augers.

354B WELDING FUNDAMENTALS

1.5 lecture hours, 13.5 lab hours, (3 weeks), (Pass/No Pass), (Repeats = 3)

ADVISORY: Completion of Manufacturing Mechanic CTC 354A.

Basic metallurgy and properties of metals, oxyacetylene welding and cutting processes, arc welding, and safety within the work environment.

354C ELECTRICAL FUNDAMENTALS

1.5 lecture hours, 13.5 lab hours, (3 weeks), (Pass/No Pass), (Repeats = 3)

ADVISORY: Completion of Manufacturing Mechanic CTC 354A.

Introduction to the basics of electrical fundamentals, AC circuitry, as well as an instruction to motor control.

Developmental Education Program

The Developmental Education Program is designed to prepare students for degree credit instruction. The program is recommended for students who are assessed as not meeting the skills requisites for Math 101 or English 125 and 126. It is not recommended for students who are learning English as a second language or who have identified learning disabilities. Course credits earned in the program do not count for the associate degree but do count for determining full- or part-time student status (i.e., workload credit). The particular courses a student takes depend upon the individual needs of the student.

Entrance into the Program

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

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

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

Benefits of the Program

Developmental Education students enjoy the following benefits:

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

Developmental Education Curriculum

ENGLISH WRITTEN EXPRESSION	Units
English 250, Basic Writing	4
English 252, Writing Improvement	4
ENGLISH READING	
English 260, Basic Reading.....	4
English 262, Reading Improvement.....	4
MATHEMATICS	
Math 260A-260D, Arithmetic Review	Maximum of 6
or Math 250, College Arithmetic.....	3

English as a Second Language (ESL) Program

Purpose

The ESL 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 ESL in the program: Low-intermediate (ESL 263R/263W), intermediate (ESL 264R/264W), advanced-intermediate (ESL 265R/265W), and advanced (ESL 67 and 68). ESL 263R, 264R, and 265R offer instruction in vocabulary and reading. ESL 263W, 264W, and 265W offer instruction in grammar and writing. ESL 68 emphasizes reading skills and ESL 67 emphasizes writing skills.

Placement

Initial placement in ESL 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 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.

Fresno City College Training Institute

Increasing the value of a company's workforce starts with the training or retraining of employees. The Fresno City College Training Institute offers the faculty and resources of a solid community college and can provide training on site. As partners in the economic development of the Central San Joaquin Valley, the Fresno City College Training Institute has training resources for any industry or business that wants to expand or locate here in the valley.

The Fresno City College Training Institute has become a primary resource for training, reeducation and continuing education for business, government and industry. "Custom classes," seminars or workshops provide learning opportunities with a variety of benefits. Classes are short-term and not-for-credit. Call the Fresno City College Training Institute, 265-5760, for more information.

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 of California and Cali-



Each fall semester students in the business law class organize and present a mock trial. The trial is held in the FCC Law Library.

ifornia State University campuses. The courses are innovative and reflect the instructors' interest in and commitment to the program's academic, intellectual, cultural, and social goals.

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

The following requirements apply for consideration for acceptance into the Honors Program:

- G.P.A. of 3.5 (4.00 scale), or
- Graduation from high school in the top 25th percentile, or
- Combined scores of 1650 on the SAT or a composite score of 24 on the ACT, and
- Superior performance on an essay, and
- Three letters of recommendation, and
- Eligibility for English 1A, and
- Successful interview by the Honors Advisory Committee.

For details regarding the Honors Program, please refer to page 150 in this catalog or consult with Honors Program staff at 442-8207.

Police Academy

Fresno City College's State Center Regional Training Facility is a Public Safety Training Academy specializing in the training of public safety personnel. All police classes are certified by the Commission on Peace Officer Standards and Training. All correctional/probation classes are certified by the Board of Correction's Standards for Training for Corrections.

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

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

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

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

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

Veterans Services

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

Educational Benefits for Veterans and Dependents

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

1. Veterans who were separated from active duty with the armed forces within the past 10 years.
2. Spouses or children (under 26 years of age) of veterans who were either killed while serving in the armed forces or were totally and permanently disabled while on active duty.
3. Widows or children of veterans who were residents of California at the time of entering the service and have a 50 percent disability may qualify for Cal Vet benefits.



A full array of counseling and academic services are offered to veterans and their dependents. Each November, a special Veterans Day ceremony is conducted to honor veterans who have served our country.

4. Persons in one of the armed forces reserve programs who meet the minimum requirements of a special benefit program may be entitled to receive some educational and/or financial assistance.
5. Post 9-11 benefits will pay eligible individuals:
 - Tuition and fees directly to the school, not to exceed the maximum in-state tuition and fees at a public Institution of Higher Learning.
 - A monthly housing allowance based on the Basic Allowance for Housing for an E-5 with dependents at the location of the school.
 - An annual books and supplies stipend of \$1,000 paid proportionately based on enrollment.

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

Further information may be obtained from Veterans Services, Student Services building, lower level, or from any Veterans Administration office.

Progress and Attendance Policies

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

The Veterans Administration will be notified of any veteran who has been dismissed for not making satisfactory progress. For further information, contact Veterans Services, Student Services building, lower level, Room 108.

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

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

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

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

Academic Limitations

Veterans/dependents attending Fresno City College who have earned a degree and/or have attempted sixty (60) or

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

Weekend College

The Weekend College program at Fresno City College allows for the completion of a Liberal Arts degree in 24 months completely on weekends! This program has been designed specifically for working adults who always wanted a college degree but their work schedules have not permitted the completion of a college degree during the day or traditional evening classes. The Weekend College program provides an educational opportunity to members of the community who are unable or find it inconvenient to attend school during the day or weekday, evening hours, work days, are on-call evenings, work out of town during the week, or work split shifts. The motivated student will be able to complete this program of study in 24 months.

The program fulfills the Associate in Arts degree requirements and it is also a transfer program to the California State University system. It fulfills the lower division general education requirements. The program provides a broad base of educational experiences about aspects of the world which a major area of study may not include.

Note: Refer to a counselor and/or the program section in this catalog for additional information on the above programs.

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 three (3) units per semester for general work experience. Students can earn no more than a total of 16 semester units of Cooperative Work Experience Education subject to the limitations as described below.

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

Types of Cooperative Work Experience

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

School Credit

For the satisfactory completion of cooperative work experience education, the college shall grant credit to a student not to exceed a total of sixteen semester credit hours.

1. General work experience education: No more than three credit hours per semester with a maximum total of six semester credit hours. May be repeated up to three times for not more than six units total.
2. Occupational/vocational work experience education: No more than eight credit hours per semester with a maximum total of sixteen semester credit hours.

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:

78 Special Areas of Study

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, up to a maximum of 8 units for occupational work experience, 3 units for general work experience.

Transfer Credits

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

Qualifications

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

In addition to the above requirements, students enrolling in occupational/vocational work experience courses must be employed in occupations which provide experience directly related to their occupational major. Title 5, Part VI, Division 6, Chapter 3, Section 55311 of California Administrative Code.



The college provides several computer labs and a tutorial center to help students with assignments or projects.

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
- Air Conditioning
- Apprenticeship
- Automotive Technology
- Business Administration
- Business & Technology
- Child Development
- Computer Information Technology
- Construction (Carpentry)
- Criminology
- Drafting
- Educational Aide
- Electrical Systems Technology
- Fashion Merchandising
- Food Service Management
- Graphic Communications
- Human Services
- Journalism
- Marketing
- Medical Assisting
- Paralegal
- Photography
- Recreation
- Registered Nursing
- Respiratory Care Practitioner

Note: Actual class offerings vary by semester.

AREAS OF STUDY BY DIVISION

APPLIED TECHNOLOGY DIVISION

Administration of Justice/Police Academy
 Adult Correctional Officer Core
 Basic Police Academy
 Basic Supervisors
 Community Service Officer
 Juvenile Correctional Officer Core
 Probation Core Course
 Requalification Basic Course
 Safety Dispatcher's Basic Course
 Aerospace Studies
 Air Conditioning
 Air Conditioning Technology Overview
 Commercial Air Conditioning, Heating, and Duct Systems
 Digital Air Conditioning Controls
 Industrial Refrigeration - CARO/EPA Section 608
 Mechanical and Electrical Systems
 Applied Technology
 Apprenticeship
 Automotive and Heavy-duty Electrical
 Automotive Mechanics
 Body and Fender
 Diesel and Heavy-duty Mechanics
 Machine Shop
 Parts Clerk
 Roofing
 Stationary Engineers
 Welding
 Architecture
 Auto Collision Repair Technology
 Automotive Technology
 Auto Tech: GM ASEP
 Building Safety and Code Administration
 Career & Technology Center
 Auto Mechanics
 Auto Collision Repair
 Industrial Training, Warehouse and Distribution Careers
 Maintenance Mechanic
 Manufacturing Mechanic

Computer Aided Drafting and Design
 Computer Aided Manufacturing
 Construction
 Drafting
 Electrical Systems Technology
 Automation Control Technician
 CISCO Certification
 CISCO CCNP Preparation
 Communications Technology
 Control Systems
 Electrical Line/Utility Worker
 Electrical Systems Technology
 Industrial Controls
 Network Security
 Networking/Computer Technician
 Wireless Networks
 Fire Technology
 Basic Fire Academy
 Emergency Medical Technician I
 Emergency Medical Technician I Refresher
 Paramedic
 Graphic Communications
 Digital Video Option
 Graphic Communications
 Graphic Design Option
 Multimedia Option
 Web Design
 Industrial Arts and Technology
 Industrial Technology
 Construction Option
 Manufacturing Option
 Interior Design
 Military Science
 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
 Wind Turbine Technology
BUSINESS DIVISION
 Accounting
 Computerized Accounting
 Full Charge Bookkeeper
 Business Administration
 Entrepreneurial Ventures
 Human Resources Management
 Logistics and Distribution Management
 Retail Management
 Business & Technology
 Business Office Assistant
 Clerical Training
 Computer Applications Software
 Legal Office Professional
 Medical Office Professional
 Medical Billing Assistant
 Microsoft Word
 Office Professional I
 Office Professional II
 Business Management
 Business Finance and Accounting
 Business Finance and Investments
 Human Relations and Communications
 Human Resources and Relations Management and Supervision
 Personal Finance and Investments
 Small Business Management
 Computer Information Technology
 Computer Information Systems
 Data Entry Operator
 Information Security I
 Information Security II
 MCSE Core
 MCSE Networking
 Microcomputer Software Specialist
 Microsoft Access
 Microsoft Excel

Microsoft Office
 Networking/Computer Technician
 Preparation in Microsoft Office
 System Support Specialist
 Web Page Development Option
 Web Developer
 Decision Science
 Fashion Merchandising (Marketing)
 Marketing
 Advertising
 Personal Sales
 Retailing
 Paralegal
 Real Estate
 Broker/Sales Option
 Escrow Option
 Housing Management Option
FINE, PERFORMING, AND COMMUNICATION ARTS DIVISION
 Art
 Art Studio
 Communication
 Dance
 Film
 Journalism
 Music
 Theatre Arts
HEALTH SCIENCES DIVISION
 Dental Hygiene
 Health Information Technology
 Medical Coding
 Health Science
 Medical Assistant - Clinician
 Medical Laboratory Technician
 Nursing, Registered
 Physical Education
 Radiologic Technology
 Recreation
 Recreation Leadership
 Respiratory Care
 Surgical Technology

 Areas of Study by Division

HUMANITIES DIVISION

English
 Composition
 Creative Writing
 Critical Thinking
 Literature
 Reading
 English as a Second Language
 (ESL)
 Vocational ESL
 Foreign Languages
 American Sign Language
 Armenian
 Chinese
 French
 German
 Hmong
 Japanese
 Portuguese
 Russian
 Spanish
 Swahili

Humanities
 Latin American Studies
 Linguistics
 Philosophy

**MATHEMATICS, SCIENCE,
AND ENGINEERING
DIVISION**

Astronomy
 Biology
 Botany
 Chemistry
 Computer Science
 Engineering
 Environmental Studies
 Geography, Physical
 Geology
 Mathematics
 Natural Resources
 Physical Science
 Physics

SOCIAL SCIENCES DIVISION

African-American Studies
 American Indian Studies
 American Studies
 Anthropology
 Asian-American Studies

Chicano-Latino Studies
 Child Development
 Child Development Associate Teacher
 Early Intervention Assistant
 Family Child Care
 Foster Care
 Criminology
 Correctional Science Option
 Forensic Evidence Option
 Law Enforcement Option
 Pre-Academy Training Option
 Culinary Arts
 Advanced
 Basic
 Intermediate
 Cultural Studies
 Dietetic Service Supervision
 Economics
 Food Services
 Food and Nutrition
 Food Service Management

Geography, Cultural/World Regional
 History
 Human Services
 Alcohol and Drug Abuse Counseling
 Option
 Social Work Option
 Liberal Arts
 Liberal Studies
 Political Science
 Psychology
 Sociology
 Teaching
 Education Aide/Special Education
 Teacher Aide
 Teaching, Bilingual
 Teaching, Elementary and Early
 Childhood
 Teaching, Liberal Studies
 Teaching, Secondary
 Women's Studies

OTHER

Adaptive Ornamental Horticulture Skills
 Counseling
 General Work Experience
 Developmental Education Program
 Developmental Services
 Honors Studies
 Individual Study
 Laboratory Assistant
 Library Skills
 Library Technology
 Special Studies
 Supervised Tutoring



The Fresno City College Commencement Ceremonies at the end of each spring semester marks a time of celebration and success as students prepare to transfer or receive an Associate in Arts or Associate in Science degree.

Associate Degree and Certificate Programs

	AA-T	AS-T	AA	AS	CA	CC	C	Catalog Page
Accounting			•		•			97
Accounting, Computerized					•			98
Accounting, Full Charge Bookkeeper					•			98
Adaptive Ornamental Horticulture Skills							•	98
Administration of Justice, Adult Correctional Officer Core							•	99
Administration of Justice, Basic Police Academy					•			99
Administration of Justice, Basic Supervisors							•	99
Administration of Justice, Juvenile Correctional Officer Core							•	99
Administration of Justice, Probation Core							•	100
Administration of Justice, Public Safety Dispatchers' Course							•	100
Administration of Justice, Requalification—Basic Course							•	100
African-American Studies			•					100
Air Conditioning				•	•			100
Air Conditioning, Air Conditioning Technology Overview					•			101
Air Conditioning, Commercial Air Conditioning, Heating and Duct Systems					•			102
Air Conditioning, Digital Air Conditioning Controls					•			102
Air Conditioning, Industrial Refrigeration - CARO/EPA Section							•	102
Air Conditioning, Mechanical and Electrical Systems					•			102
American Indian Studies			•					103
Anthropology			•					103
Anthropology-Archaeology, Archaeological Technician					•			104
Apprenticeship, Automotive and Heavy Duty Electrical							•	104
Apprenticeship, Automotive Mechanics					•			105
Apprenticeship, Body and Fender							•	105
Apprenticeship, Diesel and Heavy-Duty Mechanics						•		106
Apprenticeship, Machine Shop							•	106
Apprenticeship, Parts Clerk							•	106
Apprenticeship, Roofing						•		107
Apprenticeship, Stationary Engineers							•	107
Apprenticeship, Welding					•			108
Architecture				•	•			108
Art			•					109
Art, Studio					•			110
Automotive Collision Repair Technology				•	•			110
Automotive Technology				•	•			110
Automotive Technology, Chassis Technician							•	112
Automotive Technology, Emission Technician							•	112
Automotive Technology, General Motors ASEP Program				•				112
Automotive Technology, Powertrain Technician							•	112
Bilingual/Crosscultural, Spanish-English Major			•					113
Building Safety and Code Administration				•	•			113
Business Administration			•					114
Business Administration, Business Finance and Accounting							•	116
Business Administration, Business Finance and Investments							•	116
Business Administration, Entrepreneurial Ventures							•	114
Business Administration, Human Resource Management Assistant							•	115
Business Administration, Human Relations and Communications							•	117
Business Administration, Human Resource Management and Human Relations							•	117
Business Administration, Logistics and Distribution Management						•		115
Business Administration, Management				•	•			115
Business Administration, Management and Supervision							•	117
Business Administration, Personal Finance and Investments							•	117
Business Administration, Small Business Management							•	117
Business & Technology, Business Office Assistant						•		120
Business & Technology, Clerical Training							•	121
Business & Technology, Computer Applications Software							•	120
Business & Technology, Legal Office Professional				•	•			119
Business & Technology, Medical Office Professional				•	•			120
Business & Technology, Medical Billing Assistant							•	121
Business & Technology, Microsoft Word							•	121
Business & Technology, Office Professional I				•	•			118
Business & Technology, Office Professional II				•	•			118
Career & Technology Center, Auto Collision Repair							•	86
Career & Technology Center, Automotive Mechanics							•	86
Career & Technology Center, Industrial Training							•	87
Career & Technology Center, Maintenance Mechanic							•	87
Career & Technology Center, Manufacturing Mechanic							•	87
Chicano-Latino Studies			•					121
Child Development				•	•			122

AA-T Associate in Arts
for Transfer

AS-T Associate in
Science for
Transfer

AA Associate in Arts

AS Associate in
Science

CA Certificate of
Achievement

CC Certificate of
Completion

C Certificate

Associate Degree and Certificate Programs

	AA-T	AS-T	AA	AS	CA	CC	C	Catalog Page
					•			123
		•						123
				•	•			124
					•			124
					•			124
	•				•			126
				•	•			126
				•	•			126
				•				127
					•			128
							•	128
							•	128
							•	128
					•			129
				•	•			129
							•	129
							•	130
							•	130
				•	•			130
							•	130
							•	131
							•	131
				•	•			131
				•	•			131
				•	•			132
				•	•			133
				•	•			134
				•	•			135
					•			136
							•	136
							•	136
			•				•	136
				•				137
							•	184
				•	•			138
					•			139
					•			139
					•			139
					•			140
					•			140
					•			140
					•			140
					•			141
							•	142
				•				142
				•	•			143
					•			143
							•	85
							•	85
					•			145
				•	•			145
							•	146
					•			146
					•			146
					•			147
				•	•			147
							•	148
			•		•			148
							•	148
					•			148
				•	•			148
				•	•			149
				•	•			150
							•	150
				•	•		•	151
				•	•			152

Associate Degree and Certificate Programs

	AA-T	AS-T	AA	AS	CA	CC	C	Catalog Page
Humanities			•					153
Industrial Arts and Technology				•				154
Industrial Technology, Construction Option				•				154
Industrial Technology, Manufacturing Option				•				154
Journalism			•					155
Liberal Arts, Emphasis in American Sign Language			•					156
Liberal Arts, Emphasis in Anthropology/Criminology			•					156
Liberal Arts, Emphasis in Anthropology/Economics/Geography			•					157
Liberal Arts, Emphasis in Asian Languages			•					157
Liberal Arts, Emphasis in Cultural Studies			•					158
Liberal Arts, Emphasis in Foreign Languages			•					158
Liberal Arts, Emphasis in History/Political Science			•					159
Liberal Arts, Emphasis in Interdisciplinary Science			•					159
Liberal Arts, Emphasis in Philosophy/Humanities			•					160
Liberal Arts, Emphasis in Romance Languages			•					160
Liberal Arts, Emphasis in Social Sciences			•					161
Liberal Arts, Emphasis in Spanish			•					161
Liberal Studies			•					162
Library Technology				•	•			163
Life Science				•				164
Manufacturing Technician							•	164
Marketing				•	•			165
Marketing, Advertising							•	165
Marketing, Fashion Merchandising				•	•			165
Marketing, Personal Sales							•	166
Marketing, Retailing							•	166
Marketing, Retail Management				•	•			166
Mathematics				•				167
Medical Assistant, Clinician				•				167
Music, Commercial Music				•	•			169
Music, Guitar			•					168
Music, Instrumental			•					168
Music, Piano			•					169
Music, Vocal			•					168
Nursing, Registered				•				171
Paralegal				•	•			172
Philosophy			•					173
Photography, Commercial Photography					•			174
Photography, Digital Photography					•			174
Photography, Fine Art Photography					•			175
Photography, Photojournalism					•			175
Photography, Professional				•	•			173
Physical Science				•				93
Psychology			•					175
Psychology, Associates in Arts for Transfer	•							176
Radiologic Technology				•				176
Real Estate, Broker/Sales Option				•	•			177
Real Estate, Escrow Option				•	•			178
Real Estate, Housing Management Option				•	•			178
Recreation Leadership			•					178
Respiratory Care Practitioner				•				179
School to Work, Clerical							•	180
School to Work, Workability							•	181
Sign Language Interpreting Preparation Program					•			181
Sociology, Associate in Arts for Transfer	•							181
Spanish			•					182
Students Understanding College, Careers, Employment, Support and Success (Success)							•	182
Surgical Technology				•	•			182
Teacher Aide, General				•	•			183
Theatre Arts			•					185
Theatre Arts, Associate in Arts for Transfer	•							185
Theatre Arts, Design/Technical Theatre Studies			•					186
Welding Technology, Metal Fabrication Option				•	•			186
Welding Technology, Multi-Process					•			188
Welding Technology, Pipe and Structural Steel Certification Option				•	•			187
Welding Technology, Welding Design and Fabrication					•			188
Wind Turbine Technician					•			189
Women's Studies			•					189

AA-T Associate in Arts for Transfer

AS-T Associate in Science for Transfer

AA Associate in Arts

AS Associate in Science

CA Certificate of Achievement

CC Certificate of Completion

C Certificate

DIVISIONS

Applied Technology Division

Applied Technology Division

Christopher Whiteside,
Dean of Instruction
Division Office:
Applied Technology, T-100
Phone: (559) 442-8273
Fax: (559) 498-8350
Division E-mail:
fcc.appliedtechnology@
fresnocitycollege.edu

The Applied Technology Division provides experiences which serve to guide students in their transition from the classroom to employment, employment upgrade and transfer to other education institutions.

Counselors and educational advisors are available to assist students in planning specific courses of study. To ensure that courses are in keeping with current occupation and industrial practices and requirements, joint management and employee advisory committees are set up in each occupation in which courses are offered.

Major fields of study offered by this division include air conditioning, architectural drafting, automotive collision repair technology, automotive technology, General Motors Technology GM ASEP, building safety and code administration, Cisco, computer aided drafting and design, computer aided manufacturing, construction, electrical systems, fire technology, graphic communications, networking/computer technician, photography, and welding/metal fabrication.

Transfer college programs in architecture and industrial technology are available. Apprenticeship training and trade extension classes, in addition to other fields of study offered by the Applied Technology Division, are also available in the evening programs.

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

Associate in Science Degree

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

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

Associate in science degree requirements can be found under degree requirements on page 33.

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.

Apprenticeship programs included in this section meet state mandated supplemental requirements for indentured apprentices. Upon completion of an apprenticeship program, a certificate of achievement will be awarded. The certificate of achievement programs may also be used as a major to meet the associate in science degree requirement.

Certificates

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

Administration of Justice

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

Air Conditioning

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

Apprenticeship

1. Body and Fender (Major #9080)
2. Diesel and Heavy-Duty Mechanic (Major #9100)
3. Machine Shop (Major #9200)
4. Parts Clerk (Major #9260)
5. Roofing (Major #9300)
6. Welding (Major #9380)

Electrical Systems Technology

1. Industrial Control (EST 50 or MMCTC 372, EST 55A, EST 58, EST 59) (Major #8180)
2. Wireless Networks (EST 61, 62, 269B) (Major #8178)

Fire Technology

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

Work Experience Education

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

These courses are numbered 19. College credit is granted for the work. Inquire through your instructor or see a counselor.

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. Specific apprenticeship program requirements are outlined in the associate degree and certificate programs section.

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 12, 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:** Students must have completed Administration of Justice 270B or AJ 274 or be sworn full-time peace officers.
3. **Basic Supervisory Course:** Students must satisfactorily substantiate that they are currently serving in a supervisory capacity within a criminal justice agency or will be within a one-year period.
4. **Basic Reserve Police Academy, P.C. 832:** Students must be able to demonstrate physical ability to use a firearm and to perform arrest and control techniques with safety. Student must obtain a Department of Justice clearance for firearms possession prior to the firearms portion of this class.
5. **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.
6. **Fire Instructor IB:** Completion of Fire Instructor IA.

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

The nonaffiliated student attending basic peace officer's academies will be responsible for providing the following items (for his/her own use): California Penal Code and Vehicle Code, an approved firearm, ammunition and leather gear, notebook, paper, pens, pencils, uniform, physical training shorts, 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 range fees.

<i>Basic Academy</i>	\$120.00*
<i>P.C. 832</i>	\$45.00*
<i>Basic Reserve Level I</i>	\$45.00*
<i>Basic Reserve Level II</i>	\$60.00*
<i>Basic Reserve Level III</i>	\$45.00*

All courses conducted through the Police Academy Program have in-class registration.

**Range fees are subject to change.*

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) 486-0173.

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 take a reading test before being allowed to register.

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

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

Satisfactory Progress Standards

Satisfactory Progress

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

Placement on Progress Probation

A student will be placed on progress probation if:

1. His/her absences total 30 hours in Automotive Collision Repair, Engine Performance, Maintenance Mechanic: 20 hours in Engine Repair, 10 hours in Industrial Training

Or

2. He/she fails to maintain a “C” average between monthly progress reports.

Removal from Progress Probation

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

Program Dismissal

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

1. His/her accumulated absence hours total 60 in Automotive Collision Repair, Engine Performance, Maintenance Mechanic; 40 in Engine Repair; 17 in Industrial Training

Or

2. His/her monthly grade remains below “C” for two consecutive months.

Readmission Following Progress Dismissal

A student who has been dismissed because of progress probation must petition for readmission.

Following the first dismissal, under District standards, a student will not be admitted to school until one cycle of the class has elapsed. If a student fails to complete the course following his/her initial dismissal, the student shall be dismissed for two cycles of the course. If he/she fails to complete the course after the second dismissal, he/she shall be dismissed again. The third dismissal shall be considered permanent.

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

A Certificate of Completion will be awarded for successful completion of each of the following CTC programs with a minimum “C” grade.

1. Automotive Collision Repair (Major #807V)	Hours
Automotive Collision Repair 371, Fundamentals of Welding Technology and Working Sheet Metal	300
Automobile Collision Repair 372, Body Work Technology	300
Automotive Collision Repair 373, Automotive Refinishing Technology	300
Program Total	900
2. Automotive Mechanics (Major #811V)	Hours
Auto Mech 371, Engine Repair	600
Auto Mech 372, Engine Performance	900

Career & Technology Center

2930 E. Annadale Avenue
Fresno, CA
Phone: (599) 486-0173

3. Industrial Training (Major #852V)	Hours	5. Manufacturing Mechanic (Major #8301)	Hours
Indust Train 371, Warehouse and Distribution Careers	108	MFG Mechanic 351, Intro to Manufacturing	9
Indust Train 372, Warehouse and Distribution Careers	108	MFG Mechanic 352A, Trade Mathematics	18
Program Total	216	MFG Mechanic 352B, Programmable Controllers	18
4. Maintenance Mechanic (Major #806V)	Hours	MFG Mechanic 352C, Job Preparation	18
Maint Mech 370, Weld/Machine Shop	300	MFG Mechanic 352D, Technical Report Writing	18
Maint Mech 371, Hydraulics/Pneumatics	300	MFG Mechanic 353A, Fluid Power Fundamentals	9
Maint Mech 372, Electrical Fund	300	MFG Mechanic 353B, Pneumatic Fundamentals	18
Program Total	900	MFG Mechanic 353C, Hydraulic Fundamentals	18
		MFG Mechanic 354A, Power Transmission	9
		MFG Mechanic 354B, Welding Fundamentals	45
		MFG Mechanic 354C, Electrical Fundamentals	45
		Program Total	225

Business Division

The Business Division at Fresno City College is composed of five departments: Accounting, Business Administration, Business & Technology, Computer Information Technology/Decision Sciences, and Paralegal/Real Estate. Each department offers multiple degree and certificate programs to meet the educational needs of our students.

In addition to traditional, semester length classes, we offer a 25-month evening program for working adults to achieve an associate in arts in Business Administration, and a number of short-term certificate programs.

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

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

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

all of their general education requirements and to take only the classes required by the major.

Classroom to Worksite Collaboration

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

Employment Available

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

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

Business Division

Timothy J. Woods, Ph.D.,
Dean of Instruction

Division Office:

Business Building, BE-110

Phone: (559) 442-8222

Fax: (559) 265-5719

Division E-mail:

fcc.businessdivision@

fresnocitycollege.edu

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 33.

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 33.

Certificate of Achievement

For a listing of certificate of achievement programs, see page 81.

Certificates

Certificate programs are listed below.

Business Administration

1. Business Finance and Accounting (ACCTG 4A/4AH, 4B/4BH; BA 35) (Major #2031)
2. Business Finance and Investments (BA 34, 35) (Major #2271)
3. Entrepreneurial Ventures (BA 50, 51, 52) (Major #2041)
4. Human Relations and Communications (BA/BT 5, BA 33) (Major #2510)
5. Human Resource Management Assistant (BA 31, 33, BT 9/BT 25/CIT 20) (Major #2052)
6. Human Resource Management and Human Relations (BA 31, 33) (Major #2520)
7. Management and Supervision (BA 40, 43) (Major #2182)
8. Personal Finance and Investments (BA 30, 34) (Major #2032)
9. Small Business Management (BA 38, 51) (Major #2030)

Business and Technology

1. Clerical Training (BT 370A, 370B) (Major 2472)
2. Computer Applications Software (BT 9, 10, 14, 106) (Major #2202)
3. Microsoft Word (BT 28, 29) (Major #2323)

Computer Information Technology

1. Information Security I (CIT 57, 58A, 58B, 58C) (Major #2714)
2. Information Security II (CIT 58D, 58E, 58F) (Major #2715)
3. MCSE Core (CIT 50, 51, 52) (Major #2721)
4. Microsoft Access (CIT 26, 27) (Major #2707)
5. Microsoft Excel (CIT 23, 24) (Major #2709)
6. Microsoft Office (CIT 20, 21) (Major #2711)
7. Preparation in Microsoft Office (BT 27, 28, 29; CIT 20, 23, 24, 26, 27, 29) (Major #2710)
8. System Support Specialist (CIT 40, 45, 48; EST 60) (Major #2723)
9. Web Page Development (CIT 82, 85, 93) (Major #2741)

Marketing

1. Advertising (BA 33; MKTG 10, 12) (Major #2113)
2. Personal Sales (BA 33, MKTG 10, 11) (Major #2114)
3. Retailing (BA 33, MKTG 10, 14) (Major #2116)

Co-Curricular Activities

As an integral part of the instructional program, the Business Division supports three co-curricular groups. The effort is represented by the Paralegal Student Organization (Paralegal majors), the Collegiate Entrepreneurs Organization (CEO) and the CIT Zero Computer Technology Club. Students have the opportunity to participate in service-oriented activities and field trips that benefit both the college and community. These student organizations are designed to encourage sharing of common goals and to promote further development of knowledge and skill sets. In addition, co-curricular activities provide a medium through which leadership qualities can be taught and the laboratory in which they can be tested, practiced and proven. Membership is open to students with an interest in the subject, and active participation is highly encouraged.

These co-curricular activities provide a medium through which leadership qualities can be taught and the laboratory in which they can be tested, practiced and proven. Membership is open to students with an interest in the subject, and active participation is highly encouraged.

Nontransfer Students

The suggested courses of study offered by the Business Division prepare the student for immediate employment in business.

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
- Dance
- Journalism
- Music, Guitar
- Music, Instrumental
- Music, Vocal
- Theatre Arts
- Theatre Arts for Transfer

Associate in Science Degree

- Music, Commercial Music

Certificate of Achievement

- Studio Art
- Music, Commercial Music

Communication Arts

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

The Forensic program at Fresno City College has long been recognized as one of the most outstanding programs among community colleges

in both the state and the nation. Students in the program compete in several tournaments during the academic year, which lead to competition in the state and national tournaments for invited students.

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

Fine and Performing Arts

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

Art Space Gallery

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

Music

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

Dance

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

Theatre Arts

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

Fine, Performing, and Communication Arts Division

Jothany Blackwood, Ed.D.,
 Dean of Instruction
 Division Office:
 OAB-110
 Phone: (559) 265-5752
 Fax: (559) 265-5755
 Division E-mail:
fpca@fresnocitycollege.edu

Health Sciences Division

Health Sciences Division

Carolyn C. Drake, Ed.D.,
Dean of Instruction
Division Office:
Health Sciences Building, HS-1
Phone: (559) 244-2604
FAX: (559) 244-2626
Division E-mail:
fcc.healthsciences@
fresnocitycollege.edu

The Health Sciences 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
- Surgical Technology

The Health Sciences 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 270, 295 and 303.

Health Care Career Programs

All students must complete the appropriate Academic Summary Form for consideration for acceptance into a health care career program. Students must also meet the normal admission requirements as fully matriculated regular students at Fresno City College. See page 14 for a list of these requirements.

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

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

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

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



Fresno City College Respiratory Care Practitioner Program is a specialized program concentrated on the education and treatment of cardiopulmonary diseases. Students interested in the Respiratory Care Practitioner Program or other health care fields must complete the appropriate prerequisites before applying to the program of their choice.

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

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

Foreign Language

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

Letters

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

Linguistics/English as a Second Language

The Linguistics/ESL Department offers two distinct programs. For English as a Second Language students needing to develop their reading, writing, and study skills, the department offers a sequential program designed to prepare students for an AA/AS degree and university transfer level courses.

Additionally, the department offers linguistics courses that satisfy transfer level area requirements.

Preparatory English

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

Associate in Arts Degrees

English

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

Humanities

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

Philosophy

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

Spanish

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

Certificate of Achievement

Sign Language Interpreting Preparation

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

Humanities Division

Jennifer Johnson, Ph.D.,
Dean of Instruction
Division Office:
Humanities Office, FO-41
Phone: (559) 442-8281
FAX: (559) 265-5756

Division E-mail:
fcc.humanities@
fresnocitycollege.edu

Math, Science and Engineering Division

Math, Science and Engineering Division

Ashok Naimpally, Ph.D.,
Dean of Instruction
Division Office:
Math, Science and
Engineering Building, S-51
Phone: (559) 442-8215
Fax: (559) 497-8814
Division E-mail:
fcc.mathscience@
fresnocitycollege.edu

Biology

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

Chemistry

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

Mathematics

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

Physical Sciences

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

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

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

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

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

Students interested in the sciences can participate in the Fresno City College Science 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-Med Club.

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, Forest 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.

The two-year associate degree program in Life Science is principally a transfer program. The specified field requirement for the associate in science degree with a major in the life sciences can be fulfilled by completing the following:

Chemistry

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

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

Math, Science and Engineering Web Site Addresses

Division: www.fresnocitycollege.edu/mathscience/

Biology, Chemistry, and Mathematics

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

Sciences: Engineering, Geology, and Physics

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

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

Life Science (Major #6080)

Twenty or more units combined from the following subject areas:

1. Biological Science: 14 units minimum from courses listed in the college catalog under Biological Sciences.
2. Physical Science: 6 units may be selected from Chemistry, Physics, and Earth Science (Astronomy, Physical Geography, and Geology). The recommended sequence includes Biology 1, Biology 4, Biology 6, and Chemistry 1A, and 1B.

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 5A and 5B. Additional computer programming courses should be taken as necessary to expand the student's programming background.

Computer science courses include Computer Programming in FORTRAN (CSCI 20), Discrete Mathematics for Computer Science (CSCI 26), Programming in the PASCAL Language (CSCI 30), Computer Programming Concepts and Methodology in C++ I (CSCI 40), Computer Programming Concepts and Methodology in C++ II (CSCI 41), and Programming Concepts and Methodology in JAVA (CSCI 40).

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

Engineering and Physical Science

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

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

Geology

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

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

Physics

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

Social Sciences Division

Social Sciences Division

M.E. Mericle, Ph.D.,
 Dean of Instruction
 Division Office:
 Social Sciences Building, SO-123
 Phone: (559) 442-8210
 FAX: (559) 265-5776
 Division E-mail:
 fcc.socialsciences@
 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, Economics and Geography, including:
 Archaeology
- Cultural and Women's Studies including:
 African-American Studies
 American Indian Studies
 American Studies
 Asian-American Studies
 Chicano-Latino Studies
 Women's Studies

- History and Political Science
 - Child Development
 - Psychology and Education, including
 Education Aide
 - 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 TANE.



The FCC Child Development Center offers childcare services for students, faculty, staff and community members as space allows. It is a licensed National Association for the Education of Young Children accredited center for children ages two through five.

DISTRICT COURSES AND PROGRAMS

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

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

- Administration of Justice
- Aerospace Studies
- African-American Studies
- Air Conditioning
- American Studies
- American Indian Studies
- Applied Technology
- Apprenticeship Programs
- Architecture
- Asian-American Studies
- Automotive Collision Repair Technology
- Automotive Technology
 - General Motors ASEP
- Building Safety and Code Administration
- Business & Technology
- Computer Aided Drafting and Design
- Construction
- Cultural Studies
- Dental Hygiene
- Drafting
- Electrical Systems Technology
- Fire Technology
- Graphic Communications
- Health Information Technology
- Latin American Studies
- Marketing
- Military Science
- Networking/Computer Technician
- Paralegal
- Police Academy
- Real Estate
- Radiologic Technology
- Respiratory Care
- Surgical Technology
- Wind Turbine Technology

Career & Technology Center

Located off the main campus, the Fresno City College Career & Technology Center is a significant resource to both its students and the community. CTC staff identifies job skills employers in local industry need and then provides training to help students acquire those skills. Year-round registration is in effect.

Noncredit, open-entry classes are offered in:

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

For additional information, write or call the center.

Career & Technology Center
 2930 East Annadale Avenue, Fresno, CA 93725
 (559) 486-0173

Reedley College

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

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

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

Reedley College
995 North Reed Avenue
Reedley, CA 93654
(559) 638-3641

Madera Center

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

Oakhurst

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

Willow International Center

The Willow International Center is the newest college center for the State Center Community College District (SCCCD). This center provides the advantages of a medium-sized community college campus in a friendly and contemporary setting. The Willow International Center is on tap to become a full-scale campus of the SCCC serving 10,000 students from the Fresno, Clovis and the foothill communities with a variety of higher education options and opportunities.

Willow International
10309 N. Willow
Fresno, CA 93730
(559) 325-5200



Fresno City College offers students special programs and counseling support to be successful as they reach their educational goals. Each program provides mentoring and various activities that promote overall learning.

Second Semester		Units
*ACCTG 4B/4BH	Managerial Accounting, <i>or</i> Honors Managerial Accounting	4
*ACCTG 53	Tax Accounting-Manual & Computerized, <i>or</i> *ACCTG 57 Governmental Accounting.....	3
ACCTG 58	Accounting Practicum I	1
CIT 23	Spreadsheet Fundamentals	2
Total		10

SECOND YEAR

First Semester		Units
*ACCTG 32A	Computerized Accounting	1
*ACCTG 51	Intermediate Accounting.....	3
ACCTG 70	QuickBooks Fundamentals, <i>or</i> ACCTG 73 MAS90 Fundamentals.....	2
Total		6

Second Semester		Units
ACCTG 19	Work Experience (Coop), Occupational	1
*ACCTG 52	Cost Accounting	3
*ACCTG 56	Payroll Accounting	2
ACCTG 59	Accounting Practicum II	1
Total		7

Recommended Electives: BA 5, 18, 30, and 33; BT 4, 20, and 21; CIT 17, 20, 24, and 26; ECON 1A/1AH and 1B/1BH.

**The advanced accounting courses noted above may also be used to satisfy the 24 unit eligibility requirement that must be met before a person can take the CPA Exam. Many students take these courses to satisfy that CPA exam requirement as well as to satisfy the AS degree requirement.*

COMPUTERIZED ACCOUNTING - MAJOR #2405

This curriculum is designed for entry-level employment as an account clerk using various software packages and the latest in business technology to perform various account clerk functions.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

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

REQUIRED COURSES		Units
ACCTG 19	Work Experience (Coop), Occupational	3
ACCTG 34	Accounting Spreadsheets	2
ACCTG 55	Accounting Methods	1.5
ACCTG 70	QuickBooks Fundamentals	2
ACCTG 260	Accounting Skills Lab	1
ACCTG 270	Accounting Math Skills.....	1.5
BT 1	Computer Document Processing I	3
BT 4	Ten-Key Calculation	2
BT 23	Job Search and Workplace Skills.....	3
BT 131	Applied Accounting.....	4
BT 206	Automated Business Records.....	1
BT 250	Office Skills Lab	1
BT 271	Business Grammar Fundamentals.....	2
Total		27

Note: Student must demonstrate the ability to type 35 words per minute with 97% accuracy and 130 correct strokes per minute on the ten-key calculator.

FULL CHARGE BOOKKEEPER - MAJOR #2012

This curriculum is designed to provide knowledge and skills to individuals seeking employment as bookkeepers in small-to-large size organizations.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

- Analyze, record, and enter transactions into an integrated accounting system in both a manual and a computerized environment.
- Develop and provide accounting information to meet the needs of both external and internal users.
- Demonstrate an understanding of accounting functions and skills for full-charge bookkeeping positions.

REQUIRED COURSES

		Units
ACCTG 4A/4AH	Financial Accounting, <i>or</i> Honors Financial Accounting.....	4
ACCTG 19	Work Experience (Coop), Occupational	3
ACCTG 56	Payroll Accounting	2
ACCTG 58	Accounting Practicum	1
ACCTG 73	MAS90 Fundamentals.....	2
ACCTG 260	Accounting Skills Lab	1
Total		13

ADAPTIVE ORNAMENTAL HORTICULTURE SKILLS – MAJOR #1060

The adaptive ornamental horticulture skills program is designed to provide students with disabilities both educational and vocational opportunities. A certificate will not only validate participation in the program, but it will also enhance the opportunities to secure gainful employment.

CERTIFICATE

Student Learning Outcome:

- 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		Units
DEVSER 262	Group Interaction for Students with Disabilities	2
DEVSER 276	Horticulture Skills II	2
Total		4

SECOND YEAR

First Semester		Units
DEVSER 282	Greenhouse Workforce Prep	3
Total		3

Second Semester		Units
DEVSER 282	Greenhouse Workforce Prep	3
Total		3

ADMINISTRATION OF JUSTICE

ADULT CORRECTIONAL OFFICER CORE – MAJOR #8941

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

CERTIFICATE

Student Learning Outcomes:

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

REQUIRED COURSE	Units
AJ 280 Adult Correctional Officer Core	4

BASIC POLICE ACADEMY – MAJOR #8921

The Basic Police Academy Certificate of Achievement program offers curriculum to prepare students with the knowledge and skills necessary to complete a law enforcement field training program certified by the California Commission on Peace Officer Standards and Training (POST). Employment opportunities are found in both government and private enterprise where law enforcement principles are applied.

The basic academy is offered in three different formats; the intensive 40 hour per week format, the 24 hour per week night academy extended format, and the modular format. Hours per week may vary slightly according to schedule.

PROGRAM REQUIREMENTS

To qualify for the program, applicants must:

1. Be 18 years of age and have a high school diploma or G.E.D.
2. Complete and submit the Fresno City College and Police Academy applications.
3. Pass the POST written examination and physical agility test.

Applicants must attend an interview and orientation, and will be notified regarding their acceptance.

Accepted applicants must:

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

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Demonstrate knowledge of California laws pertaining to arrest authority of a peace officer and a citizen covered under Penal Code sections 836 and 837.
2. Compare and contrast the constitutional issues involved in detentions, arrest and interrogations.

3. Demonstrate physical competency in psychomotor skills in handling police weaponry in a safe manner.
4. Demonstrate the ability to communicate effectively and professionally through written, oral and electronic media.
5. Identify the California laws that pertain to the enforcement and procedural aspects of law enforcement, recognizing the violations an officer is likely to encounter and describe the legal obligations in enforcing those laws.
6. Identify the process to confine and care for adult or juvenile prisoners in such a manner as to provide the necessary confinement and to protect the prisoner's rights and welfare.

REQUIRED COURSES		Units
AJ 270A	Basic Police Academy – Part 1	10
AJ 270B	Basic Police Academy – Part 2	13
Total		23
OR		
AJ 272	Regular Basic Course Module III	4
AJ 273	Regular Basic Course Module II	5.5
AJ 274	Regular Basic Course Module I	11
Total		20.5

BASIC SUPERVISOR– MAJOR #8924

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

CERTIFICATE

Student Learning Outcomes:

1. Satisfies all the required mandated training for California Peace Officers Standards and Training (POST) to become a supervisor.
2. Identify methodologies of supervision related to the law enforcement profession.

REQUIRED COURSE	Units
AJ 276 Basic Supervisors	2

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	3

100 Administration of Justice

PROBATION CORE COURSE – MAJOR #8942

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

CERTIFICATE

Student Learning Outcomes:

1. Identify the responsibilities of a County Probation Officer for the State of California.
2. Distinguish the responsibilities of the probation officer when a minor is taken into custody using the Welfare and Institutions Codes 625, 627, and 627.5.

REQUIRED COURSE	Units
AJ 285 Probation Core Course.....	4

PUBLIC SAFETY DISPATCHER – MAJOR #8970

Designed for the student needing to complete the Peace Officer Standards and Training (POST) Public Safety Dispatcher 120-hour course required under POST Regulation 1018(d)(1).

CERTIFICATE

Student Learning Outcomes:

1. Identify basic functions of Public Safety Dispatcher.
2. Recognize the required state and federal reporting laws as they pertain to a Public Safety Dispatcher.

REQUIRED COURSE	Units
AJ 278 Public Safety Dispatcher.....	3

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.....	3

AFRICAN-AMERICAN STUDIES –

MAJOR #7640

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

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Describe the historical and cultural contributions made by African-Americans to the American system.
2. Demonstrate a positive self-image based on the study of various subject areas of art, music, literature, and history of African-American people.

Total Units Required..... 27

REQUIRED CORE COURSES: Select 24 units Units

AFRAM 1	African-American Culture.....	3
AFRAM 2	Cultural Adaptation of the African-American.....	3
AFRAM 3	African-American Art.....	3
AFRAM 4	African Civilization.....	3
AFRAM 5	The African in the New World.....	3
AFRAM 6	African Cultures and Languages.....	3
AFRAM 13	African-American Music to 1940.....	3
AFRAM 15	African-American Music 1940 to present.....	3
ENGL 1B/1BH	Introduction to Study of Literature, or Honors Introduction to Study of Literature.....	3

COURSE OPTIONS: Select 3 units Units

AFRAM 8	African-American Creative Workshop.....	3
AFRAM 17	African-American Literature.....	3
AFRAM 21/SWAHLI 1	Beginning Swahili.....	4
AFRAM 22/SWAHLI 2	High-Beginning Swahili.....	4
AFRAM 36	Contemporary Africa.....	3
AFRAM/WSTS 41	The African-American Woman.....	3
AFRAM 49	Black Gospel Choir.....	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 27 units of course work as listed above.

AIR CONDITIONING – MAJOR #8030

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

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Identify and describe the function of the major and auxiliary refrigerant system components.
2. Interpret HVAC wiring diagrams to be used in the electrical troubleshooting process of related equipment.
3. Calculate air volume (CFM) and system capacity by measuring velocity pressure using a pitot tube and incline manometer along with wet and dry bulb readings on the psychrometric chart.
4. Diagnose and repair electrical and refrigerant circuit problems in an air conditioning system.

5. Certification of students' ability as an entry level air conditioning technician.
6. Flare, swage, silver braze and solder copper pipe and fittings while observing all safety precautions.

FIRST YEAR

First Semester	Units
AC 50 Principles of Mechanical Refrigeration	3
AC 51 Electrical Systems	7
AC 53 Measurements and Diagnosis.....	7
AT 10 Technical Computer Applications	2
Total	19

Second Semester	Units
AC 52 Heating Systems.....	7
AC 54 Commercial Systems	7
AC 55 Technician Testing & Certification	1
AC 56 Duct Systems.....	3
Total	18

SECOND YEAR

First Semester	Units
AC 57 System Configuration & Control.....	2
AT 21 Occupational Safety & Health	2
WELD 1 Exploring Welding/Metals.....	3
Total	7

Second Semester	Units
AT 40 Preparing for Employment Opportunities	3
AT 120 Industrial Science	3
EST 55A Digital Concepts.....	3
EST 55B Facility Automation	3
Total	12

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 33 of the catalog, upon application, will be awarded the associate in science degree.

AIR CONDITIONING – MAJOR #8030

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

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Identify and describe the function of the major and auxiliary refrigerant system components.
2. Interpret HVAC wiring diagrams to be used in the electrical troubleshooting process of related equipment.
3. Calculate air volume (CFM) and system capacity by measuring velocity pressure using a pitot tube and incline manometer along with wet and dry bulb readings on the psychrometric chart.

4. Diagnose and repair electrical and refrigerant circuit problems in an air conditioning system.
5. Certification of students' ability as an entry level air conditioning technician.
6. Flare, swage, silver braze and solder copper pipe and fittings while observing all safety precautions.

FIRST YEAR

First Semester	Units
AC 50 Principles of Mechanical Refrigeration	3
AC 51 Electrical Systems	7
AC 53 Measurements and Diagnosis.....	7
AT 10 Technical Computer Applications	2
Total	19

Second Semester	Units
AC 52 Heating Systems.....	7
AC 54 Commercial Systems	7
AC 55 Technician Testing & Certification	1
AC 56 Duct Systems.....	3
Total	18

SECOND YEAR

First Semester	Units
AC 57 System Configuration & Control.....	2
AT 21 Occupational Safety & Health	2
AT 130 Industrial Math.....	3
WELD 1 Exploring Welding/Metals.....	3
Total	10

Second Semester	Units
AT 40 Preparing for Employment Opportunities	3
AT 120 Industrial Science	3
EST 55A Digital Concepts.....	3
EST 55B Facility Automation	3
Total	12

Note: Students qualify for the certificate of achievement upon completion of the major requirements listed above.

AIR CONDITIONING TECHNOLOGY OVERVIEW – MAJOR #8033

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

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

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

102 Air Conditioning

REQUIRED COURSES		Units
AC 60A	Fund of Refrigeration	3
AC 260B	Electricity for Air Conditioning	3
AC 260C	Residential Heating	3
AC 260D	Troubleshooting Procedures.....	2
AT 10	Technical Computer Applications	2
Total		13

COMMERCIAL AIR CONDITIONING, HEATING, AND DUCT SYSTEMS – MAJOR #8031

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

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

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

REQUIRED COURSES		Units
AC 52	Heating Systems.....	7
AC 54	Commercial Systems	7
AC 56	Duct Systems	3
Total		17

DIGITAL AIR CONDITIONING CONTROLS – MAJOR #8034

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

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

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

REQUIRED COURSES		Units
AC 57	System Configuration & Control.....	2
AC 250	Digital Unitary Controls	2
AC 251	Digital VAV Controls.....	1
AC 252	DDC Network Controllers.....	2
AT 10	Technical Computer Applications	3
EST 55A	Digital Concepts.....	3
EST 55B	Facility Automation	2
Total		15

INDUSTRIAL REFRIGERATION – CARO/EPA-SECTION 608 CERTIFICATE – MAJOR #8231

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

CERTIFICATE

Student Learning Outcomes:

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

REQUIRED COURSES		Units
AC 55	Technician Testing & Certification	1
AC 353	Principles of Industrial Refrigeration	0
Total		1

MECHANICAL AND ELECTRICAL SYSTEMS – MAJOR #8032

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

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Identify and describe the function of the major auxiliary refrigeration system components.
2. Calculate air volume (CFM) and system capacity by measuring velocity pressure using a pitot tube and incline manometer along with wet and dry bulb readings on the psychrometric chart.

3. Illustrate electrical components using the correct electrical symbol and read and interpret pictorial and ladder wiring diagrams.
4. Plot return and supply air state points on a psychrometric chart, measure external static pressure and determine CFM and system capacity using manufacture's specification tables.
5. Troubleshoot and wire single phase motors and their starting components.
6. Flare, swage, silver braze and solder copper pipe and fittings while observing all safety precautions.

REQUIRED COURSES		Units
AC 50	Principles of Mechanical Refrigeration	3
AC 51	Electrical Systems	7
AC 53	Measurements and Diagnosis.....	7
Total		17

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 there are 14 reservations 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 14 units of required basic core courses. Select 9 units from the course options listed below for a total of 23 units for an associate in arts degree.

ASSOCIATE IN ARTS DEGREE

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 in the New World.....	3
ANTHRO 20	Native Peoples of California	3
ANTHRO/CLS 28	Ancient Mexico.....	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 33 of this catalog. General Education requirements for transfer certification are on page 39.

ANTHROPOLOGY – MAJOR #7100

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

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

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

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

REQUIRED CORE COURSES (15 units minimum) Units

Recommend ANTHRO 2 be taken prior to other anthropology courses. For these core courses, students may take either ANTHRO 3 or ANTHRO 4.

ANTHRO 1	Biological Anthropology	3
ANTHRO 2/2H	Cultural Anthropology, <i>or</i> Honors Cultural Anthropology	3
ANTHRO 3	Archaeology & World Prehistory, <i>or</i> ANTHRO 4 Intro to Archaeology	3
ANTHRO 13	Magic, Witchcraft, and Religion	3
LING 10	Introduction to Language	3

ELECTIVES: 6 units minimum Units

*ANTHRO 3	Archaeology & World Prehistory.....	3
*ANTHRO 4	Intro to Archaeology	3
ANTHRO 4L	Archaeological Field Methods.....	1
ANTHRO 5	Archaeological Lab Methods.....	4
ANTHRO 6	Field Archaeology.....	1-3
ANTHRO 20	Native Peoples of California	3
ANTHRO 28	Ancient Mexico.....	3
ANTHRO 30	Topics in Anthropology.....	1-3
AFRAM 1	African-American Studies Culture.....	3
AFRAM 6	African Cultures and Languages	3
AFRAM 41	The African-American Women.....	3
AMIND 31	American Indian Culture	3
AMIND 33	Indians of the San Joaquin Valley.....	2
AMIND 34	American Indian Contemporary Society.....	3
AMST 10	American Pluralism.....	3
ASAMER 10	Hmong Culture	3
ASAMER 15	Introduction to Asian-Americans.....	3
ASAMER 25	Asian-American Social Issues.....	3
ASAMER 30	Asian-American Women	3
ASL 5	Deaf Culture.....	3
BIOL 5	Human Biology.....	4
BIOL 20	Human Anatomy	4

104 Anthropology

CHDEV 15	Diversity and Culture in Early Care and Education Programs.....	3
CHDEV 30	Child, Family and Community	3
CLS 11	Intro to Chicano-Latino Studies.....	3
CLS 22	Pre-Columbian Art.....	3
CLS 24	La Chicana and Latina.....	3
COMM 20	Community Involvement	1-3
CULTS 10	Islamic Culture.....	3
ENGL 14	Folklore	3
ENGL 36	Women in Literature.....	3
FILM 3	Film and Culture	3
FILM 5	Digital Filmmaking	3
GEOG 2	Cultural Geography	3
HIST 3	History of Ancient Rome.....	3
HIST 18	History of Ancient Greece.....	3
HIST 30	California History.....	3
HS 10	Introduction to Aging Studies	3
HS 30	Group and Community Social Services	3
JOURN 16	Race, Gender and the Media	3
PLEGAL 16	Environmental Law.....	3
PHIL 1D	World Religions.....	3
PHIL 4	Critical Reasoning	3
PSY 5	Social Psychology	3
PSY 15	Psychology of Religion.....	3
PSY 36	Biological Psychology.....	3
PSY 42	Statistics for the Behavioral Sciences	4
SOC 1B	Critical Thinking about Social Problems	3
WSTS 10	Changing Roles of Women.....	3
WSTS 47	Intro to Lesbian and Gay Studies	3

**If not used for core requirement.*

ANTHROPOLOGY – ARCHAEOLOGY ARCHAEOLOGICAL TECHNICIAN – MAJOR #7120

The Archaeological Technician Certificate of Achievement is a program designed to provide students with education and training in the various aspects of modern archaeology in preparation for 1) entry level employment, and 2) continuing education in archaeology. An archaeological technician may work in the field doing survey or excavation or in a laboratory processing archaeological collections, doing data entry, archival research, or other tasks related to the management of archaeological data, all under the direction of a professional archaeologist.

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

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Students will demonstrate knowledge of terminology, methods, and theoretical framework of modern, scientific archaeology.
2. Students will have demonstrable skills in archaeological field methods.
3. Students will have demonstrable skills in archaeological laboratory methods.

Required Core Courses: (13 units minimum)		Units
ANTHRO 1	Biological Anthropology.....	3
ANTHRO 2/2H	Cultural Anthropology, <i>or</i> Honors Cultural Anthropology.....	3
ANTHRO 4	Introduction to Archaeology.....	3
ANTHRO 5	Archaeological Lab Methods.....	4

Field Experience (2 units minimum)		Units
ANTHRO 4L	Archaeological Field Methods.....	1
ANTHRO 6	Field Archaeology.....	2-6

ELECTIVES

Students must complete six units from the following list of electives. Other courses may be substituted based on the student's area of focus [e.g. if a student is particularly interested in archaeological ceramics, ART 10 may be an appropriate elective. If a student is interested in floral or faunal analysis, BIOL 6 (Botany) or BIOL 4 (Zoology) may be appropriate electives. This is flexibility will aid students in acquiring specific knowledge, skills, and abilities, which will then aid them in obtaining employment or transferring to a four-year institution.]

ELECTIVES (6 units minimum)		Units
ANTHRO 3	Archaeology and World Prehistory.....	3
ANTHRO 20	Native Peoples of California	3
ANTHRO 28	Ancient Mexico.....	3
ANTHRO 30	Topics in Anthropology.....	1-4
ART 7	Beginning Drawing	3
BIOL 7	Field Biology	4
GEOG 10	Intro to GIS.....	3
*GEOL 1/1H	Physical Geology, <i>or</i> Honors Physical Geology.....	4
HIST 3	History of Ancient Rome.....	3
HIST 18	History of Ancient Greece.....	3
HIST 30	California History.....	3
INTDS 1	Museum Studies.....	3
PHOTO 5	Introduction to Photography	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 or at the same time as ANTHRO 4L and prior to ANTHRO 6. Other courses may be taken in any sequence.

APPRENTICESHIP AUTOMOTIVE AND HEAVY-DUTY ELECTRICAL – MAJOR #9020

This curriculum is designed for the auto electrical or heavy-duty electrical worker who is employed full time and indentured as an apprentice by the Automotive Mechanics Joint Apprenticeship Committee.

CERTIFICATE

Student Learning Outcomes:

1. Assess, identify, and minimize safety hazards in the performance of job duties.
2. Identify automotive/forklift and heavy-duty electrical systems and summarize how the respective system(s) functions.
3. Adhering to industry standards, identify, troubleshoot and resolve automotive/forklift faults/problems.

FIRST YEAR

First Semester	Units
AUTOT 281A Automotive Power Trains I	3
Second Semester	Units
AUTOT 281B Automotive Power Trains II	3

SECOND YEAR

First Semester	Units
AUTOT 282A Suspension and Wheel Alignment.....	3
Second Semester	Units
AUTOT 282B Automotive Braking Systems	3

THIRD YEAR

First Semester	Units
AUTOT 283A Engine Performance and Diagnosis	3
Second Semester	Units
WELD 1 Exploring Welding/Metals.....	3

FOURTH YEAR

First Semester	Units
AT 10 Technical Computer Applications	2
Second Semester	Units
APP 260 Apprenticeship – First Aid.....	5

Total 20.5

Recommended Elective: APP 19

*Contact Coordinator of Apprenticeship Training

SECOND YEAR

First Semester	Units
AUTOT 54 Suspension/Steering/Alignment.....	5
**AUTOT 19 Work Experience (Coop), Occupational	2-8

Second Semester **Units**

AUTOT 55 Power Trains	6
**AUTOT 19 Work Experience (Coop), Occupational	2-8

THIRD YEAR

First Semester	Units
AUTOT 56 Auto Braking Systems	5
**AUTOT 19 Work Experience (Coop), Occupational	2-8

Second Semester **Units**

AUTOT 57 Heating and Air Conditioning	5
---	---

FOURTH YEAR

First Semester	Units
WELD 1 Exploring Welding/Metals	3
AT 130 Industrial Mathematics	3

Second Semester **Units**

APP 260 Apprenticeship-First Aid.....	5
AT 10 Technical Computer Applications	2
AT 21 Occupational Safety and Health.....	2

Total 59.5

* High School Articulation (1 year)

**Apprentice must complete at least 10 units of work experience

Recommended Elective: AUTOT 161A, 262A, 281A.

APPRENTICESHIP AUTOMOTIVE MECHANICS – MAJOR #9040

This curriculum is designed for the automotive mechanic who is employed full time and indentured as an apprentice by the Automotive Mechanics Joint Apprenticeship Committee.

CERTIFICATE

Student Learning Outcomes:

1. Assess, identify, and minimize safety hazards in the performance of job duties.
2. Identify automotive systems (power train, braking, etc.) and summarize how the respective system(s) functions.
3. Adhering to industry standards, identify, troubleshoot and resolve automotive faults/problems.

FIRST YEAR

First Semester	Units
*AUTOT 9 Automotive Essentials.....	3
AUTOT 52 Auto Electrical Systems.....	5
**AUTOT 19 Work Experience (Coop), Occupational	2-8

Second Semester **Units**

AUTOT 53 Engine Performance.....	5
**AUTOT 19 Work Experience (Coop), Occupational	2-8

Summer Session

AUTOT 51 Principles of Engine Theory and Service	3
AUTOT 51L Automotive Engine Laboratory.....	2

APPRENTICESHIP BODY AND FENDER – MAJOR #9080

This curriculum is designed for the body and fender mechanic who is employed full time and indentured as an apprentice by the Automotive Mechanics Joint Apprenticeship Committee.

CERTIFICATE

Student Learning Outcomes:

1. Assess, identify, and minimize safety hazards in the performance of job duties.
2. Identify automotive body repair systems (preparation, body panel repair/replacement, metal finishing, glass and hardware, etc.) and their characteristics.
3. Adhering to industry standards, identify the problem and related body system and compose an action plan for repair.

FIRST YEAR

First Semester	Units
APP 260 Apprenticeship-First Aid.....	5

Second Semester **Units**

AUTOT 9 Automotive Essentials	3
-------------------------------------	---

SECOND YEAR

First Semester	Units
AUTOT 282A Suspension and Wheel Alignment.....	3

Second Semester **Units**

AUTOT 284 Automotive Air Conditioning.....	3
--	---

106 Apprenticeship

THIRD YEAR

First Semester	Units
AUTOT 294 Lamp/Brake Adjustment/Cert Prep	1.5

Second Semester	Units
ACRT 55 Spray Finishing.....	2

FOURTH YEAR

First Semester	Units
AT 10 Technical Computer Applications	2

Second Semester	Units
WELD 1 Exploring Welding/Metals.....	3
Total	18

APPRENTICESHIP DIESEL AND HEAVY-DUTY MECHANICS – MAJOR #9100

This curriculum is designed for the diesel and heavy-duty mechanic who is employed full time and indentured as an apprentice by the Automotive Mechanics Joint Apprenticeship Committee.

CERTIFICATE

Student Learning Outcomes:

1. Assess, identify, and minimize safety hazards in the performance of job duties.
2. Identify diesel truck systems (power train, suspension, braking, etc.) and summarize how the respective system(s) functions.
3. Adhering to industry standards, identify, troubleshoot and resolve diesel truck faults/problems.

FIRST YEAR

First Semester	Units
MAG 201 Diesel Electrical Troubleshooting.....	5

Second Semester	Units
MAG 202 Diesel Engines.....	5

SECOND YEAR

First Semester	Units
MAG 203 Transmissions & Torque Converters.....	5

Second Semester	Units
MAG 204 Hydraulics	5

THIRD YEAR

First Semester	Units
AT 10 Technical Computer Applications	2

Second Semester	Units
APP 260 Apprenticeship – First Aid.....	5
Total	22.5

Recommended Elective: APP 19.

APPRENTICESHIP MACHINE SHOP – MAJOR #9200

This curriculum is designed for the machinist who is employed full time and indentured as an apprentice by the Machinist Joint Apprenticeship Committee.

CERTIFICATE

Student Learning Outcomes:

1. Assess, identify, and minimize safety hazards in the performance of job duties.
2. Identify machine tool systems (mill, lathe, grinder, etc.) and summarize how the respective machine tool functions.
3. Perform repair and replacement of manufacturing equipment, up to and including machining of the replacement part.

FIRST YEAR

First Semester	Units
AT 130 Industrial Math.....	3
DRAFT 12 Drafting Practices	3

Second Semester	Units
MFGT 37A Machine Shop (Turning)	5

SECOND YEAR

First Semester	Units
MFGT 37B Machine Shop (Milling).....	5

Second Semester	Units
AT 10 Technical Computer Applications	2
CAM 10 CNC Mill Programming & Operation I.....	7

THIRD YEAR

First Semester	Units
CAM 20 CNC Mill Programming & Operation II	7

Second Semester	Units
APP 260 Apprenticeship First Aid	5
AT 11 Basic Electricity.....	3

FOURTH YEAR

First Semester	Units
CAM 20 CNC Mill Programming & Operation II	7

Second Semester	Units
AT 120 Industrial Science	3
WELD 1 Exploring Welding/Metals.....	3
Total	48.5

Recommended Elective: APP 19.

APPRENTICESHIP PARTS CLERK – MAJOR #9260

This curriculum is designed for the parts clerk who is employed full time and indentured as an apprentice by the local Automotive Mechanics Joint Apprenticeship Committee.

CERTIFICATE

Student Learning Outcomes:

1. Demonstrate basic knowledge of automotive systems (power train, suspension, braking, etc.) and their related placement parts.
2. Identify and describe inventory control and accounting systems in their relation to the automotive parts application(s).
3. Define and describe human behavioral theories/applications in relation to supervisory and customer relation roles.

FIRST YEAR

First Semester	Units
AUTOT 9 Automotive Essentials.....	3
Second Semester	Units
AT 130 Industrial Math, <i>and/or</i> math test	3

SECOND YEAR

First Semester	Units
BA 10/10H Introduction to Business, <i>or</i> Honors Introduction to Business.....	3
Second Semester	Units
BA 40 Supervision & Leadership.....	3

THIRD YEAR

First Semester	Units
ACCTG 4A/4AH Financial Accounting, <i>or</i> Honors Financial Accounting.....	4
Second Semester	Units
AT 10 Technical Computer Applications	2

FOURTH YEAR

First Semester	Units
COMM 2 Interpersonal Communication	3
Second Semester	Units
APP 260 Apprenticeship-First Aid.....	5
AT 21 Occupational Safety and Health.....	2
Total	21.5

APPRENTICESHIP ROOFING – MAJOR #9300

This curriculum is designed for the roofer who is employed full time and indentured as an apprentice by the Roofing Joint Apprenticeship Committee.

CERTIFICATE OF COMPLETION

Student Learning Outcomes:

1. Assess, identify, and minimize safety hazards in the performance of job duties.
2. Identify roofing systems (Build-up, Composition, Rigid, etc.) and summarize how the respective system(s) functions and its installation.
3. Identify flashing systems and summarize how the respective system(s) functions and its installation.

FIRST YEAR

First Semester	Units
APP 361/7J Roofing.....	0
Second Semester	Units
APP 361/7J Roofing.....	0

SECOND YEAR

First Semester	Units
APP 361/7J Roofing.....	0
Second Semester	Units
APP 361/7J Roofing.....	0

THIRD YEAR

First Semester	Units
APP 361/7J Roofing.....	0
Second Semester	Units
APP 361/7J Roofing.....	0

FOURTH YEAR

First Semester	Units
APP 361/7J Roofing.....	0
Recommended Elective: APP 19.	

APPRENTICESHIP STATIONARY ENGINEERS – MAJOR #9360

This curriculum is designed for the stationary engineer who is employed full time and indentured as an apprentice by the Stationary Engineers Joint Apprenticeship Committee.

CERTIFICATE

Student Learning Outcomes:

1. Maintain and repair systems and functions associated with the maintenance of facilities.
2. Troubleshoot and provide preventative maintenance of facilities.
3. Communicate effectively, not only using terminology appropriate to this trade, but the skills acquired in the other non-technical course work.

FIRST YEAR

First Semester	Units
AT 130 Industrial Mathematics	3
Second Semester	Units
AT 21 Occupational Safety and Health.....	2

SECOND YEAR

First Semester	Units
WELD 1 Exploring Welding/Metals.....	3
Second Semester	Units
AT 11 Basic Electricity.....	3

THIRD YEAR

First Semester	Units
AC 60A Fundamentals of Refrigeration	3
Second Semester	Units
AC 260B Electricity for Air Conditioning	3

FOURTH YEAR

First Semester	Units
AT 10 Technical Computer Applications	2
Second Semester	Units
EST 272 Industrial Motor Control	3
Total	22

Recommended Elective: APP 19.

APPRENTICESHIP WELDING – MAJOR #9380

This curriculum is designed for the welder who is employed full time and indentured as an apprentice by the Welding/Mechanic Joint Apprenticeship Committee.

CERTIFICATE

Student Learning Outcomes:

1. Assess, identify, and minimize safety hazards in the performance of job duties.
2. Identify and differentiate between different welding systems (TIG, MIG, etc.).
3. Identify different manufacturing systems (e.g. hydraulic, pneumatic, electrical) and formulate methods for troubleshooting and/or repair.

FIRST YEAR

First Semester	Units
AT 130 Industrial Mathematics	3
DRAFT 12 Drafting Practices	3

Second Semester	Units
MFGT 37A Machine Shop (Turning)	5

SECOND YEAR

First Semester	Units
MFGT 37B Machine Shop (Milling).....	5

Second Semester	Units
AT 120 Industrial Science	3
WELD 1 Exploring Welding/Metals.....	3

THIRD YEAR

First Semester	Units
EST 51 Direct Current Fund of Electronics.....	3

Second Semester	Units
EST 58 Programmable Logic Controllers.....	3

FOURTH YEAR

First Semester	Units
AT 10 Technical Computer Applications	2
EST 59 Instrumentation Systems.....	3

Second Semester	Units
APP 260 Apprenticeship – First Aid.....	5
Total	33.5

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.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

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

FIRST YEAR

Fall Semester	Units
ARCH 10 Architectural Design and Visualization I	3
ARCH 11 Introduction to Architecture.....	2
ARCH 12 Architectural Practice I.....	3
ARCH 14 Digital Tools for Architects.....	3
AT 10 Technical Computer Applications	2
DRAFT 160 Math of Drafting.....	3
Total	15

Spring Semester

Spring Semester	Units
ARCH 20 Architectural Design and Visualization II.....	3
ARCH 21 Materials of Construction	3
ARCH 22 Architectural Practice II	3
ARCH 24 Architecture CAD I.....	3
AT 131 Technical Report Writing.....	3
Total	15

SECOND YEAR

Fall Semester	Units
ARCH 30 Architectural Design and Visualization III	3
ARCH 31 Building Codes.....	3
ARCH 32 Statics and Strength of Materials	3
ARCH 34 Architectural CAD II.....	3
Total	12

Spring Semester

Spring Semester	Units
ARCH 40 Architectural Design and Visualization IV	3
ARCH 41A Office Practices.....	3
ARCH 42 Timber and Steel Structures	3
AT 40 Preparing for Employment Opportunities	3
Total	12

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 33 of the catalog, upon application, will be awarded the associate in science degree.

ARCHITECTURE – MAJOR #6810

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

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

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

FIRST YEAR

Fall Semester		Units
ARCH 10	Architectural Design and Visualization I	3
ARCH 11	Introduction to Architecture	2
ARCH 12	Architectural Practice I	3
ARCH 14	Digital Tools for Architects.....	3
AT 10	Technical Computer Applications	2
DRAFT 160	Math of Drafting.....	3
Total		15

Spring Semester		Units
ARCH 20	Architectural Design and Visualization II.....	3
ARCH 21	Materials of Construction	3
ARCH 22	Architectural Practice II	3
ARCH 24	Architecture CAD I.....	3
AT 131	Technical Report Writing.....	3
Total		15

SECOND YEAR

Fall Semester		Units
ARCH 30	Architectural Design and Visualization III	3
ARCH 31	Building Codes	3
ARCH 32	Statics and Strength of Materials	3
ARCH 34	Architectural CAD II.....	3
Total		12

Spring Semester		Units
ARCH 40	Architectural Design and Visualization IV	3
ARCH 41A	Office Practices.....	3
ARCH 42	Timber and Steel Structures	3
AT 40	Preparing for Employment Opportunities	3
Total		12

Note: Students qualify for the certificate of achievement upon completion of the major requirements listed above.

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.

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 **Units**

ART 3	Two-Dimensional Design	3
ART 4	Three-Dimensional Design	3
ART 5/5H	Art History 1, <i>or</i> Honors Art History 1	3
ART 6/6H	Art History 2, <i>or</i> Honors Art History 2	3
ART 7	Beginning Drawing, <i>or</i>	
ART 8	Beginning Figure Drawing and Anatomy	3

Select a Minimum of 12 Units: **Units**

ART 7	Beginning Drawing	3
ART 8	Beginning Figure Drawing and Anatomy	3
ART 9	Beginning Painting: Oil/Acrylic	3
ART 10	Beginning Ceramics	3
ART 11	Beginning Sculpture.....	3
ART 12A	Craft Workshop: Living Traditions.....	3
ART 12B	Intermediate Craft Workshop: Living Traditions	3
ART 13	Beginning Watercolor Painting.....	3
ART 14	Beginning Printmaking	3
ART 15	Ceramic Sculpture	3
ART 16	Life Painting	3
ART 17	Intermediate Drawing	3
ART 18	Intermediate Figure Drawing and Anatomy	3
ART 19	Intermediate Painting: Oil/Acrylic	3
ART 20	Intermediate Ceramics	3
ART 21	Intermediate Sculpture.....	3
ART 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 49	Studio Topics: Art Exhibition and Presentation Practices	3
ART 55	Introduction to Asian Art	3
ART 60	Pre-Columbian Art.....	3

STUDIO 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.
4. Understand the impact of art making in a global and societal context.

REQUIRED CORE COURSES **Units**

ART 2	Art Appreciation, <i>or</i>	
ART 5/5H	Art History 1, <i>or</i>	
	Honors Art History 1, <i>or</i>	
ART 6/6H	Art History 2, <i>or</i>	
	Honors Art History 2.....	3
ART 3	Two-Dimensional Design	3
ART 4	Three-Dimensional Design	3

Select A Minimum of 9 Units: **Units**

ART 7	Beginning Drawing	3
ART 8	Beginning Figure Drawing and Anatomy.....	3
ART 9	Beginning Painting: Oil/Acrylic.....	3
ART 10	Beginning Ceramics	3
ART 11	Beginning Sculpture.....	3
ART 12A	Craft Workshop: Living Traditions.....	3
ART 12B	Intermediate Craft Workshop: Living Traditions.....	3
ART 13	Beginning Watercolor Painting.....	3
ART 14	Beginning Printmaking	3
ART 15	Ceramic Sculpture	3
ART 16	Life Painting	3
ART 17	Intermediate Drawing	3
ART 18	Intermediate Figure Drawing and Anatomy.....	3
ART 19	Intermediate Painting: Oil/Acrylic.....	3
ART 20	Intermediate Ceramics	3
ART 21	Intermediate Sculpture.....	3
ART 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 49	Studio Topics: Art Exhibition and Presentation Practices	3

AUTOMOTIVE COLLISION REPAIR TECHNOLOGY FORMERLY BODY AND FENDER**MECHANIC – MAJOR #8071**

Training in this field is designed to prepare the student for employment as an advanced apprentice trainee in body repairing, reconstruction finishing.

ASSOCIATE IN SCIENCE AND CERTIFICATE OF ACHIEVEMENT**Student Learning Outcomes:**

1. Safely work with hazardous materials and equipment.
2. Demonstrate the use of hand, air, electric and hydraulic powered tools.
3. Straighten and fill damaged sheet metal.
4. Mix and apply body fillers, putties and plastic repair systems.
5. Identify body styles and frame configurations.
6. Service compressed air supply equipment.

FIRST YEAR

First Semester		Units
ACRT 51	Basic ACR	9
AT 21	Occupational Safety and Health.....	2
WELD 2A	Introduction to Welding Technology	6
Total		17

Second Semester		Units
ACRT 53	Advanced ACR	9
AT 11	Basic Electricity.....	3
AT 130	Industrial Mathematics	3
Total		15

SECOND YEAR

First Semester		Units
AT 10	Technical Computer Applications	2
AT 131	Technical Report Writing.....	3
Total		5

Second Semester		Units
AT 40	Preparing for Employment Opportunities	3
AT 120	Industrial Science	3
Total		6

Recommended Electives: ACRT 55; AUTOT 19, 54, 282A

Note: Associate degree requirements are listed on page 33.

AUTOMOTIVE TECHNOLOGY**AUTOMOTIVE TECHNOLOGY - MAJOR #8051**

Satisfactory completion of this curriculum prepares the student for entry-level employment as a skilled technician in the automotive service and repair industry. Students will perform actual service and repair procedures in the automotive laboratory. This curriculum has been certified by the National Automotive Technicians Education Foundation (NATEF).

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Student will demonstrate the appropriate repair procedure for a given system to industry standards.

FIRST YEAR

First Semester	Units
AT 21 Occupational Safety and Health.....	2
AUTOT 9 * Automotive Essentials.....	3
AUTOT 51 + Principles of Engine Theory and Service.....	3
AUTOT 51L + Automotive Engine Laboratory.....	2
AUTOT 52 Automotive Electrical Systems.....	5
AUTOT 53 Engine Performance.....	5

Second Semester	Units
AT 10 Technical Computer Applications.....	2
AUTOT 19 ** Work Experience (Cooperative), Occupational.....	8
AUTOT 55 Power Trains: Transmissions/Transaxles, Differentials, and Driveaxles.....	6
AUTOT 57 Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics.....	5
MATH 102 Plane Geometry.....	3

SECOND YEAR

Second Semester	Units
AT 40 Preparing for Employment Opportunities.....	3
AUTOT 19 ** Work Experience (Cooperative), Occupational.....	0
AUTOT 54 Suspension, Steering, and Wheel Alignment.....	5
AUTOT 56 Automotive Braking Systems.....	5

Second Semester	Units
AUTOT 19 ** Work Experience (Cooperative), Occupational.....	0
AUTOT 161A Basic Clean Air Car Course (BCACC).....	3
AUTOT 161B Advanced Clean Air Car Course (ACACC).....	1
WELD 1 Exploring Welding/Metals.....	3
Electives.....	4
Total	68

Recommended Electives: AUTOT 58, 58A, 58B, 58C.

**High School articulation (1 year)*

+Course offered during summer session

*** Students must complete at least 8 units of work experience. AUTOT 19 may be taken in one or more semesters for total of 8 units.*

AUTOMOTIVE TECHNOLOGY - MAJOR #8051

Satisfactory completion of this curriculum prepares the student for entry-level employment as a skilled technician in the automotive service and repair industry. Students will perform actual service and repair procedures in the automotive laboratory. This curriculum has been certified by the National Automotive Technicians Education Foundation (NATEF).

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Student will demonstrate the appropriate repair procedure for a given system to industry standards.

FIRST YEAR

First Semester	Units
AT 21 Occupational Safety and Health.....	2
AUTOT 9 * Automotive Essentials.....	3
AUTOT 51 Principles of Engine Theory and Service.....	3
AUTOT 51L Automotive Engine Laboratory.....	2
AUTOT 52 Automotive Electrical Systems.....	5
AUTOT 53 Engine Performance.....	5

Second Semester	Units
AT 10 Technical Computer Applications.....	2
AUTOT 19 Work Experience (Cooperative), Occupational.....	8
AUTOT 55 Power Trains: Transmissions/Transaxles, Differentials, and Driveaxles.....	6
AUTOT 57 Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics.....	5
AT 130 Industrial Mathematics.....	3
AT 131 Technical Report Writing.....	3

SECOND YEAR

First Semester	Units
AT 40 Preparing for Employment Opportunities.....	3
AUTOT 19 Work Experience (Cooperative), Occupational.....	0
AUTOT 54 Suspension, Steering, and Wheel Alignment.....	5
AUTOT 56 Automotive Braking Systems.....	5

Second Semester	Units
AUTOT 19 ** Work Experience (Cooperative), Occupational.....	0
AUTOT 161A Basic Clean Air Car Course (BCACC).....	3
AUTOT 161B Advanced Clean Air Car Course (ACACC).....	1
WELD 1 Exploring Welding/Metals.....	3
Electives.....	4

Recommended Electives	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
HLTH 1 Contemporary Health Issues.....	3
PHOTO 5 Introduction to Photography.....	3
Total	71

**High School articulation (1 year)*

+Course offered during summer session.

*** Students must complete at least 8 units of work experience. AUTOT 19 may be taken in one or more semesters for total of 8 units.*

112 Automotive Technology

CHASSIS TECHNICIAN – MAJOR #8053

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

CERTIFICATE

Student Learning Outcomes:

1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.

Completion of the following courses and 3 units of work experience:

	Units
AUTOT 19 Work Experience (Cooperative), Occupational	3
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

EMISSION TECHNICIAN – MAJOR #8054

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

CERTIFICATE

Student Learning Outcomes:

1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.

REQUIRED COURSES	Units
AUTOT 19 Work Experience (Cooperative), Occupational	3
AUTOT 161A Basic Clean Air Car Course (BCACC).....	3
AUTOT 161B Advanced Clean Air Car Course (ACACC)	1
AUTOT 261 Clean Air Car Diagnosis and Repair.....	3
AUTOT 283A Engine Performance and Diagnosis	3
AUTOT 283B Electrical Systems	3
Total	16

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

GENERAL MOTORS ASEP PROGRAM – MAJOR #805G

The General Motors Automotive Service Educational Program (GM ASEP) is a two-year associate degree program. GM ASEP incorporates the most advanced automotive technical training with a strong academic foundation in math, English, electronics, analytical and technical skills. The student earns a solid education combined with invaluable work experience for hands-on learning.

The National Automotive Technicians Education Foundation (NATEF) and General Motors Corporation certify this curriculum.

Seventy-four (74) units required for this associate degree.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Student will demonstrate the appropriate repair procedure for a given system to industry standards.

FIRST YEAR

Fall Semester	Units
AT 10 Technical Computer Applications	2
ATGM 54 Suspension, Steering, and Wheel Alignment	5
ATGM 56 Automotive Braking Systems	5
AUTOT 9 * Automotive Essentials.....	3
MATH 102 Plane Geometry	3
Electives	2

Spring Semester	Units
ATGM 52 Automotive Electrical Systems.....	5
AUTOT 19 ** Work Experience (Cooperative), Occupational	5
ENGL 1A/1AH Reading and Composition, <i>or</i> Honors Reading and Composition	4
Electives	2

Summer Semester	Units
ATGM 51 Principles of Engine Theory and Service	3
ATGM 51L Automotive Engine Laboratory.....	2
AUTOT 19 ** Work Experience (Cooperative), Occupational	0
Electives	2

SECOND YEAR

Fall Semester	Units
ATGM 53 Engine Performance.....	5
AUTOT 19 ** Work Experience (Cooperative), Occupational	5
Electives	2

Spring Semester	Units
ATGM 55 Power Trains: Transmissions/Transaxles, Differentials, and Driveaxles	6
AUTOT 19 ** Work Experience (Cooperative), Occupational	0
AUTOT 161A Basic Clean Air Car Course (BCACC).....	3
AUTOT 161B Advanced Clean Air Car Course (ACACC)	1
Electives	2

Summer Semester	Units
ATGM 57 Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics.....	5
Electives	2

Recommended Electives	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
HLTH 1 Contemporary Health Issues.....	3
PHOTO 5 Introduction to Photography.....	3
Total	74

**High School articulation (1 year)*

***Students must complete at least 10 units of work experience.*

BILINGUAL/CROSSCULTURAL SPANISH-ENGLISH MAJOR – MAJOR #7690

This curriculum is designed to prepare students for entry into a variety of career options requiring expertise in bilingual/cross-cultural skills.

ASSOCIATE IN ARTS DEGREE

REQUIRED CORE COURSES	Units
CLS/SOC 14 Sociology of the Mexican American Community.....	3
CLS 17 Beginning Mexican Folklorico Dance, <i>or</i>	4
MUS 3 Music Fundamentals, <i>or</i>	3
MUS 20 Beginning Piano: Level I, <i>or</i>	2
MUS 27 Beginning Guitar: Level I.....	2 - 4
LAST 10 Latin American Literature, <i>or</i>	
CLS 21 Chicano Literature, <i>or</i>	
ENGL 1B/1BH Introduction to the Study of Literature, <i>or</i> Honors Introduction to the Study of Literature, <i>or</i>	
ENGL 44A World Literature to the Renaissance, <i>or</i>	
ENGL 44B World Literature since the Renaissance, <i>or</i>	
ENGL 45 Contemporary World Literature, <i>or</i>	
ENGL 46A English Literature to 1800, <i>or</i>	
ENGL 46B English Literature from 1800 to the Present, <i>or</i>	
ENGL 48A Introduction to American Literature to World War I, <i>or</i>	
ENGL 48B Introduction to American Literature World War I to the Present.....	3
LING 10 Introduction To Language.....	3
SPAN 3 Intermediate Spanish, <i>or</i>	
SPAN 3NS Spanish for Spanish Speakers.....	4
SPAN 4 High-Intermediate Spanish, <i>or</i>	
SPAN 4NS Spanish for Spanish Speakers.....	4
Total 19-21	

Note: Refer to page 33 for details.

English 3 recommended. Required for full General Education Certification.

BODY AND FENDER MECHANIC

SEE AUTOMOTIVE COLLISION REPAIR TECHNOLOGY

BUILDING SAFETY AND CODE ADMINISTRATION

BUILDING SAFETY AND CODE ADMINISTRATION – MAJOR #8220

The Building Safety and Code degree program (major #8220) is designed to prepare students for employment with building departments, other governmental agencies, and private inspection companies.

ASSOCIATE IN SCIENCE

Student Learning Outcomes:

1. Interpret and apply architectural and engineering drawings in performance of building inspections.
2. Identify various jobs and associated work performed in a building department to gain employment.
3. Identify different building materials and methods of construction currently used in the building industry.
4. Articulate ideas using the technical and formal vocabulary of architecture and construction.

REQUIRED CORE COURSES	Units
ARCH 12 Architectural Practice I.....	3
ARCH 21 Materials of Construction.....	3
AT 10 Technical Computer Applications.....	2
AT 40 Preparing for Employment Opportunities.....	3
BSCA 10 Building Codes.....	3
BSCA 12 Plans Examining.....	3
BSCA 14 Building Inspection.....	3
BSCA 18 Calif Disabled Access Regulations.....	3
Total	23

ELECTIVES - Select Minimum 6 Units	Units
ARCH 32 Statics & Strength of Materials.....	3
BSCA 15 Plumbing Code and Inspection.....	3
BSCA 16 Mechanical Code and Inspection.....	3
BSCA 17 National Electrical Code Part 1.....	3
BSCA 20 Advanced Building Codes.....	3
BSCA 22 Advanced Plans Examining.....	3
BSCA 24 Advanced Building Inspection.....	3

BUILDING SAFETY AND CODE ADMINISTRATION – MAJOR #8220

This curriculum is designed to prepare students for employment with building departments, other government agencies, and private inspection companies.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Interpret and apply architectural and engineering drawings in performance of building inspections.

114 Building Safety and Code Administration

- Identify various jobs and associated work performed in a building department to gain employment.
- Identify different building materials and methods of construction currently used in the building industry.
- Articulate ideas using the technical and formal vocabulary of architecture and construction.

REQUIRED CORE COURSES		Units
ARCH 12	Architectural Practice I	3
ARCH 21	Materials of Construction	3
AT 10	Technical Computer Applications	2
AT 130	Industrial Mathematics	3
BSCA 10	Building Codes	3
BSCA 12	Plans Examining.....	3
BSCA 14	Building Inspection	3
BSCA 18	Calif Disabled Access Regulations	3
Total		23

ELECTIVES - 6 Units Required		Units
ARCH 32	Statics & Strength of Materials.....	3
AT 40	Preparing for Employment Opportunities	3
BSCA 15	Plumbing Code and Inspection.....	3
BSCA 16	Mechanical Code and Inspection.....	3
BSCA 17	National Electrical Code Part 1	3
BSCA 20	Advanced Building Codes	3
BSCA 22	Advanced Plans Examining	3
BSCA 24	Advanced Building Inspection.....	3

Second Semester		Units
*BA 18	Business and the Legal Environment.....	4
*CIT 15	Computer Concepts.....	3
Total		7

SECOND YEAR

First Semester		Units
*ACCTG 4A/4AH	Financial Accounting, <i>or</i> Honors Financial Accounting.....	4
****BA 20	Law and the Legal System	3
*ECON 1A/1AH	Introduction to Macroeconomics, <i>or</i> Honors Introduction to Macroeconomic.....	3
Total		10

Second Semester		Units
*ACCTG 4B/4BH	Managerial Accounting, <i>or</i> Honors Managerial Accounting	4
*DS 23	Business Statistics	4
*ECON 1B/1BH	Introduction of Microeconomics, <i>or</i> Honors Introduction of Microeconomics.....	3
Total		11

*CSU, Fresno transfer courses required to enter the School of Business at CSUF

**Transfers as an elective

*** Satisfies CSU, Fresno GE Area E

****Satisfies CSUF's GE, D.8, and FCC's GE, B.2

Note: Associate degree requirements are listed on page 33.

BUSINESS ADMINISTRATION

BUSINESS ADMINISTRATION - MAJOR #2050

Recommended transfer program for California State University, Fresno. The following courses are required for the associate in arts degree.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

- Demonstrate the ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
- Assist in the formulation and implementation of a corporate strategy.
- 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.
- 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
**BA 10/10H	Introduction to Business, <i>or</i> Honors Introduction to Business.....	3
***BA 30	Personal Finance	4
Total		7

ENTREPRENEURIAL VENTURES – MAJOR #2041

This certificate is designed to provide skilled artisans 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:

- Mastery of course content sufficient to complete a business plan.
- Appropriate application of management theory relating to the functions of planning, organizing, leading and controlling.
- Ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
- Formulate and implement business strategy as applied to e-shop.
- 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.
- Manage new venture launch and continuing entrepreneurial operations.

COURSES

		Units
BA 50	Business Concepts	1.5
BA 51	Business Planning & New Venture Launch	1.5
BA 52	Introduction to Entrepreneurship.....	3
Total		6

HUMAN RESOURCE MANAGEMENT ASSISTANT - MAJOR #2052

A step incentive certificate signifying proficiency in basic knowledge and skills required for an entry-level human resource assistant.

CERTIFICATE

Student Learning Outcomes:

1. Describe basic computer software and appropriate applications.
2. Demonstrate the appropriate application of State and Federal HR laws to business situations.
3. Demonstrate the appropriate application for each of the primary HR functions.
4. Demonstrate effective communication skills through speaking, writing, and other common forms of business communication including the appropriate use of communication devices.
5. Define and describe how to take personal responsibility for professional and effective workplace relationships.

COURSES	Units
BA 31 Human Resource Management	4
BA 33 Human Relations in the Workplace	3
BT 9 Computer Applications I, <i>or</i>	
BT 25 Microsoft Office, <i>or</i>	
CIT 20 Microsoft Office	3-4
Total	10-11

LOGISTICS AND DISTRIBUTION MANAGEMENT - MAJOR #2054

A certificate of achievement in Logistics and Distribution Management prepares students for entry-level management and technical careers in the ever-expanding field of logistics. The comprehensive program provides the student with a basic understanding of business principles and all areas related to the logistics and distribution industry.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Demonstrate the applications of logistics, inventory control, loss prevention and computer applications.
2. Apply effective leadership skills while managing basic logistical functions within a business enterprise.
3. Display soft skills required for workplace success including ethical behavior, customer service, teambuilding, time management, conflict management, communication, and professional behavior.

COURSES	Units
BA/BT 5 Workplace Communication	3
BA 33 Human Relations in the Workplace	3
BA 40 Supervision and Leadership	3
BA 55 Introduction to Logistics.....	3
BA 56 Inventory Control Management.....	3
BA 57 Security & Loss Prevention Management	1.5
BA 58 Business Morality and Ethics.....	1.5
BT 9 Computer Applications I.....	4
Total	22

BUSINESS ADMINISTRATION, MANAGEMENT

BUSINESS ADMINISTRATION, MANAGEMENT - MAJOR #2181

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

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Appropriate application of management theory relating to the functions of planning, organizing, leading, and controlling as it relates to existing business and entrepreneurial ventures.
2. Ability to create and analyze the four basic financial statements and budgets, ability to perform time value of money calculations and recognize and evaluate opportunity and risk.
3. Assist in formulation and implementation of a corporate strategy.
4. Demonstrate basic workplace written, verbal, and non-verbal communication skills including the proper use of appropriate technologies, written reports, and formal presentations.
5. Demonstrate the appropriate application of ethics, laws and soft skills required for the work environment.

REQUIRED CORE COURSES	Units
ACCTG 4A/4AH Financial Accounting, <i>or</i> Honors Financial Accounting, <i>or</i>	
BT 131 Applied Accounting	4
BA/BT 5 Workplace Communication	3
BA 10/10H Introduction to Business, <i>or</i> Honors Introduction to Business.....	3
BA 18 Business and the Legal Environment.....	4
BA 30 Personal Finance	4
BA 31 Human Resource Management	4
BA 33 Human Relations in the Workplace.....	3
*BA 40 Supervision and Leadership, <i>or</i> BA 43 Principles of Management	3
CIT 15 Computer Concepts.....	3
MKTG 10 Principles of Marketing	3
Total	34

ELECTIVES: Select 6 units	Units
**ACCTG 4A/4AH Financial Accounting, <i>or</i> Honors Financial Accounting.....	4
BA 28 E-Law & Ethics	3
BA 34 Fundamentals of Investing.....	3
BA 35 Financial Management	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.....	4
MKTG 11 Salesmanship.....	3
MKTG 12 Advertising and Promotion.....	3
MKTG 14 Retailing.....	3

116 Business Administration

* 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 33.

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 may include any combination of required core or 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	Units
BA/BT 5 Workplace Communication	3
BA 10/10H Introduction to Business, <i>or</i> Honors Introduction to Business	3
BA 33 Human Relations in the Workplace	3
*BA 40 Supervision and Leadership, <i>or</i> BA 43 Principles of Management	3
Total	12

ELECTIVES: Select 8 units	Units
ACCTG 4A/4AH Financial Accounting, <i>or</i> Honors 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	4
BA 31 Human Resource Management	4
BA 34 Fundamentals of Investing.....	3
BA 35 Financial Management	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	4
CIT 15 Computer Concepts.....	3
MKTG 10 Principles of Marketing	3
MKTG 11 Salesmanship.....	3
MKTG 12 Advertising and Promotion.....	3
MKTG 14 Retailing.....	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/4AH Financial Accounting, <i>or</i> Honors Financial Accounting.....	4
ACCTG 4B/4BH Managerial Accounting, <i>or</i> Honors Managerial Accounting	4
BA 35 Financial Management	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 Financial Management	3

HUMAN RELATIONS AND COMMUNICATIONS – MAJOR #2510

A step incentive certificate signifying proficiency in workplace human relations and communications.

CERTIFICATE

Student Learning Outcomes:

1. Demonstrate effective communication skills through speaking, writing, and other common forms of business communication including the appropriate use of communication devices.
2. Describe how to make personal responsibility for professional and effective workplace relationships.
3. Describe and identify goal-setting theories and its influence on workplace performance.

REQUIRED COURSES		Units
BA/BT 5	Workplace Communication	3
BA 33	Human Relations in the Workplace	3

HUMAN RESOURCE MANAGEMENT AND HUMAN RELATIONS – MAJOR #2520

A step incentive certificate signifying proficiency in entry-level human resource management.

CERTIFICATE

Student Learning Outcomes:

1. Demonstrate the appropriate application of State and Federal HR laws to business situations.
2. Demonstrate the appropriate application for each of the primary HR functions.
3. Demonstrate effective communication skills through speaking, writing, and other common forms of business communication including the appropriate use of communication devices.
4. Demonstrate how to take personal responsibility for professional and effective workplace relationships.
5. Demonstrate an understanding of motivation and goal-setting theories and its influence on workplace performance.

REQUIRED COURSES		Units
BA 31	Human Resources Management	4
BA 33	Human Relations in the Workplace	3

MANAGEMENT AND SUPERVISION – 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	4
BA 34	Fundamentals of Investing.....	3

SMALL BUSINESS MANAGEMENT – MAJOR #2030

Certificate designed to prepare students to successfully launch and operate a small business.

CERTIFICATE

Student Learning Outcomes:

1. Appropriate application of management theory relating to the functions of planning, organizing, leading and controlling.
2. Create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
3. Assist in the formulation and implementation of a business strategy.
4. Demonstrate soft skills required for workplace success as applied to customer service, teambuilding, conflict management, time management, communication, and professional behavior.
5. Demonstrate basic workplace written, verbal, and non-verbal communication skills required for the workplace, including the proper use of appropriate technologies, written reports, and formal presentations.
6. Manage new venture launch and continuing entrepreneurial operations.

REQUIRED COURSES		Units
BA 38	Operation of the Small Business	3
BA 51	Business Planning & New Venture Launch	1.5

BUSINESS & TECHNOLOGY PROGRAM

OFFICE PROFESSIONAL I

OFFICE PROFESSIONAL I – FORMERLY CLERICAL EMPHASIS – MAJOR #2062

Training is designed to provide skills for employment in a variety of professional office environments. Students may earn more than one certificate in addition to the associate in science degree and are required to earn grades of “C” or better in the Office Professional I courses.

ASSOCIATE IN SCIENCE

Student Learning Outcomes:

1. Use technology and office equipment effectively in an office environment.
2. Type a minimum of 40 words per minute.
3. Key a minimum of 110 correct strokes per minute on a ten-key calculator.
4. Maintain confidentiality and appropriate work habits including punctuality, teamwork, professional appearance, and positive attitude.

REQUIRED CORE COURSES		Units
BT 1	Computer Document Processing I	3
BT 2	Computer Document Processing II.....	3
BT 4	Ten-Key Calculation	2
BT 6	Records Management.....	3
BT 9	Computer Applications I.....	4
BT 11	Today's Office.....	3
BT 23	Job Search and Workplace Skills.....	3
BT 112	Business English.....	3
BT 115	Refresher Math.....	3
BT 122	Typing Skillbuilding.....	5
BT 123	Ten-Key Skillbuilding.....	5
Total		28

Note: Requires additional general education units for AS degree.

OFFICE PROFESSIONAL I – FORMERLY CLERICAL EMPHASIS – MAJOR #2062

Training is designed to provide skills for employment in a variety of professional office 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.

REQUIRED CORE COURSES		Units
BT 1	Computer Document Processing I	3
BT 2	Computer Document Processing II.....	3
BT 4	Ten-Key Calculation	2

BT 6	Records Management.....	3
BT 9	Computer Applications I.....	4
BT 11	Today's Office	3
BT 23	Job Search and Workplace Skills.....	3
BT 112	Business English.....	3
BT 115	Refresher Math.....	3
BT 122	Typing Skillbuilding.....	5
BT 123	Ten-Key Skillbuilding.....	5
Total		28

OFFICE PROFESSIONAL II

OFFICE PROFESSIONAL II – FORMERLY ADMINISTRATIVE ASSISTANT EMPHASIS – MAJOR #2214

Training is designed to provide advanced skills for employment in a variety of professional 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 and emphasis courses.

ASSOCIATE IN SCIENCE

Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Demonstrate the use of intermediate Windows and software skills.
3. Construct short, effective business letters, memos and reports with correct meaning, tone, grammar, punctuation, and complete information.

REQUIRED CORE COURSES (Office Professional I)		Units
BT 1	Computer Document Processing I.....	3
BT 2	Computer Document Processing II.....	3
BT 4	Ten-Key Calculation	2
BT 6	Records Management.....	3
BT 9	Computer Applications I.....	4
BT 11	Today's Office	3
BT 23	Job Search and Workplace Skills.....	3
BT 112	Business English.....	3
BT 115	Refresher Math.....	3
BT 122	Typing Skillbuilding.....	5
BT 123	Ten-Key Skillbuilding.....	5

EMPHASIS AREA COURSES		Units
BT 10	Computer Applications II	4
BT 13	Applied Business Correspondence.....	2
BT 14	Windows	2
BT 19	Work Experience (Coop), Occupational	2
BT 131	Applied Accounting.....	4
Total		42

Note: Requires additional general education units for AS degree.

OFFICE PROFESSIONAL II – FORMERLY ADMINISTRATIVE ASSISTANT EMPHASIS – MAJOR #2214

Training is designed to provide advanced skills for employment in a variety of professional office environments. Students may earn more than one certificate and are required to earn grades of “C” or better in the Office Professional I and emphasis courses.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Demonstrate the use of intermediate Windows and software skills.
3. Construct short, effective business letters, memos and reports with correct meaning, tone, grammar, punctuation, and complete information.

REQUIRED CORE COURSES (Office Professional I) Units

BT 1	Computer Document Processing I	3
BT 2	Computer Document Processing II	3
BT 4	Ten-Key Calculation	2
BT 6	Records Management	3
BT 9	Computer Applications I	4
BT 11	Today's Office	3
BT 23	Job Search and Workplace Skills	3
BT 112	Business English	3
BT 115	Refresher Math	3
BT 122	Typing Skillbuilding	5
BT 123	Ten-Key Skillbuilding	5

EMPHASIS AREA COURSES Units

BT 10	Computer Applications II	4
BT 13	Applied Business Correspondence	2
BT 14	Windows	2
BT 19	Work Experience (Coop), Occupational	2
BT 131	Applied Accounting	4
Total		42

LEGAL OFFICE PROFESSIONAL

LEGAL OFFICE PROFESSIONAL – FORMERLY LEGAL ADMINISTRATIVE ASSISTANT EMPHASIS – MAJOR #2103

Training is designed to prepare students for employment in a legal office environment. Students may earn more than one certificate in addition to the associate in science degree and are required to earn grades of “C” or better in the Office Professional I and emphasis courses.

ASSOCIATE IN SCIENCE

Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Demonstrate the advanced features of MS Word by creating documents with special features such as charts, headers and footers, AutoCorrect, Quick Parts, fields, themes, styles, references, specialized tables and indexes, sharing and protecting documents.
3. Describe the basic organizational structure, operational principles and administrative processes associated with the law office environment.

REQUIRED CORE COURSES (Office Professional I) Units

BT 1	Computer Document Processing I	3
BT 2	Computer Document Processing II	3
BT 4	Ten-Key Calculation	2
BT 6	Records Management	3
BT 9	Computer Applications I	4
BT 11	Today's Office	3

BT 23	Job Search and Workplace Skills	3
BT 112	Business English	3
BT 115	Refresher Math	3
BT 122	Typing Skillbuilding	5
BT 123	Ten-Key Skillbuilding	5

EMPHASIS AREA COURSES Units

BT 19	Work Experience (Coop), Occupational	2
BT 28	Microsoft Word I	2
BT 29	Microsoft Word II	2
BT 140/		
PLEGAL 156	Legal Office Administration	3
PLEGAL 7	Law Offices Practices	3
PLEGAL 14	Law Office Computing	3
Total		43

Note: Requires additional general education units for AS degree.

LEGAL OFFICE PROFESSIONAL – FORMERLY LEGAL ADMINISTRATIVE ASSISTANT EMPHASIS – MAJOR #2103

Training is designed to prepare students for employment in a legal office environment. Students may earn more than one certificate and are required to earn grades of “C” or better in the Office Professional I and emphasis courses.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Demonstrate the advanced features of MS Word by creating documents with special features such as charts, headers and footers, AutoCorrect, Quick Parts, fields, themes, styles, references, specialized tables and indexes, sharing and protecting documents.
3. Describe the basic organizational structure, operational principles and administrative processes associated with the law office environment.

REQUIRED CORE COURSES (Office Professional I) Units

BT 1	Computer Document Processing I	3
BT 2	Computer Document Processing II	3
BT 4	Ten-Key Calculation	2
BT 6	Records Management	3
BT 9	Computer Applications I	4
BT 11	Today's Office	3
BT 23	Job Search and Workplace Skills	3
BT 112	Business English	3
BT 115	Refresher Math	3
BT 122	Typing Skillbuilding	5
BT 123	Ten-Key Skillbuilding	5

EMPHASIS AREA COURSES Units

BT 19	Work Experience (Coop), Occup	2
BT 28	Microsoft Word I	2
BT 29	Microsoft Word II	2
BT 140/		
PLEGAL 156	Legal Office Administration	3
PLEGAL 7	Law Offices Practices	3
PLEGAL 14	Law Office Computing	3
Total		43

MEDICAL OFFICE PROFESSIONAL

**MEDICAL OFFICE PROFESSIONAL - FORMERLY
MEDICAL ADMINISTRATIVE ASSISTANT EMPHASIS -
MAJOR #2382**

Training is designed to prepare students for employment in a medical office environment. Students may earn more than one certificate in addition to the associate in science degree and are required to earn grades of “C” or better in the Office Professional I and emphasis courses.

ASSOCIATE IN SCIENCE

Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Demonstrate the use of intermediate Windows and software skills.
3. Perform medical administrative duties.

REQUIRED CORE COURSES (Office Professional I)		Units
BT 1	Computer Document Processing I	3
BT 2	Computer Document Processing II	3
BT 4	Ten-Key Calculation	2
BT 6	Records Management	3
BT 9	Computer Applications I	4
BT 11	Today's Office	3
BT 23	Job Search and Workplace Skills	3
BT 112	Business English	3
BT 115	Refresher Math	3
BT 122	Typing Skillbuilding	5
BT 123	Ten-Key Skillbuilding	5

EMPHASIS AREA COURSES		Units
BT 10	Computer Applications II	4
BT 19	Work Experience (Coop), Occupational	2
BT 43	Medical Office Vocabulary	1
BT 144	Medical Administrative Assistant	3
BT 148	Medical Insurance Forms	3
Total		41

Note: Requires additional general education units for AS degree.

MEDICAL OFFICE PROFESSIONAL - MAJOR #2382

Training is designed to prepare students for employment in a medical office environment. Students may earn more than one certificate and are required to earn grades of “C” or better in the Office Professional I and emphasis courses.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Demonstrate the use of intermediate Windows and software skills.
3. Perform medical administrative duties.

REQUIRED CORE COURSES (Office Professional I)		Units
BT 1	Computer Document Processing I	3
BT 2	Computer Document Processing II	3
BT 4	Ten-Key Calculation	2
BT 6	Records Management	3

BT 9	Computer Applications I	4
BT 11	Today's Office	3
BT 23	Job Search and Workplace Skills	3
BT 112	Business English	3
BT 115	Refresher Math	3
BT 122	Typing Skillbuilding	5
BT 123	Ten-Key Skillbuilding	5

EMPHASIS AREA COURSES		Units
BT 10	Computer Applications II	4
BT 19	Work Experience (Coop), Occupational	2
BT 43	Medical Office Vocabulary	1
BT 144	Medical Administrative Assistant	3
BT 148	Medical Insurance Forms	3
Total		41

BUSINESS OFFICE ASSISTANT – MAJOR #2201

This certificate option is designed to meet the training needs for qualified entry level employment. Students are required to earn grades of “C” or better in all courses.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Type a minimum of 40 words per minute.
3. Key a minimum of 110 correct strokes per minute on a ten-key calculator.

COURSES		Units
BT 1	Computer Document Processing I	3
BT 2	Computer Document Processing II	3
BT 9	Computer Applications I	4
BT 19	Work Experience (Coop), Occupational	3
BT 23	Job Search and Workplace Skills	3
BT 29	Microsoft Word II	2
BT 116	Spelling & Vocabulary Building	2
BT 122	Typing Skillbuilding	5
BT 123	Ten-Key Skillbuilding	5
BT 270	Business Math and Ten Key	2
BT 271	Business Grammar Fundamentals	2
BT 280	Basic Office Procedures	2
Total		27

Note: Students are required to earn grades of “C” or better in all classes; demonstrate the ability to type 40 words per minute with 97% accuracy on three five-minute timed writings; and key 110 correct strokes per minute on three five-minute timed writings using the ten-key calculator.

**COMPUTER APPLICATIONS SOFTWARE -
MAJOR #2202**

This certificate option prepares students for Microsoft 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 14	Windows.....	2
BT 106	Computer Keyboarding.....	1.5
	Total	11.5

MEDICAL BILLING ASSISTANT - MAJOR #2242

This certificate option is designed to meet the training needs for qualified entry level employment. Students are required to earn grades of "C" or better in all courses.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Achieve a satisfactory evaluation in a work experience setting.
2. Type a minimum of 25 words per minute.
3. Key a minimum of 110 correct strokes per minute on a ten-key calculator.
4. Input data accurately into a medical computer management system.

COURSES		Units
BT 1	Computer Document Processing I.....	3
BT 19	Work Experience (Coop), Occupational.....	3
BT 23	Job Search and Workplace Skills.....	3
BT 27	Microsoft Outlook.....	1
BT 43	Medical Office Vocabulary.....	1
BT 116	Spelling and Vocabulary Building.....	2
BT 147	Medical Management Software.....	2
BT 148	Medical Insurance Forms.....	3
BT 240	Legal Issues in Medical Billing.....	1
BT 270	Business Math & 10 Key.....	2
BT 271	Business Grammar Fundamentals.....	2
BT 280	Basic Office Procedures.....	2
	Total	25

MICROSOFT WORD - MAJOR #2323

This option is designed to assist students pursuing Microsoft Word certification. Students are required to earn grades of "C" or better in all courses.

CERTIFICATE

Student Learning Outcome:

1. Demonstrate the advanced features of Microsoft Word.

COURSES		Units
BT 28	Microsoft Word I.....	2
BT 29	Microsoft Word II.....	2
	Total	4

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 40 words per minute.
3. Key a minimum of 110 correct strokes per minute on a ten-key calculator.

COURSES		Hours
BT 370A	Office Assistant Applications.....	300
BT 370B	Office Assistant Applications.....	300
	Total	600

CHICANO-LATINO STUDIES

FORMERLY CULTURAL STUDIES, LA RAZA – MAJOR #7661

This program is designed to focus on Mexican-American history, heritage, and culture. Chicano-Latino Studies offers a broad interdisciplinary approach to the study of society and culture. The curriculum provides students with the strong academic background helpful to those planning careers in law, health, education, social work, business, and industry. Chicano-Latino Studies provides the knowledge and skills necessary to help students understand, communicate, and appreciate the rich cultural diversity in American society through the study of the Mexican-American community.

ASSOCIATE IN ARTS DEGREE

REQUIRED CORE COURSES		Units
CLS 11	Intro to Chicano-Latino Studies.....	3
CLS 12	Mexican American History.....	3
CLS/SOC 14	Sociology of the Mexican American Community.....	3
CLS 21	Chicano Literature.....	3
	Total	12

COURSE OPTIONS: Select 8 units		Units
CLS 13	Politics and the Chicano-Latino Community.....	3
CLS 17	Beginning Mexican Folklorico Dance.....	4
CLS 18	Latin Jazz Ensemble.....	2
CLS 20	Chicano Art.....	3
CLS 22	Pre-Columbian Art.....	3
CLS/WSTS 24	La Chicana and Latina.....	3
CLS 27	Advanced Mexican Folklorico Dance.....	4
CLS/ANTHRO 28	Ancient Mexico.....	3
CLS/HIST 29	History of Mexico.....	3
CLS 30	The Mexican-American Family.....	3
CLS 33	Community Leadership.....	3

Recommended Electives: Students are encouraged to include Spanish classes as part of their college program.

Note: An associate in arts degree will be awarded to the candidate who successfully completes a total of 60 units. The 60 units must include associate degree requirements and 20 units of course work as listed above. Associate degree requirements are listed in the Graduation Requirements section of this catalog. General Education requirements for transfer certification are listed in the Transfer Requirements section of this catalog.

CHILD DEVELOPMENT

CHILD DEVELOPMENT - MAJOR #5615

The associate in science degree in Child Development is designed to prepare students to work with young children in a variety of early care and education settings. Completion of the requirements for the associate in science degree will fulfill the educational requirements in child development, general education and the experience necessary to obtain the California Child Development Permit at the Teacher level which qualifies the student to work in a State of California funded child development center or preschool.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.
4. Develop strategies that promote partnerships between programs, teachers, families and their communities.
5. Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the early care and education profession.

REQUIRED COURSES	Units
CHDEV 1 Principles and Practices of Teaching Young Children	3
CHDEV 3 Introduction to Curriculum	3
CHDEV 6 Health, Safety and Nutrition in Early Childhood Education.....	3
CHDEV 15 Diversity and Culture in Early Care and Education Programs.....	3
CHDEV 20 Observation and Assessment.....	3
CHDEV 30 Child, Family and Community	3
CHDEV 37A Early Childhood Practicum.....	3
CHDEV 39 Child Growth and Development.....	3

COURSE OPTIONS - Group A: Select 3 units	Units
CHDEV 16 Introduction to Early Intervention.....	3
CHDEV 17A Infant Development Birth to Age Three	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 8A School Age Child: Growth and Development	3
CHDEV 8B Programs for School-Age Child Care	3
CHDEV 9 Music, Movement and Drama for Young Children	3
CHDEV 10 Science and Math for Young Children	3
CHDEV 11 The Young Child With Special Needs	3
CHDEV 12 Child Abuse	3
CHDEV 16 Introduction to Early Intervention.....	3

CHDEV 17B Advanced Infant Toddler Development and Care	3
CHDEV 37B Advanced Practicum in Early Childhood Education.....	3
CHDEV 38 Lifespan Development	3
CHDEV 40A Administration of Early Childhood Programs	3
CHDEV 40B Advanced Administration of Early Childhood Programs.....	3
CHDEV 43 Children's Literature	3
CHDEV 46 Computers in Early Childhood Education.....	3
CHDEV 47 Emergent Literacy.....	3
CHDEV 48 Children With Challenging Behaviors	3
CHDEV 53 Family Child Care Programs.....	3

Suggested sequence of courses:

FIRST YEAR

First Semester	Units
CHDEV 1 Principles and Practices of Teaching Young Children	3
CHDEV 3 Introduction to Curriculum	3
CHDEV 30 Child, Family and Community	3
CHDEV 39 Child Growth and Development.....	3

Second Semester	Units
CHDEV 6 Health, Safety and Nutrition in Early Childhood Education.....	3
CHDEV 15 Diversity and Culture in Early Care and Education Programs.....	3
CHDEV 20 Observation and Assessment.....	3
CHDEV 37A Early Childhood Practicum.....	3

SECOND YEAR

First Semester	Units
Child Development Course Options Group A	3
Child Development Course Options Group B	3
Total	30

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

CHILD DEVELOPMENT – MAJOR #5615

The certificate of achievement 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 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
CHDEV 1 Principles and Practices of Teaching Young Children.....	3
CHDEV 3 Introduction to Curriculum	3
CHDEV 6 Health, Safety and Nutrition in Early Childhood Education.....	3
CHDEV 15 Diversity and Culture in Early Care and Education Programs.....	3
CHDEV 20 Observation and Assessment.....	3
CHDEV 30 Child, Family and Community	3
CHDEV 37A Early Childhood Practicum.....	3
CHDEV 39 Child Growth and Development.....	3

Suggested sequence of courses:

FIRST YEAR

First Semester	Units
CHDEV 1 Principles and Practices of Teaching Young Children.....	3
CHDEV 3 Introduction to Curriculum	3
CHDEV 30 Child, Family and Community	3
CHDEV 39 Child Growth and Development.....	3

Second Semester	Units
CHDEV 6 Health, Safety and Nutrition in Early Childhood Education.....	3
CHDEV 15 Diversity and Culture in Early Care and Education Programs.....	3
CHDEV 20 Observation and Assessment.....	3
CHDEV 37A Early Childhood Practicum.....	3
Total	24

EARLY CHILDHOOD EDUCATION FOR TRANSFER – MAJOR #31177

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

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.

4. Develop strategies that promote partnerships between programs, teachers, families and their communities.
5. Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the early care and education profession.

REQUIRED COURSES	Units
CHDEV 1 Principles and Practices of Teaching Young Children	3
CHDEV 3 Introduction to Curriculum	3
CHDEV 6 Health, Safety and Nutrition in Early Childhood Education.....	3
CHDEV 15 Diversity and Culture in Early Care and Education Programs.....	3
CHDEV 20 Observation and Assessment.....	3
CHDEV 30 Child, Family and Community	3
CHDEV 37A Early Childhood Practicum.....	3
CHDEV 39 Child Growth and Development.....	3
Total	24

Notes:

Required Major Courses	24 units.
CSU General Education or IGETC.....	39 units.
Approved courses may be double counted in major and CSU-GE.	
Transferable Electives as needed to reach 60 transferable units.	
DEGREE TOTAL.....	60 units.

CHILD DEVELOPMENT ASSOCIATE TEACHER – MAJOR #5614

A 15-unit program designed for individuals who desire a short-term training program in Child Development. Students will complete coursework and work experience to become qualified to provide instruction in child development centers and family child care homes as well as to obtain a California Child Development Permit at the Associate Teacher level.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.

REQUIRED COURSES	Units
CHDEV 3 Introduction to Curriculum	3
CHDEV 6 Health, Safety and Nutrition in Early Childhood Education.....	3
CHDEV 19 Work Experience (Cooperative), Occupational	3
CHDEV 30 Child, Family and Community	3
CHDEV 39 Child Growth and Development, <i>or</i>	3
CHDEV 150 Basic Child Growth and Development	3
Total	15

EARLY INTERVENTION ASSISTANT - MAJOR #5617

This certificate of achievement 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.**

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
CHDEV 11	The Young Child With Special Needs	3
CHDEV 15	Diversity and Culture in Early Care and Education Programs.....	3
CHDEV 16	Introduction to Early Intervention.....	3
CHDEV 17A	Infant Development - Birth to Age Three.....	3
CHDEV 20	Observation and Assessment.....	3
CHDEV 30	Child, Family and Community	3
CHDEV 39	Child Growth and Development.....	3
CHDEV 48	Children With Challenging Behaviors	3

Suggested sequence of courses:

FIRST YEAR

First Semester		Units
CHDEV 3	Introduction to Curriculum	3
CHDEV 30	Child, Family and Community	3
CHDEV 39	Child Growth and Development.....	3

Second Semester		Units
CHDEV 1	Principles and Practices of Teaching Young Children.....	3
CHDEV 17A	Infant Development: Birth to Age Three	3
CHDEV 15	Diversity and Culture in Early Care and Education Programs.....	3

* CD 1 is not required for the Early Intervention Certificate but is a prerequisite for CD 20

SECOND YEAR

First Semester		Units
CHDEV 6	Health, Safety and Nutrition in Early Childhood Education.....	3
CHDEV 11	The Young Child With Special Needs	3
CHDEV 20	Observation and Assessment.....	3

Second Semester		Units
CHDEV 16	Introduction to Early Intervention.....	3
CHDEV 48	Children With Challenging Behaviors	3
Total		30

** To qualify for the AS in Child Development in addition to the Early Intervention Assistant Certificate, complete CD 37A during second year.

FAMILY CHILD CARE – MAJOR #5571

A 15-unit program designed to meet the training needs of family child care providers, individuals who are licensed to care for children in their homes. The following course of study will also prepare the student to meet the coursework requirements for the California Child Development Permit at the Associate Teacher level.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.

Required Courses		Units
CHDEV 3	Introduction to Curriculum	3
CHDEV 6	Health, Safety and Nutrition in Early Childhood Education.....	3
CHDEV 30	Child, Family and Community	3
CHDEV 39	Child Growth and Development, <i>or</i> CHDEV 150 Basic Child Growth and Development	3
CHDEV 53	Family Child Care Programs.....	3
Total		15

FOSTER CARE - MAJOR #5580

A 14-unit program designed to train foster parents in specialized areas, acquiring knowledge and skills necessary for caring for special needs children.

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 who are in out-of-home placement due to issues of neglect and/or abuse.
2. Apply effective guidance and interaction strategies that support children in out-of-home placements in social learning, identity and self-confidence.
3. Develop strategies that support relationships between birth families, foster families, and child welfare staff.

Required Courses	Units
CHDEV 5 Parent Education.....	3
CHDEV 12 Child Abuse	3
CHDEV 30 Child, Family and Community	3
CHDEV 39 Child Growth and Development.....	3
CHDEV 161 Introduction to Foster Parenting	1
CHDEV 162 Independent Living Skills.....	1
Total	14

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 or Child Development 150 (DSS*1)
2. Child Development 30. (DSS*2))
3. Child Development 3, 9, 10, 37A/B, 43 or 44 (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:

Child Development 8B, Programs for School Age Child Care, or Child Development 8A, School Age Child: Growth and Development. (DSS*5)

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 or 150

Child Development 30

Child Development 3...

plus 3 additional units of child development coursework

Teacher level: 40 units

(Experience: 175 days of 3 + hours per day within 4 years of application)
Completion of the Associate Teacher level (above) plus 12 additional units in Child Development and 16 units of general education including one course that meets FCC graduation requirements from each of the following areas:

English

Math or Science

Social Sciences

Humanities

* *Alternative qualifications: an AS degree in Child Development which includes one supervised field experience course. No work experience required*

*Master Teacher level:

(Experience: 350 days of experience within 4 years, including 100 days of supervising adults)

Complete the Teacher level requirements listed above, plus:

Child Development 45

6 units of specialized course work in Child Development

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

*Site Supervisor level:

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

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

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

* Alternative qualifications for Master Teacher and Site Supervisor levels:

BA degree or higher with 12 units of child development

Plus a supervised field work experience course (Child Development 37A or 37B; Child Development 17A)

Family Child Care

A family child care provider is an individual who is licensed to care for up to six children in his/her home. State law requires that the family child care provider must complete 15 hours of child health and safety. This requirement is satisfied by Child Development 6, Child Care, Health and Safety, 3 units. There are currently no additional educational requirements for family child care providers, however, the Child Development Department recommends completion of the Family Child Care Certificate Program.

Elementary School Teaching Credential

Students wishing to teach in an elementary school must take the Liberal Studies (Credential) major.

Please note that most child development classes listed above do not count toward the Liberal Studies (Credential) major.

This material has been prepared as carefully as possible. Fresno City College does not assume responsibility for inaccuracies or changes in the information contained herein after the date of publication.

COMMUNICATION FOR TRANSFER FORMERLY SPEECH – MAJOR #31144

The Communication degree program is intended 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 Communication associate in arts for Transfer degree is designated 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 minimum 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.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

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

Required Core Courses		Units
COMM 1	Intro 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	1-3
COMM 26	Forensics	1-3
JOURN 1	Introduction to Mass Communication	3
JOURN 3	Newsriting	3

Notes:

- Required Major Courses 18 units.
- CSU General Education or IGETC Pattern..... 39 units.
- Transferable Electives as needed to reach 60 transferable units.
- DEGREE TOTAL..... 60 units.**

COMPUTER AIDED DRAFTING AND DESIGN FORMERLY DRAFTING - MAJOR #3051

The field of drafting is one, which serves a wide and varied number of vocations, professions, and industries. The Computer Aided Drafting and Design program directs its courses and training along practical lines as demanded by industry so that students, upon completion of their training, are better qualified to obtain employment in CADD or related occupations.

ASSOCIATE OF SCIENCE DEGREE AND 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 3D assembly using various CAD systems to industry standards as determined by the instructor.

FIRST YEAR

First Semester		Units
CADD 14	2D CAD I	3
CADD 16	3D Solid Modeling I	3
DRAFT 12	Drafting Practices	3
DRAFT 160	Mathematics of Drafting.....	3
Total		12

Second Semester		Units
AT 10	Technical Computer Applications	2
CADD 22	Mechanical Drawing I	3
CADD 24	2D CAD II	3
CADD 26A	3D Solid Modeling II	3
CADD 28	Rapid Prototyping I	3
Total		14

SECOND YEAR

First Semester		Units
AT 131	Technical Reports	3
AT 120	Industrial Science	3
CADD 32	Mechanical Drawing II.....	3
CADD 36A	3D Solid Modeling III	3
Total		12

Second Semester		Units
AT 40	Preparing for Employment Opportunities	3
CADD 40	Civil Drafting Applications	3
CADD 42	Mechanical Drawing III	3
CAM 10	CNC Mill Programming & Operation	7
Total		16

Recommended Elective: Drafting 19.

Note: Students planning to receive the AS degree must meet the associate in science degree requirements on page 33.

COMPUTER AIDED MANUFACTURING FORMERLY MANUFACTURING TECHNOLOGY & MACHINIST

COMPUTER AIDED MANUFACTURING – MAJOR #8271

The CAM Program is designed for students who have a strong interest in hands-on experience both in the classroom as well as in the industry. Core courses ensure students with a knowledgeable foundation to operate and setup computer numerical control machines using our Computer Aided Manufacturing laboratory. MasterCAM software is the designing software used to generate G and M codes for product prototyping. The CAM program prepares students for an entry level job as a CNC operator or as CNC programmer. The software and machines give students the most experiences possible, and help develop skills for our local manufacturing workforce.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Design geometric shapes using MasterCAM software.
2. Select the correct toolpaths for the manufacturing of the prototypes.
3. Setup and operate Computer Numerical Control Machines.

FIRST YEAR

First Semester		Units
AT 10	Technical Computer Applications	2
CAM 10	CNC Mill Programming & Operation I, <i>or</i>	
CAM 1A	CAM and Cabinetry Operation I	7-13
Total		9-15

Second Semester		Units
CAM 20	CNC Mill/Programming & Operation II, <i>or</i>	
CAM 1B	Mill and Lathe Operation II	7-13
DRAFT 12	Drafting Practices	3
Total		10-16

SECOND YEAR

First Semester		Units
AT 40	Preparing for Employment Opportunities	3
Total		3

Second Semester		Units
AT 21	Occupational Safety and Health.....	2
CADD 16	3D Solid Modeling	3
Total		5

Associate degree requirements are listed on page 33.

COMPUTER AIDED MANUFACTURING – MAJOR #8271

The CAM Program is designed for students who have a strong interest in hands-on experience both in the classroom as well as in the industry. Core courses ensure students with a knowledgeable foundation to operate and setup computer numerical control machines using our Computer Aided Manufacturing laboratory. MasterCAM software is the designing software used to generate G and M codes for product prototyping. The CAM program prepares students for an entry level job as a CNC operator or as CNC programmer. The software and machines give students the most experiences possible, and help develop skills for our local manufacturing workforce.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Design geometric shapes using MasterCAM software.
2. Select the correct toolpaths for the manufacturing of the prototypes.
3. Setup and operate Computer Numerical Control Machines.

FIRST YEAR

First Semester		Units
AT 10	Technical Computer Applications	2
CAM 10	CNC Mill Programming & Operation I, <i>or</i>	
CAM 1A	CAM and Cabinetry Operation I	7-13
Total		9-15

Second Semester		Units
CAM 20	CNC Mill/Programming & Operation II, <i>or</i>	
CAM 1B	Mill and Lathe Operation II	7-13
DRAFT 12	Drafting Practices	3
Total		10-16

SECOND YEAR

First Semester		Units
AT 40	Preparing for Employment Opportunities	3
AT 130	Industrial Mathematics, <i>or</i>	
MATH 101	Elementary Algebra (or higher level)	3-5
Total		6-8

Second Semester		Units
AT 21	Occupational Safety	2
CADD 16	3D Solid Modeling	3
Total		5

Associate degree requirements are listed on page 33.

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 current programming languages and a broad foundation in Business Administration. This major will prepare students for transfer as an Information Systems major to most transfer schools as well as entry-level employment as a computer programmer. Transfer students should obtain complete information on transfer requirements as they plan their program.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcome:

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

FIRST YEAR

First Semester		Units
ACCTG 4A/4AH	Financial Accounting, <i>or</i>	
	Honors Financial Accounting.....	4
BA 28	E-Law and Ethics	3
CIT 15	Computer Concepts.....	3
Total		10

Second Semester		Units
ACCTG 4B/4BH	Managerial Accounting, <i>or</i>	
	Honors Managerial Accounting	4
BA 18	Business and the Legal Environment.....	4
CIT 60	Beginning Visual Basic.....	3
Total		11

128 Computer Information Technology

SECOND YEAR

First Semester		Units
CIT 63	Beginning Java Programming, <i>or</i>	
CIT 66	Beginning C++ Programming.....	4
DS 21	Finite Mathematics.....	3
ECON 1A/1AH	Introduction to Macroeconomics, <i>or</i>	
	Honors Introduction to Macroeconomic.....	3
Total		10

Second Semester		Units
CIT 68	Advanced Programming Applications, <i>or</i>	
CIT 64	Advanced Java Programming, <i>or</i>	
CIT 67	Advanced C++ Programming.....	4
DS 23	Business Statistics.....	4
ECON 1B/1BH	Introduction of Microeconomics, <i>or</i>	
	Honors Introduction of Microeconomics.....	3
Total		11

Note: Requires additional general education units for AS degree.

DATA ENTRY TECHNICIAN – MAJOR #2716

This program is designed to prepare student for entry level employment as a data entry operator.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Input data into a computer at 25 words per minute (wpm).
2. Input numeric data into a computer program at 110 strokes per minute (spm).

First Semester		Units
BT 1	Computer Document Processing I.....	3
BT 4	Ten-Key Calculations.....	2
CIT 12	Computer Literacy.....	3
DS 117	Business Math.....	3
Total		11

Second Semester		Units
BA 10/10H	Introduction to Business, <i>or</i>	
	Honors Introduction to Business.....	3
CIT 17	Windows Vista Basics.....	2
CIT 80	Internet Basics.....	2
CIT 81	Worldwide Web Research.....	2
Total		9

INFORMATION SECURITY I – MAJOR #2714

Designed to meet the training needs for qualified entry-level computer network security professionals. It is also designed to help prepare students for industry standard security certifications like CompTIA Security+, Security Certified Professional (SCP) and others.

CERTIFICATE

Student Learning Outcome:

1. Given a business scenario, assess and control risk, create a blueprint for security, control network remote access, and manage e-mail and website security.

REQUIRED CORES		Units
CIT 57	Wireless Networking.....	3
CIT 58A	Principles of Information Security.....	3
CIT 58B	Operating System Security.....	3
CIT 58C	Network Security Fundamentals.....	3
Total		12

INFORMATION SECURITY II – MAJOR #2715

Designed to meet the training needs for qualified entry-level computer network security professionals. It is also designed to help prepare students for industry standard security certifications like CompTIA Security+, Security Certified Professional (SCP), and others.

CERTIFICATE

Student Learning Outcomes:

1. Given a business scenario, perform a security risk analysis, design a security policy, choose and configure a firewall, and set up a virtual private network (VPN).
2. Use hacking tools and techniques to hack web servers and wireless networks to determine the security risk and the appropriate cryptography and network security devices needed to limit the security risk of a business.

REQUIRED COURSES		Units
CIT 58D	Network Defense and Countermeasures.....	3
CIT 58E	Firewalls and Network Security.....	3
CIT 58F	Ethical Hacking.....	3
Total		9

MCSE CORE – MAJOR #2721

Designed to meet the training needs for qualified entry-level Microsoft network technicians. It is also designed to help prepare students for the core requirements for the Microsoft Certified Systems Engineer (MCSE) certification tests.

CERTIFICATE

Student Learning Outcomes:

1. Students will be able to assemble a personal computer including hardware and software components, operating systems, and applications.
2. Students will be able to configure routing by using the Routing and Remote Access service, manage and monitor DHCP, resolve host names by using DNS, resolve network basic input/output system (NetBIOS) names by using WINS, and configure network access.
3. Students will be able to plan a TCP/IP physical and logical network, Dynamic Host Configuration Protocol (DHCP) strategy, Domain Name System (DMS) strategy, optimize Window Internet Naming Service (WINS), and troubleshoot network access.

REQUIRED COURSES		Units
CIT 50	Fundamentals of Networking.....	4
CIT 51	MCSE Network Infrastructure.....	4
CIT 52	MCSE Directory Services.....	4
Total		12

MCSE NETWORKING – MAJOR #2722

Designed to meet the training needs for qualified entry-level MCSE network technicians. It is also designed to help prepare for the MCSE certification tests.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Students will be able to describe the logical and physical components of Active Directory, plan and implement an organizational unit structure, plan and implement a Group Policy strategy to centrally manage users and computers in an enterprise, implement sites to manage and monitor Active Directory replication, plan and manage operations masters, and plan and implement an Active Directory infrastructure that is based on a directory service design provided by an enterprise architect.
2. Students will be able to install and upgrade to Windows XP Professional, configure and manage files systems, configure the desktop environment, use profiles to control desktop customization, configure Windows XP Professional to operate on Windows networks, and configure Windows XP Professional for mobile computing.
3. Students will be able to describe the process for designing an Active Directory infrastructure and a network infrastructure that supports Active Directory, design a site infrastructure that meets the needs of an organization, design an administrative structure that meets the needs of an organization, design a Dynamic Host Configuration Protocol (DHCP) structure that supports Active Directory and meets the needs of the organization, and design a name resolution strategy that supports Active Directory and meets the needs of the organization.
4. Students will be able to outline best practices for the information security goals of confidentiality, integrity and availability, explain ethical practices, define vocabulary/terminology related to information security, explain the importance of planning and administrative controls, identify security threats, vulnerabilities, and countermeasures, and identify procedures for security risk management.

REQUIRED COURSES		Units
CIT 50	Fundamentals of Networking.....	4
CIT 51	MCSE Network Infrastructure.....	4
CIT 52	MCSE Directory Services	4
CIT 53	MCSE Directory Infrastructure	2
CIT 54	MCSE Network Services.....	2
CIT 55	MCSE Network Security	4
CIT 56	MCSE ISA	4
Total		24

MICROCOMPUTER SOFTWARE SPECIALIST – MAJOR #2705

Designed for the nontransfer student leading to employment as a micro-computer 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

First Semester		Units
ACCTG 4A/4AH	Financial Accounting, <i>or</i> Honors Financial Accounting.....	4
BA 28	E-Law and Ethics	3
BT 106	Computer Keyboarding.....	1.5
CIT 15	Computer Concepts.....	3
MATH 101	Elementary Algebra (if needed)	5
Total		11.5 or 16.5

Second Semester **Units**

CIT 17	Windows Vista Basics	2
CIT 20	Microsoft Office	3
CIT 80	Internet Basics	2
CIT 81	World Wide Web Research	2
Total		9

SECOND YEAR

First Semester		Units
CIT 29	PowerPoint.....	1
CIT 45	Data Communications	3
CIT 60	Beginning Visual Basic.....	3
Total		7

Second Semester **Units**

CIT 19	Work Experience (Coop), Occupational	2
CIT 21	Advanced Microsoft Office.....	3
Total		5

Recommended Electives: CIT 68, CIT 260

Note: Requires additional general education units for AS degree.

MICROSOFT ACCESS – MAJOR #2707

This certificate option is designed to assist students pursuing MOUS certification.

CERTIFICATE

Student Learning Outcome:

1. Given a business scenario use the Microsoft Access database to create a customized solution addressing the scenario that demonstrates a proficiency with tables, queries, forms, macros, and reports.

REQUIRED CORE COURSES **Units**

CIT 26	Database Fundamentals.....	2
CIT 27	Advanced Databases.....	2
Total		4

Note: Courses in the program have CIT 12 or CIT 15 as prerequisites.

130 Computer Information Technology

MICROSOFT EXCEL – MAJOR #2709

This certificate option is designed to assist students pursuing MOUS certification.

CERTIFICATE

Student Learning Outcome:

- Given a business scenario use the Microsoft Excel spreadsheet application to design and create a solution demonstrating proficiency with formulas, functions, charts, macros and object-linking and embedding.

REQUIRED CORE COURSES		Units
CIT 23	Spreadsheet Fundamentals	2
CIT 24	Advanced Spreadsheets	2
Total		4

Note: Courses in the program have CIT 12 or CIT 15 as prerequisites.

MICROSOFT OFFICE – MAJOR #2711

This certificate option is designed to assist students pursuing MOUS certification.

CERTIFICATE

Student Learning Outcome:

- Given a business scenario, select and use appropriate application program(s) from Microsoft Office to create a solution addressing the scenario.

REQUIRED CORE COURSES		Units
CIT 20	Microsoft Office.....	3
CIT 21	Advanced Microsoft Office.....	3
Total		6

Note: Courses in the program have CIT 12 or CIT 15 as prerequisites.

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:

- Construct and apply an IP addressing scheme for a simple network problem.
- Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
- Define and apply digital numbering systems.
- Explain how networks are interconnected and understand how operating system software affects the hardware.
- Install and configure the network server operating system software, and manage servers, users, and resources with a server manager utility, and monitor network system performance.

Required CORE Courses		Units
*BT 23	Job Search and Workplace Skills.....	3
BT 112	Business English.....	3
CIT 15	Computer Concepts.....	3
CIT 40	Computer Operating Systems.....	4

**CIT 45	Data Communications.....	3
CIT 50	Fundamentals of Networking.....	4
EST/CIT 19	Work Experience (Cooperative), Occupational.....	2
EST 55A	Digital Concepts.....	3
EST 60	A+ PC Maintenance.....	3
EST 61	Networking Fundamentals.....	3
EST 62	Routing Protocols and Concepts.....	3

Suggested sequence of courses:

First Semester		Units
CIT 15	Computer Concepts.....	3
**CIT 45	Data Communications.....	3
EST 55A	Digital Concepts.....	3
EST 60	A+ PC Maintenance.....	3
EST 61	Networking Fundamentals.....	5
Total		15

Second Semester		Units
*BT 23	Job Search and Workplace Skills.....	3
BT 112	Business English.....	3
CIT 40	Computer Operating Systems.....	4
CIT 50	Fundamentals of Networking.....	4
EST/CIT 19	Work Experience (Cooperative), Occupational.....	2
EST 62	Routing Protocols and Concepts.....	3
Total		19

*AT 40 can be substituted for BT 23.

**EST 57A and EST 57B may be substituted for CIT 45.

Note: Requires additional general education units for AS degree.

PREPARATION IN MICROSOFT OFFICE – MAJOR #2710

This certificate option is designed to assist students pursuing MOUS certification.

CERTIFICATE

Student Learning Outcomes:

- Given a business scenario, select and use an appropriate application program to create a solution addressing the scenario.
- Given a Microsoft Office related software problem, troubleshoot, identify, research, and provide assistance to users.

First Semester		Units
BT 27	Microsoft Outlook.....	1
BT 28	Microsoft Word I.....	2
BT 29	Microsoft Word II.....	2
CIT 20	Microsoft Office.....	3
CIT 29	PowerPoint.....	1
Total		9

Second Semester		Units
CIT 23	Spreadsheet Fundamentals.....	2
CIT 24	Advanced Spreadsheets.....	2
CIT 26	Database Fundamentals.....	2
CIT 27	Advanced Database.....	2
Total		8

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	4
CIT 45	Data Communication.....	3
Total		7

Spring Semester		Units
CIT 48	A+ and Server+Systems Fundamentals.....	3
EST 60	A+PC Maintenance.....	3
Total		6

WEB DEVELOPER – FORMERLY WEBMASTER – MAJOR #2742

This option is designed to prepare students for work in the computer industry as Web Developers. Completing the program with the college graduation requirements leads to an AS degree; without the graduation requirements, student is eligible for a certificate of achievement.

ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:

1. Given a business scenario create an interactive client-side and/or server-side, data driven website using appropriate tools to create a solution addressing the scenario.

Suggested sequence of courses:

FIRST YEAR

First Semester		Units
BA 28	E-Law and Ethics, <i>or</i>	
BA 48	E-Business.....	3
CIT 15	Computer Concepts.....	3
CIT 82	Web Technologies	3
Total		9

Second Semester		Units
CIT 28	Client/Server Databases.....	3
CIT 85	Creating Websites.....	3
CIT 93	Client Side Scripting.....	3
Total		9

SECOND YEAR

First Semester		Units
CIT 63	Beginning Java Programming.....	4
CIT 94	Server Side Scripting.....	3
Electives	See list below.....	3-4
Total		10-11

Second Semester

	Units	
CIT 64	Advanced Java Programming, <i>or</i>	
CIT 68	Advanced Programming Applications.....	4
CIT 90	Data Driven Websites	4
Electives	See list below.....	3-4
Total		11-12

Recommended Electives (6 to 9 units)

CIT 40	Computer Operating Systems	4
CIT 45	Data Communications	3
CIT 50	Fundamentals of Networking.....	4
CIT 60	Beginning Visual Basic.....	3
CIT 66	Beginning C++ Programming.....	4
CIT 80	Internet Basics	2
CIT 81	World Wide Web Research	2

WEB PAGE DEVELOPMENT – MAJOR #2741

This certificate option is designed to assist students who would like to develop web pages.

CERTIFICATE

Student Learning Outcome:

1. Given a business scenario create interactive web pages to create a solution addressing the scenario.

REQUIRED COURSES		Units
CIT 82	Web Technologies	3
CIT 85	Creating Websites.....	3
CIT 93	Client Side Scripting.....	3
Total		9

CONSTRUCTION – MAJOR #8091

The construction curriculum is designed to offer students hands-on training which will prepare them for entry into the construction industry as an advanced apprentice.

ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Install roof sheathing.
2. Construct foundation forms for a slab on grade.
3. Correctly install vinyl windows in a newly framed residence.
4. Correctly install and finish drywall.
5. Install pre-hung doors.
6. Lay out and square a building foundation.

FIRST YEAR

First Semester		Units
ARCH 21	Materials of Construction	3
AT 10	Technical Computer Applications	2
AT 21	Occupational Safety and Health.....	2
AT 130	Industrial Mathematics	3
CONS 50A	Basic Residential Construction.....	3
Total		13

132 Construction

Second Semester		Units
ARCH 22	Architectural Practice II	3
AT 40	Preparing for Employment Opportunities	3
AT 131	Technical Report Writing.....	3
CONS 50B	Basic Resident Construction.....	3
Total		12

SECOND YEAR

First Semester		Units
CONS 51	Residential Foundations and Framing, <i>or</i>	9
CONS 51A	Residential Construction: Foundations, <i>and</i>	5
CONS 51B	Residential Construction: Framing.....	5
Total		9-10

Second Semester		Units
CONS 53	Residential Exterior and Interior Finishing, <i>or</i>	9
CONS 53A	Residential Construction: Exterior Finish, <i>and</i>	5
CONS 53B	Residential Construction: Interior Finish	5
CONS 55	Roof Framing Systems.....	3
Total		12-13

Recommended Electives: BT 1; CONS 19, 56, 57; WELD 1.

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 33 of the catalog, upon application, will be awarded the associate in science degree.

CRIMINOLOGY

FORMERLY ADMINISTRATION OF JUSTICE

CORRECTIONAL SCIENCE OPTION – MAJOR #7731

Designed to provide specialized education for those students desiring a career in the correctional field including employment as a juvenile correctional officer, a state of California corrections officer, a jail correctional officer and a probation and parole officer. This degree is also designed to provide those students who are pursuing careers in the correctional field of criminology, the opportunity to broaden their knowledge and appreciation of the many levels of corrections and the value of correctional roles in the criminal justice system.

This degree will also serve as a primer for those students who wish to pursue a higher level of education in corrections at the university level.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcome:

1. The students will understand state and federal regulations and have knowledge of correctional systems.

REQUIRED CORE COURSES		Units
CRIM 6	Concepts of Criminal Law	3
+CRIM 13	The Constitution and Your Individual Rights	3
CRIM 15	Police Ethics.....	3
CRIM 20	Introduction to Corrections	3
CRIM 21	Correctional Report Writing	3
CRIM 23	Correctional Interviewing and Counseling.....	3

CRIM 24	Control and Supervision in Corrections	3
CRIM 25	Legal Aspects of Corrections.....	3
+*Ethnic Studies	Any course listed below.....	3
+ENGL 1A/1AH	Reading and Composition, <i>or</i> Honors Reading and Composition	4
+HLTH 1	Contemporary Health Issues.....	3
+Spanish or Hmong	Any Level	3-4
Total		37-38

COURSE OPTIONS: Select any 16 units

COURSE OPTIONS: Select any 16 units		Units
CRIM 1	Introduction to Criminology	3
CRIM 5	Community Relations	3
CRIM 8	Criminal Investigation	4
CRIM 11	Juvenile Delinquency.....	3
CRIM 18	Criminal Personalities.....	3
CRIM 19	Work Experience (Coop), Occupational	1-6
CRIM 36	Gangs and Corrections	3
+*Ethnic Studies	Any course listed below.....	3
+HMONG	Any level	4
HS 44	Drug Use: Physical and Psychological Effects	3
PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology.....	3
PSY 16	Abnormal Psychology	3
+SPANISH	Any level	3-4
WSTS 10	Changing Roles of Women.....	3

* Choose from AFRAM 1, 2, or 4; AMIND 31, 32, 33, or 34; ASAMER 1 or 15; or CLS 11, 12, 13, 14, 24, 28, 29, or 30.

+Also fulfills degree or transfer requirements.

Note: 1. An associate in science degree will be awarded to any candidate who successfully completes a minimum of 60 units.

STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:

Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

CORRECTIONAL SCIENCE OPTION – MAJOR #7731

This certificate provides specialized education for those students desiring a career in the correctional field including employment as a juvenile correctional officer, a state of California corrections officer, a jail correctional officer and parole officer.

This certificate is also designed to provide students who are pursuing careers in the correctional field, the opportunity to broaden their technical knowledge of the many levels of correctional employment opportunities.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:

1. The students will understand state and federal regulations and have knowledge of correctional systems.

REQUIRED CORE COURSES		Units
CRIM 6	Concept of Criminal Law	3
CRIM 20	Introduction to Corrections	3
CRIM 21	Correctional Report Writing	3
CRIM 23	Correctional Interviewing and Counseling	3
CRIM 24	Control and Supervision in Corrections	3
CRIM 25	Legal Aspects of Corrections	3
Total		18

COURSE OPTIONS: Select any 16 units		Units
CRIM 1	Introduction to Criminology	3
CRIM 5	Community Relations	3
CRIM 8	Criminal Investigation	4
CRIM 11	Juvenile Delinquency	3
CRIM 18	Criminal Personalities	3
CRIM 36	Gangs and Corrections	3
*Ethnic Studies	Any Course Listed Below	3
Hmong	Any Level	4
PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology	3
PSY 16	Abnormal Psychology	3
Spanish	Any Level	3-4
WSTS 10	Changing Roles of Women	3

*Choose from AFRAM 1, 2, or 4; AMIND 31, 32, 33, or 34; ASAMER 1 or 15; or GLS 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 transfer program designed for upper division work in law enforcement, corrections, *or* victimology.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Recognize, name and define the key terms necessary for further study in criminology including its sub specializations of law enforcement, corrections, and victimology.
2. Explain the significance and importance of criminology to the society in which they live.
3. Identify the principle discoveries and contributions in the study of criminology and appraise critical areas for further inquiry.
4. Be familiar with a base of knowledge to make educated field level decisions in law enforcement, corrections, or victimology.

REQUIRED CORE COURSES		Units
AT 10	Technical Computer Applications, <i>or</i>	
CIT 12	Computer Literacy	2-3
CRIM 1	Introduction to Criminology	3
CRIM 4	Principles and Procedures of the Justice System	3
CRIM 5	Community Relations	3

CRIM 6	Concepts of Criminal Law	3
CRIM 12	Criminal Justice Communications	3
*CRIM 13	The Constitution and Your Individual Rights	3
CRIM 15	Police Ethics	3
CRIM 16	Victimology	3
Total		26-27

COURSE OPTIONS: Select 9 units **Units**

*AFRAM 1	African-American Culture, <i>or</i>	
*AFRAM 4	African Civilization	3
*AMIND 31	American Indian Culture, <i>or</i>	
*AMIND 34	American Indian Contemporary Society	3
ASAMER 15	Introduction to Asian-Americans	3
*CLS 11	Introduction to Chicano-Latino Studies, <i>or</i>	
*CLS/SOC 14	Sociology of the Mexican American Community	3
*PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology	3
*Soc 1A/1AH	Introduction to Sociology, <i>or</i> Honors Introduction to Sociology	3
*SOC 2	American Minority Groups	3
*WSTS 10	Changing Roles of Women	3

* Also fulfills degree or transfer requirements

Note: An associate in science degree will be awarded to any candidate who successfully completes a minimum of 60 units. The 60-unit minimum must include associate degree requirements and 39 units of course work listed above.

STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:

Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

CRIMINOLOGY OPTION – MAJOR #7700

A transfer program designed for upper division work in law enforcement, corrections, or victimology.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Recognize, name and define the key terms necessary for employment or for further study in criminology including its sub-fields of law enforcement, corrections, and victimology.
2. Explain the significance and importance of criminology [including law enforcement, corrections, and victimology] to the society in which they live.
3. Identify the principle discoveries and contributions of the study of criminology, and appraise critical areas for further academic inquiry.
4. Make educated field level decisions in law enforcement, corrections, and victimology.

REQUIRED CORE COURSES		Units
AT 10	Technical Computer Applications, <i>or</i>	
CIT 12	Computer Literacy	2-3
CRIM 1	Introduction to Criminology	3

134 Criminology

CRIM 4	Principles and Procedures of the Justice System	3
CRIM 5	Community Relations	3
CRIM 6	Concepts of Criminal Law	3
CRIM 12	Criminal Justice Communications.....	3
CRIM 13	The Constitution and Your Individual Rights	3
CRIM 15	Police Ethics.....	3
CRIM 16	Victimology	3
ENGL 1A/1AH	Reading and Composition, <i>or</i> Honors Reading and Composition.....	4
Total 30-31		

COURSE OPTIONS: Select 9 units **Units**

AFRAM 1	African-American Culture, <i>or</i> AFRAM 4 African Civilization	3
AMIND 31	American Indian Culture, <i>or</i> AMIND 34 American Indian Contemporary Society.....	3
CLS 11	Introduction to Chicano-Latino Studies, <i>or</i> CLS/SOC 14 Sociology of the Mexican American Community.....	3
PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology.....	3
SOC 1A/1AH	Introduction to Sociology, <i>or</i> Honors Introduction to Sociology	3
SOC 2	American Minority Groups	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
##BIOL 1/1H	Principles of Biology, <i>or</i> Honors Principles of Biology, <i>or</i> Introduction to Life Science, <i>or</i> Honors Introduction to Life Science.....	4
##BIOL 3/3H	2D CAD I.....	3
CADD 14	Introductory General Chemistry.....	4
##CHEM 3A	Introduction to Criminology	3
CRIM 1	Legal Aspects of Evidence.....	3
CRIM 3	Criminal Investigation	4
CRIM 8	Crime Scene Forensic Evidence.....	3
CRIM 9	Criminal Justice Communications.....	3
CRIM 12	Introduction to Photography	3
##PHOTO 5	Total	33

COURSE OPTIONS: Select 6 units

CRIM 18	Criminal Personalities.....	3
FIRET 13	Arson and Fire Investigation Technology.....	3
##PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology.....	3
PSY 16	Abnormal Psychology.....	3

Transferable to CSU system to fulfill general education requirement.

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 Degree program has been approved by the International Association for Identification (IAI).

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Make an assessment of a crime scene and organize a systematic search for evidence.
2. Collect and process evidence, including analysis and comparison of evidence.
3. Reconstruct a crime scene and prepare evidence for presentation in a judicial proceeding.

REQUIRED CORE COURSES		Units
ANTHRO 1	Physical Anthropology	3
CADD 14	2D CAD I.....	3
CIT 12	Computer Literacy	3
CRIM 1	Introduction to Criminology.....	3
CRIM 3	Legal Aspects of Evidence.....	3
CRIM 8	Criminal Investigation	4
CRIM 9	Crime Scene Forensic Evidence.....	3
CRIM 12	Criminal Justice Communications.....	3
PHOTO 5	Introduction to Photography	3
Total		28

STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:

Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

LAW ENFORCEMENT OPTION – MAJOR #8872

This degree is designed for students considering careers as police officers, sheriff's deputies, or highway patrol officers.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Describe the development and history of law enforcement in the western world.
2. Compare and contrast legal and constitutional issues.
3. Compare and contrast components of the American criminal justice system.

REQUIRED CORE COURSES		Units
AT 10	Technical Computer Applications, <i>or</i>	
CIT 12	Computer Literacy	2-3
CRIM 1	Introduction to Criminology	3
CRIM 3	Legal Aspects of Evidence.....	3
CRIM 5	Community Relations	3
CRIM 6	Concepts of Criminal Law	3
CRIM 7	Concepts of Enforcement Services.....	3
CRIM 8	Criminal Investigation	4
CRIM 11	Juvenile Delinquency.....	3
CRIM 12	Criminal Justice Communications.....	3
*CRIM 13	The Constitution and Your Individual Rights	3
CRIM 15	Introduction to Police Ethics.....	3
Total		33-34

COURSE OPTIONS: Select 9 units **Units**

*AFRAM 1	African-American Culture, <i>or</i>	
*AFRAM 4	African Civilization	3
*AMIND 31	American Indian Culture, <i>or</i>	
*AMIND 34	American Indian Contemporary Society.....	3
*CLS 11	Introduction to Chicano-Latino Studies, <i>or</i>	
*CLS/SOC 14	Sociology of the Mexican American Community.....	3
*PSY 2/2H	General Psychology, <i>or</i>	
	Honors General Psychology.....	3
*Soc 1A/1AH	Introduction to Sociology, <i>or</i>	
	Honors Introduction to Sociology.....	3

*SOC 2	American Minority Groups	3
*WSTS 10	Changing Roles of Women.....	3

**Also fulfills degree or transfer requirements*

Note: An associate in science degree will be awarded to any candidate who successfully completes a minimum of 60 units. The 60-unit minimum must include associate degree requirements and 42-43 units of course work listed above.

STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:

Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

LAW ENFORCEMENT OPTION – MAJOR #8872

This certificate of achievement is designed for students considering careers as police officers, sheriff's deputies, or highway patrol officers.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Describe the development and history of law enforcement in the western world.
2. Compare and contrast legal and constitutional issues.
3. Compare and contrast components of the American criminal justice system.

REQUIRED COURSES		Units
AT 10	Technical Computer Applications, <i>or</i>	
CIT 12	Computer Literacy	2-3
CRIM 1	Introduction to Criminology.....	3
CRIM 3	Legal Aspects of Evidence.....	3
CRIM 5	Community Relations	3
CRIM 6	Concepts of Criminal Law	3
CRIM 7	Concepts of Enforcement Services.....	3
CRIM 8	Criminal Investigation	4
CRIM 11	Juvenile Delinquency.....	3
CRIM 12	Criminal Justice Communications.....	3
CRIM 13	The Constitution and Your Individual Rights	3
CRIM 15	Introduction to Police Ethics.....	3
Total		33-34

COURSE OPTIONS: Select 9 units **Units**

AFRAM 1	African-American Culture, <i>or</i>	
AFRAM 4	African Civilization	3
AMIND 31	American Indian Culture, <i>or</i>	
AMIND 34	American Indian Contemporary Society.....	3
CLS 11	Introduction to Chicano-Latino Studies, <i>or</i>	
CLS/SOC 14	Sociology of the Mexican American Community.....	3
PSY 2/2H	General Psychology, <i>or</i>	
	Honors General Psychology.....	3
SOC 1A/1AH	Introduction to Sociology, <i>or</i>	
	Honors Introduction to Sociology.....	3
SOC 2	American Minority Groups	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.

PRE-ACADEMY TRAINING OPTION – MAJOR #8923

Non-affiliated students who intend to undertake training through the Police Academy can enhance their chances of success by taking the Pre-Academy Certificate of Achievement program listed below.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:

1. The student will have the fundamental knowledge of related subjects matters taught at a POST Police Academy.

REQUIRED COURSES		Units
CRIM 3	Legal Aspects of Evidence.....	3
CRIM 4	Principles and Procedures of the Justice System.....	3
CRIM 6	Concepts of Criminal Law	3
CRIM 8	Criminal Investigating	4
CRIM 12	Criminal Justice Communications.....	3
CRIM 13	The Constitution and Your Individual Rights	3
CRIM 15	Police Ethics.....	3
ENGL 1A/1AH	Reading and Composition, <i>or</i> 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. Demonstrate proper knife skills and cooking techniques.

Required Courses		Units
FSM 35	Food Services, Sanitation, Safety and Equipment.....	2
FSM 144	Presenting Service for Food Service Professionals.....	2
FSM 146	Elementary Food Service Computation I.....	1.5
FSM 160	Basic Skills: Basic Foods	3
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. Identify and compare preparation methods to optimize nutritional content.
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 1	Principles of Food Preparation.....	3
FN 35	Nutrition and Health	3
FSM 147	Elementary Food Service Computation II.....	1.5
Total		7.5

ADVANCED CULINARY ARTS – MAJOR #5686

This certificate is designed to prepare students for entry level management positions in food service.

CERTIFICATE

Student Learning Outcomes:

1. Use specification standards to purchase food and nonfood items.
2. Apply different management theories and styles of leadership in the management of a food service establishment.
3. Plan a menu and buying program within budgetary requirements.

Required Courses		Units
FSM 11	Food Service Supervision	2
FSM 15	Food Production Management.....	2
FSM 25	Food & Beverage Purchase & Control.....	2
FSM 38	Quantity Food Preparation.....	3
FSM 149	Food Service Internship.....	3
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.

**Bachelor degree or higher required.*

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Participate in a public dance performance.
2. Describe characteristic elements and form of various dance choreography.

Required Core Courses		Units
DANCE 10	Beginning Modern Dance.....	1
DANCE 12A, <i>or</i> DANCE 12B	Beginning Ballet.....	1
DANCE 13*	Intermediate Ballet.....	1

DANCE 14 or		
DANCE 15*	Beg/Int Jazz Dance Technique	1
DANCE 20A	Beg Modern Dance Composition.....	3
DANCE 20B	Intermediate Modern Dance Composition.....	3
DANCE 21	Dance Workshop Performance.....	2-4
DANCE 22	Dance Theatre Performance.....	2-4
DANCE 28	Intermediate Modern Dance.....	1
DANCE 30	Dance Appreciation.....	3
MUS 3	Music Fundamentals	3
PE 17 or	Hatha Yoga, or	
DANCE 9	Dance Conditioning.....	1
	Total	22-25

* Class level dependent on entry-level experience.

NONTRANSFER (PROFESSIONAL) PROGRAM

Students planning a career in dance upon leaving Fresno City College are urged to complete additional courses in physical education, music and theatre arts.

NONTRANSFER TOTAL UNITS REQUIRED..... 36-39

Required Courses	Units
MUS 12 Music Appreciation	3
PE 20 Care & Prevention of Athletic Injuries	4

At least one (1) of the following courses:

TA 12 Fundamentals of Interpretation.....	3
TA 41 Beginning Acting.....	3

At least four (4) units from:

TA 27B Introduction Lighting Design.....	3
TA 28 Introduction to Stage Makeup.....	2
TA 35 Costume Crafts.....	3

Note: The associate degree additionally requires the completing of the requirements listed on page 33 with a 2.0 or better GPA.

TRANSFER PROGRAM

Most four-year colleges and universities will require a dance audition to determine level of placement upon transfer. An effective program of study can best be obtained by consulting directly with the department of the target institution as early as possible.

TOTAL UNITS REQUIRED 35-38

Course Options: Select 13 units	Units
ART 2 Art Appreciation	3
ART 3 Two-Dimensional Design	3
ART 4 Three-Dimensional Design	3
BIOL 20 Human Anatomy	4
DANCE 9 Dance Conditioning.....	1
DANCE 10 Modern Dance.....	1
DANCE 11 Introduction to Social Dance	1
DANCE 12A Beginning Ballet Part 1	1
DANCE 13 Intermediate Ballet.....	1
DANCE 14 Beginning Jazz Dance Technique	1
DANCE 15 Intermediate Jazz Dance.....	1
DANCE 16 Beginning Tap Dance.....	1
DANCE 17 Beginning Mexican Folklorico Dance.....	4
DANCE 18 Intermediate Tap Dance	1
DANCE 21 Dance Workshop Performance.....	2-4
DANCE 22 Dance Theatre Performance.....	2-3

DANCE 27	Advanced Mexican Folklorico Dance	4
MUS 12	Music Appreciation	3
PE 17	Hatha Yoga.....	1
PE 20	Care & Prevention of Athletic Injuries	4

DENTAL HYGIENE – MAJOR #4580

Registered Dental Hygienists provide dental health education, promote and encourage the preventive aspects of dental care, remove deposits and stains from teeth, expose and process dental radiographs, and treat oral diseases to protect both the oral and systemic health of their patients.

Completion of the program leads to an associate in science degree. After completing the program and passing the National Board Dental Hygiene Examination, graduates are eligible to apply for and take the California State Board and other clinical licensing examinations for 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, sex, 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 equivalents) each with a grade of "C" or better.
4. Have completed English 1A, Reading and Comprehension; Chemistry 2A or 3A, Introduction to General Chemistry; Biology 31, Microbiology; Math 103, Intermediate Algebra, or another more advanced math course; Chemistry 3B, Organic and Biological Chemistry; Food and Nutrition 40, Nutrition, (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.

Note: COMM 1 or 2 is a prerequisite for DH 3A, a first semester course. Successful applicants must complete one of these courses with a "C" or better prior to beginning the program.

In addition, PSY 2 is a course prerequisite to DH 7A and SOC 1A is a course prerequisite to DH 7B (second year courses).

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.

138 Dental Hygiene

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.

Student Learning Outcomes:

1. Complete the dental hygiene program at Fresno City College with a GPA of 2.0 or better.
2. Complete the National Board Dental Hygiene Examination with a score of 75th percentile or better.
3. Pass state and/or regional clinical licensing examinations.
4. Secure employment as a Registered Dental Hygienist.

ASSOCIATE IN SCIENCE DEGREE

Dental Hygiene Course Sequence (must be completed with a grade of "C" or better.)

FIRST YEAR

First Semester	Units
DH 1A Oral Biology	2
DH 3A Pre-Clinical Dental Hygiene Tech	4
DH 4 Oral Radiography	4
DH 10 Head & Neck Anatomy	2
Total	12

Second Semester

Second Semester	Units
DH 1B General & Oral Pathology	4
DH 2 Dental Materials	2
DH 5A Clinical Dental Hygiene	3
DH 6A Medical Emergencies in the Dental Office	1
DH 8A Patient Management	2
DH 11 Local Anesthesia	2.5
DH 12 Clinical Seminar Topics I	1
Total	15.5

SECOND YEAR

First Semester	Units
DH 1C Periodontology	2
DH 5B Clinical Dental Hygiene	5
DH 6B Pharmacology	3
DH 7A Community Dental Health I	2
DH 13 Clinical Seminar Topics II	1
Total	13

Second Semester

Second Semester	Units
DH 1D Applied Periodontics	1
DH 3B Dental Specialties	1

DH 5C Clinical Dental Hygiene	5
DH 7B Community Dental Health II	1
DH 8B Practice & Financial Management	2
DH 9 Nutrition in Dentistry	1
DH 14 Clinical Seminar Topics III	1
Total	12

Note: All application requirements, program requirements and selection criteria are subject to change. Students will enter the selection pool based on the current catalog or catalog supplement. Contact a Fresno City College health career counselor every semester for current information.

DRAFTING – SEE COMPUTER AIDED DRAFTING AND DESIGN

ELECTRICIAN – SEE ELECTRICAL SYSTEMS TECHNOLOGY

ELECTRICAL SYSTEMS TECHNOLOGY

FORMERLY ELECTRONIC TECHNOLOGY – MAJOR #8171

Electrical Systems Technology provides an opportunity for students to prepare for employment in the electronics/electrical industry. Specific occupational preparation is provided in the following program.

ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Define and apply various numbering systems (i.e. Binary, hexadecimal and Octal).
2. Develop a motor logic control solution using the defined parameters given.
3. Demonstrate a comprehension of the basic operation of communication systems for digital signals.
4. Design and configure a control application using a PLC and PLC software.
5. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.

FIRST YEAR

First Semester	Units
AT 10 Technical Computer Applications	2
EST 51 Direct Current Fund of Electronics	3
EST 52 Alternating Current Fundamentals	3
EST 54 Integrated Devices	3
Total	11

Second Semester

Second Semester	Units
EST 53 Lab Safety Practices	2
EST 55A Digital Concepts	3
EST 55B Facility Automation	3
EST 57C Voice and Data Cabling	3
EST 96A National Electrical Code Part 1, <i>or</i>	
EST 96B National Electrical Code Part 2, <i>or</i>	
EST 96C National Electrical Code Part 3	3
Total	14

SECOND YEAR

First Semester		Units
EST 55C	SCADA Systems	2
EST 57A	Analog Communications.....	3
EST 57B	Digital Communications.....	3
EST 58	Programmable Logic Controllers.....	3
Total		11
Second Semester		Units
AT 40	Preparing for Employment Opportunities	3
EST 56A	Wiring Methods.....	3
EST 56B	Motor Controls	3
EST 56C	Industrial Electronics	3
EST 59	Instrumentation Systems.....	3
Total		15
Total Units		51

AUTOMATION CONTROL TECHNICIAN – MAJOR #8179

Training is designed to prepare the student for employment as an industrial and/or building automation technician.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Develop and implement a strategy utilizing HVAC controls.
2. Design and implement a network topology for a solution to a proposed communication problem.
3. Configure the I/O for a PLC project using PLC software.
4. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.
5. Identify the role of a supervisory controller within a DDC network.

FIRST YEAR

First Semester		Units
AT 10	Technical Computer Applications	2
EST 51	Direct Current Fund of Electronics.....	3
EST 55B	Facility Automation	3
EST 57C	Voice and Data Cabling.....	3
Total		11

Second Semester		Units
AC 57	System Configuration and Control	2
EST 55A	Digital Concepts.....	3
EST 58	Programmable Logic Controllers.....	3
Total		8

SECOND YEAR

First Semester		Units
AC 250	Digital Unitary Controls	2
EST 55C	SCADA Systems.....	2
EST 59	Instrumentation Systems.....	3
Total		7

Second Semester		Units
AC 251	Digital VAV Controls.....	1
AC 252	DDC Network Controllers.....	2
Total		3

CISCO CCNA PREPARATION

CISCO CCNA PREPARATION - MAJOR #8174

This option is to prepare students for the CISCO Certified Network Associate (CCNA) certification test. By completing this option, a student will have basic knowledge of networking hardware, including routers.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for either static and/or dynamic IP routing for a given scenario.
3. Configure a switch for implementing the VLAN protocols.
4. Construct a WAN network utilizing the requested protocol over multiple routers and WAN service providers.

REQUIRED COURSES		Units
EST 61	Networking Fundamentals.....	3
EST 62	Routing Protocols and Concepts	3
EST 63	Advanced Routing and Switching.....	3
EST 64	Advanced Networking and Management	3
Total		12

CISCO CCNP PREPARATION - MAJOR #8165

This option is to prepare students for the CISCO Certified Networking Professional (CCNP) certification test. By completing this option, a student will have advanced knowledge of networking hardware, including routers and switches.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Implement appropriate technologies to build a scalable routed network using multilayer switching technologies.
2. Construct a network for multilayer switching, and configure the network devices accordingly.
3. Describe and configure a site-to-site IPsec VPN.
4. Design and implement an IP QoS strategy in a network.

REQUIRED COURSES		Units
EST 65	Building Scalable Internetworks	3
EST 66	Building Multilayer Switched Networks.....	3
EST 67	Implementing Secure Converged WANs.....	3
EST 68	Optimizing Converged Networks.....	3
Total		12

COMMUNICATIONS TECHNOLOGY – MAJOR #8175

Training is designed to prepare the student for employment as a communication technician.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Describe the basic parameters when working on electronic circuits.
2. Demonstrate a comprehension of the basic operation of communication systems for analog signals.

140 Electrical System Technology

3. Demonstrate a comprehension of the basic operation of communication systems for digital signals.
4. Design and implement a network topology for a solution to a proposed communication problem.

First Semester	Units
EST 52 Alternating Current Fundamentals.....	3
EST 53 Lab Safety Practices	2
EST 54 Integrated Devices.....	3

Second Semester	Units
EST 57A Analog Communications.....	3
EST 57B Digital Communications.....	3
EST 57C Voice and Data Cabling	3

Total 17

CONTROL SYSTEMS – MAJOR #8176

Training in this specialized field is designed to prepare the student for employment as a control and instrument technician.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

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

First Semester	Units
EST 51 Direct Current Fund of Electronics.....	3
EST 55A Digital Concepts.....	3
EST 57C Voice and Data Cabling	3

Second Semester	Units
EST 58 Programmable Logic Controllers.....	3
EST 59 Instrumentation Systems.....	3
EST 55C SCADA Systems.....	2

Total 17

ELECTRICAL LINE/UTILITY WORKER – MAJOR #8181

This option is to prepare students for entry level employment as an electrical lineman or utility worker. By completing this option students will also be better prepared for the pre-employment testing process used by utility companies.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Analyze and evaluate potential employment opportunities.
2. Recognize, analyze and compute circuit values using the fundamental laws and rules.
3. Demonstrate safe and appropriate application of electrical instruments for circuit simulations.

REQUIRED COURSES	Units
AT 40 Preparing for Employment Opportunities	3
EST 271 Electrical Line/Utility Worker.....	12
Total	15

INDUSTRIAL CONTROLS – MAJOR #8180

This option is to prepare students for the Industrial Controls Certificate. By completing this option, a student will have training that emphasizes industrial control systems.

CERTIFICATE

Student Learning Outcomes:

1. Define and apply digital numbering systems (i.e. Binary, hexadecimal and Octal).
2. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.
3. Write programs in ladder logic, load and troubleshoot the programs, and operate the system.

REQUIRED COURSES	Units
EST 50 Introduction to Electronics, <i>or</i>	2.5
MMCTC 371 Fund of Hydraulics & Pneumatics	0
EST 55A Digital Concepts.....	3
EST 58 Programmable Logic Controllers.....	3
EST 59 Instrumentation Systems.....	3
Total	9-11.5

NETWORK SECURITY – MAJOR #8177

Training is designed to prepare the student for employment as a networking technician emphasizing network security.

CERTIFICATE

Student Learning Outcomes:

1. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
2. Configure a switch for implementing the VLAN protocols.
3. Construct a WAN network utilizing the requested protocol over multiple routers and WAN providers.
4. Create and implement (through the configuration of network devices) a security policy per a scenario.

First Semester	Units
EST 61 Networking Fundamentals	3

Second Semester	Units
EST 62 Routing Protocols and Concepts	3

Third Semester	Units
EST 63 Advanced Routing & Switching.....	3

Fourth Semester	Units
EST 64 Advanced Networking and Management	3

Fifth Semester	Units
EST 269A Fund of Network Security-Firewalls	3

Total 15

NETWORKING/COMPUTER TECHNICIAN

**NETWORKING/COMPUTER TECHNICIAN –
MAJOR #8172**

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

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
3. Define and apply digital numbering systems.
4. Explain how networks are interconnected and understand how operating system software affects the hardware.
5. Install and configure the network server operating system software, and manage servers, users, and resources with a server manager utility, and monitor network system performance.

REQUIRED CORE COURSES	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 (Coop), Occupational	2
EST 55A Digital Concepts.....	3
EST 60 A+ PC Maintenance.....	3
EST 61 Networking Fundamentals.....	3
EST 62 Routing Protocols and Concepts	3
Total	34

Suggested sequence of courses:

First Semester	Units
CIT 15 Computer Concepts.....	3
**CIT 45 Data Communications	3
EST 55A Digital Concepts.....	3
EST 60 A+ PC Maintenance.....	3
EST 61 Networking Fundamentals.....	3
Total	15

Second Semester	Units
*BT 23 Job Search and Workplace Skills	3
BT 112 Business English	3
CIT 40 Computer Operating Systems	4
CIT 50 Fundamentals of Networking.....	4
EST/CIT 19 Work Experience (Coop), Occupational	2
EST 62 Routing Protocols and Concepts	3
Total	19

* AT 40 can be substituted for BT 23.

** EST 57A and EST 57B may be substituted for CIT 45.

Note: Associate degree requirements are listed on page 33.

**NETWORKING/COMPUTER TECHNICIAN –
MAJOR #8172**

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 (Coop), Occupational	2
EST 55A Digital Concepts.....	3
EST 60 A+ PC Maintenance.....	3
EST 61 Networking Fundamentals.....	3
EST 62 Routing Protocols and Concepts	3
Total	34

Suggested sequence of courses:

First Semester	Units
CIT 15 Computer Concepts.....	3
**CIT 45 Data Communications	3
EST 55A Digital Concepts.....	3
EST 60 A+ PC Maintenance.....	3
EST 61 Networking Fundamentals.....	3
Total	15

Second Semester	Units
*BT 23 Job Search and Workplace Skills	3
BT 112 Business English	3
CIT 40 Computer Operating Systems	4
CIT 50 Fundamentals of Networking.....	4
EST/CIT 19 Work Experience (Coop), Occupational	2
EST 62 Routing Protocols and Concepts	3
Total	19

* AT 40 can be substituted for BT 23.

** EST 57A and EST 57B may be substituted for CIT 45.

142 Electrical Systems Technology

WIRELESS NETWORKS – MAJOR #8178

Training is designed to prepare the student for employment as a networking technician emphasizing Wireless Local Area Networks.

CERTIFICATE

Student Learning Outcomes:

1. Identify network devices, and at which level of the OSI model they are applicable.
2. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
3. Recognize and apply Wireless LAN topologies for a scenario or set of parameters.

First Semester	Units
EST 61 Networking Fundamentals.....	3
Second Semester	Units
EST 62 Routing Protocols and Concepts.....	3
EST 269B Fund of Wireless LANs.....	3
	Total 9

ENGINEERING – MAJOR #3010

Recommended Transfer Program

The following curriculum satisfies the lower division requirements of most colleges and universities that offer degrees in engineering. Depending upon the engineering field selected, students may be required to complete additional prerequisite classes. The student is strongly advised to consult with an advisor and compare his/her planned program with that listed in the catalog of the senior institution to which he/she expects to transfer.

Fresno City College offers courses that fulfill prerequisites which have not been completed in high school.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Identify the broad context of engineering problems, including describing the problem conditions, identifying possible contributing factors, and generating alternative solution strategies.
2. Design the fundamental elements of engineering systems, system components and processes, with a good understanding of associated safety, quality, schedule and cost considerations.
3. Undertake laboratory, field and other data collection efforts using commonly used measurement techniques to support the study and solution of engineering problems.
4. Employ mathematics, science, and computing techniques in a systematic, comprehensive, and rigorous manner to support the study and solution of engineering problems.
5. Exhibit good teamwork skills and serve as effective members of multidisciplinary project teams and articulate and justify technical solutions to diverse audiences through oral, written, and graphical communication.
6. Understand the importance of professional and ethical responsibilities of engineers, and be aware of codes of conduct and other sources of guidance for professionally ethical decision-making.

ENGINEERING: Select a minimum of nine units from the following:

	Units
ENGR 1A Elementary Plane Surveying 1.....	4
ENGR 1B Elementary Plane Surveying 2.....	4
ENGR 2 Graphics.....	4
ENGR 4 Engineering Materials.....	3
ENGR 6 Circuits with Lab.....	4
ENGR 8 Statics.....	3
ENGR 10 Intro to Engineering.....	2
ENGR 11 Manufacturing Processes.....	3

PHYSICS: Select two or three courses from the list depending on your engineering major.

	Units
PHYS 4A Physics for Scientists and Engineers.....	4
PHYS 4B Physics for Scientists and Engineers.....	4
PHYS 4C Physics for Scientists & Engineers.....	4

CHEMISTRY: Select one set of chemistry courses.

	Units
CHEM 1A General Chemistry, <i>and</i>	5
CHEM 1B Gen Chemistry & Qual Analysis, <i>or</i>	5
CHEM 3A Introductory General Chemistry, <i>and</i>	4
CHEM 3B Intro Org & Biol Chemistry.....	3

Mathematics: 5A, 5B, and 6 are required.

MATH 7 may be required depending on your

Engineering major.	Units
MATH 5A Mathematical Analysis I.....	5
MATH 5B Mathematical Analysis II.....	4
MATH 6 Mathematical Analysis III.....	4
*MATH 7 Introduction to Differential Equations.....	4

PROGRAMMING COURSES: Two programming courses listed below.

	Units
CSCI 40 Programming Concepts & Methodology I.....	4
CSCI 41 Programming Concepts & Methodology II.....	4
	Total 45-56

Notes: *MATH 7 not required for Geomatics Engineers.

ENGLISH – MAJOR #5300

The English degree program is intended to offer students lower division exposure to subjects they will study as English majors in four-year colleges or university programs and/or to prepare students for entry into a variety of career options requiring expertise in the English language and literature.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Read and critically evaluate college-level material from various sources through analysis and synthesis of information.
2. Write appropriately documented argumentative essays and research papers to deal with the ideas by definition, evaluation, interpretation, and persuasion.
3. Analyze and respond in writing to a variety of literature, including short fiction, poetry, drama, novels, and other genres, concerning thematic, rhetorical, and symbolic elements.
4. Write about and analyze the various literary elements such as plot, characterization, setting, voice, meter and tragedy in selected works.
5. Demonstrate an understanding of the importance of the assigned works to various time periods and cultures, and to literary tradition.

MAJOR CORE

English 1A/1AH is a prerequisite to major core courses; it also meets writing/reading competency and general education area D1.

COURSES	Units
ENGL 1B/1BH Introduction to the Study of Literature, <i>or</i> Honors Intro to the Study of Literature.....	3
ENGL 3/3H Critical Reading and Writing, <i>or</i> Honors Critical Reading and Writing.....	3
Total	6

MAJOR COURSE OPTIONS - Section A

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

ENGL 44A	World Literature to the Renaissance, <i>and</i>	
ENGL 44B	World Literature since the Renaissance, <i>or</i>	
ENGL 46A	English Literature to 1800, <i>and</i>	
ENGL 46B	English Literature from 1800 to the Present, <i>or</i>	
ENGL 48A	Introduction to American Literature to World War, <i>and</i>	
ENGL 48B	Introduction to American Literature from World War I to the Present	6

MAJOR COURSE OPTIONS - Section B

Select a minimum of six (6) additional units from the following list:

(Courses taken to meet Section A above cannot be used to fulfill Section B):

ENGL 12	The Bible as Literature.....	3
ENGL 14	Folklore	3
ENGL 15A	Creative Writing: Poetry.....	3
ENGL 15B	Creative Writing: Fiction.....	3
ENGL/TA15C	Creative Writing: Playwriting	3
ENGL 15D	Creative Writing: Autobiography	3
ENGL/AFRAM 17	African-American Literature.....	3
ENGL/ASAMER 20	Asian-American Literature.....	3
ENGL/WSTS 36	Women in Literature.....	3
ENGL 40	Critical Thinking about Literature.....	3
ENGL 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 47	Introduction to Shakespeare	3
ENGL 48A	Introduction to American Literature to World War I	3
ENGL 48B	Introduction to American Literature from World War I to the Present.....	3
LING 10	Introduction to Language	3

Note: An associate in arts degree in English 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 33. General Education requirements for transfer certification are listed on page 39.

**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. Possess a valid California driver's license.
- D. Provide proof of a clear physical examination including an electrocardiogram printout (EKG).
- E. 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.....	13
Total	26

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.....	2
AT 120 Industrial Science.....	3

144 Fire Technology

AT 130	Industrial Mathematics.....	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
FIRET 14	Principles of Fire & Emergency Services Safety & Survival.....	3
Total		26

COURSE OPTIONS: Select 12 units		Units
FIRET 8	Fire Hydraulics.....	3
FIRET 9	Fire Fighting Practices.....	3
FIRET 13	Arson and Fire Investigation Tech.....	3
*FIRET 130	Basic Fire Academy.....	6
FIRET 131	Emergency Medical Technician 1.....	10
**FIRET 135	Emergency Medical Technician- Paramedic - Field Internship.....	9

Suggested sequence of courses:

FIRST YEAR

First Semester		Units
AT 120	Industrial Science.....	3
AT 130	Industrial Mathematics.....	3
Total		6

Second Semester		Units
FIRET 1	Fire Protection Organization.....	3
FIRET 2	Fire Prevention Technology.....	3
FIRET 5	Fire Behavior and Combustion.....	3
Options	.....	6
Total		15

SECOND YEAR

First Semester		Units
AT 10	Technical Computer Applications.....	2
FIRET 14	Principles of Fire & Emergency Services Safety & Survival.....	3
Total		5

Second Semester		Units
FIRET 3	Fire Protection Equipment and Systems.....	3
FIRET 4	Building Construction for Fire Protection.....	3
Options	.....	6
Total		15

* FIRET 130 carries a value of up to 27 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 training program.

It is recommended that students establish eligibility for English 125 and 126 or English as a Second Language 67 and 68.

Note: The associate degree additionally requires completion of the requirements listed in the Graduation Requirements section of this catalog.

FIRE TECHNOLOGY - MAJOR #883A

This program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service careers. The curriculum serves as an in-service program as well as a pre-employment program for students seeking employment or advancement in the profession of fire fighting and fire technology.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Given a typical type of fire department, describe the organizational structure and all of the staff functions within it.
2. Given a specific function of the fire service, describe the purpose of a paid and volunteer firefighter.

REQUIRED CORE COURSES		Units
AT 10	Technical Computer Applications.....	2
AT 120	Industrial Science.....	3
AT 130	Industrial Mathematics.....	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
FIRET 14	Principles of Fire & Emergency Services Safety & Survival.....	3
Total		26

COURSE OPTIONS: Select 12 units		Units
FIRET 8	Fire Hydraulics.....	3
FIRET 9	Fire Fighting Practices.....	3
FIRET 13	Arson and Fire Investigation Tech.....	3
*FIRET 130	Basic Fire Academy.....	6
FIRET 131	Emergency Medical Technician 1.....	10
**FIRET 135	Emergency Medical Technician- Paramedic - Field Internship.....	9

Suggested sequence of courses:

FIRST YEAR

First Semester		Units
AT 120	Industrial Science.....	3
AT 130	Industrial Mathematics.....	3
Total		6

Second Semester		Units
FIRET 1	Fire Protection Organization.....	3
FIRET 2	Fire Prevention Technology.....	3
FIRET 5	Fire Behavior and Combustion.....	3
Options	.....	6
Total		15

SECOND YEAR

First Semester		Units
AT 10	Technical Computer Applications.....	2
FIRET 14	Principles of Fire & Emergency Service Safety & Survival.....	3
Total		5

Second Semester		Units
FIRET 3	Fire Protection Equipment and Systems	3
FIRET 4	Building Construction for Fire Protection	3
Options	.....	6
Total		12

* FIRET 130 carries a value of up to 27 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 training program.

It is recommended that students establish eligibility for English 125 and 126 or English as a Second Language 67 and 68.

Note: The certificate of achievement requires completion of the major (23 units) and 12 units of recommended course options with a GPA of 2.0 or better.

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.....	10
FIRET 133	Emergency Medical Technician - Didactic	22
FIRET 134	Emergency Medical Technician - Clinical.....	4
FIRET 135	Emergency Medical Technician – Field Internship	9
Total		45

FOOD AND NUTRITION – MAJOR #5682

This degree is designed to prepare students for entry level employment in nutrition programs or food service. This degree prepares students for transfer to four year college in dietetics or culinology.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. Identify and compare preparation methods to optimize nutritional content.
3. Evaluate the nutritional content of foods and menus.

REQUIRED CORE COURSES		Units
CIT 15	Computer Concepts.....	3
FN 1	Principles of Food Preparation.....	3
FN 40	Nutrition.....	3
FN 45	Therapeutic Diets	3
FSM 11	Food Service Supervision	2
FSM 15	Food Production Management.....	2
FSM 19	Work Experience (Coop), Occupational	1-4
FSM 35	Food Services, Sanitation, Safety and Equipment	2
Total		19-22

ELECTIVES: Select 18 units		Units
BIOL 1/1H	Principles of Biology, <i>or</i> Honors Principles of Biology	4
BIOL 22	Human Physiology	5
BIOL 31	Microbiology	5
CHEM 3A	Intro 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 33. General Education requirements for transfer certification are on page 39.

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 (Coop), Occupational	1-4
FSM 35	Food Services, Sanitation, Safety and Equipment	2
Total		19-22

ELECTIVES: Select 18 units		Units
BIOL 1/1H	Principles of Biology, <i>or</i> Honors Principles of Biology	4
BIOL 22	Human Physiology	5
BIOL 31	Microbiology	5
CHEM 3A	Intro General Chemistry.....	4
FN 41	Sports Nutrition	2
FN 42	Child Nutrition.....	3
FN 43	Women's Nutrition.....	2
FSM 25	Food and Beverage Purchase and Control	2
FSM 38	Quantity Food Preparation.....	3

DIETARY AIDE – MAJOR #5750

This certificate is designed to prepare students for employment as a dietary aide in acute care, convalescent hospitals and residence care facilities.

CERTIFICATE

Student Learning Outcomes:

1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. With the guidance of a registered dietician will ensure that the nutritional needs of the clients of a health care facility will be met.

REQUIRED CORE COURSES		Units
FN 40	Nutrition.....	3
FN 45	Therapeutic Diets.....	3
FSM 19	Work Experience (Coop), Occupational.....	1
FSM 35	Food Services, Sanitation, Safety and Equipment.....	2
Total		9

DIETETIC SERVICE SUPERVISOR - MAJOR #5681

The dietetic service supervisor is responsible for food service supervision and nutrition care of clients or patients in hospitals, nursing homes and residential facilities.

This program is accredited and approved by the California State Department of Health Services, Licensing and Certification Division. To graduate from the program, the student must earn a grade of “C” or better in each course that is included in the program. Course grades are earned through the development of competencies needed for successful employment as a Dietary Service Supervisor.

Consult with a member of the Dietetic Services staff before scheduling courses in the program. At this time, the student will be registered in the program and a program of study, including appropriate field experience, will be planned.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:

1. The students will be able to apply the state and federal regulations that govern the operation of a food service department in a long term health care facility.

REQUIRED CORE COURSES		Units
FN 1	Principles of Food Preparation.....	3
FN 40	Nutrition.....	3
FN 45	Therapeutic Diets.....	3
FSM 11	Food Service Supervision.....	2
FSM 19 *	Work Experience (Cooperative), Occupational.....	3
FSM 35	Food Services, Sanitation, Safety and Equipment.....	2
FSM 38	Quantity Food Preparation.....	3

Suggested sequence of courses:

First Semester		Units
FN 1	Principles of Food Preparation.....	3
FN 40	Nutrition.....	3
FSM 19 *	Work Experience (Cooperative), Occupational.....	1
FSM 35	Food Services, Sanitation, Safety and Equipment.....	2
Second Semester		Units
FN 45	Therapeutic Diets.....	3
FSM 11	Food Service Supervision.....	2
FSM 19 *	Work Experience (Cooperative), Occupational.....	2
FSM 38	Quantity Food Preparation.....	3
Total		19

** One unit of FSM 19 can either be 75 hours paid or 60 hours volunteer. Two units of 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	Units	
ACCTG 4A/4AH	Financial Accounting, <i>or</i> Honors Financial Accounting.....	4
*BIOL 1/1H	Principles of Biology, <i>or</i> Honors Principles of Biology.....	4
*BIOL 20	Human Anatomy.....	4
BIOL 22	Human Physiology.....	5
BIOL 31	Microbiology.....	5
CHEM 3A	Intro General Chemistry.....	4
CHEM 8A	Elementary Organic Chemistry.....	3
Computer Class	.....	3
FN 40	Nutrition.....	3
FN 1	Principles of Food Preparation.....	3
MATH 11	Elementary Statistics.....	4
*MATH 101	Elementary Algebra, <i>or</i> Intermediate Algebra.....	5
*MATH 103	Intermediate Algebra.....	5
PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology.....	3

** Prerequisite to required course(s).*

FOOD SERVICE MANAGEMENT

FOOD SERVICE MANAGEMENT – MAJOR #5691

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

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. Evaluate the nutritional content of foods and menus.
3. Choose record keeping methods to monitor the fiscal viability of a food service establishment.

REQUIRED CORE COURSES	Units	
ACCTG 4A/4AH	Financial Accounting, <i>or</i> Honors Financial Accounting.....	4
BT 131	Applied Accounting.....	4
BA 18	Business and the Legal Environment.....	4
CIT 15	Computer Concepts.....	3
ECON 1B/1BH	Introduction to Microeconomics, <i>or</i> Honors Introduction to Microeconomics.....	3
FN 1	Principles of Food Preparation.....	3
FN 35	Nutrition and Health, <i>or</i> Nutrition.....	3
FN 40	Nutrition.....	3
FSM 11	Food Service Supervision.....	2

FSM 15	Food Production Management.....	2
FSM 19	Work Experience (Coop), Occupational	1-4
FSM 25	Food and Beverage Purchasing and Control	2
FSM 35	Food Services, Sanitation, Safety and Equipment	2
FSM 38	Quantity Food Preparation	3
MKTG 10	Principles of Marketing	3
Total 35-38		

Note: The Food Service Management major consists of 35-38 units as indicated above. Students must complete the Food Service Management major and associate degree requirements are listed on page 33. General Education requirements for transfer certification are on page 39.

FOOD SERVICE MANAGEMENT – MAJOR #5691

This certificate of achievement is designed to prepare students for employment in Food Service Management.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. Evaluate the nutritional content of foods and menus.
3. Choose record keeping methods to monitor the fiscal viability of a food service establishment.

REQUIRED CORE COURSES		Units
ACCTG 4A/4AH	Financial Accounting, <i>or</i> Honors Financial Accounting, <i>or</i> BT 131 Applied Accounting.....	4
BA 18	Business and the Legal Environment.....	4
CIT 15	Computer Concepts.....	3
ECON 1B/1BH	Introduction to Microeconomics, <i>or</i> Honors Introduction to Microeconomics	3
FN 1	Principles of Food Preparation.....	3
FN 35	Nutrition and Health, <i>or</i> FN 40 Nutrition.....	3
FSM 11	Food Service Supervision	2
FSM 15	Food Production Management.....	2
FSM 19	Work Experience (Coop), Occupational	1-4
FSM 25	Food and Beverage Purchasing and Control	2
FSM 35	Food Services, Sanitation, Safety and Equipment	2
FSM 38	Quantity Food Preparation	3
MKTG 10	Principles of Marketing	3
Total 35-38		

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 35	Nutrition and Health	3
FSM 35	Food Services, Sanitation, Safety and Equipment	2
FSM 160	Basic Skills: Basic Foods	3
FSM 162	Menu Planning for Child Nutrition	3
Total		14

ELECTIVES: Select 10 units		Units
BT 6	Records Management	3
FN 1	Principles of Food Preparation.....	3
FN 42	Child Nutrition.....	3
FSM 19	Work Experience (Coop), Occupational	1-4
FSM 11	Food Service Supervision	2
FSM 15	Food Production Management.....	2
FSM 25	Food and Beverage Purchasing and Control	2
FSM 38	Quantity Food Preparation.....	3

Complete 14 units of required core courses. Select an additional 10 units from the elective courses for the certificate of achievement.

GRAPHIC COMMUNICATIONS - FORMERLY

PRINTING TECHNOLOGY AND REPROGRAPHICS – MAJOR #8332

This curriculum is for the student considering employment in graphic communications production. Completion of the program will provide entry level skills and a general understanding of production techniques ranging from computerized layout through output in print media, world wide web, interactive multimedia products, and repurposing work for distribution.

**ASSOCIATE IN SCIENCE DEGREE AND
CERTIFICATE OF ACHIEVEMENT**

FIRST YEAR

First Semester		Units
GRC 5	Introduction to Macintosh Computer Use	1
GRC 10	Introduction to Graphic Communications.....	2
GRC 20	Graphic Communications.....	3
GRC 41	Visual Communications	3
Total		9

Second Semester		Units
GRC 15	Web Page Construction 1.....	4
GRC 17	Adobe Illustrator	3
GRC 18	Production Methods.....	3
GRC 31	Photoshop for Graphics	3
Total		13

SECOND YEAR

First Semester		Units
AT 40	Preparing for Employment Opportunities	3
GRC 14	Adobe Acrobat Professional.....	3
GRC 27	Digital Video Production	4
GRC 30	Quark Xpress/Professional Publishing.....	3
Total		13

148 Graphic Communications

Second Semester		Units
GRC 22	Multimedia 1	4
GRC Elective	.....	3
GRC Elective	.....	3
Total		10

Recommended Electives: BT 6; GRC 13, 16, 23, 24, 32, 33, 34, 39A, 40A; MKTG 11; PHOTO 12

GRAPHIC DESIGN OPTION - MAJOR #8501

The Graphic Design Option combines aspects of the graphic communication, fine art, and business curricula to provide a foundation in graphic design. The student interested in pre-press operations will receive a background in art and computer graphics with an understanding of the requirements and limitations of production printing.

ASSOCIATE IN ARTS DEGREE AND CERTIFICATE OF ACHIEVEMENT

FIRST YEAR

First Semester		Units
ART 7	Beginning Drawing	3
GRC 5	Introduction to Macintosh Computer Use	1
GRC 10	Introduction to Graphic Communications	2
GRC 17	Adobe Illustrator	3
GRC 20	Graphic Communications.....	3
Total		12

Second Semester		Units
GRC 30	Adobe InDesign/Professional Publishing.....	3
GRC 31	Photoshop for Graphics.....	3
GRC 39A	Graphic Design I.....	3
GRC Elective	.....	3
Total		12

SECOND YEAR

First Semester		Units
AT 40	Preparing for Employment Opportunities	3
GRC 14	Adobe Acrobat Professional.....	3
GRC 18	Production Methods.....	3
GRC 40A	Graphic Design II	3
Total		12

Second Semester		Units
BA 38	Operation of the Small Business, <i>or</i>	
BA 51	Business Planning and New Venture Launch, <i>or</i>	
MKTG 11	Salesmanship	1.5-3
GRC Elective	.....	3
GRC Elective	.....	3
Total		7.5-9

Recommended Electives: GRC 13, 15, 22, 24, 41; PHOTO 12

DIGITAL VIDEO OPTION – MAJOR #8506

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

CERTIFICATE

Student Learning Outcomes:

1. 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.

COURSES		Units
GRC 27	Digital Video Production	4
GRC 32	Video Techniques	4
GRC 41	Visual Communications	3
Total		11

MULTIMEDIA OPTION – MAJOR #8504

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

CERTIFICATE

COURSES		Units
GRC 14	Adobe Acrobat Professional.....	3
GRC 22	Multimedia 1	4
GRC 24	Flash Animation, <i>or</i>	
GRC 33	Flash for the Web	3
GRC 27	Digital Video Production	4
GRC 34	Introduction to 3-D Animation	3
GRC 41	Visual Communications	3
Total		20

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

COURSES		Units
GRC 15	Web Page Construction	4
GRC 16	Web Design.....	4
GRC 24	Flash Animation, <i>or</i>	
GRC 33	Flash for the Web	3
GRC 25	Specialized Web Techniques.....	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 profession that combines healthcare with information technology. Health information technicians perform the essential functions of maintaining digital and traditional medical information in acute, long-term, and ambulatory healthcare settings. Job responsibilities may include coding, data collection,

documentation analysis, quality improvement, access and release of information, or supervision.

The HIT Program is accredited by the Commission on Accreditation for Health Information 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. Perform health information technician skills and competencies required for employment in a health information management department.
2. Pass the Registered Health Information Technician examination.

Recommended Sequence of Courses

First Semester – Fall		Units
BIOL 5	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

HIT 2	Legal Aspects of Health Information.....	2
HIT 4	Disease Process.....	3
HIT 5	Introduction to Coding.....	3
HIT 12	Health Information in Alternative Settings.....	2
MA 2	Pharmacology.....	3
Total		13

Third Semester - Fall

CIT 20	Microsoft Office.....	3
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		13

Fourth Semester - Spring

HIT 7	Directed Practice.....	5
HIT 8	Management and Supervision.....	3
HIT 11	CPT Coding.....	3
Total		11

Notes: The associate degree requires the completion of the program and degree requirements with a 2.0 or higher GPA.

Biology 20 and 22, or 24 may be substituted for Biology 5.

In addition to the courses listed above, all requirements for the associate degree in Science must be met. Refer to the Fresno City College Catalog section on certificate and degree and meet with a counselor for advisement.

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.

National Registration

The Health Information Technology Program is accredited by the Commission on Accreditation for Health Information 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 from the American Health Information Management Association (AHIMA).

Notes: 1. BIOL 24 or BIOL 20 and 22 may be substituted for BIOL 5.

2. 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.

3. The associate degree requires the completion of additional units and requirements listed with a 2.0 or better GPA.

MEDICAL CODING - MAJOR #8502

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, extract data, and ensure appropriate codes are assigned for billing, internal and external reporting, research and regulatory compliance.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Evaluate the content of patient health records and assign diagnostic and procedure codes following regulatory guidelines.
2. Use computer technology and applications as a coding professional would in the regular course of business for HIM functions such as the electronic health record, encoding, abstracting, billing, and revenue management.

RECOMMENDED SEQUENCE OF COURSES

First Semester		Units
BIOL 5	Human Biology.....	4
HIT 1	Introduction to Health Information Management.....	3
HIT 10	Medical Terminology.....	3
Total		10

Second Semester

CIT 15	Computer Concepts.....	3
HIT 4	Disease Process.....	3
HIT 5	Introduction to Coding.....	3
Total		9

Third Semester

HIT 6	Coding and Reimbursement.....	3
HIT 14	HIM Technology and Systems.....	3
MA 2	Pharmacology.....	3
Total		9

Fourth Semester

HIT 11	CPT Coding.....	3
HIT 15	Medical Coding Directed Practice.....	1
Total		4

150 Home Economics – Consumer Education

HOME ECONOMICS – CONSUMER EDUCATION – MAJOR #5640

Students must complete 12 units of required core courses and select 8 units from the course options, for a total of 20 units for a Home Economics major or certificate of achievement.

ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

REQUIRED CORE COURSES		Units
FN 45	Therapeutic Diets	3
FN 40	Nutrition, <i>or</i>	
FN 35	Nutrition and Health	3
FSHTX 20	Textiles	3
INTRDSN 7	Interior Design	3
Total		12

COURSE OPTIONS: Select a minimum of 8 units		Units
CHDEV/PSY 38	Lifespan Development	3
CHDEV/PSY 39	Child Growth and Development	3
CHDEV/FN 42	Child Nutrition	3
FN 1	Food Preparation	3
FN 41	Sports Nutrition	2
FN 43	Women's Nutrition	2
FM 28	Visual Merchandising	3
FSHTX 22	Fashion Analysis & Wardrobe Selection	3
FSHTX 24	Beginning Sewing	3
FSHTX 25	Professional Image	3
FSHTX 26	Intermediate Sewing	2
SOC 32	Introduction to Marriage and Family	3

Note: An AS degree will be awarded on the successful completion of 60 units. (See page 33 for associate degree requirements.) General Education requirements for transfer certification are on page 39.

Suggested sequence of courses:

FIRST YEAR

First Semester	Units
FSHTX 20	3

OPTION (select one)

FN 41, <i>or</i> FN 43	2
------------------------------	---

Second Semester

Second Semester	Units
FN 45	3

OPTION (select one) from the Child & Family Studies courses:

CHDEV/PSY 38, CHDEV/PSY 39, CHDEV/FN 42, <i>or</i> SOC 32	3
--	---

SECOND YEAR

First Semester	Units
FN 40 <i>or</i> FN 35	3

OPTIONS (select one) from the Food & Nutrition, or Clothing & Textiles courses:

FN 1, FSHTX 24, <i>or</i> FSHTX 26	2-3
--	-----

Second Semester	Units
INTRDSN 7	3

OPTION (select one) from the Fashion Merchandising, or Fashion and Textiles Studies courses:

FSHTX 22, FSHTX 25, FM 28	3
---------------------------------	---

HONORS PROGRAM

LEON S. PETERS HONORS PROGRAM – MAJOR #5331

CERTIFICATE

A Leon S. Peter Certificate in Honors will be awarded to Honors students who successfully complete a minimum of 17 credits of Honors courses including 2 colloquium units with an overall GPA of 3.2 or better.

REQUIRED COURSE

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.

COURSE	Units
*ENGL 1AH Honors Reading and Composition	4

** An exception can be made if student has successfully completed ENGL 1A prior to entering the Honors program.*

ELECTIVE COURSES: Select a minimum of 11 units

COURSE	Units
ACCTG 4AH Honors Financial Accounting, <i>or</i>	
ACCTG 4BH Honors Managerial Accounting	4
ANTHRO 2H Honors Cultural Anthropology	3
ART 5H Honors Art History 1, <i>or</i>	
ART 6H Honors Art History, 2	3
BA 10H Honors Introduction to Business	3
BIOL 11AH Honors Biology for Science Majors 1, <i>or</i>	
BIOL 1H Honors Principles of Biology	4-5
ECON 1AH Honors Introduction to Macroeconomics, <i>or</i>	3
ECON 1BH Honors Introduction to Microeconomics	3
ENGL 1BH Honors Introduction to Literature	3
ENGL 3H Honors Critical Reading & Writing	3
HIST 1H Honors Western Civilization to 1648, <i>or</i>	
HIST 2H Honors Western Civilization since 1648	3
HUM 10H Honors Classical Humanities, <i>or</i>	
HUM 11H Honors Modern Humanities	3
PHIL 1AH Honors Theories of Knowledge and Reality	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 2 units

HONORS 1A	Honors Science Colloquium.....	1
HONORS 1C	Honors Humanities Colloquium.....	1
HONORS 1D	Honors Business & Economics Colloquium.....	1
HONORS 1E	Honors Social Science Colloquium.....	1
HONORS 1F	Honors Phi Theta Kappa Colloquium.....	1

HUMAN SERVICES

ALCOHOLISM AND DRUG ABUSE COUNSELING

OPTION – MAJOR #7951

This degree is designed for students interested in working in the field of chemical dependency. Completion of the total program will broaden a candi-date’s understanding and assist in preparation needed to enter the field.

These core classes of the degree are accredited by the California Association for Alcohol/Drug Educators (CAADE) and recognized by the other counselor certification organizations in California.

The degree offers course work leading to a certificate of achievement, and an AS degree in Alcoholism and Drug Abuse Counseling.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Demonstrate a fundamental working knowledge of the Alcohol and Other Drug Abuse system.
2. Be prepared for entry-level employment in an Alcohol or Other Drug Program.
3. Demonstrate an understanding of the 12 core competencies and their application to the treatment of substance use disorders.

REQUIRED CORE COURSES

		Units
HS/SOC 10	Introduction to Aging Studies	3
HS 18	Alcohol and Drug Abuse Counseling: Professional and Personal Growth.....	2
HS 19B	Work Experience (Coop), Occupational	6
HS 20	Introduction to Social Welfare	3
HS 24	Fund of Interviewing and Counseling	3
HS 40	Alcohol and Drug Abuse Counseling: Law and Ethics, Prevention, Education, and Outreach and Referral	3
HS 42	Introduction to Alcohol and Drug Counseling.....	3
HS 43	Alcohol and Drug Abuse Counseling: Case Management	3
HS 44	Drug Use: Physical and Psychological Effects	3
	Total	29

COURSE OPTIONS: Select 7 units

		Units
AFRAM 1	African-American Culture, <i>or</i>	
AMIND 34	American Indian in Contemporary Society, <i>or</i>	
CLS/SOC 14	Sociology of the Mexican American Community.....	3
CHDEV 5	Parent Education.....	3
CHDEV/PSY 12	Child Abuse	3
HS/WSTS 25	Assertiveness Training.....	2
PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology.....	3
PSY 5	Social Psychology.....	3
PSY 16	Abnormal Psychology	3
PSY 25	Human Sexuality.....	3

PSY 33	Personal and Social Adjustment	3
SOC 1A/1AH	Introduction to Sociology, <i>or</i> Honors Introduction to Sociology, <i>or</i> Basic Sociology	3
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 degree requirements are listed on page 33. General Education requirements for transfer certification are on page 39.

ALCOHOLISM AND DRUG ABUSE COUNSELING

OPTION – MAJOR #7951

This certificate is designed for students interested in working in the field of 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 eight 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 9 certifying organizations.

REQUIRED CORE COURSES

		Units
HS/SOC 10	Introduction to Aging Studies	3
HS 18	Alcohol and Drug Abuse Counseling: Professional and Personal Growth.....	2
HS 19B	Work Experience (Coop), Occupational	6
HS 20	Introduction to Social Welfare	3
HS 24	Fund of Interviewing and Counseling	3
HS 40	Alcohol and Drug Abuse Counseling: Law and Ethics, Prevention, Education, and Outreach and Referral.....	3
HS 42	Introduction to Alcohol and Drug Counseling.....	3
HS 43	Alcohol and Drug Abuse Counseling: Case Management	3
HS 44	Drug Use: Physical and Psychological Effects	3
	Total	29

COURSE OPTIONS: Select 7 units

		Units
AFRAM 1	African-American Culture, <i>or</i>	
AMIND 34	American Indian in Contemporary Society, <i>or</i>	
CLS/SOC 14	Sociology of the Mexican American Community.....	3
CHDEV 5	Parent Education.....	3

152 Human Services

CHDEV/PSY 12	Child Abuse	3
HS/WSTS 25	Assertiveness Training.....	2
PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology.....	3
PSY 5	Social Psychology	3
PSY 16	Abnormal Psychology.....	3
PSY 25	Human Sexuality.....	3
PSY 33	Personal and Social Adjustment	3
SOC 1A/1AH	Introduction to Sociology, <i>or</i> Honors Introduction to Sociology, <i>or</i> 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

CERTIFICATE

This certificate is a recognition that the student has completed two entrance-level courses in the area of Alcoholism Counseling.

HS 42	Intro to Alcohol and Drug Counseling.....	3
HS 43	Alcohol and Drug Abuse Counseling.....	3
Total		6

SOCIAL WORK OPTION – MAJOR #7631

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 social work. Students must take the required courses listed in the Core (see below), and select 12 units from the list of options.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Demonstrate a fundamental working knowledge of the social services system.
2. Be prepared for entry-level employment in a social service setting.
3. Understand who are the underrepresented within our society and what might be appropriate interventions to assist them.
4. Apply the multiple perspectives of a broad Liberal Arts foundation to their analysis of social problems.

REQUIRED CORE COURSES		Units
CIT 12	Computer Literacy	3
HS/SOC 10	Introduction to Aging Studies	3
HS 19A	Work Experience (Coop), 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		18

COURSE OPTIONS: Select 12 units

	Units	
AFRAM 1	African-American Culture	3
AFRAM 2	Cultural Adaptation of the African-American.....	3
AMIND 32	American Indian History.....	3
AMIND 34	The American Indian in Contemporary Society.....	3
AMST 10	American Pluralism.....	3
ANTHRO 2/2H	Cultural Anthropology, <i>or</i> Honors Cultural Anthropology	3
ASAMER 15	Intro to Asian-Americans.....	3
ASL 1	Beginning American Sign Language.....	4
CHDEV 5	Parent Education.....	3
CHDEV 30	Child, Family and Community, <i>or</i> SOC 31 Child in Society.....	3
CHDEV/PSY 38	Lifespan Development	3
CHDEV/PSY39	Child Growth and Development.....	3
CLS 11	Introduction to Chicano-Latino Studies.....	3
CLS/SOC 14	Sociology of the Mexican American Community.....	3
CLS 30	The Mexican American Family – Social and Psychological Perspectives.....	3
COMM 1	Introduction to Public Speaking.....	3
FN 35	Nutrition and Health, <i>or</i> FN/WSTS 43 Women's Nutrition.....	2-3
HMONG 1	Beginning Hmong.....	4
HS/WSTS 25	Assertiveness Training.....	2
HS 44	Drug Use: Physical and Psychological Effects	3
SOC 1A/1AH	Introduction to Sociology, <i>or</i> Honors Introduction to Sociology, <i>or</i> SOC 160 Basic Sociology	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
SPAN 1	Beginning Spanish	4
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 33 for associate degree requirements. General education requirements for transfer certification are on page 39.

For career options, consult with Human Services staff.

SOCIAL WORK OPTION – MAJOR #7631

This certificate of achievement 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 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 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.

- Understand who are the underrepresented within our society and what might be appropriate interventions to assist them.
- Apply the multiple perspectives of a broad liberal arts foundation to their analysis of social problems.

REQUIRED CORE COURSES		Units
CIT 12	Computer Literacy	3
HS/SOC 10	Introduction to Aging Studies	3
HS 19A	Work Experience (Coop), 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		18

COURSE OPTIONS: Select 12 units		Units
AFRAM 1	African-American Culture	3
AFRAM 2	Cultural Adaptation of the African-American	3
AMIND 32	American Indian History	3
AMIND 34	The American Indian in Contemporary Society	3
AMST 10	American Pluralism	3
ANTHRO 2/2H	Cultural Anthropology, <i>or</i> Honors Cultural Anthropology	3
ASAMER 15	Intro to Asian-Americans	3
ASL 1	Beginning American Sign Language	4
CHDEV 5	Parent Education	3
CHDEV 30	Child, Family and Community, <i>or</i> SOC 31 Child in Society	3
CHDEV/PSY 38	Lifespan Development	3
CHDEV/PSY39	Child Growth and Development	3
CLS 11	Introduction to Chicano-Latino Studies	3
CLS/SOC 14	Sociology of the Mexican American Community	3
CLS 30	The Mexican American Family – Social and Psychological Perspectives	3
COMM 1	Introduction to Public Speaking	3
FN 35	Nutrition and Health, <i>or</i> FN/WSTS 43 Women's Nutrition	2-3
HMONG 1	Beginning Hmong	4
HS/WSTS 25	Assertiveness Training	2
HS 44	Drug Use: Physical and Psychological Effects	3
SOC 1A/1AH	Introduction to Sociology, <i>or</i> Honors Introduction to Sociology, <i>or</i> SOC 160 Basic Sociology	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
SPAN 1	Beginning Spanish	4
WSTS 10	Changing Roles of Women	3

For career options, consult with Human Services staff.

HUMANITIES – MAJOR #5330

The Humanities major is ideal for students seeking an integrated liberal arts education, either as a pre-professional major or as a self-enrichment program. The program is designed to help students develop a diverse understanding and appreciation of world cultures past and present. The Humanities major requirements provide a curriculum that allows for the development of critical thinking, reading, and writing, as well as the development of a creative

imagination. A Humanities major is valuable to a student planning to transfer to a four-year institution, whether as a major in humanities or some other field, and will enhance preparation for a wide range of career opportunities.

Requirements within the program (18 units)

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

- Recognize the significance of the interrelationships between cultures and their art forms.
- Discern a sense of continuity in the history of ideas.
- Critically read literature, philosophy, and drama in translation.

COURSES: Select 18 units:		Units
HUMAN 10	Classical Humanities, <i>or</i>	
HUMAN 10H	Honors Classical Humanities	3
HUMAN 11	Modern Humanities, <i>or</i>	
HUMAN 11H	Honors Modern Humanities	3
ENGL 12	The Bible as Literature, <i>or</i>	
ENGL 42	Classic Myths, <i>or</i>	
PHIL 1D	World Religions	3
ENGL 1B	Introduction to the Study of Literature, <i>or</i>	
ENGL 1BH	Honors Intro to the Study of Literature, <i>or</i>	
ENGL 44A	World Literature to the Renaissance, <i>or</i>	
ENGL 44B	World Literature since the Renaissance, <i>or</i>	
ENGL 45	Contemporary World Literature, <i>or</i>	
ENGL 46A	English Literature to 1800, <i>or</i>	
ENGL 46B	English Literature from 1800 to the Present, <i>or</i>	
ENGL 48A	Intro to American Literature to World War I, <i>or</i>	
ENGL 48B	Intro to American Literature World War I to the Present	3
PHIL 1A	Theories of Knowledge and Reality, <i>or</i>	
PHIL 1AH	Honors Theories of Knowledge and Reality, <i>or</i>	
PHIL 1B	Social and Political Philosophy, <i>or</i>	
PHIL 1C	Ethics, <i>or</i>	
PHIL 5	Philosophy of Religion	3
CLS 21	Chicano Literature, <i>or</i>	
TA 30	Theatre Appreciation, <i>or</i>	
TA 31	Theatre History and Dramatic Literature I, <i>or</i>	
TA 32	Theatre History and Dramatic Literature II, <i>or</i>	
ART 6	Art History 2, <i>or</i>	
ART 6H	Honors Art History 2, <i>or</i>	
ART 55	Introduction to Asian Art, <i>or</i>	
ART 60	Pre-Columbian Art, <i>or</i>	
MUS 12	Music Appreciation, <i>or</i>	
MUS 13	History of Music, <i>or</i>	
MUS 14	Opera Appreciation, <i>or</i>	
MUS 16	Jazz History and Appreciation	3
Total		18

Note: An associate in arts degree in Humanities 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 major 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.

INDUSTRIAL ARTS AND TECHNOLOGY –

MAJOR #8991

The student interested in a career teaching industrial arts and technology may complete the lower division requirements at Fresno City College and transfer as a junior at the end of two years. The sample program shown parallels lower division at California State University, Fresno, and is acceptable for majors in this area. Students should carefully check the lower division requirements of other colleges to which they plan to transfer for minor variations. This program has been articulated with the California State University, Fresno Industrial Arts Department since spring semester 1974.

ASSOCIATE IN SCIENCE DEGREE

FIRST YEAR

First Semester		Units
AT 11	Basic Electricity.....	3
DRAFT 12	Draft Practices.....	3
Total		6

Second Semester		Units
AUTOT 9	Automotive Essentials.....	3
Total		3

SECOND YEAR

First Semester		Units
AT 10	Technical Computer Applications	2
AT 40	Preparing for Employment Opportunities	3
Elective	.....	3
Total		8

Recommended Electives: ARCH 12; WELD 1.

Note: associate in science degree requirements are listed on page 33.

INDUSTRIAL TECHNOLOGY

CONSTRUCTION OPTION – MAJOR #8240

ASSOCIATE IN SCIENCE DEGREE

FIRST YEAR

First Semester		Units
ARCH 12	Architectural Practice I.....	3
ENGL 1A/1AH	Reading and Composition, <i>or</i> Hons Reading and Composition.....	4
PHYS 2A	General Physics.....	4
MATH 5A	Mathematical Analysis I.....	5
Physical Education	.....	1
Total		17

Second Semester		Units
AT 11	Basic Electricity.....	3
BIOL, CHEM <i>or</i> GEOL	.....	4
COMM 1	Introduction to Public Speaking, <i>or</i> COMM 2 Interpersonal Communication	3

ENGR 2	Graphics	4
ENGR 1A	Elementary Plane Surveying	4
Total		18

SECOND YEAR

First Semester		Units
AT 10	Technical Computer Applications	2
BIOL, CHEM <i>or</i> PHYS 2B	.....	3-4
ECON 1A/1AH	Introduction to Macroeconomics, <i>or</i> Hons Introduction to Macroeconomics	3
ENGL 1B/1BH	Introduction to the Study of Literature, <i>or</i> Hons Introduction to the Study of Literature, <i>or</i> Theories of Knowledge and Reality, <i>or</i> Hons Theories of Knowledge and Reality	3
PHIL 1A/1AH	.....	1
Physical Education	.....	1
POLSCI 2/2H	American Government, <i>or</i> Hons American Government.....	3
Total		15-16

Second Semester		Units
ARCH 21	Materials of Construction	3
ECON 1B/1BH	Introduction to Microeconomics, <i>or</i> Hons Introduction to Microeconomics.....	3
Fine Arts Elective	.....	3
HLTH 1	Contemporary Health Issues.....	3
HIST 11	History of the United States to 1877, <i>or</i> HIST 12 History of the United States since 1877	3
Physical Education	.....	1
Total		16

Recommended Electives: AT 21; CONS 19, 51, 53; ARCH 10, 24, 30, 42.

Note: Associate degree requirements are listed on page 33.

MANUFACTURING OPTION – MAJOR #8260

ASSOCIATE IN SCIENCE DEGREE

FIRST YEAR

First Semester		Units
ENGL 1A/1AH	Reading and Composition, <i>or</i> Hons Reading and Composition.....	4
CHEM 3A	Introductory General Chemistry, <i>or</i> PHYS 2A General Physics.....	4
DRAFT 12	Drafting Practices	3
MATH 5A	Mathematical Analysis I.....	5
Physical Education	.....	1
Total		17

Second Semester		Units
AT 11	Basic Electricity.....	3
BIOL or GEOL	.....	4
COMM 1	Introduction to Public Speaking, <i>or</i> COMM 2 Interpersonal Communication	3
ENGR 11	Manufacturing Processes.....	3
Physical Education	.....	1
Total		14

SECOND YEAR

First Semester		Units
CHEM 3A	Introductory General Chemistry, <i>or</i>	
PHYS 2B	General Physics.....	4
ECON 1A/1AH	Introduction to Macroeconomics, <i>or</i> Honors Introduction to Macroeconomic.....	3
ENGL 1B/1BH	Introduction to the Study of Literature, <i>or</i> Honors Study of Literature, <i>or</i>	
PHIL 1A/1AH	Theories of Knowledge and Reality, <i>or</i> Honors Theories of Knowledge and Reality	3
Physical Education	.....	1
POLSCI 2/2H	American Government, <i>or</i> Honors American Government.....	3
WELD 1	Exploring Welding/Metals.....	3
Total		17

Second Semester		Units
ECON 1B/1BH	Introduction to Microeconomics, <i>or</i> Honors Introduction to Microeconomics	3
Fine Arts Elective	.....	3
HIST 11	History of the United States to 1877, <i>or</i>	
HIST 12	History of the United States since 1877	3
HLTH 1	Contemporary Health Issues.....	3
Physical Education	.....	1
Total		13

Recommended Electives: AT 21; GRC 10; and WELD 19.

Note: Associate degree requirements are listed on page 33.

**INFORMATION SYSTEMS –
SEE COMPUTER INFORMATION TECHNOLOGY**

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		Units
JOURN 4	Writing for the College Newspaper, <i>or</i>	
JOURN 5	Newspaper Production	3
JOURN 6	Magazine Production	3
Total		6

Complete a total of twelve (12) units from the courses listed below:

		Units
ART 5/5H	Art History 1, <i>or</i> Honors Art History 1	3
ECON 1A/1AH	Introduction to Macroeconomics, <i>or</i> Honors Introduction to Macroeconomics	3
GRC 10	Introduction to Graphic Communications.....	2
GRC 41	Visual Communications	3
JOURN 2	Interpreting Current Events.....	3
JOURN 9	Feature Writing	3
JOURN 15	Basic Editing for Journalists	2
JOURN 19	Work Experience	1-8
PHIL 1C	Ethics.....	3
PHOTO 30	Editorial Photography	3

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
- Philosophy/Humanities
- Romance Languages
- Interdisciplinary Science
- 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 it.

This program will provide students with an understanding of the cultures and history of the people who use American Sign 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. Those preparing to transfer to a California State University or a University of California should refer to the transfer requirements in the FCC catalog and consult a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Students will acquire and demonstrate signing, 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 sign language.
3. Students will acquire and demonstrate skills necessary to analyze and 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.

List of classes recommended (minimum of 18 units)

Courses taken at Fresno City College can be transferred to other colleges and universities.

Currently, Fresno City College has a transfer agreement with University of California Santa Cruz, Berkeley, Riverside and Davis. In addition, University of California at Santa Barbara and San Diego and Fresno State University accept Fresno City College students who comply with transfer requirements.

Minimum of 18 units from the following:

	Units
ASL 2 High-Beginning American Sign Language.....	4
ASL 3 Intermediate American Sign Language.....	4
ASL 4 High-Intermediate American Sign Language.....	4
ASL 5 Deaf Culture.....	3
ASL 6 Structure of American Sign Language.....	3
ASL 7 Deaf History.....	3
ASL 8 American Sign Language/Literature.....	3
Total	18

**Note: An associate in arts degree in Liberal Arts with an emphasis in American Sign Language will be awarded to students who successfully complete a total of 60 units, which include the associate degree requirements and a minimum of 18 units of core course work listed above. Students seeking an associate degree may apply for an evaluation after they 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.

CORE COURSES: Select 18 units from the following

	Units
ANTHRO 1 Biological Anthropology.....	3
And two from the following:	
ANTHRO 2/2H Cultural Anthropology, <i>or</i> Honors Cultural Anthropology.....	3
ANTHRO 4 Introduction to Archaeology.....	3
ANTHRO 5 Archaeological Laboratory Methods.....	4
Total	9-10

CRIM 1 Introduction to Criminology.....	3
CRIM 8 Criminal Investigation.....	4
CRIM 9 Crime Scene Forensic Evidence.....	3
Total	10

LIBERAL ARTS DEGREE WITH AN EMPHASIS IN ANTHROPOLOGY/ECONOMICS/GEOGRAPHY – 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
ANTHRO 1	Biological Anthropology	3
ANTHRO 2/2H	Cultural Anthropology, <i>or</i> Hons Cultural Anthropology	3
ANTHRO 3	Archaeology and World Prehistory	3
ANTHRO 13	Anthropology of Magic, Witchcraft, and Religion	3
ANTHRO 20	Native Peoples of California	3
ANTHRO/CLS 28	Ancient Mexico.....	3
ECON 1A/1AH	Introduction to Macroeconomics, <i>or</i> Hons Introduction to Macroeconomics	3
ECON 1B/BH	Introduction to Microeconomics, <i>or</i> Hons Introduction to Microeconomics	3
GEOG 2	Cultural Geography	3
GEOG 4A	World Geography	3
GEOG 4B	World Geography	3
GEOG 20	Geography in California.....	3

LIBERAL ARTS DEGREE WITH AN EMPHASIS IN ASIAN LANGUAGES - MAJOR #5111

This program is designed to acquaint students with Asian Languages and with an understanding of the culture and history of the people who speak it. The study of foreign languages encourages students to examine assumptions they have uncritically accepted before their college experience. Baccalaureate majors in this area may include degrees in any one of the Asiatic languages offered in this program.

This program will provide students with an understanding of the cultures and history of the people who speak the languages studied. It will also encourage them to appreciate the complexities of the multicultural society in which they live. Students will acquire the necessary language skills to succeed in everyday life experiences, vocational programs, and university transfer courses. Those preparing to transfer to a California State University or a University of California should refer to the transfer requirements in the FCC catalog and consult a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Students will acquire and demonstrate listening, speaking, reading, and writing skills at the intermediate-advanced level of the target languages consistent with national standards for foreign language education.
2. Students will show evidence of the acquisition and application of grammatical structures when using the languages.
3. Students will acquire and 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.

List of classes recommended (minimum of 19 units)

Courses taken at Fresno City College can be transferred to other colleges and universities. Currently, Fresno City College has a transfer agreement with University of California Santa Cruz, Berkeley, Riverside and Davis. In addition, University of California at Santa Barbara and San Diego and Fresno State University accept Fresno City College students who comply with transfer requirements.

16 units from the following courses (at least two different languages):		Units
ARMEN 2	High-Beginning Armenian.....	4
ARMEN 3	Intermediate Armenian	4
CHIN 2	High-Beginning Chinese	4
CHIN 3	Intermediate Chinese.....	4
CHIN 4	High-Intermediate Chinese	4
CHIN 5	Chinese Short Stories and Culture	3
HMONG 2	High-Beginning Hmong.....	4
JAPAN 2	High-Beginning Japanese.....	4
In addition, 3 units from the following courses:		
ASAMER 1	Indo-Chinese Americans	3
ASAMER 10	Hmong Culture	3
ASAMER 15	Introduction to Asian-Americans.....	3
ASAMER 20	Asian-American Literature.....	3
Total		19

**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	African-American Culture	3
AFRAM 2	Cultural Adaptation of the African-American.....	3
AFRAM 4	African Civilization	3
AFRAM 5	The African in the New World.....	3
AFRAM 6	African Cultures and Languages.....	3
AFRAM/WSTS 41	The African-American Woman.....	3
AMIND 31	American Indian Culture	3
AMIND 32	American Indian History	3
AMIND 33	Indians of the San Joaquin Valley and Adjacent Foothills Areas.....	2
AMIND 34	The American Indian in Contemporary Society	3
ANTHRO 2/2H	Cultural Anthropology, <i>or</i> Honors Cultural Anthropology	3
ANTHRO 20	Native Peoples of California	3
ANTHRO/CLS 28	Ancient Mexico.....	3
ASAMER 1	Indo-Chinese Americans	3
ASAMER 10	Hmong Culture.....	3
ASAMER 15	Introduction to Asian-Americans.....	3
ASAMER 25	Asian American Social Issues	3
ASAMER/WSTS 30	Asian-American Women.....	3
AMST 10	American Pluralism: A Search for Common Ground in a Multicultural Society.....	3
CLS 11	Introduction to Chicano-Latino Studies.....	3
CLS 12	Mexican American History	3
CLS 13	Politics and the Chicano-Latino Community.....	3
CLS/SOC 14	Sociology of the Mexican American Community.....	3
CLS 24	La Chicana and Latina.....	3
CLS/HIST 29	History of Mexico, Colonial to Contemporary Period.....	3
CLS 30	Mexican American Family: Social & Psychological Perspectives.....	3
CHDEV 15	Diversity and Culture in Early Care and Education Programs.....	3
GEOG 2	Cultural Geography.....	3
GEOG 4A	World Geography	3
GEOG 4B	World Geography	3

GEOG 20	Geography in California.....	3
POLSCI 24	International Relations	3
SOC 1B	Critical Thinking about Social Problems	3
SOC 2	American Minority Groups.....	3
WSTS 10	Changing Roles of Women.....	3

**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.

This program will provide students with an understanding of the cultures and history of the people who speak the languages studied. It will also encourage them to appreciate the complexities of the multicultural society in which they live. Students will acquire the necessary language skills to succeed in everyday life experiences, vocational programs, and university transfer courses. Those preparing to transfer to a California State University or a University of California should refer to the transfer requirements in the FCC catalog and consult a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Students will acquire and 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 acquire and 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.

List of classes recommended (minimum of 18 units)

Courses taken at Fresno City College can be transferred to other colleges and universities. Currently, Fresno City College has a transfer agreement with University of California Santa Cruz, Berkeley, Riverside and Davis. In addition, University of California at Santa Barbara and San Diego and Fresno State University accept Fresno City College students who comply with transfer requirements.

Minimum of 18 units in at least two foreign languages

Choose from the following:		Units
ARMEN 2	High-Beginning Armenian.....	4
ARMEN 3	Intermediate Armenian	4
CHIN 2	High-Beginning Chinese	4
CHIN 3	Intermediate Chinese.....	4
CHIN 4	High-Intermediate Chinese	4
CHIN 5	Chinese Short Stories and Culture	3
FRENCH 2	High-Beginning French.....	4
FRENCH 3	Intermediate French.....	4
FRENCH 4	High-Intermediate French.....	4
GERMAN 2	High-Beginning German.....	4

GERMAN 3	Intermediate German.....	4
GERMAN 4	High-Intermediate German.....	4
HMONG 2	High-Beginning Hmong.....	4
JAPAN 2	High-Beginning Japanese.....	4
SPAN 2	High-Beginning Spanish.....	4
SPAN 3	Intermediate Spanish, <i>or</i>	
SPAN 3NS	Spanish for Spanish Speakers.....	4
SPAN 4	High-Intermediate Spanish, <i>or</i>	
SPAN 4NS	Spanish for Spanish Speakers.....	4
SPAN 5	The Short Story: Mexico, Spain, and the U.S.....	3
SPAN 6	The Short Story: Latin America.....	3
SPAN 7	Advanced Spanish: Composition and Grammar.....	3
SPAN 8	Advanced Spanish Conversation.....	3
	Total	18

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, <i>or</i> Honors Western Civilization to 1648.....	3
HIST 2/2H	Western Civilization since 1648, <i>or</i> Honors Western Civilization since 1648.....	3
HIST 3	History of Ancient Rome.....	3
HIST 11	History of the United States to 1877.....	3
HIST 12	History of the United States since 1877.....	3
HIST 15	History of the British Isles.....	3
HIST 17	History of Islam.....	3
HIST 18	History of Ancient Greece.....	3
HIST 20	World History I, to 1600.....	3
HIST 21	United States Civil War.....	3
HIST 22	History of American Women.....	3
HIST 23	World History II, since 1500.....	3
HIST 25	History of Religion in the United States.....	3
HIST/GLS 29	History of Mexico, Colonial to Contemporary Period.....	3
HIST 30	California History.....	3
HIST 34	History of the American Civil Rights Movement.....	3
POLSCI 1	Modern Politics.....	3
POLSCI 2/2H	American Government, <i>or</i> 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 WITH AN EMPHASIS IN INTERDISCIPLINARY SCIENCE – MAJOR #5147

The degree program is meant for students who need a broad knowledge of science, math and engineering in the context of a degree that will assist them to function as good citizens. It will be specifically useful to persons who are planning to take up jobs in the following sectors: public policy, media & journalism. This area of emphasis course list is useful to students who wish to transfer and obtain 4-year degrees in Biology, Chemistry, Engineering, Physics, Geology, Mathematics, Computer Science, and Geography. The courses meet part of the transfer requirements for each of these degrees.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Obtain an elementary knowledge of at least 3 of the following broad fields: math, biology, chemistry, physics, geology, and engineering.
2. Have the ability to perform elementary computational exercises in at least 3 of the following broad fields: math, biology, chemistry, physics, geology & engineering.
3. Have the ability to understand the interconnection between several fields of science, math & engineering.

Choose 20 units (minimum) of core courses, with no more than 2 classes from any subject area: Units

BIOL 1/1H	Principles of Biology, <i>or</i> Honors Principles of Biology.....	4
BIOL 3/3H	Introduction to Life Science, <i>or</i> Honors 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.....	4
BIOL 11A/11AH	Biology for Science Majors I, <i>or</i> Honors Biology for Science Majors I.....	5
BIOL 11B	Biology for Science Majors II.....	5
BIOL 20	Human Anatomy.....	4
BIOL 22	Human Physiology.....	5
BIOL 24	Human Anatomy and Physiology.....	5
BIOL 31	Microbiology.....	5
BIOL 46	Elementary Horticulture.....	4
CHEM 1A	General Chemistry.....	5
CHEM 1B	General Chemistry & Qualitative Analysis.....	5
CHEM 3A	Introductory General Chemistry.....	4
CHEM 3B	Introductory Organic & Biological Chemistry.....	3
CHEM 8A	Elementary Organic Chemistry.....	3
CHEM 28A	Organic Chemistry I.....	3
GEOL 1/1H	Physical Geology, <i>or</i> Honors Physical Geology.....	4
GEOL 2	Historical Geology.....	3
GEOL 9	Introduction to Earth Science.....	3
ENGR 1A	Elementary Plane Surveying 1.....	4
ENGR 1B	Elementary Plane Surveying 2.....	4
ENGR 2	Engineering Graphics.....	4
ENGR 4	Engineering Materials.....	3
ENGR 6	Circuits with Laboratory.....	4
ENGR 8	Statics.....	3
ENGR 10	Introduction to Engineering.....	2
ENGR 11	Manufacturing Processes.....	3

MATH 4A	Trigonometry	4
MATH 4B	Pre-Calculus	4
MATH 5A	Mathematical Analysis I	5
MATH 5B	Mathematical Analysis II	4
MATH 6	Mathematical Analysis III	4
MATH 7	Introduction to Differential Equations	4
MATH 10A	Structure & Concepts in Mathematics I	3
MATH 10B	Structure & Concepts in Mathematics II	3
MATH 11	Elementary Statistics	4
MATH 21	Finite Math	3
MATH 26	Elementary Linear Algebra	3
MATH 42	Statistics for the Behavioral Sciences	4
MATH 45	Contemporary Math	3
MATH 48A	Pre-Calculus Workshop	1
MATH 48B	Calculus Workshop I	1
MATH 48C	Calculus Workshop II	1

LIBERAL ARTS DEGREE WITH EMPHASIS IN PHILOSOPHY/HUMANITIES – MAJOR #5161

A Liberal Arts Degree with an emphasis in Philosophy/Humanities is designed for students seeking an integrated Liberal Arts education and will aid in the development of critical thinking and critical reasoning skills. The courses offered will fulfill requirements towards the AA degree and for GE transfer certification for the state university system.

The goal of the Liberal Arts emphasis in Philosophy/Humanities is to offer a course of study for students interested in an interdisciplinary education. In a structured environment, students will learn to apply techniques of critical thinking and critical reasoning to a broad social, cultural context. The program will enhance students' ability to read and understand complex material, and will improve communication skills. Those preparing to transfer to a California State University or a University of California should refer to the transfer requirements in the FCC catalog and consult a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Students will be prepared to transfer to a four-year college as a Philosophy or Humanities major.
2. Students will have a foundational background in the historical development of cultures and societies.
3. Students will demonstrate skills in critical reasoning and thinking that enable them to succeed in pursuing an advanced degree or in employment in good-paying jobs.
4. In appropriate contexts, students will demonstrate the benefits of an interdisciplinary education of the kind provided in this major.

Students should select one of the following options to prepare for transfer to a 4-year college. Please refer to www.ASSIST.org for transfer details or see a counselor for additional details.

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.

List of Courses: 18 units selected from the lists below*

PHILOSOPHY (any three):		Units
PHIL 1A/1AH	Theories of Knowledge and Reality, <i>or</i> Honors Theories of Knowledge and Reality	3
PHIL 1B	Social and Political Philosophy	3
PHIL 1C	Ethics	3
PHIL 1D	World Religions	3
PHIL 4	Critical Reasoning	3
PHIL 5	Philosophy of Religion	3
PHIL 6	Introduction to Logic	3
HUMANITIES (any three):		
ENGL 12	The Bible as Literature	3
ENGL 42	Classic Myths	3
ENGL 44A	World Literature to the Renaissance, <i>or</i> ENGL 44B World Literature since the Renaissance	3
HUMAN 7/7H	Introduction to British Culture, <i>or</i> Honors Introduction to British Culture	3
HUMAN 10/10H	Classical Humanities, <i>or</i> Honors Classical Humanities	3
HUMAN 11/11H	Modern Humanities, <i>or</i> Honors Modern Humanities	3

*Note: An associate in arts degree in Liberal Arts with an emphasis in Philosophy/Humanities 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 major 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 ROMANCE LANGUAGES – MAJOR #5168

This program is designed to acquaint students with the Romance languages and with an understanding of the culture and history of the people who speak them. The study of foreign languages encourages students to examine assumptions they have uncritically accepted before their college experience. Students will have a number of rich opportunities to explore the languages, literatures, and cultures of the Spanish, Portuguese, and French-speaking worlds.

This program will provide students with an understanding of the cultures and history of the people who speak the languages studied. It will also encourage them to appreciate the complexities of the multicultural society in which they live. This emphasis will assure fluency in at least two Romance languages, as well as knowledge of the cultures they represent. Students will acquire the necessary language skills to succeed in everyday life experiences, vocational programs, and university transfer courses. Those preparing to transfer to a California State University or a University of California should refer to the transfer requirements in the FCC catalog and consult a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Students will acquire and 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 acquire and demonstrate skills necessary to analyze and compare and contrast cultures and practices of the target language with their own culture.

- 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.

List of classes recommended (minimum of 20 units)

Courses taken at Fresno City College can be transferred to other colleges and universities. Currently, Fresno City College has a transfer agreement with University of California Santa Cruz, Berkeley, Riverside and Davis. In addition, University of California at Santa Barbara and San Diego and Fresno State University accept Fresno City College students who comply with transfer requirements.

Choose from the following courses (at least two different languages) for a minimum of 20 units:

	Units
FRENCH 2 High-Beginning French.....	4
FRENCH 3 Intermediate French.....	4
FRENCH 4 High-Intermediate French.....	4
SPAN 2 High-Beginning Spanish.....	4
SPAN 3 Intermediate Spanish, <i>or</i>	
SPAN 3NS Spanish for Spanish Speakers.....	4
SPAN 4 High-Intermediate Spanish, <i>or</i>	
SPAN 4NS Spanish for Spanish Speakers.....	4
Total	20

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:

- Be academically prepared to transfer to a four-year college.
- Be prepared to analyze the influence of culture, economics, family, and society on individual development.
- Identify the consequences of bias on social interactions.
- 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 African-American Culture.....	3
AFRAM 3 African-American Art.....	3
AMIND 31 American Indian Culture.....	3
AMIND 32 American Indian History.....	3
ANTHRO 2/2H Cultural Anthropology, <i>or</i>	
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
CLS 11	Introduction to Chicano-Latino Studies.....	3
CLS 12	Mexican American History.....	3
CHDEV 39/PSY 39	Child Growth and Development.....	3
ECON 1A/1AH	Introduction to Macroeconomics, <i>or</i>	
	Honors Introduction to Macroeconomics.....	3
ECON 1B/1BH	Introduction to Microeconomics, <i>or</i>	
	Honors Introduction to Microeconomics.....	3
GEOG 2	Cultural Geography.....	3
GEOG 4A	World Geography.....	3
GEOG 4B	World Geography.....	3
HIST 1/1H	Western Civilization to 1648, <i>or</i>	
	Honors Western Civilization to 1648.....	3
HIST 2/2H	Western Civilization since 1648, <i>or</i>	
	Honors Western Civilization since 1648.....	3
HIST 15	History of the British Isles.....	3
HIST 17	History of Islam.....	3
HIST 18	History of Ancient Greece.....	3
HIST 21	United States Civil War.....	3
HIST 22	History of American Women.....	3
HIST/CLS 29	History of Mexico, Colonial to Contemporary Period.....	3
HIST 30	California History.....	3
HIST 34	History of the American Civil Rights Movement.....	3
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, <i>or</i>	
	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, <i>or</i>	
	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, such

as Teachers, Teacher Aides, Translators/Interpreters, Human Services, Health Professionals, Government Agencies, Agricultural Enterprises, Airlines, Latin American/International Markets, Shipping Companies and Social Work among others. Some career options may require more than an associate degree. For more career options visit the FCC Career Center located in the Student Services Building in the Counseling Center.

This program will provide students with an understanding of the cultures and history of the people who speak the languages studied. It will also encourage them to appreciate the complexities of the multicultural society in which they live. Students will acquire the necessary language skills to succeed in everyday life experiences, vocational programs, and university transfer courses. Those preparing to transfer to a California State University or a University of California should refer to the transfer requirements in the FCC catalog and consult a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Students will acquire and 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 acquire and 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.

List of classes recommended (minimum of 18 units)

Courses taken at Fresno City College can be transferred to other colleges and universities. Currently, Fresno City College has a transfer agreement with University of California Santa Cruz, Berkeley, Riverside and Davis. In addition, University of California at Santa Barbara and San Diego and Fresno State University accept Fresno City College students who comply with transfer requirements.

Select 12 units from the following courses: Units

Non-native speakers

SPAN 2	High-Beginning Spanish.....	4
SPAN 3	Intermediate Spanish	4
SPAN 4	High-Intermediate Spanish.....	4

or

Native speakers

SPAN 2	High-Beginning Spanish.....	4
SPAN 3NS	Spanish for Spanish Speakers	4
SPAN 4NS	Spanish for Spanish Speakers	4

Select 6 units from the following: Units

SPAN 5	The Short Story: Mexico, Spain, and the U.S.....	3
SPAN 6	The Short Story: Latin America	3
SPAN 7	Advanced Spanish: Composition and Grammar.....	3
SPAN 8	Advanced Spanish Conversation.....	3

Total 18

LIBERAL STUDIES – MAJOR #588T

The Liberal Studies major is for students pursuing a general-purpose associate degree. Most students will use the Liberal Studies major to transfer to a four-year ready to continue for a multi-subject teaching credential. The Liberal Studies major for elementary teaching can result in a bachelor's degree and a preliminary Multiple Subject Teaching Credential. Courses selected for the major depends upon the four-year institution the student plans to attend.

Note: Credential requirements are subject to change by state regulations; consult with a counselor each semester to ensure complete compliance with state regulations. Also, consult with a counselor for current information since some CSUs, UCs and private universities have unique admissions and preparation for the major requirements beyond the minimum requirements.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Students will demonstrate skills in reading, writing, and mathematics at levels that will enable them to attain success in passing the California Basic Education Skills Test (CBEST).
2. Students will demonstrate skills in arts, language, literature, history, social studies, science and mathematics at levels that will enable them, after transferring to a four year university, to pass the California Subject Examinations for Teachers (CSET) and teach at the elementary school level.

PROGRAM REQUIREMENTS

REQUIRED CORE COURSES Units

EDA 19	Work Experience (Coop), Occupational	1
EDUC 30	Survey of American Education	3
HIST 11	History of the United States to 1877	3
HIST 20	World History I, to 1600.....	3
POLSCI 2/2H	American Government, <i>or</i> Honors American Government.....	3

Select one course: Units

CHDEV/PSY 38	Lifespan Development	3
CHDEV/PSY 39	Child Growth and Development.....	3
HLTH 1	Contemporary Health Issues.....	3

Select one course: Units

AFRAM/ENGL 17	African-American Literature.....	3
ASAMER 20	Asian-American Literature.....	3
CLS 21	Chicano Literature.....	3
ENGL 1B/1BH	Introduction to the Study of Literature, <i>or</i> Honors Introduction to the Study of Literature	3
ENGL 15A	Creative Writing: Poetry	3
ENGL 15B	Creative Writing: Fiction	3
ENGL 44A	World Literature to the Renaissance	3
ENGL 44B	World Literature since the Renaissance	3
ENGL 46A	English Literature to 1800.....	3
ENGL 46B	English Literature from 1800 to the Present	3
ENGL 48A	Introduction to American Literature to World War I.....	3
ENGL 48B	Introduction to American Literature World War I to the Present.....	3
HUMAN 10/10H	Classical Humanities, <i>or</i> Honors Classical Humanities	3

HUMAN 11/11H	Modern Humanities, <i>or</i> Honors Modern Humanities	3
Select one course: Units		
COMM 1	Introduction to Public Speaking	3
COMM 2	Interpersonal Communication	3
COMM 4	Persuasion.....	3
COMM 8	Group Communication	3
Select one course: Units		
COMM 25	Argumentation.....	3
ENGL 3/3H	Critical Reading & Writing, <i>or</i> Honors Critical Reading & Writing.....	3
PHIL 4	Critical Reasoning	3
PHIL 6	Introduction to Logic.....	3
Select one course: Units		
MATH 4B	Pre-Calculus	4
MATH 5A	Mathematical Analysis I	5
MATH 5B	Mathematical Analysis II.....	4
MATH 10A	Structure & Concepts in Math I.....	3
MATH 10B	Structure & Concepts in Math II	3
MATH 11	Elementary Statistics	4
MATH 21	Finite Mathematics.....	3
MATH 45	Contemporary Mathematics.....	3
Select one course: Units		
BIOL 1/1H	Principles of Biology, <i>or</i> Honors Principles of Biology	4
BIOL 3/3H	Introduction to Life Science, <i>or</i> Honors Intro to Life Science	4
BIOL 5	Human Biology.....	4
Select one course: Units		
ART 2	Art Appreciation	3
ART 5/5H	Art History 1, <i>or</i> Honors Art History 1	3
ART 6/6H	Art History 2, <i>or</i> Honors Art History 2.....	3
ART 7	Beginning Drawing	3
ART 9	Beginning Painting: Oil/Acrylic.....	3
ART 10	Beginning Ceramics	3
ART 13	Beginning Watercolor Painting.....	3
MUS 3	Music Appreciation	3
MUS 12	Music Appreciation	3
MUS 13	History of Music	3
MUS 16	Jazz History and Appreciation.....	3
TA 12	Fundamentals of Interpretation.....	3
TA 30	Theatre Appreciation	3
TA 41	Beginning Acting.....	3
Total		35-37

- Notes:*
1. The major requires completion of 35-37 units with a "C" or better grade in each course. The remaining units should total 60 semester units minimum with a 2.0 or better GPA. These units should include transferable courses required for the multisubject credential SPECIFIC TO YOUR TRANSFER UNIVERSITY IN CONSULTATION WITH A COUNSELOR. See the FCC catalog that applies to you for associate degree requirements.
 2. The courses specified are to help prepare students to pass the state approved California Subject Exam for Teachers (CSET) which is required for all elementary education teachers in California.

3. It is recommended that students take and pass the CBEST Exam as soon as they have completed ENGL 1A and MATH 10A.

LIBRARY TECHNOLOGY

LIBRARY TECHNOLOGY – MAJOR #5171

Program prepares students to work as a paraprofessional in a variety of libraries.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Given an aspect of library service, describe the purpose of the library paraprofessional.
2. Given a specific type of library, describe the structure and staff function within it.

REQUIRED COURSE WORK

	Units	
LIBSKL 2	Information and Computer Literacy.....	3
LITEC 51	Introduction to Library Services	3
LITEC 52A	Organization of Information	3
LITEC 52B	Collection Management	1
LITEC 54	Literature and Services for Youth	3
LITEC 55	Library Public Service.....	3
LITEC 56	Information Technology	3
LITEC 57	Reference: Print and Online Sources	3
Total		22

Note: Requires completion of the minimum (22 units). Additionally requires completion of the associate degree requirements found in the Fresno City College Catalog. Students seeking an associate degree may apply for an evaluation at Admissions and Records after they have completed 30-40 units and are within a year of graduation.

LIBRARY TECHNOLOGY – MAJOR #5171

Certificate of Achievement prepares students to work as a paraprofessional in a variety of libraries.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Given an aspect of library service, describe the purpose of the library paraprofessional.
2. Given a specific type of library, describe the structure and staff function within it.

REQUIRED COURSE WORK

	Units	
LIBSKL 2	Information and Computer Literacy.....	3
LITEC 51	Introduction to Library Services	3
LITEC 52A	Organization of Information	3
LITEC 52B	Collection Management	1
LITEC 54	Literature and Services for Youth	3
LITEC 55	Library Public Service.....	3
LITEC 56	Information Technology	3
LITEC 57	Reference: Print and Online Sources	3
Total		22

LIFE SCIENCE DEGREE – MAJOR #6080

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): Recommended sequence is Biology 1, 4, 6.

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 1/1H Principles of Biology, <i>or</i> Honors Principles of Biology	4
BIOL 3/3H Introduction to Life Science, <i>or</i> Honors 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	4
BIOL 11A/11AH Biology for Science Majors I.....	5
BIOL 11B Biology for Science Majors II	5
BIOL 20 Human Anatomy	4
BIOL 22 Human Physiology	5
BIOL 24 Human Anatomy and Physiology	5
BIOL 31 Microbiology	5
BIOL 46 Elementary Horticulture.....	4

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

GEOLOGY

GEOL 1//1H	Physical Geology, <i>or</i> Honors Physical Geology	4
GEOL 2	Historical Geology.....	3
GEOL 4	Geology of California.....	3
GEOL 5	Introduction to Oceanography.....	3

GEOGRAPHY

GEOG 1	Physical Geography	3
GEOG 7	Physical Geography: Earth's Surface	4
GEOG 8	Physical Geography: Weather and Climate.....	4

PHYSICAL SCIENCE

PHYS 7	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

MANUFACTURING TECHNICIAN – MAJOR #8061

This curriculum provides training in maintenance mechanic, electrical control systems, and principles of industrial refrigeration (ammonia) systems.

CERTIFICATE

Student Learning Outcomes:

1. Demonstrate satisfactory knowledge of pneumatic/hydraulic systems.
2. Demonstrate satisfactory knowledge of oxyacetylene and arc welding processes, and use of common hand tools.
3. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.
4. Write programs in ladder logic, load and troubleshoot the programs, and operate the system.

REQUIRED COURSES

	Units/Hours
AC 353 Principles of Industrial Refrigeration	52 Hours
EST 50 Introduction to Electronics	2.5 Units
EST 55A Digital Concepts	3 Units
EST 58 Programmable Logic Controllers	3 Units
EST 59 Instrumentation Systems	3 Units
MMCTC 370 Fundamentals of Welding and Machine Shop.....	300 Hours
MMCTC 371 Fundamentals of Hydraulics and Pneumatics	300 Hours
MMCTC 372 Electrical Fundamentals	300 Hours

MARKETING

MARKETING – MAJOR #2110

This curriculum is designed for students planning to enter the marketing fields of retailing, wholesaling, general selling, and advertising.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Develop and implement a marketing plan in response to market opportunities.
2. Assess and apply technology to appropriate marketing activities.
3. Design, write, and execute a promotional plan including the formulation of selling strategies.
4. Apply effective leadership skills while managing marketing functions within a business enterprise.

FIRST YEAR

First Semester	Units
MKTG 10 Principles of Marketing	3
MKTG 11 Salesmanship.....	3
Associate Degree Requirements.....	10
Total	16

Second Semester	Units
BA 18 Business and the Legal Environment.....	4
CIT 15 Computer Concepts.....	3
MKTG 12 Advertising and Promotion.....	3
Associate Degree Requirements.....	7
Total	17

SECOND YEAR

First Semester	Units
MKTG 14 Retailing	3
Associate Degree Requirements.....	10
Total	13

Second Semester	Units
BA 33 Human Relations in the Workplace.....	3
DS 117 Business Mathematics	3
Associate Degree Requirements.....	10
Total	16

Recommended Electives: ACCTG 4A; BA 5, 10; MKTG 17, 19. (MKTG 19, 1st & 2nd semester, should be equivalent to 500 hours of work experience.)

Note: Associate degree requirements are listed on page 33.

MARKETING – MAJOR #2110

This curriculum is designed for students planning to enter the marketing fields of retailing, wholesaling, general selling, and advertising/promotion.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Develop and implement a marketing plan in response to market opportunities.
2. Assess and apply technology to appropriate marketing activities.
3. Design and execute a promotional plan including the formulation of selling strategies.

4. Apply effective leadership skills while managing marketing functions within a business enterprise.

REQUIRED COURSES	Units
BT 23 Job Search and Workplace Skills	3
BT 115* Refresher Math.....	3
BT 131 Applied Accounting	4
CIT 12 Computer Literacy	3
MKTG 10 Principles of Marketing	3
MKTG 11 Salesmanship.....	3
MKTG 12 Advertising and Promotion.....	3
MKTG 14 Retailing.....	3
MKTG 19 Work Experience (Cooperative), Occupational	2
Total	27

**Requirements and units will be waived if knowledge and skill in the subject matter can be demonstrated.*

ADVERTISING – MAJOR #2113

A step incentive certificate signifying proficiency in advertising and sales promotion.

CERTIFICATE

Student Learning Outcomes:

1. Describe each element in the promotion mix.
2. Identify appropriate media for various promotional situations.
3. Develop and implement a marketing media plan in response to market opportunities.
4. Formulate promotion and selling strategies.
5. Display soft skills required for workplace success including teambuilding, conflict management, communication, and professional behavior.

REQUIRED COURSES	Units
BA 33 Human Relations in the Workplace.....	3
MKTG 10 Principles of Marketing	3
MKTG 12 Advertising and Promotion.....	3
Total	9

MARKETING, FASHION MERCHANDISING

MARKETING, FASHION MERCHANDISING - MAJOR #2152

This degree prepares students for employment in the field of Fashion Merchandising.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Integrate the elements of fashion design into the marketing and entrepreneurial concepts of retailing, merchandising, promotion, and personal sales.

REQUIRED CORE COURSES	Units
AT 10 Technical Computer Applications	3
BA 51 Business Planning and New Venture Launch	1.5
INTRDSN 7 Interior Design	3
MKTG 10 Principles of Marketing	3

166 Marketing

MKTG 12	Advertising and Promotion.....	3
MKTG 14	Retailing.....	3
MKTG 17	Visual Merchandising,	3
MKTG 22	Introduction to Fashion Merchandising.....	3

COURSE OPTIONS: Select 3 Units		Units
MKTG 11	Salesmanship.....	3
TA 36	Costume Design	3
		Total 25.5

Notes: 1. An AS degree will be awarded to any Fashion Merchandising certificate candidate who successfully completes a total of 60 units. The 60 units must include associate degree requirements and 23 units of course work in the major as listed above.

2. Associate degree requirements are listed on page 33.

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

MARKETING, FASHION MERCHANDISING - MAJOR #2152

This certificate prepares students for employment in the field of Fashion Merchandising.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:

1. Integrate the elements of fashion design into the marketing and entrepreneurial concepts of retailing, merchandising, promotion, and personal sales.

REQUIRED CORE COURSES		Units
AT 10	Technical Computer Applications	3
BA 51	Business Planning and New Venture Launch.....	1.5
INTRDSN 7	Interior Design	3
MKTG 10	Principles of Marketing	3
MKTG 12	Advertising and Promotion.....	3
MKTG 14	Retailing.....	3
MKTG 17	Visual Merchandising	3
MKTG 22	Introduction to Fashion Merchandising.....	3

COURSE OPTIONS: Select 3 units		Units
MKTG 11	Salesmanship.....	3
TA 36	Costume Design	3
		Total 25.5

Students are required to establish eligibility for English 125 and 126 or ESL 67 and 68.

MARKETING, RETAIL MANAGEMENT – MAJOR #2055

The program prepares current and future retail employees for the fast paced, ever changing challenges in a competitive retail environment. Specific occupational preparation is provided in the following program.

ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Develop and implement a marketing plan in response to market opportunities.
2. Demonstrate effective leadership skills while managing marketing functions within a business enterprise.
3. Describe and identify appropriate application of the wheel of retailing to various retailing situations.

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 customer service, teambuilding, time management, conflict management, communication, and professional behavior.

First Semester		Units
BA/BT 5	Workplace Communication	3
BT 115	Refresher Math.....	3
CIT 15	Computer Concepts.....	3
COMM 1	Introduction to Public Speaking.....	3
		Total 12

Second Semester		Units
BA 10/10H	Introduction to Business, or Honors Introduction to Business.....	3
BT 131	Applied Accounting.....	4
MKTG/FM 10	Principles of Marketing	3
		Total 10

Third Semester		Units
BA 33	Human Relations in the Workplace.....	3
MKTG 11	Salesmanship.....	3
MKTG 12	Advertising and Promotion.....	3
MKTG 14	Retailing.....	3
		Total 12

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 33 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 teambuilding, 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	Salesmanship.....	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.

- Identify and describe appropriate application of the wheel of retailing to various retailing situation.
- Identify and describe the types of retailers and appropriate distribution methods for each type of retail situation.
- Display soft skills required for workplace success including teambuilding, conflict management, communication, and professional behavior.

REQUIRED COURSES		Units
BA 33	Human Relations in the Workplace.....	3
MKTG 10	Principles of Marketing.....	3
MKTG 14	Retailing.....	3
Total		9

MATHEMATICS – MAJOR #6200

The math degree program will help prepare students for math and science related subjects they will study in four-year college or university programs.

Preparatory courses: Students needing prerequisite courses will take from the following as required:

MATH 4A	Trigonometry
MATH 4B	Precalculus
MATH 101	Elementary Algebra
MATH 102	Plane Geometry
MATH 103	Intermediate Algebra

ASSOCIATE IN SCIENCE DEGREE

TOTAL UNITS REQUIRED.....23-25

REQUIRED CORE COURSES		Units
CSCI 40	Programming Concepts & Methodology I.....	4
MATH 5A	Mathematical Analysis I.....	5
MATH 5B	Mathematical Analysis II.....	4
MATH 6	Mathematical Analysis III.....	4
Total		17

ELECTIVES: Select two (2) courses from the following:

CSCI 41	Programming Concepts & Methodology II.....	4
MATH 7	Introduction to Differential Equations.....	4
MATH 11	Elementary Statistics, <i>or</i>	
MATH 42	Statistics for the Behavioral Sciences.....	4
MATH 21	Finite Mathematics, <i>or</i>	
MATH 10B	Structure/Concepts II.....	3
MATH 26	Elementary Linear Algebra.....	3
MATH 45	Contemporary Mathematics.....	3
PHYS 4A	Physics for Scientists and Engineers.....	4
PHYS 4B	Physics for Scientists and Engineers.....	4

Note: Associate degree requirements are listed on page 33.

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.

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:

- Graduated from high school with a minimum average of “C” (2.0) in high school work or complete the General Educational Development (GED) test with an average score of 45.
- Completed Math 260D or test score that would qualify the student to place out of or above Math 260D.
- Completed an Academic Summary Form for the Medical Assistant–Clinician Program and be prepared to furnish transcripts when requested.
- 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.

Background Check

Upon entry into the program, students may be required to obtain a background check.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

- Identify common medical conditions and diseases.
- Perform clinical skills commonly associated in the physician’s office.

*FIRST YEAR

First Semester		Units
BT 23	Job Search and Workplace Skills.....	3
HIT 10	Medical Terminology.....	3
**MA 1	Legal and Ethical Concepts.....	2
Total		8

Second Semester

Second Semester		Units
BIOL 5	Human Biology.....	4
CIT 15	Computer Concepts.....	3
HLTH 2	First Aid and Safety.....	2
HS 24	Interviewing and Counseling.....	3
**MA 2	Pharmacology.....	3
Total		15

*SECOND YEAR

First Semester		Units
**MA 4	Office Lab Procedures.....	4
**MA 6A	Clinical Training.....	3
Total		7

Second Semester

Second Semester		Units
FN 40	Nutrition.....	3
**MA 5	Diagnostic and Therapeutic Procedures.....	4
**MA 6B	Advanced Training.....	3
**MA 19	Work Experience (Coop), Occupational.....	1-4
Total		11-14

** Requires additional general education units for two-year associate in science degree. All courses must be completed with a “C” grade or better.*

*** Upon completion, the student will be eligible to take the California Medical Assistant State Certification Exam.*

Note: BIOL 24 or BIOL 20 and 22 may be substituted for BIOL 5.

MUSIC

This program satisfies the requirements for the associate in arts degree with a major in music and the lower division course requirements at most California state universities.

Music majors must select one of the following areas of specialization: instrumental (woodwind, brass, percussion, or strings), vocal, guitar, piano, or commercial music.

Instrumental, vocal, guitar, and piano majors must take Music 1A, 1B, 2A, 2B, 7A, 7B, 9, 13, and 18. These majors must also take the appropriate Intermediate/Advanced class and participate in a Large Ensemble every semester they are enrolled in the Music Major.

INSTRUMENTAL MAJORS - MAJOR #5810

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Perform music on the instrument of choice from at least three different time periods.
2. Hear, analyze, read, and write music.
3. Distinguish historical musical styles while using appropriate conducting patterns.

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 9	Composition.....	2
MUS 13	History of Music.....	3
MUS 18	Basic Conducting and Score Reading.....	2
Total		21

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 69 Wind Band.....	2
MUS 75 Community Orchestra.....	2
MUS 76 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
MUS 42B Intermediate/Advanced Woodwinds (Woodwind Choir).....	1-2
MUS 42C Intermediate/Advanced Strings (String Orchestra).....	1-2
MUS 42D Intermediate/Advanced Percussion (Percussion Ensemble).....	1-2

MUS 73A Intermediate/Advanced Chamber Ensemble (Brass).....	1-2
MUS 73B Intermediate/Advanced Chamber Ensemble (Woodwinds).....	1-2
MUS 73C Intermediate/Advanced Chamber Ensemble (Strings).....	1-2
MUS 73D Intermediate/Advanced Chamber Ensemble (Percussion).....	1-2
MUS 74A Intermediate/Advanced Brass Performance Practices.....	1-2
MUS 74B Intermediate/Advanced Woodwind Performance Practices.....	1-2
MUS 74C Intermediate/Advanced String Performance Practices.....	1-2
MUS 74D Intermediate/Advanced Percussion Performance Practices.....	1-2

VOCAL MAJORS - MAJOR #5820

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 9	Composition.....	2
MUS 13	History of Music.....	3
MUS 18	Basic Conducting and Score Reading.....	2
Total		21

Eight units of Intermediate/Advanced class requirement:

	Units
MUS 26 Intermediate/Advanced Voice.....	1-2

Select eight units of Large Ensemble from the following:

	Units
MUS 30 College Choir.....	2
MUS 39 Opera and Musical Theatre Workshop.....	2
MUS 60 Symphonic Choir.....	2
MUS 61 A Cappella Choir.....	2
MUS 66 Opera Performance Practices.....	2
MUS 67 Musical Theater Performance Practices.....	2

GUITAR MAJORS - MAJOR #5830

Student Learning Outcomes:

1. Perform guitar music of at least three different time periods.
2. Hear, analyze, read, and write music.
3. Distinguish historical musical styles while using appropriate conducting patterns.

REQUIRED CORE COURSES		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 9	Composition	2
MUS 13	History of Music	3
MUS 18	Basic Conducting and Score Reading	2
	Total	21

For the 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 47	Jazz Combo	2
MUS 48	Latin Jazz Ensemble	2
MUS 53	Latin Jazz Workshop	2
MUS 60	Symphonic Choir	2
MUS 61	A Cappella Choir	2
MUS 68	Symphonic Band	2
MUS 69	Wind Band	2
MUS 70	Contemporary Jazz Ensemble.....	2
MUS 71	Lab Jazz Ensemble	2
MUS 72	Jazz Composer's Orchestra	2
MUS 77	Studio Jazz Combo	2
MUS 78	Lab Jazz Combo	2
MUS 90	Jazz Composers Workshop	2
MUS 91	Jazz Composers Ensemble	2
MUS 92	Vocal Jazz Ensemble	2

PIANO MAJORS - MAJOR #5840

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 9	Composition	2
MUS 13	History of Music	3
MUS 18	Basic Conducting and Score Reading.....	2
	Total	21

For the 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: Units

MUS 30	College Choir	2
MUS 34	Fresno Chorale	2

MUS 40	Concert Band	2
MUS 41	Jazz Ensemble.....	2
MUS 47	Jazz Combo	2
MUS 48	Latin Jazz Ensemble	2
MUS 53	Latin Jazz Workshop	2
MUS 60	Symphonic Choir	2
MUS 61	A Cappella Choir	2
MUS 68	Symphonic Band	2
MUS 69	Wind Band	2
MUS 70	Contemporary Jazz Ensemble.....	2
MUS 71	Lab Jazz Ensemble	2
MUS 72	Jazz Composer's Orchestra	2
MUS 77	Studio Jazz Combo.....	2
MUS 78	Lab Jazz Combo	2
MUS 90	Jazz Composers Workshop	2
MUS 91	Jazz Composers Ensemble	2
MUS 92	Vocal Jazz Ensemble	2

COMMERCIAL MUSIC

COMMERCIAL MUSIC – MAJOR #5850

This program satisfies the music course requirements for the associate in science degree in commercial music and provides the skills necessary for employment in the music industry.

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, <i>or</i>	
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	Elementary 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 47	Jazz Combo	2
MUS 48	Latin Jazz Ensemble	2
MUS 53	Latin Jazz Workshop	2

170 Music

MUS 60	Symphonic Choir.....	2
MUS 61	A Cappella Choir.....	2
MUS 68	Symphonic Band.....	2
MUS 69	Wind Band.....	2
MUS 70	Contemporary Jazz Ensemble.....	2
MUS 71	Lab Jazz Ensemble.....	2
MUS 72	Jazz Composer's Orchestra.....	2
MUS 77	Studio Jazz Combo.....	2
MUS 78	Lab Jazz Combo.....	2
MUS 90	Jazz Composers Workshop.....	2
MUS 91	Jazz Composers Ensemble.....	2
MUS 92	Vocal Jazz Ensemble.....	2

For the Music Electives requirement, Commercial Music majors select from the following:

	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	Elementary Voice: Level II.....	1
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 39	Opera and Musical Theatre Workshop.....	2
MUS 40	Concert Band.....	2
MUS 41	Jazz Ensemble.....	2
MUS 42A	Intermediate/Advanced Brass (Brass Choir).....	1-2
MUS 42B	Intermediate/Advanced Woodwinds (Woodwind Choir).....	1-2
MUS 42C	Intermediate/Advanced Strings (String Orchestra).....	1-2
MUS 42D	Intermediate/Advanced Percussion (Percussion Ensemble).....	1-2
MUS 46	Symphony Orchestra.....	2
MUS 47	Jazz Combo.....	2
MUS 48	Latin Jazz Ensemble.....	2
MUS 49	Advanced Large Ensembles.....	1
MUS 57	Solo Repertoire Studies I.....	1
MUS 59	Advanced Chamber Ensembles.....	1
MUS 60	Symphonic Choir.....	2
MUS 63	Chamber Singers.....	2
MUS 64	Vocal Ensemble.....	2
MUS 68	Symphonic Band.....	2

MUS 69	Wind Band.....	2
MUS 70	Contemporary Jazz Ensemble.....	2
MUS 71	Lab Jazz Ensemble.....	2
MUS 72	Jazz Composer's Orchestra.....	2
MUS 73A	Intermediate/Advanced Chamber Ensemble (Brass).....	1-2
MUS 73B	Intermediate/Advanced Chamber Ensemble (Woodwinds).....	1-2
MUS 73C	Intermediate/Advanced Chamber Ensemble (Strings).....	1-2
MUS 73D	Intermediate/Advanced Chamber Ensemble (Percussion).....	1-2
MUS 74A	Intermediate/Advanced Brass Performance Practices.....	1-2
MUS 74B	Intermediate/Advanced Woodwind Performance Practices.....	1-2
MUS 74C	Intermediate/Advanced String Performance Practices.....	1-2
MUS 74D	Intermediate/Advanced Percussion Performance Practices.....	1-2
MUS 75	Community Orchestra.....	2
MUS 76	College Philharmonic Orchestra.....	2
MUS 77	Studio Jazz Combo.....	2
MUS 78	Lab Jazz Combo.....	2
MUS 90	Jazz Composers Workshop.....	2
MUS 91	Jazz Composers Ensemble.....	2
MUS 92	Vocal Jazz Ensemble.....	2

Notes: *MUS 25 or 26 may be substituted.

**MUS 21 or 22 may be substituted.

***MUS 22 may be substituted.

COMMERCIAL MUSIC – MAJOR #5850

This program satisfies the music course requirements for the Certificate of Achievement in Commercial Music which provides fundamental skills necessary for employment in the music industry. Students continuing and successfully completing required coursework in the commercial music program will earn the associate in science degree in Commercial Music.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Analyze, read, and write music.
2. Perform early intermediate level piano solos, duets and ensembles in an artistic manner using good technique with stylistic and aesthetic considerations.
3. Appropriately work with music industry professionals.
4. Record musicians in a professional manner.
5. Successfully manipulate Midi and Finale software.

Required Core Course		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.

Nursing, Registered Application Requirements

Enrollment in the Registered Nursing Program is limited. Minimum qualifications for selection must be met. There are no restrictions as to age, race, sex or marital status. Prior to the final date for filing an application to the program, the applicant must have:

1. Graduated from high school with a minimum grade point average of “C+” (2.5) or better in high school work or completed the General Educational Development (GED) test with an average standard score of 45.
2. Completed Chemistry 3A or equivalent with a grade of “C” or better.
3. Completed Biology 20, Human Anatomy, and Biology 22, Human Physiology, (or equivalents) with a grade of “C” or better in each course.
4. Completed Biology 31, Microbiology, with a grade of “C” or better.
5. Completed Sociology 1A, Introduction to Sociology or Anthropology 2, Cultural Anthropology; and Psychology 2, General Psychology; with grades of “C” or better in each course.
6. Completed English 1A, Reading and Composition, with a grade of “C” or better.
7. Completed Mathematics 103, Intermediate Algebra, or a more advanced math course with a grade of “C” or better.
8. Attained a cumulative grade point average (GPA) of “C+” (2.5) or better in completed college work.
9. Completed an Academic Summary Form for the Registered Nursing Program and be prepared to furnish transcripts when requested to do so.
10. Have no physical impairment that would preclude the performance of all registered nurse duties.
11. Be in good physical and mental health.

Notes:

1. *The college GPA and college courses of an applicant will have precedence over an applicant's high school GPA and courses.*
2. *Prior to registration for the semester in which the applicant is scheduled to take courses in the Registered Nursing Program, the student must submit evidence of physical examination, current immunizations, and freedom of TB by a licensed physician. The student is also required to attend a mandatory orientation meeting before the start of the semester.*
3. *Students are required to complete a background check.*

Change of Name, Address, and/or Telephone Number

Applicants and nursing students must keep the Nursing Education Office informed of any change in name, address, and/or telephone number. Failure of applicants to inform the Nursing Education Office of changes may result in loss of entry into the program.

Vocational Nursing Articulation

Procedures and application requirements specific to vocational nurse articulation into the Registered Nursing Program are available upon request.

Previous Education in Nursing

Any person desiring to enter the Fresno City College Registered Nursing Program by transfer or challenge will be evaluated on an individual basis after all college general requirements for transfer or challenge have been met. The college has written policies and procedures for academic training in registered nursing programs. Individuals who have completed vocational nursing programs and persons having other education in the field of nursing should contact the Director of Nursing for specific information.

Pre-nursing Preparation

Pre-nursing 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. 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 nursing courses. Less than a “C” or a “Pass” grade in any nursing course requires that the course be repeated before continuing with the major. Registered Nursing courses must be repeated in their entirety. Courses may be repeated once only. Safe nursing practice is necessary for retention of students in the program.

If, based on the professional judgment of the faculty, a student demonstrates that he/she is unsuited to nursing, is not progressing satisfactorily or is engaged in unethical, unprofessional, or illegal practices, he/she may be asked to withdraw from the program.

State License

The successful completion of the prescribed registered nursing course sequence in addition to the other licensure and/or degree requirements qualifies the graduate for an associate in science degree and eligibility to apply for licensure as a Registered Nurse.

ASSOCIATE IN SCIENCE DEGREE

Registered Nursing Course Sequence (All courses must be completed with a grade of “C” or better.)

Student Learning Outcomes:

1. Students completing the Registered Nursing Program, who have their names forwarded by the college to the California Board of Registered Nursing, will pass the NCLEX-RN at 85% for first-time takers.

172 Nursing

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 Semester		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.....	2
RN 46	Nursing Care of the Childbearing Family Clinical.....	2
Total		11.5

SECOND YEAR

Third Semester		Units
RN 51	Nursing Care of the Adult with Complex Health Problems.....	2.5
RN 52	Nursing Care of the Adult and Older Adult with Complex Health Problems Clinical.....	2
RN 52A	Nursing Care of the Adult and Older Adult with Complex Health Problems Skills.....	0.5
RN 53	Nursing Care of the Older Adult.....	1
RN 55	Nursing Care of Infants & Children.....	2
RN 56	Nursing Care of Infants & Children Clinical.....	2
Total		10

Fourth Semester		Units
RN 61	Nursing Care of the Critically Ill Adult and Coordinator of Care.....	2.5
RN 62	Nursing Care of the Critically Ill Adult and Coordinator of Care Clinical.....	4
RN 62A	Nursing Care of the Critically Ill 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		11

LVN to RN Upgrade

Prior to Entering Third Semester Fresno City College Nursing Curriculum		Units
RN 101	Transition to Fresno City College Registered Nursing Program.....	1.5
RN 102	Transition to Fresno City College Registered Nursing Program Skills.....	1-2
Total		2.5-3.5

Third Semester		Units
RN 51	Nursing Care of the Adult with Complex Health Problems.....	2.5
RN 52	Nursing Care of the Adult and Older Adult with Complex Health Problems Clinical.....	2
RN 52A	Nursing Care of the Adult and Older Adult with Complex Health Problems Skills.....	0.5
RN 53	Nursing Care of the Older Adult.....	1.5
Total		6.5

Fourth Semester		Units
RN 61	Nursing Care of the Critically Ill Adult and Coordinator of Care.....	2.5
RN 62	Nursing Care of the Critically Ill Adult and Coordinator of Care Clinical.....	4
RN 62A	Nursing Care of the Critically Ill 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.....	1.5
Total		10.5

Required Courses on Entry for Transfer Students from other Accredited Nursing Programs:		Units
RN 101	Transition to Fresno City College Registered Nursing Program.....	1.5
RN 102	Transition to Fresno City College Registered Nursing Program Skills.....	1-2

ELECTIVE COURSES

RN 19	Work Experience (Cooperative), Occupational
RN 105	Medication Math
RN 107	Introduction to Nursing Process
RN 201	NCLEX-RN Review (not part of the program)

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 completed with a "C" or better.

Note: All application requirements, program requirements, and selection criteria are subject to change. Students will enter the selection pool based on the current catalog or catalog supplement. Contact a Fresno City College Health Career Counselor every semester for current information.

PARALEGAL – MAJOR #2550

This curriculum is designed for the student who desires employment and advancement in the field of paralegal work.

ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Describe the nature and historical development of the field of paralegalism, the ethical rules applicable to paralegals and the role of the paralegal in today's law office.

- Demonstrate basic legal research, analysis and writing skills in preparing basic legal documents.
- Define basic legal terminology and explain the basic substantive and procedural concepts applicable to American civil and criminal law.
- Demonstrate basic proficiency in certain selected computer software programs used in the law office for: legal forms preparation, time and billing, calendaring, litigation support and case management.

Completion of 32 units of common-core courses.

REQUIRED CORE COURSES		Units
BA 20	Law and the Legal System	3
BT 28	Word I.....	2
BT 29	Word II	2
PLEGAL 1	Introduction to Paralegalism.....	3
PLEGAL 2A	Legal Research & Writing I	3
PLEGAL 2B	Legal Research & Writing II.....	3
PLEGAL 6A	Litigation I.....	3
PLEGAL 6B	Litigation II.....	3
PLEGAL 7	Law Office Practices	3
PLEGAL 14	Law Office Computing.....	3
PLEGAL 19	Work Experience (Cooperative) Occupational (300 hours).....	4
Total Core Curriculum		32

ELECTIVES Units

Choose any 2 of the following courses for a total of 6 units:

PLEGAL 3	Family Law.....	3
PLEGAL 4	Probate.....	3
PLEGAL 5	Business Organizations	3
PLEGAL 8	Torts/Contracts.....	3
PLEGAL 9	Real Property	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 16	Environmental Law	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 Office Administration.....	3
Total		38

PHILOSOPHY – MAJOR #5340

A Philosophy major 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.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

- Demonstrate independent and critical thinking regarding important topics in philosophy.

- Analyze and evaluate arguments, both philosophical and non-philosophical, in accordance with the standards taught in our philosophy courses.

Requirements within program (21 units)		Units
Hum 10/10H	Classical Humanities, <i>or</i>	3
	Honors Classical Humanities	3
Hum 11/11H	Modern Humanities, <i>or</i>	3
	Honors Modern Humanities	3
PHIL 1A/1AH	Theories of Knowledge and Reality, <i>or</i> Honors Theories of Knowledge and Reality	3
PHIL 1B	Social/Political Philosophy, <i>or</i>	
PHIL 1D	World Religions, <i>or</i>	
PHIL 4	Critical Reasoning.....	3
PHIL 1C	Ethics.....	3
PHIL 5	Philosophy of Religion;.....	3
PHIL 6	Introduction to Logic.....	3

Note: An associate in arts degree in Philosophy will be awarded to students who successfully complete a total of 60 units, which include the associate degree requirements and a minimum of 21 units of major 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.

PHOTOGRAPHY

PROFESSIONAL PHOTOGRAPHY

PROFESSIONAL PHOTOGRAPHY – FORMERLY PHOTOGRAPHY – MAJOR #5221

Students in this curriculum are trained in the major areas of professional photography. Positions for which graduates may qualify, depending upon their interest, abilities, and achievement, include those in the portrait, commercial, editorial, digital, laboratory, and retail fields. Some equipment and supplies provided.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

- Demonstrate abilities in both digital and film disciplines of photography in creating professional quality images.
- Utilize various marketing and visual techniques to not only produce their images but distribute and promote their work to a wide range of markets.

FIRST YEAR

First Semester	Units	
PHOTO 5	Introduction to Photography	3
PHOTO 12	Photoshop 1: Photoshop for Photographers	3
PHOTO 15	Photography and Visual Literacy	3
Total		9

Second Semester

Second Semester	Units	
PHOTO 18	Digital Black and White Photography	3
PHOTO 23	Photoshop 2: Digital Darkroom	3
PHOTO 26	Lighting Principles	3
Total		9

174 Photography

SECOND YEAR

First Semester

COURSES		Units
PHOTO 30	Editorial Photography	3
PHOTO 32	Commercial Portraiture	3
Elective	.....	3
Total		9

Second Semester

		Units
PHOTO 40	Professional Photographic Practices.....	3
PHOTO 45	Advanced Projects	3
Elective	.....	3
Total		9

Recommended Photography Electives:

Photography 17	Classic Black and White Photography	3
Photography 27	Alternative Photographic Processes.....	3
Photography 37	Editorial Portraiture	3
Photography 47	Book/Video Publishing	3

Note: Associated degree requirements are listed on page 33.

PROFESSIONAL PHOTOGRAPHY – FORMERLY PHOTOGRAPHY – MAJOR #5221

Students in this curriculum are trained in the major areas of professional photography. Positions for which graduates may qualify, depending upon their interest, abilities, and achievement, include those in the portrait, commercial, editorial, digital, laboratory, and retail fields. Some equipment and supplies provided.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:

- Utilize and demonstrate competency in photography in both digital and film based formats.

FIRST YEAR

First Semester		Units
PHOTO 5	Introduction to Photography	3
PHOTO 12	Photoshop 1: Photoshop for Photographers.....	3
PHOTO 15	Photography and Visual Literacy	3
Total		9

Second Semester

		Units
PHOTO 18	Digital Black and White Photography	3
PHOTO 23	Photoshop 2: Digital Darkroom	3
PHOTO 26	Lighting Principles	3
Total		9

SECOND YEAR

First Semester		Units
PHOTO 30	Editorial Photography	3
PHOTO 32	Commercial Portraiture	3
Elective	.....	3
Total		9

Second Semester

		Units
PHOTO 40	Professional Photographic Practices.....	3
PHOTO 45	Advanced Projects	3
Elective	.....	3
Total		9

Recommended Photography Electives:

Photography 17	Classic Black and White Photography	3
Photography 27	Alternative Photographic Processes.....	3
Photography 37	Editorial Portraiture	3
Photography 47	Book/Video Publishing	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:

- Demonstrate skills necessary to set up and use an electronic still photograph studio workstations.
- Utilize skills in picture selection, placement and cropping with emphasis on impact and marketability.

REQUIRED COURSES

		Units
PHOTO 23	Photoshop 2: Digital Darkroom	3
PHOTO 26	Lighting Principles	3
PHOTO 32	Commercial Portraiture	3
PHOTO 40	Professional Photography Practices.....	3
Total		12

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:

- Use Photoshop to selectively adjust, tone, color and manage color throughout a workflow process.
- Organize and manage effective color management of images from input to output on high end digital printing devices.

REQUIRED COURSES

		Units
PHOTO 18	Digital Black and White Photography	3
PHOTO 23	Photoshop 2: Digital Darkroom	3
PHOTO 40	Professional Photography Practices.....	3
PHOTO 47	Book/Video Publishing	3
Total		12

FINE ART PHOTOGRAPHY – MAJOR #5224

Students taking these courses will concentrate on the fine art of photography exploring various methods and processes to explore historical techniques as well as new forms. Both film and digital technologies are used to develop the creative process and personal expression.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Produce quality black and white photographs using various cameras and film formats.
2. Utilize photography as a visual communication tool.

REQUIRED COURSES		Units
PHOTO 15	Photography and Visual Literacy	3
PHOTO 17	Classic Black and White Photography	3
PHOTO 23	Photoshop 2: Digital Darkroom	3
PHOTO 27	Alternative Photographic Processes.....	3
Total		12

PHOTOJOURNALISM – MAJOR #5225

Students in these classes will learn the art of storytelling through images and the power in conveying someone else’s story through their own eyes. Digital compositional and editing of storytelling images and their publication will be explored and utilized.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Describe and demonstrate the effective use of various applications of camera and lens techniques for visual story telling.
2. Photograph, scan, design and layout for traditional, video and Internet publications.

REQUIRED COURSES		Units
PHOTO 30	Editorial Photography	3
PHOTO 37	Editorial Portraiture	3
PHOTO 40	Professional Photography Practices.....	3
PHOTO 47	Book/Video Publishing	3
Total		12

PSYCHOLOGY – MAJOR #7501

The Psychology AA Program is designed to provide a strong academic foundation for students planning to major in Psychology at a four-year institution. Psychology is the scientific study of human behavior and mental processes. Two of the field’s key features reflect the highly valuable approach psychology takes to gain knowledge about human behavior. First, psychology emphasizes the use of critical thinking and the scientific method to ask questions, acquire and evaluate information, and solve problems. Second, the field recognizes the complexity of human behavior, and is guided by the idea that a complete understanding of human behaviors, emotions, and thoughts must include an analysis of factors as diverse as biological, interpersonal, and sociocultural influences. Thus, psychology represents a method of inquiry that can be a useful tool for students with a variety of interests and career goals.

Earning an Associates in Arts degree in Psychology may be beneficial for individuals whose vocational plans include working in human or social services (e.g., law enforcement, education, sales, social welfare, and nursing). Students are encouraged to follow the CSU General Education-Breadth or IGETC pattern with the assistance of a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Students will apply their knowledge of psychology’s major theoretical perspectives (psychodynamic, behavioral, biological, humanistic, cognitive, evolutionary, and sociocultural) and its scientific research process when studying topics of interest, including methodologies and ethical concerns within the field’s subdisciplines.
2. Students will recognize and analyze the application of psychological concepts and theories to human experiences across the lifespan and within the context of various social and cultural constructs.
3. When presented with information and claims about human behavior and mental processes, students critically evaluate them within a framework that views humans as continually developing physiological, social, and psychological organisms.

REQUIRED CORE COURSES		Units
PSY 2	General Psychology, <i>or</i>	
PSY 2H	Honors General Psychology.....	3
PSY 36	Biological Psychology.....	3
PSY 42	Statistics for the Behavior Sciences	4
Total		10

ELECTIVES Units

DEPTH: Choose two (2) of the following:

PSY 5	Social Psychology	3
PSY 12	Child Abuse	3
PSY 15	Psychology of Religion.....	3
PSY 16	Abnormal Psychology.....	3
Total		6

LIFESPAN: Choose one (1) of the following:

PSY 25	Human Sexuality.....	3
PSY 33	Personal & Social Adjustment.....	3
PSY 38	Lifespan Development	3
PSY 39	Child Growth and Development.....	3
Total		3

DIVERSITY: Choose one (1) of the following:

AFRAM 1	African-American Culture	3
AMIND 31	American Indian Culture	3
AMST 10	American Pluralism.....	3
ANTHRO 2/2H	Cultural Anthropology, <i>or</i> Honors Cultural Anthropology.....	3
ASAMER 15	Introduction to Asian-Americans.....	3
CLS 11	Chicano-Latino Studies	3
SOC 2	American Minority Groups.....	3
WSTS 10	Roles of Women.....	3
Total		3

PSYCHOLOGY FOR TRANSFER – MAJOR #7550T

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. Nondegree-applicable credit courses cannot be counted toward the units required for the degree. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Apply their knowledge of psychology's major theoretical perspectives (psychodynamic, behavioral, biological, humanistic, cognitive, evolutionary, and sociocultural) and its scientific research process when studying topics of interest, including methodologies and ethical concerns within the field's subdisciplines.
2. Recognize and analyze the application of psychological concepts and theories to human experiences across the lifespan and within the context of various social and cultural constructs.
3. When presented with information and claims about human behavior and mental processes, critically evaluate them within a framework that views humans as continually developing physiological, social, and psychological organisms.

REQUIRED CORE COURSE **Units**

PSY 2/PSY 2H	General Psychology, <i>or</i> Honors General Psychology.....	3
PSY 36	Biological Psychology.....	3
PSY/MATH 42	Statistics for the Behavioral Sciences.....	4
PSY 45	Introduction to Research Methods in Psychology.....	3

Select one of the following course: **Units**

BIOL 5	Human Biology.....	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.

RADIOLOGIC TECHNOLOGY - MAJOR #4570

Imaging examinations performed by, and accompanying responsibilities assigned to, a radiographer shall be at the direction of physicians qualified to request and/or perform radiologic procedures. Upon completion of the program the radiographer shall be able to:

1. Apply knowledge of anatomy, physiology, and radiographic techniques to demonstrate accurately anatomical structures on a radiograph or other imaging receptor.
2. Determine exposure factors to achieve optimum radiographic techniques with minimum radiation exposure to the patient.
3. Evaluate radiographic images for appropriate positioning and imaging quality.
4. Apply the principles of radiation protection for the patient, self, and others.
5. Provide patient care and comfort.
6. Recognize emergency patient conditions and initiate lifesaving first aid and basic life support procedures.
7. Evaluate the performance of radiologic systems, know the safe limits of equipment operation, and report malfunctions to the proper authority.
8. Exercise independent judgment and discretion in the technical performance of medical imaging procedures.
9. Participate in radiologic quality assurance programs.
10. Assist in fluoroscopic procedures.

Classes are conducted on the Fresno City College campus. Students also attend classes at local hospitals affiliated with the program for clinical experience.

An associate in science degree will be granted upon successful completion of requirements for graduation, which includes formal hospital training. The student will be eligible to take the State licensing examination and the examination given by the American Registry of Radiologic Technologists upon successful completion of requirements for graduation.

Admission Policy

Enrollment is limited in the Radiologic Technology Program. There are no restrictions as to age, race, or marital status. In order to qualify for admission to the program, the applicant must have met all of the following conditions:

Application Requirements

Minimum prerequisite requirements for application to the Radiological Technology Program follow.

1. Have completed and submitted an Academic Summary Form for the Radiologic Technology Program.
2. Have graduated from high school or have an average score of 45 on the General Educational Development (GED) test.
3. Have completed Biology 24, Anatomy and Physiology (or equivalent), with a grade of "C" or better. Biology 24 may be replaced by Biology 20, Human Anatomy, and Biology 22, Human Physiology, with a grade of "C" or better in each course.
4. Have completed Applied Technology 11, Basic Electricity (or equivalent), with a grade of "C" or better.
5. Have attained a minimum cumulative grade point average (GPA) of "C+" (2.5) in completed college work.
6. Have no physical impairment that would preclude the performance of all radiologic technology duties.
7. Be in good physical and mental health.

Note: Prior to registration for the semester in which the applicant is scheduled to take courses in Radiologic 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 Health Science office informed of any change in name, address, and/or telephone number. Failure of applicants to inform the Health Science office of this vital information may result in loss of entry into the program.

Academic Requirements

All program entry requirement courses listed above must be completed with a grade of “C” or better. In order to be eligible to take the state licensing examination and the examination given by the American Registry of the Radiologic Technologists, all other courses leading to the associate degree must also be completed with a grade of “C” or better.

Students in the radiologic technology program must earn a “C” grade or better (or a “Pass” grade when applicable) in all program courses. Less than a “C” or a “Pass” grade in any radiologic technology course requires that the course be repeated before continuing with the major. Courses must be repeated in their entirety. Courses may be repeated once only.

Safe professional practice is necessary for retention of students in the program. If a student demonstrates that he/she is unsuited to the profession or is not progressing satisfactorily based on the professional judgment of the faculty, he/she may be asked to withdraw from the program.

ASSOCIATE IN SCIENCE DEGREE

Radiologic Technology Course Sequence (all courses must be completed with grade of “C” or better)

Student Learning Outcome:

1. Students will pass the ARRT National Registry Examination on the first attempt.

FIRST YEAR

First Semester		Units
RAD 1A	Fundamentals	6
RAD 1B	Basic Positioning	1
RAD 1C	Clinical Orientation Lab	2
Total		9
Second Semester		Units
RAD 2A	Radiation Biology	6
RAD 2B	Advanced Positioning	1
RAD 2C	Clinical Observation	2
RAD 2D	Quality Assurance	1
Total		10
Summer Semester		Units
RAD 3A	Nursing Procedures	2
RAD 3B	Basic Clinical Rad Tech	7
Total		9

SECOND YEAR

First Semester		Units
RAD 4A	Pathology	2
RAD 4B	Advanced Clinical	11
RAD 4C	Advanced Positioning-Cranium	1
Total		14
Second Semester		Units
RAD 5A	Special Procedures	2
RAD 5B	Specialized Clinical	11
RAD 5C	Fluoroscopy	2
Total		15
Summer Semester		Units
RAD 6	Concentrated Clinical	6
Total		6

Radiologic Technology Program Requirements

A “C” or better grade is required in each course. In addition to the program application requirements and Radiologic Technology course sequence, the following courses are required to apply for the associate degree:

- Communication 1 or 2
- Psychology 2 (formerly Psychology 7)
- Sociology 1A
- Electives to complete the associate in science degree requirements

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.

REAL ESTATE

BROKER/SALES OPTION – MAJOR #2190

This curriculum is designed for the student interested in working in the real estate industry in the broker/sales field.

ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Explain and apply to a specific factual situation the Realtor Code of Ethics and the Regulations of the Department of Real Estate.
2. Describe the different methods for holding and conveying interests in real property.
3. Explain how a real estate office is established and operated.
4. Explain the fiduciary responsibility owed by a real estate agent to her/his principal.

REQUIRED CORE COURSES		Units
BA 5	Workplace Communication	3
BA 18	Business and the Legal Environment	4
BA 33	Human Relations in the Workplace	3
CIT 15	Computer Concepts	3
RE 40	Real Estate Principles	3
RE 42	Legal Aspects of Real Estate	3
RE 44	Real Estate Finance	3
Total		22

178 Real Estate

OPTION REQUIRED COURSE		Units
RE 41	Real Estate Practice	3
RE 43	Appraisal I	3
RE 46	Economics of Real Estate	3
Total Option Requirements		31

ESCROW OPTION – MAJOR #2310

This curriculum is designed for the student interested in working in the real estate industry in the escrow field.

ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Evaluate the need for escrows and the ramifications of not having one.
2. Evaluate the need for fiduciary laws and duties covering escrow agents.
3. Compare and contrast common financing methods and their impact on escrows.
4. Evaluate the impact of property taxes on property and the method of accounting for them in escrow.

REQUIRED CORE COURSES		Units
BA 5	Workplace Communication	3
BA 18	Business and the Legal Environment.....	4
BA 33	Human Relations in the Workplace.....	3
CIT 15	Computer Concepts.....	3
RE 40	Real Estate Principles	3
RE 42	Legal Aspects of Real Estate	3
RE 44	Real Estate Finance	3
Total		22

OPTION REQUIRED COURSES		Units
RE 41	Real Estate Practice	3
RE 45	Real Estate Principles and Practices	3
RE 46	Real Estate Economics	3
Total Option Requirements		31

HOUSING MANAGEMENT OPTION – MAJOR #2340

This curriculum is designed for the student interested in working in the real estate industry in the housing management field.

ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Identify the components of and be able to complete a rental agreement.
2. Explain the small claims court procedures to present a case for debt collection related to real property management.
3. Describe the legal steps necessary for an eviction.
4. Describe basic state and federal laws related to property management.

REQUIRED CORE COURSES		Units
BA 5	Workplace Communication	3
BA 18	Business and the Legal Environment.....	4
BA 33	Human Relations in the Workplace.....	3
CIT 15	Computer Concepts.....	3

RE 40	Real Estate Principles	3
RE 42	Legal Aspects of Real Estate	3
RE 44	Real Estate Finance	3
Total		22

OPTION REQUIRED COURSES		Units
BA 30	Personal Finance	4
RE 48	Real Estate Investment	3
RE 49	Property Management	3
Total Option Requirements		32

Note: Associate degree requirements are listed on page 33.

RECREATION LEADERSHIP – MAJOR #4300

Proposed courses for transfer to State Universities.

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

FIRST YEAR

First Semester	Units	
ENGL 1A/1AH	Reading & Composition, <i>or</i> Honors Reading & Composition	4
+HLTH 1	Contemporary Health Issues.....	3
+PE	Physical Education Activity	1
*REC 20	Intro to Recreation	3
TA 41	Beginning Acting	3
Electives	.....	3
Total		17

Second Semester

Second Semester	Units	
+COMM 1	Intro to Public Speaking, <i>or</i> COMM 2 Interpersonal Communication	3
*HLTH 2	First Aid and Safety	2
+PE	Physical Education Activity	1
+PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology.....	3
*REC 23	Outdoor Recreation	3
Electives	.....	3
Total		15

SECOND YEAR

First Semester	Units	
+ART 2	Art Appreciation	3
+BIOL 1/1H	Principles of Biol, <i>or</i> BIOL 3/3H Introduction to Life Science	4
COMM 25	Argumentation, <i>or</i> ENGL 3/3H Critical Reading & Writing.....	3
*PE	Physical Education Activity	1
*REC 21	Recreation Leadership	3
Electives	.....	2
Total		16

Second Semester	Units
MATH 45 Contemporary Mathematics	3
*PE 62 Intro to Kinesiology	3
+POLSCI 2/2H American Government, <i>or</i>	
POLSCI 110 American Institutions	3
*PE Physical Education Activity	1
*REC 19 Work Experience (Coop), Occupational	4
Electives	1
Total	15

Recommended Electives: ART 10, 20; BA 5, 18; BT 1, 131; Cultural Studies; English; JOURN 1; MUS 12; PHIL 1A; PHOTO 10; PE 31A; PHYSC 7; SOC 2, 32; TA 25, 26. For students planning to transfer as Recreation Therapy majors: BA 21, 33; BIOL 24; HIT 10, PSY 33, 39; SOC 10.

**Required major courses.*

+Course requirements/General Education requirements for degree.

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. A recent survey for the American Association for Respiratory Care (AARC) estimated that there are 111,700 RCPs employed in the United States. Currently, there are 13,660 active licensed RCPs in California.

Respiratory care practitioners work under the direction of physicians. The scope of their practice ranges from delivering temporary relief to persons with asthma, pulmonary edema, chronic obstructive pulmonary disease (COPD) and emphysema, to providing emergency treatment for asphyxiation, heart failure, stroke, drowning, and shock. The diagnostic and therapeutic responsibilities include the administration of medical gases, aerosols, environmental control systems, life sustaining mechanical ventilation, medication, chest physical therapy, pulmonary functions testing, and specialized cardiopulmonary procedures. The respiratory care practitioner works closely with the physician in assessing the patient and planning the proper respiratory care protocol. Most RCPs (75%) work in a hospital setting and are key staff in critical care units and emergency rooms. Next to nurses, RCPs are the most frequently seen health care provider at the patient bedside. In addition, RCPs are present in the emergency room for resuscitation and are always a member of response teams that rush to the aid of patients who experience sudden cardiac arrest.

The respiratory care program is designed to prepare the student for employment in the health care delivery system, and to participate as a member of the health care team. Clinical work experiences in respiratory care are provided in selected local hospitals where students practice their skills under the supervision of the Fresno City College faculty.

Essential function and general job description utilizes the application of scientific principles for the identification, prevention, remediation, research, and rehabilitation of acute or chronic cardiopulmonary dysfunction. Reviews existing data, collects additional data, and recommends obtaining data to evaluate the respiratory status of patients, develops the respiratory care plan, and determines if the prescribed therapy is appropriate. Initiates, conducts, and modifies prescribed therapeutic and diagnostic procedures such as: administering medical gases, humidification and aerosols, aerosol medications, postural drainage, bronchopulmonary hygiene, cardiopulmonary resuscitation;

providing support services to mechanically ventilated patients; maintaining artificial and natural airways; performing pulmonary function testing, hemodynamic monitoring and other physiologic monitoring; collecting specimens of blood and other materials. Documents necessary information in the patient's medical record and on other forms, and communicates that information to members of the health care team. Obtains, assembles, calibrates, and checks necessary equipment. Uses problem solving to identify and correct malfunctions of respiratory care equipment. Demonstrates appropriate interpersonal skills to work productively with patients, families, staff, and co-workers. Accepts directives, maintains confidentiality, does not discriminate, and upholds the ethical standards of the profession.

State License and National Registration and Certification

Successful completion of the respiratory care program qualifies the graduate for an associate in science degree and satisfies eligibility requirements: (1) take the licensing examination for the CRT by the National Board for Respiratory Care. (2) take the national registry examinations for the registered respiratory therapist credential issued by the National Board for Respiratory Care (3) be eligible to apply for California State licensing through the Respiratory Care Board in Sacramento, California.

Program Statement

The Respiratory Care program is accredited by the Commission on Accreditation for Respiratory Care (CoARC), 1248 Harwood Road, Bedford, TX 76021, 1-817-283-2835, www.coarc.com.

Application Requirements

Enrollment into the respiratory care program is limited; however, there are no restrictions as to age, sex, race, or marital status. To qualify for admission to the program, the applicant must meet all of the following conditions:

1. Complete and submit an Academic Summary Form for the Respiratory Care Program.
2. Have graduated from high school with a minimum average grade of 2.0 (C) or have an average score of 45 on the General Educational Development (GED) examination.
3. Have completed Fresno City College Math 103 or higher, Biology 1 or 5 or Biology 11A or higher, and Chemistry 3A or higher (or their college level equivalents) Biology 24 (Anatomy and Physiology), or Biology 20 (Anatomy) and Biology 22 (Physiology) or Biology 21A and Biology 21B, and Biology 31 (Microbiology).
4. Have attained a minimum average grade of C (2.5) in all completed college work.
5. Submit high school and college transcripts.

Note: It is the applicants responsibility to request his/her transcripts from the necessary schools and to ensure that the transcripts are on file by the deadline. The college GPA and courses will have precedence over an applicant's high school GPA and courses.

PRIOR TO REGISTRATION for the semester in which the applicant is actually scheduled to take courses in respiratory care, the following conditions must be met to finalize program qualifications:

1. Submit evidence of physical and mental health (a physical examination form to be completed by a physician.)
2. Complete immunization portfolio and diagnostic tests.

3. Attend an allied health orientation program.
4. Complete a State and Federal background check.

Change of Name, Address, and/or Telephone Number

Applicants and respiratory care students must keep the Respiratory Care Program office informed of any change in name, address, and /or telephone number. Failure of applicant to inform the Respiratory Care Program office of this vital information may result in loss of entry into the program.

Academic Requirements

In order to be licensed by the State of California, the student must pass the CRT offered by the National Board for Respiratory Care. Additionally, the student must apply for State licensing through the Respiratory Care Board in Sacramento, California. The student must earn an associate in science degree with a grade of C or better in every course. Students earning less than a C grade in any course must repeat that course in its entirety. In the case of earning less than a C grade in a respiratory care course, the student may not progress in the major until the course is completed successfully. Courses may be repeated once only.

ASSOCIATE IN SCIENCE DEGREE

Respiratory Care course sequence (all must be completed with a “C” grade or better):

Student Learning Outcomes:

1. Prepare students to successfully complete the CRT (entry-level exam) through the NBRC (National Board for Respiratory Care) within five months of graduation.
2. Students will demonstrate effective patient assessment skills as respiratory care practitioners.

FIRST YEAR

First Semester		Units
RCARE 16	Patient Assessment.....	3
RCARE 17	Fundamentals of Patient Mgmt.....	4
RCARE 18	Physiology of Respiratory System.....	2
RCARE 20	Intro to Respiratory Care.....	5
Total		14

Second Semester		Units
RCARE 21	Applications & Procedures.....	11
Total		11

SECOND YEAR

First Semester		Units
RCARE 22	Clinical Applications I.....	9
Total		9

Second Semester		Units
RCARE 23	Clinical Applications II.....	9
RCARE 25	Respiratory Disease.....	2
Total		11

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:

- Biology 24, or Biology 20 and Biology 22
- Biology 31
- Communication 1 or Communication 2
- Physical Science 11 or Applied Technology 120
- Psychology 2
- Sociology 1A

General education courses to complete the associate in science degree requirements.

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.

SCHOOL TO WORK

SCHOOL TO WORK, CLERICAL - MAJOR #7004

The School to Work Clerical Certificate Program is designed to provide students with the opportunity to enhance their education while focusing on an environment which will encourage awareness in the clerical workforce as well as prepare students for mainstream computer classes. This certificate will validate the students’ participation in the School to Work objectives at Fresno City College and enhances computer/clerical awareness of each student.

CERTIFICATE

Student Learning Outcomes:

1. Describe potential employment opportunities based on their educational and vocational experiences.
2. Demonstrate basic computer literacy skills.

Select a minimum of 16 units from the following list:

	Units
DEVSER 262	Group Interaction for Students with Disabilities.....2
DEVSER 272	Consumer Skills.....2
DEVSER 273	Independent Living Skills.....2
DEVSER 277	Adapted Computer Literacy.....2
DEVSER 278	Modified Word Processing.....2
DEVSER 279	Modified Computer Applications.....2
DEVSER 291	Strategies for Academic Success.....2
DEVSER 292	College Awareness Survival Skills.....2
ENGL 277	Reading Skills.....3
ENGL 278	Reading Comprehension.....3
ENGL 281	Grammar and Sentence Writing.....3
ENGL 282	Paragraph Writing.....3
MATH 277	Arithmetic for the Learning Disabled.....2

The Certificate requires completion of 16 units within major with a 2.0/Pass or better GPA. Certificates do not appear on the transcript.

SCHOOL TO WORK, WORKABILITY - MAJOR #7005

The School to Work Workability Certificate Program is designed to provide students with the opportunity to enhance their education while focusing on an environment which will encourage job awareness. This certificate will validate the students' participation in the School to Work objectives of Fresno City College and enhance employment of each student.

CERTIFICATE

Student Learning Outcomes:

1. Describe potential employment opportunities based on their educational and vocational experiences.
2. Demonstrate time management and organizational skills.

Select a minimum of 16 units from the following list:

	Units
DEVSER 250 Workability Assess & Career Awareness.....	3
DEVSER 251 Workability Prep and Job Placement.....	3
DEVSER 252 Workability Strategies & Job Maintenance.....	3
DEVSER 255 Workability Experience.....	1-4
DEVSER 260 Workability.....	3
DEVSER 262 Group Interaction for Students with Disabilities.....	2
DEVSER 264 Transition to College for Student w/Disabilities.....	1
DEVSER 272 Consumer Skills.....	2
DEVSER 273 Independent Living Skills.....	2
DEVSER 275 Horticultural Skills I.....	2
DEVSER 276 Horticulture Skills II.....	2
DEVSER 277 Adapted Computer Literacy.....	2
DEVSER 278 Modified Word Processing.....	2
DEVSER 279 Modified Computer Applications.....	2
DEVSER 282 Greenhouse Workforce Prep.....	4
DEVSER 291 Strategies for Academic Success.....	2
DEVSER 292 College Awareness Survival Skills.....	2

The Certificate requires completion of 16 units within major with a 2.0/Pass or better GPA. Certificates do not appear on the transcript.

SIGN LANGUAGE INTERPRETING PREPARATION PROGRAM – MAJOR #

This program is designed 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

REQUIRED 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

SOCIOLOGY FOR TRANSFER – MAJOR #7600T

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, <i>or</i>	
MATH 11 Elementary Statistics.....	4
SOC 1A/1AH Introduction to Sociology, <i>or</i>	
Honors Introduction to Sociology.....	3
SOC 1B Critical Thinking about Social Problems.....	3
SOC 32 Introduction to Marriage and Family.....	3

Choose one of the following 3-unit courses:

	Units
AMST 10 American Pluralism: A Search for Common Ground in a Multicultural Society.....	3
ANTHRO 2/2H Cultural Anthropology, <i>or</i>	
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 Changing Roles of Women.....	3

Notes:

Required Major Courses	19 units.
CSU General Education or IGETC Pattern.....	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

TOTAL UNITS REQUIRED29

Required Core Courses	Units
CLS 29 or	
HIST 29 History of Mexico	3
SPAN 3 Intermediate Spanish or Placement, <i>or</i>	
SPAN 3NS Spanish for Spanish Speakers	4
SPAN 4 High-Intermediate Spanish or Placement, <i>or</i>	
SPAN 4NS Spanish for Spanish Speakers	4
SPAN 5 Short Story: Mexico, Spain & the U.S.....	3
SPAN 6 Short Story: Latin America	3
SPAN 7 Advanced Spanish: Composition & Grammar	3
SPAN 8 Advanced Spanish: Conversation.....	3
	Total 23

COURSE OPTIONS: Select 6 units

CLS 11 Intro to Chicano-Latino Studies, <i>or</i>	
CLS 12 Mexican American History, <i>or</i>	
CLS 28 Ancient Mexico.....	3
CLS 17 Beginning Mexican Folklorico Dance, <i>or</i>	
CLS 18 Latin Jazz Ensemble, <i>or</i>	
CLS 27 Advanced Mexican Folklorico Dance	2-4
CLS 20 Chicano Art	3
ENGL 40 Hispanic Literature emphasis only, <i>or</i>	
CLS 21 Chicano Literature.....	3
LING 10 Introduction to Language	3

- 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 26 units of course work as listed above. Associate degree requirements are listed on page 33. General Education requirements for transfer certification are listed on page 39.
 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, 3.

STUDENTS UNDERSTANDING COLLEGE, CAREERS, EMPLOYMENT, SUPPORT AND SUCCESS (SUCCESS) – MAJOR #7003

SUCCESS is designed to provide students with severe disabilities with the necessary self-understanding and skills to transition successfully into the world of work. The SUCCESS certificate will provide employers with verification of the student's completion of the program.

CERTIFICATE

Student Learning Outcome:

1. Provide students with self understanding and opportunities to learn skills to transition successfully into the world of work.

REQUIRED COURSE	Units
DevSer 281 Professional Preparation for Students with Disabilities	1
	Total 1

SURGICAL TECHNOLOGY - MAJOR #4572

The Surgical Technology Program is designed for selected men and women who wish to prepare for a career as members of a multidisciplinary team caring for patients in the operating room and in the surgical practice setting. The program is a combination of academic study and clinical practice in metropolitan hospitals.

Background Check

Upon entry into the program, students may be required to obtain a background check.

ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

FIRST YEAR

First Semester	Units
HIT 10 Medical Terminology	3
MA 2 Pharmacology.....	3
SURGT 101 Introduction to Surgical Technology	3
	Total 9

Second Semester	Units
BIOL 24# Human Anatomy & Physiology, <i>or</i>	
BIOL 20*+ Human Anatomy, <i>and</i>	
BIOL 22*+ Human Physiology	4-5
SURGT 102 Surgical Techniques	3
SURGT 103 Surgical Procedures.....	3
	Total 10-11

SECOND YEAR

First Semester	Units
BIOL 31# Microbiology	5
SURGT 104 Clinical Practicum.....	6
	Total 11

Second Semester		Units
COMM 2	Interpersonal Communication	3
SURGT 105	Advanced Clinical Practicum	6
Total		9

Courses have prerequisites. See catalog or a counselor.

*+ BIOL 20 and 22 may be substituted for BIOL 24.

Note: All courses listed are required for national certification. For the certificate of achievement and the associate degree, courses must be completed with a grade of "C" or better. An associate in science degree will be awarded to any candidate who successfully completes the associate degree requirements and the course work listed above. Associate degree requirements are listed on page 33. General Education requirements for transfer certification are listed on page 39.

NATIONAL CERTIFICATION

The Surgical Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAHEEP). Successful completion of the Surgical Technology Program qualifies the student eligibility to take the Association of Surgical Technologist's (AST) National Certification Examination in order to become a Certified Surgical Technologist (CST).

TEACHER AIDE

TEACHER AIDE: GENERAL – MAJOR #5910

The Teacher Aide major provides students the first two years of transferable lower division course work and field experience for the California Single Subject Teaching Credential required to teach at public middle schools, high schools and in some adult education setting.

The Teacher Aide major also prepares students for an education career as aides to classroom teachers in elementary, middle and high schools. The major may be used for employment as an aide in daycare centers, migrant training programs, community centers and adult education programs.

FCC's Education 30, Survey of American Education and Educational Aide 19, Work Experience are particularly valuable for students seeking an understanding of education in the United States. These courses will also enable students to explore the field of education before committing to a teacher aide or teaching program of study.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. While most students will use this associate degree as a transfer major toward a single subject teaching degree, the major also prepares students to meet federal "No Child Left Behind" (NCLB) academic requirements for employment as teacher aides in public K-12 classrooms.
2. The major provides students with the ability to transfer to selected UC's and CSU's as rising juniors to pursue the California Single Subject teaching credential required for teaching in public middle and high schools.
3. The major will prepare students for the California Basic Education Skills Test (CBEST) required of students applying to a UC or CSU school of education for purposes of beginning a Single Subject Teaching Credential Program.
4. Students will learn student management (discipline) techniques.
5. Students will clearly understand the role of the K-12 credentialed teacher and the K-12 teacher aide.

REQUIRED CORE COURSES		Units
EDA 19	Work Experience (Coop.) Occupational	1
EDUC 30	Survey of American Education	3
COURSE OPTIONS: Select a minimum of 16 units		Units
ART 2	Art Appreciation	3
ART 5/5H	Art History 1, <i>or</i> Honors Art History 1	3
ART 6/6H	Art History 2, <i>or</i> Honors Art History 2	3
ASTRO 10	Basic Astronomy	3
BIOL 3/3H	Introduction to Life Science, <i>or</i> Honors Introduction to Life Science, <i>or</i> Biology for Science Majors I, <i>or</i> Honors Biology for Science Majors I	4-5
BIOL 11A/11AH		
CHDEV 39	Child Growth and Development	3
CLS 21	Chicano Literature	3
COMM 1	Introduction to Public Speaking	3
COMM 2	Interpersonal Communication	3
COMM 8	Group Communication	3
COMM 25	Argumentation	3
ECON 1A/1AH	Introduction to Macroeconomics, <i>or</i> Honors Intro to Macroeconomics	3
ECON 1B/1BH	Introduction to Microeconomics, <i>or</i> Honors Intro to Microeconomics	3
ENGL 1B/1BH	Introduction to the Study of Literature, <i>or</i> Honors Intro to the Study of Literature	3
ENGL 3/3H	Critical Reading and Writing, <i>or</i> Honors Critical Reading and Writing	3
ENGL 15B	Creative Writing: Fiction	3
ENGL 46A	English as Literature 1800	3
GEOG 1	Physical Geography	3
GEOG 4A	World Geography	3
GEOG 7	Physical Geography: Earth's Surface	4
GEOG 8	Physical Geography: Weather and Climate	4
GEOL 1/1H	Physical Geology, <i>or</i>	4
	Honors Physical Geology	4
HIST 1/1H	Western Civilization to 1648, <i>or</i> Honors Western Civilization to 1648	3
HIST 2/2H	Western Civilization since 1648, <i>or</i> Honors Western Civilization since 1648	3
HUMAN 10/10H	Classical Humanities, <i>or</i> Honors Classical Humanities	3
HUMAN 11/11H	Modern Humanities, <i>or</i> Honors Modern Humanities	3
LING 10	Introduction to Language	3
MATH 4A	Trigonometry, <i>or</i> Higher Math	3-5
MATH 11	Elementary Statistics	4
MATH 45	Contemporary Mathematics	3
MUS 3	Music Fundamentals	3
PHYSC 7	Environmental Science	3
TA 30	Theatre Appreciation	3
TA 41	Beginning Acting	3

- Notes:
1. A minimum of 1 unit of Work Experience (EDA 19) is required.
 2. The 16 units of course options cannot double count in the major and General Education.

3. An associate degree in science will be awarded to Teacher Aide certificate of achievement candidates who successfully completes a total of 60 units. The 60 units must include associate degree requirements and 20 units of course work in the major as listed above.
4. General Education requirements for transfer certification and associate degree requirements are in the FCC catalog.

TEACHER AIDE: GENERAL – MAJOR #5910

The Teacher Aide Certificate major prepares students for an education career as aides to classroom teachers in elementary, middle and high schools. The major may also be used for employment as an aide in daycare centers, migrant training programs, community centers, and adult education programs.

The Teacher Aide certificate major satisfies the federal No Child Left Behind legislation for school districts to employ teacher aides that have completed an appropriate college requisite course of study.

FCC's Education 30, Survey of American Education and Educational Aide 19, Work Experience are particularly valuable courses for students seeking an understanding of education in the United States. These courses are also useful for exploring the field of education before committing to a teacher aide or teaching program of study.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. The major prepares students to meet federal "No Child Left Behind" (NCLB) requirements for employment as teacher aides in public K-12 classrooms.
2. Students will learn student management (discipline) techniques.
3. Students will learn how to successfully apply for a job as a teacher aide in a K-12 school system.
4. Students will clearly understand the role of the K-12 credentialed teacher and the K-12 teacher aide.

REQUIRED CORE COURSES		Units
EDA 19	Work Experience (Coop), Occup.....	1
EDUC 30	Survey of American Education.....	3
ENGL 125	Writing Skills for College, <i>or</i>	
ENGL 1A/1AH	Reading and Composition, <i>or</i>	
	Honors Reading and Composition.....	4
MATH 101	Elementary Algebra, <i>or</i>	
MATH 102	Plane Geometry, <i>or</i>	
MATH 103	Intermediate Algebra, <i>or</i>	
Higher Math	.....	3-5

COURSE OPTIONS: Select a minimum of 9 units		Units
ART 2	Art Appreciation	3
ART 5/5H	Art History 1, <i>or</i>	
	Honors Art History 1.....	3
ART 6/6H	Art History 2, <i>or</i>	
	Honors Art History 2.....	3
ASTRO 10	Basic Astronomy.....	3
BIOL 3/3H	Introduction to Life Science, <i>or</i>	
	Honors Introduction to Life Science.....	4
BIOL 11A/11AH	Biology for Science Majors I, <i>or</i>	
	Honors Biology for Science Majors I.....	5
CHDEV 39	Child Growth and Development.....	3
CLS 21	Chicano Literature.....	3
COMM 1	Introduction to Public Speaking.....	3
COMM 2	Interpersonal Communication	3

COMM 8	Group Communication	3
COMM 25	Argumentation.....	3
ECON 1A/1AH	Introduction to Macroeconomics, <i>or</i>	
	Honors Intro to Macroeconomics.....	3
ECON 1B/1BH	Introduction to Microeconomics, <i>or</i>	
	Honors Intro to Microeconomics.....	3
ENGL 1B/1BH	Introduction to the Study of Literature, <i>or</i>	
	Honors Intro to the Study of Literature.....	3
ENGL 3/3H	Critical Reading and Writing, <i>or</i>	
	Honors Critical Reading and Writing.....	3
ENGL 15B	Creative Writing: Fiction.....	3
ENGL 46A	English as Literature 1800.....	3
GEOG 1	Physical Geography	3
GEOG 4A	World Geography	3
GEOG 7	Physical Geography: Earth's Surface	4
GEOG 8	Physical Geography: Weather and Climate.....	4
GEOL 1/1H	Physical Geology, <i>or</i>	
	Honors Physical Geology.....	4
HIST 1/1H	Western Civilization to 1648, <i>or</i>	
	Honors Western Civilization to 1648.....	3
HIST 2/2H	Western Civilization since 1648, <i>or</i>	
	Honors Western Civilization since 1648.....	3
HUMAN 10/10H	Classical Humanities, <i>or</i>	
	Honors Classical Humanities	3
HUMAN 11/11H	Modern Humanities, <i>or</i>	
	Honors Modern Humanities.....	3
LING 10	Introduction to Language	3
MATH 4A	Trigonometry, <i>or</i>	
	Higher Math	3-5
MATH 11	Elementary Statistics	4
MATH 45	Contemporary Mathematics	3
MUS 3	Music Fundamentals	3
PHYS 7	Environmental Science	3
TA 30	Theatre Appreciation	3
TA 41	Beginning Acting.....	3

Notes: A minimum of 1 unit of Work Experience (EDA 19) is required.

EDUCATIONAL AIDE: SPECIAL EDUCATION – MAJOR #5981

CERTIFICATE

REQUIRED COURSES		Units
EDA 6	Survey of Special Education	3
EDA 7	Learning Disabilities.....	3
EDA 19	Work Experience (Coop), Occupational	4
		Total 10

TEACHER EDUCATION

Teaching is the profession that offers the greatest opportunity to have an impact on young people and on America's future. More than three million teachers will be needed over the next decade, 250,000 in California alone.

TEACHING: ELEMENTARY

Students seeking careers as California public elementary school teachers must complete the BA degree with a Liberal Studies major and the "fifth year" Multiple Subject Credential program. The first two years of transferable lower

division course work and field experience of the five years required for the Multiple Subject California Teaching Credential can be completed at Fresno City College.

TEACHING: SECONDARY

Students seeking careers as public secondary school teachers at middle schools, high schools, and adult educational settings must complete a bachelor's degree in an approved major and the "fifth year" Single Subject Credential program. The first two years of transferable lower division course work and field experience in 18 approved majors required for the California Teaching Credential can be completed at Fresno City College.

CBEST REQUIREMENT

Teaching credential candidates must pass the California Basic Education Skills Test (CBEST). Test preparatory classes are offered at Fresno City College.

TEACHER AIDE/PARAEDUCATOR

While not a teacher credential, the Fresno City College Teacher Aide/Paraeducator associate degree, certificate and certificate of achievement program prepares personnel to assist teachers at the elementary and secondary levels or to work in day-care centers, migrant training programs, community centers, and other child care institutions. Many of the courses required for the teacher aide/paraeducator also apply to teacher credential course work.

IS TEACHING FOR ME?

Fresno City College's Education 30, Survey of Education, and Educational Aide 19, Work Experience (Cooperative), Occupational, are particularly valuable for an understanding of education in the United States and to explore the teaching field before committing to a program of study.

Satisfying the U.S. Constitution Requirement for a California Teaching Credential

The Education Code, Section 13132 requires teaching credential candidates either (1) to pass a satisfactory examination on the provisions and principles of the Constitution of the United States in a junior college, college or university of recognized merit or (2) to complete satisfactorily two semester units of work on the provisions and principles of the Constitution of the U. S. in any accepted university or college.

Candidates who wish to satisfy the U. S. Constitution requirement for a California teaching credential may do so by doing one of the following:

1. Pass Political Science 2 at Fresno City College. This course is offered in fall (day and night), spring (day and night) and summer sessions.
2. Pass Political Science 2 (American Government) or Political Science 101 (American Constitution, Institutions, and Ideals) at California State University, Fresno. These courses are offered fall, winter (three weeks), spring and summer sessions.

THEATRE ARTS – MAJOR #5440

The Theatre Arts major is more *Performance* oriented than the Design/Technical Theatre Studies major. Both major options emphasize 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 .....3
TA 30	Theatre Appreciation, <i>or</i>
TA 15C	Playwriting.....3
TA 31	Theatre History and Literature I.....3
TA 32	Theatre History and Literature II .....3
TA 35	Costume Crafts.....3
TA 41	Beginning Acting <i>or</i>
TA 42	Beginning Acting for Theatre Majors.....3
TA 43	Intermediate Acting .....3
TA 46	Voice for the Actor .....3

Three units from the following courses:

	Units
TA 40	Performance Practicum .....3
TA 44	Actors Workshop.....3
TA 45	Kennedy Center American College Theater.....2
TA 48	Teasers.....1

Recommended Electives: DANCE 9, 10, 11, 12A, 14, 16; TA 28

THEATRE ARTS FOR TRANSFER – MAJOR #31292

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.

REQUIRED COURSES

	Units
TA 31	Theatre History and Dramatic Literature I .....3
TA 40	Performance Practicum, <i>or</i>
TA 23	Technical Theatre Practicum .....3
TA 41	Beginning Acting .....3

Elective Courses: Select 9 units from the following courses:

	Units
TA 23	Technical Theatre Practicum.....3
TA 25	Stagecraft .....3
TA 27B	Introduction to Lighting Design .....3
TA 28	Introduction to Stage Makeup.....3
TA 36	Costume Design .....3
TA 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 four-year university or conservatory.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Analyze a play in the context of its historical period, structure, theme, character, style and synthesize these components with research in the creation of a theatrical design.
2. Demonstrate the performance process as an actor from rehearsal to preparing to go before an audience.
3. Demonstrate the production from construction/installation through technical rehearsals and performance before an audience.

REQUIRED COURSES	Units
TA 23	Technical Theatre Practicum.....3
TA 25	Stagecraft .....3
TA 28	Introduction to Stage Makeup.....3
TA 30	Theatre Appreciation, <i>or</i>
TA 15C	Playwriting.....3
TA 31	Theatre History and Literature I.....3
TA 32	Theatre History and Literature II .....3
TA 35	Costume Crafts.....3
TA 41	Beginning Acting, <i>or</i>
TA 42	Beginning Acting for Theatre Majors.....3

Two of the following courses:	Units
TA 27A	Introduction to Scenic Design.....3
TA 27B	Introduction to Lighting Design .....3
TA 29A	Advanced Technical Theatre Practicum I.....1
TA 36	Costume Design .....3
Total 28-30	

Recommended Electives: TA 43, TA 40.

- Notes:
1. An associate in arts degree requirements will be awarded to any candidate who successfully completes a total of 60 units, which include associates degree requirements and a minimum of 24 units of course work listed above.
 2. Associate degree requirements listed on page 33. General Education requirements for transfer certification are listed on page 39.
 3. Recommended electives for Physical Education: DANCE 10, 11, 12A, 14, 16.

WELDING TECHNOLOGY

METAL FABRICATION OPTION

METAL FABRICATION OPTION - MAJOR #8371

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.

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.

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, cost calculations, and fabrication time requirement.
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 their advanced projects.

REQUIRED CORE COURSES

FIRST YEAR

First Semester	Units
AT 10	Technical Computer Applications.....2
AT 130	Industrial Mathematics, <i>or</i> .....3
MATH 101	Elementary Algebra 3 - 5
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 14	2D CAD I.....3

SECOND YEAR

First Semester	Units
DRAFT 12 Drafting Practices	3
WELD 3A Welding Design and Fabrication	5
Second Semester	Units
WELD 3B Advanced Welding Design and Fabrication	5
Elective	2 - 3
Total 39-42	

Recommended Electives: CAM 10; CADD 24, 34; ENGR 10, 11; WELD 56.

Note: Associate degree requirements are listed on page 33.

METAL FABRICATION OPTION - MAJOR #8371

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.

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, cost calculations and fabrication time requirements.
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 their advanced projects.
5. During the construction of their project, students will demonstrate the efficient use of time and materials to produce their advanced projects.

REQUIRED CORE COURSES

FIRST YEAR

First Semester	Units
AT 10 Technical Computer Applications	2
AT 130 <i>or</i> Industrial Mathematics, <i>or</i>	3
MATH 101 Elementary Algebra	3 - 5
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 14 2D CAD I.....	3

SECOND YEAR

First Semester	Units
DRAFT 12 Drafting Practices	3
WELD 3A Welding Design and Fabrication	5
Second Semester	Units
WELD 3B Advanced Welding Design and Fabrication	5
Elective	2 - 3
Total 39-42	

Recommended Electives: CAM 10; CADD 24, 34; ENGR 10, 11; WELD 56.

PIPE AND STRUCTURAL STEEL

**PIPE AND STRUCTURAL STEEL
CERTIFICATION OPTION – MAJOR #8372**

Welding technology provides an opportunity for students to prepare for employment in welding and metal occupations. Specific preparation is provided in welding and metal fabrication or pipe and steel certification procedures.

Pre-employment training for structural steel and pipe welding technicians. An emphasis is placed on developing certification code-level proficiency in the use of shielded metal arc and flux cored arc welding procedures used in the construction of components on bridges, building, and pressure vessel systems.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Students will demonstrate correct usage of all weld symbols on the American Welding Society welding symbols chart.
2. Students will weld in all welding positions.
3. Students will correctly use ASME, AWS and API codes.
4. Students will perform and weld different pipe configurations according to specification.

FIRST YEAR

First Semester	Units
AT 10 Technical Computer Applications	2
AT 130 <i>or</i> Industrial Mathematics, <i>or</i>	3
MATH 101 Elementary Algebra	3 - 5
DRAFT 12 Drafting Practices	3
WELD 2A Introduction to Welding Technology	6
Total 14-16	

Second Semester	Units
AT 21 Occupational Safety and Health.....	2
AT 40 Preparing for Employment Opportunities	3
WELD 2B Advanced Multi-Process Welding.....	5
Total 10	

SECOND YEAR

First Semester	Units
WELD 4A Heavy Plate, Structural Steel and Welding Certification	5
Recommended Elective	3
Total 8	

Second Semester	Units
WELD 4B Pipe, Tube Welding and Certification.....	5
Recommended Elective	3
Total 8	

Recommended Electives: CAM 10; CADD 12, 24; ENGR 10, 11; WELD 56.

**PIPE AND STRUCTURAL STEEL
CERTIFICATION OPTION – MAJOR #8372**

Welding technology provides an opportunity for students to prepare for employment in welding and metal occupations.

Pre-employment training for structural steel and pipe welding technicians. An emphasis is placed on developing certification code-level proficiency in the use of shielded metal arc and flux cored arc welding procedures used in the construction of components on bridges, building, and pressure vessel systems.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Students will demonstrate correct usage of all weld symbols on the American Welding Society welding symbols chart.
2. Students will weld in all welding positions.
3. Students will correctly use ASME, AWS and API codes.
4. Students will perform and weld different pipe configurations according to specification.

FIRST YEAR

First Semester	Units
AT 10 Technical Computer Applications	2
AT 130 Industrial Mathematics, <i>or</i>	
MATH 101 Elementary Algebra	3-5
DRAFT 12 Drafting Practices	3
WELD 2A Introduction to Welding Technology	6
Total	14-16

Second Semester	Units
AT 21 Occupational Safety and Health.....	2
AT 40 Preparing for Employment Opportunities	3
WELD 2B Advanced Multi-Process Welding.....	5
Total	10

SECOND YEAR

First Semester	Units
WELD 4A Heavy Plate, Structural Steel and Welding Certification	5
Recommended Elective	3
Total	8

Second Semester	Units
WELD 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 #8371

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, cost calculations, and fabrication time requirements.
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	2
CADD 14 2D CAD I.....	3

Second Semester	Units
WELD 3A Welding Design and Fabrication	5

SECOND YEAR

First Semester	Units
WELD 3B Advanced Welding Design and Fabrication	5
Total	15

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 welding and cutting and plasma cutting will be presented. Skills will include welding in the flat, horizontal, vertical and overhead positions with the various processes as well as welding with aluminum and stainless steel with the Gas Metal and Gas Tungsten arc welding processes. Students will also use common power and hand tools to compliment related to the welding industry.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Students will be able to identify defects and discontinuities in their horizontal, vertical, and overhead welds according to AWS (American Welding Society) standards.
2. Given a power source, students will be able to properly set up and adjust the 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.
4. Given a set of plans, students will be able to construct a simple project by correctly setting up and using various fabrication tools.

First Semester	Units
AT 130 Industrial Math.....	3
WELD 2A Introduction to Welding Technology	6
Total	9

Second Semester	Units
DRAFT 12 Drafting Practices	3
WELD 2B Advanced Multi-Process Welding.....	5
Total	8

WIND TURBINE TECHNICIAN – MAJOR #8601

This curriculum is designed to prepare the student for entry into the field of utility scale Wind Power Generation.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Identify and list the hazards of working around electrical generation equipment.
2. Illustrate the accepted safety practices in the use of electrical measuring devices (i.e. multimeters, amp meters, infrared testers, etc.).
3. Explain the importance and inter-relationship between turbine maintenance and turbine performance.

FIRST YEAR

First Semester		Units
EST 51	DC Electronics.....	3
EST 80	Intro to Energy Sys Past, Present & Future.....	2
HLTH 2	First Aid and Safety.....	2
Total		7

Second Semester		Units
EST 52	Alternating Current Fundamentals.....	3
EST 96D	National Electric Code – Elect Safety.....	3
WTT 1	Intro and Safety in Utility Wind Turbine Gen.....	2.5
Total		8.5

SECOND YEAR

First Semester		Units
EST 58	Programmable Logic Controllers.....	3
WTT 2	Wind Generation and Electrical Circuits.....	2.5
Total		5.5

Second Semester		Units
EST 55C	SCADA Systems.....	2
WTT 3	Wind Turbine Systems.....	2.5
Total		4.5
Certificate Total		25.5

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 15 units		Units
WSTS/SOC 5	Sociology of Rape.....	3
WSTS/SOC 7	Domestic Violence: Abuse Within the Family.....	3
WSTS/CLS 24	La Chicana and Latina.....	3
WSTS/ENGL 36	Women in Literature.....	3
WSTS/AFRAM 41	The African-American Woman.....	3
WSTS/FN 43	Women's Nutrition.....	2
WSTS/BA 44	Women in Management.....	3

Note: Associate degree requirements are listed on page 33.

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).

Repeatable courses are designated with the number of repeats in parenthesis following the course units and hours. For example,

<u>Course Name</u>	<u>Initial Enroll.</u>	<u>Number of Repeats</u>	<u>Max. Times Taken</u>
ANTHRO 5 (Repeats = 1)	1	1	2
ANTHRO 4L (Repeats = 2)	1	2	3
ART 251 (Repeats = 3)	1	3	4

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 “Description of Courses” section of the catalog.

Key to Graduation or Transfer Status Designations

The identification of the transfer acceptance of Fresno City College courses by the California State University and University of California systems was one of the outcomes of the Fresno City College Student Success Project. Listed at the end of each course description, if applicable, are abbreviations identifying the transfer or graduation status of the course. The key to the abbreviations follows:

A	Associate degree applicable
CSU	Transferable to the California State University system
CSU-GE	Meets the general education requirements for California State

University transfer certification. Completion of all courses in the California State University General Education transfer certification pattern will permit a student to transfer to a campus in the California State University system without having to complete additional lower division general education courses after transfer.

I Meets the requirements of the Intersegmental General Education Transfer Curriculum (IGETC). Completion of all IGETC requirements will permit a student to transfer to a campus in either the California State University or University of California system without having to complete additional lower division general education courses after transfer.

UC Transferable to the University of California system

Schedule of Classes

The schedule of classes contains information necessary for registration and is available at the Admissions Office. Where no prerequisite is indicated, none is required except as explained in the section on “Prerequisites” which follows. Students should study the Schedule of Classes very carefully before completing registration.

Course Credit Limitation

A student shall not be granted credit for the completion of a course that is a prerequisite for another course previously completed by the student.

Prerequisites/Corequisites/Advisories

Students are urged to study the description of courses in this catalog to ensure that prerequisites are satisfied before registering for a course. Correct registration at an early date is important.

It is the student’s responsibility to be certain that he/she has met the necessary prerequisite(s) for any course taken. The student may be dropped from any class where it is verified that the necessary prerequisite has not been taken.

It should be understood by the student that whether or not a prerequisite is

specifically stated, the instructional staff of this college assumes that each student who enrolls in a transfer-level course possesses sufficient competencies in the areas of reading, writing, and mathematics to be able to profit from instruction.

Advisory indicates that the institution recommends, but does not require, certain course work be taken prior to enrolling in the described course.

Corequisite indicates that the course must be taken simultaneously with another course if not already completed.

Prerequisite is defined to mean a condition of enrollment that a student must meet in order to register in a course or program. A student may challenge any prerequisite by completing the Prerequisite Challenge Form available in the Counseling Center.

Course Numbering System

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

Accounting 260	Accounting Skills Lab
Accounting 270	Accounting Math Skills
Admin of Justice 204	Instructor Training
Admin of Justice 211	Expandable Straight Baton Instructor
Admin of Justice 217	Background Investigation
Admin of Justice 219	Requalification—Basic Course
Admin of Justice 220	Radar Operator
Admin of Justice 221	Explosive Recog for First Respondrs
Admin of Justice 268	Pre-Police Academy Conditioning
Admin of Justice 269A	Advanced Officer Topics #2
Admin of Justice 270A	Basic Police Academy—Part 1
Admin of Justice 270B	Basic Police Academy—Part 2
Admin of Justice 271A	PC 832 Laws of Arrest/Arrest & Control
Admin of Justice 271B	PC 832 Firearms
Admin of Justice 272	Reg Basic Course—Mod Format—Mod III
Admin of Justice 273	Reg Basic Course—Mod Format—Mod II
Admin of Justice 274	Reg Basic Course—Mod Format—Mod I
Admin of Justice 276	Basic Supervisors

Admin of Justice 278	Public Safety Dispatcher
Admin of Justice 279	Citizens' Police Academy
Admin of Justice 279A	Citizens on Patrol
Admin of Justice 280	Basic Correctional Academy
Admin of Justice 281	Adv Correctional Officer Academy
Admin of Justice 285	Probation Core Course
Admin of Justice 286	Juvenile Counselor CORE Course
Admin of Justice 290	Firearms Instructor Course
Admin of Justice 291	Field Training Officer
Admin of Justice 293	Drug Influence—H & S 11550
Admin of Justice 295	Traffic Collision Investigation
Admin of Justice 298	Sexual Assault Investigation
Admin of Justice 299	Basic Bicycle Patrol
Air Conditioning 250	Digital Unitary Controls
Air Conditioning 251	Digital VAV Controls
Air Conditioning 252	DDC Network Controllers
Air Conditioning 260B	Electricity for Air Conditioning
Air Conditioning 260C	Residential Heating
Air Conditioning 260D	Advanced Troubleshooting
Applied Technology 212	Computer Skills Lab
Apprenticeship 260	Apprenticeship - First Aid
Art 251	Open Art Studio
Auto Tech 261	Clean Air Car—Diag & Rep
Auto Tech 262A (A6)	Electrical/Electronic Training BAR/ASE (Alt)
Auto Tech 262 B (A8)	Engine Performance Training BAR/ASE (Alt)
Auto Tech 262 C (L1)	AOW Engine Performance Training BAR/ASE (Alt)
Auto Tech 281A	Automatic Power Trains I
Auto Tech 281B	Automatic Power Trains II
Auto Tech 282A	Suspen/Wheel Align
Auto Tech 282B	Auto Braking Systems
Auto Tech 283A	Tune-up & Diag
Auto Tech 283B	Electrical Systems
Auto Tech 284	Auto Air Conditioning
Auto Tech 285	Auto Engines
Auto Tech 286	Automotive Information Systems
Auto Tech 287	Street Rod Technology
Auto Tech 292	Cert Preparatory
Auto Tech 294	Lamp/Brk Adj Prep
Biology 261	Internet and Computer Skills Lab
Business & Technology 206	Automated Business Records
Business & Technology 240	Legal Issues in Medical Billing
Business & Technology 250	Office Skills Labs
Business & Technology 251	Office Application Skills Lab
Business & Technology 270	Business Math & Ten Key
Business & Technology 271	Grammar Fundamentals
Business & Technology 272	Office Procedures
Business & Technology 273	Filing
Business & Technology 274	Introduction to Microsoft Outlook

192 Course Classification System

Business & Technology 277	Accelerated Excel	Math 250	College Arithmetic
Business & Technology 280	Business Office Procedures	Math 255	Pre-Algebra
Computer Info Tech 202	Introduction to Online Learning	Math 260A	Arithmetic Review: Whole Numbers
Computer Info Tech 205	Computer Basics	Math 260B	Arithmetic Review: Fractions
Computer Info Tech 260	Computer Skills Lab	Math 260C	Arithmetic Review: Decimals
Computer Info Tech 261	Internet Skills Lab	Math 260D	Arithmetic Review: Percents
Computer Science 261	Internet and Computer Skills Lab	Math 277	Arithmetic for Learn Disabled
Counseling 200	College Orientation	Nursing, Registered 201	NCLEX—RN Review
Counseling 250	Student Readiness Seminar	Nursing, Registered 202	Successful Strategies for RN Students
Dental Hygiene 200	Clinical Dental Hygiene IV	Nursing, Registered 203	RN Refresher Course
Developmental Services 250	Workability Assessment and Career Awareness	Nursing, Registered 204	Intro to the Nursing Profession
Developmental Services 251	Workability Preparation and Job Placement	Special Studies 277	Credit, Nondegree SP ST
Developmental Services 252	Workability Strategies and Job Maintenance	Vocational ESL 266R	Applied Inter Reading for College and Careers
Developmental Services 255	Workability Experience	Vocational ESL 266W	Applied Inter Writing for College and Careers
Developmental Services 260	Workability	Vocational ESL 269R	Applied Adv Reading for College and Careers
Developmental Services 262	Group Inter for Stud w/Disabilities	Vocational ESL 269W	Applied Adv Writing for College and Careers
Developmental Services 264	Trans to College Stud w/Disabilities	B. Noncredit	
Developmental Services 272	Consumer Skills	Admin of Justice 369A	Advanced Office Topics
Developmental Services 273	Independent Living Skills	Air Conditioning 353	Principles of Industrial Refrigeration
Developmental Services 275	Horticulture Skills I	Apprenticeship 361/7J	Roofing
Developmental Services 276	Horticulture Skills II	Business & Technology 370A	Office Asst Applications
Developmental Services 277	Adapted Computer Literacy	Business & Technology 370B	Office Asst Applications
Developmental Services 278	Modified Word Processor	Developmental Services 359	Differential Learn Diag
Developmental Services 279	Modified Computer Applications	Developmental Services 377	Transition to Independent Living & Education
Developmental Services 281	Professional Prep for Stud with Disabilities	ST 300	Tutoring
Developmental Services 282	Greenhouse Workforce Prep	Special Studies 377	Zero Unit, No Grade Sp St
Developmental Services 291	Strategies for Academic Success	Theatre Arts 348	Senior Play Production
Developmental Services 292	College Awareness Survival Skills	Career & Technology Center Courses	
Education 200A	CBEST Preparation: English	Auto Mechanics 371	Engine Repair
Education 200B	CBEST Preparation: Mathematics	Auto Mechanics 372	Engine Performance
Electrical Systems Tech 269A	Fundamentals of Network Security-Firewalls	Auto Collision Repair 371	Fund of Weld Tech & Working Sheet Metal
Electrical Systems Tech 269B	Fundamentals of Wireless LANS	Auto Collision Repair 372	Body Work Technology
Electrical Systems Tech 271	Electrical Line/Utility Worker	Auto Collision Repair 373	Automotive Refinishing Technology
English 250	Basic Writing	Indust Training 371	Warehouse and Distribution Careers
English 252	Reading Improvement	Indust Training 372	Warehouse and Distribution Careers
English 260	Basic Reading	Maint Mechanic 370	Fund-Weld/Machine Shop
English 262	Writing Improvement	Maint Mechanic 371	Fund Hydraul/Pneumatics
English 277	Reading Skills	Maint Mechanic 372	Electrical Fundamentals
English 278	Reading Comprehension	Manuf Mechanic 351	Introduction to Manufacturing
English 279	Beg Spell and Vocab	Manuf Mechanic 352A	Trade Mathematics
English 280	Advanced Spelling and Vocabulary	Manuf Mechanic 352B	Programmable Controllers
English 281	Grammar and Sentence Writing	Manuf Mechanic 352C	Job Preparation
English 282	Paragraph Writing	Manuf Mechanic 352D	Technical Report Writing
ESL 263R	Low Intermediate Reading and Vocabulary	Manuf Mechanic 353A	Fluid Power Fundamentals
ESL 263W	Low Intermediate Writing and Grammar	Manuf Mechanic 353B	Pneumatic Fundamentals
ESL 264R	Intermediate Reading and Vocabulary	Manuf Mechanic 353C	Hydraulic Fundamentals
ESL 264W	Intermediate Writing and Grammar	Manuf Mechanic 354A	Power Transmission
ESL 265R	High Intermediate Reading and Vocabulary	Manuf Mechanic 354B	Welding Fundamentals
ESL 265W	High Intermediate Writing and Grammar	Manuf Mechanic 354C	Electrical Fundamentals
Fire Technology 261	EMT 1 Refresher		
Fire Technology 265	I-300, Intermediate ICS		
Fire Technology 269	Advanced Firefighter Topics		

SCCCD INTRA-DISTRICT ARTICULATED COURSES, COMMON COURSES, AND IN-LIEU COURSES

This is a list of courses that Fresno City College and Reedley College (which includes the North Centers—Clovis, Madera, Oakhurst and Willow International) have agreed to articulate with one another.

Note: Before registering for courses you want to use for transfer (for use in CSU GE, IGETC or to meet a major requirement at a university), you must verify that the course is listed on Fresno City College's or Reedley College's CSU GE or IGETC pattern or articulation list. Do not ask a friend! Check with the lists provided by Fresno City College, Reedley College and the North Centers—or see the Fresno City College or Reedley College catalogs.

FRESNO CITY COLLEGE		REEDLEY COLLEGE	
Course	Title	Course	Title
ACCTG 4A	Financial Accounting	ACCTG 1A	Principles of Accounting
ACCTG 4B	Managerial Accounting	ACCTG 1B	Principles of Accounting
ACCTG 19	Work Experience, Cooperative Occup	ACCTG 19V	Cooperative Work Experience, Accounting
ANTHRO 1	Biological Anthropology	ANTHRO 1	Biological Anthropology
ANTHRO 2	Cultural Anthropology	ANTHRO 2	Cultural Anthropology
ANTHRO 3	Archaeology and World Prehistory	ANTHRO 3	Intro to Archaeology & Prehistory
ART 2	Art Appreciation	ART 2	Art Appreciation
ART 5	Art History 1	ART 5	Art History 1
ART 6	Art History 2	ART 6	Art History 2
ART 6H	Honors Art History 2	ART 6H	Honors Art History 2
ART 7	Beginning Drawing	ART 7	Beginning Drawing
ART 9	Beginning Painting: Oil/Acrylic	ART 9	Beginning Painting: Oil/Acrylic
ART 10	Beginning Ceramics	ART 10	Beginning Ceramics
ART 13	Beginning Watercolor Painting	ART 13	Beginning Watercolor Painting
ART 17	Intermediate Drawing	ART 17	Intermediate Drawing
ART 19	Intermediate Painting: Oil/Acrylic	ART 19	Intermediate Painting: Oil/Acrylic
ART 20	Intermediate Ceramics	ART 20	Intermediate Ceramics
ART 23	Intermediate Watercolor Painting	ART 23	Intermediate Watercolor Painting
ASL 1	Beginning American Sign Language	ASL 1	Beginning American Sign Language
ASL 2	High Beginning American Sign Language	ASL 2	High Beginning American Sign Language
ASL 3	Intermediate American Sign Language	ASL 3	Intermediate American Sign Language
ASL 4	High Inter American Sign Language	ASL 4	High Inter American Sign Language
ASTRO 10	Basic Astronomy	SCI 3	Introduction to Astronomy
AUTOT 9	Automotive Essentials	AUTOT 9	Automotive Essentials
BA 5	Workplace Communication	BA 5	Business Communications
BA 10	Introduction to Business	BA 10	Introduction to Business
BA 11	Introduction to Hospitality Management	BA 12	Introduction to Hospitality
BA 18	Business and the Legal Environment	BA 18	Business and the Legal Environment
BA 19	Work Experience (Cooperative), Occup	BA 19V	Work Experience (Cooperative), Occup
BA 27	(CEO)/(SIFE)	BA 27	Students in Free Enterprise (SIFE)
BA 33	Human Relations in the Workplace	BA 33	Human Relations in Business
BA 34	Fundamentals of Investing	BA 34	Fundamentals of Investing
BA 38	Operation of the Small Business	BA 38	Operation of the Small Business
BA 40	Supervision and Leadership	BA 15	Introduction to Management
BA 52	Introduction to Entrepreneurship	BA 52	Introduction to Entrepreneurship
BA 55	Introduction to Logistics	BA 55	Introduction to Logistics
BIOL 1	Principles of Biology	BIOL 1	Principles of Biology
BIOL 3	Introduction to Life Science	BIOL 3	Introduction to Life Science
BIOL 4	Principles of Zoology	BIOL 4	Principles of Zoology
BIOL 5	Human Biology	BIOL 5	Human Biology

FRESNO CITY COLLEGE		REEDLEY COLLEGE	
Course	Title	Course	Title
BIOL 6	Principles of Botany	BIOL 6	Principles of Botany
BIOL 11A	Biology for Science Majors I	BIOL 11A	Biology for Science Majors I
BIOL 11AH	Honors Biology for Science Majors I	BIOL 11A	Biology for Science Majors I
BIOL 11B	Biology for Science Majors II	BIOL 11B	Biology for Science Majors II
BIOL 20	Human Anatomy	BIOL 20	Human Anatomy
BIOL 22	Human Physiology	BIOL 22	Human Physiology
BIOL 31	Microbiology	BIOL 31	Microbiology
BT 4	Ten-Key Calculation	BA 46	Calculator Applications
BT 5	Workplace Communication	BA 5	Business Communications
BT 19	Work Experience (Coop), Occupational	OT 19	Cooperative Work Experience, Office Tech
CHDEV 1	Prin & Pract of Teaching Young Children	CHDEV 1	Prin & Pract of Teaching Young Children
CHDEV 3	Introduction to Curriculum	CHDEV 3	Introduction to Curriculum
CHDEV 5	Parent Education	CHDEV 5	Parent Education
CHDEV 6	Health, Safety & Nutrition in ECE	CHDEV 6	Health, Safety & Nutrition in ECE
CHDEV 8B	Programs for School Age Child Care	CHDEV 8B	Programs for School Age Child Care
CHDEV 11	The Young Child with Special Needs	CHDEV 35	Exceptional Children
CHDEV/PSY 12	Child Abuse	CHDEV 12	Child Abuse
CHDEV 15	Diversity & Culture in EC & Educ	CHDEV 15	Diversity & Culture in EC & Educ
CHDEV 16	Intro to Early Intervention	CHDEV 32	Intro to Early Intervention (3-unit course)
CHDEV 17A	Infant Development-Birth to Age Three	CHDEV 7	Infant-Toddler Development & Care
CHDEV 17B	Advanced Infant Toddler Develop & Care	CHDEV 7A	Advanced Infant Toddler Develop & Care
CHDEV 20	Observation and Assessment	CHDEV 20	Observation and Assessment
CHDEV 30	Child, Family and Community	CHDEV 30	Child, Family and Community
CHDEV 37A	Early Childhood Practicum	CHDEV 37A	Early Childhood Practicum
CHDEV 37B	Adv Practicum in ECE	CHDEV 37B	Adv Practicum in ECE
CHDEV/PSY 38	Lifespan Development	CHDEV/PSY 38	Lifespan Development
CHDEV/PSY 39	Child Growth and Development	CHDEV 39	Child Growth and Development
CHDEV 40A	Admin of Early Childhood Programs	CHDEV 40A	Admin of Early Childhood Programs
CHDEV 40B	Adv Admin of Early Childhood Programs	CHDEV 40B	Adv Admin of Early Childhood Programs
CHDEV 45	Adult Supervision ECE Classrooms	CHDEV 45	Supervision of Adults in ECE Classrooms
CHEM 1A	General Chemistry	CHEM 1A	General Chemistry
CHEM 1B	General Chemistry & Qual Analysis	CHEM 1B	General Chemistry & Qual Analysis
CHEM 3A	Introductory General Chemistry	CHEM 3A	Introductory General Chemistry
CHEM 3B	Intro Organic & Biological Chemistry	CHEM 3B	Intro Organic & Biological Chemistry
CHEM 8A	Elementary Organic Chemistry	CHEM 8	Elementary Organic Chemistry
CHEM 28A	Organic Chemistry I	CHEM 28A	Organic Chemistry I
CHEM 28B	Organic Chemistry II	CHEM 28B	Organic Chemistry II
CHEM 29A	Organic Chemistry Laboratory I	CHEM 29A	Organic Chemistry Laboratory I
CHEM 29B	Organic Chemistry Laboratory II	CHEM 29B	Organic Chemistry Laboratory II
CHIN 1	Beginning Chinese	CHIN 1	Beginning Chinese
CHIN 2	High-Beginning Chinese	CHIN 2	High-Beginning Chinese
CIT 12	Computer Literacy	IS 12	Computer Literacy
CIT 15	Computer Concepts	IS 15	Computer Concepts
CIT 19	Work Experience (Cooperative), Occupational	IS 19V	Cooperative Work Experience, Information Systems
CIT 23	Spreadsheet Fundamentals	IS 18	Spreadsheet Fundamentals
CIT 60	Beginning Visual Basic	IS 47	Visual Basic
CIT 63	Beginning Java Programming	IS 33	Beginning Java Programming
CIT 202	Introduction to Online Learning	IS 202	Introduction to Online Learning
CLS 21	Chicano Literature	ENGL 49	Latino & Chicano Literature
COMM 1	Introduction to Public Speaking	COMM 1	Introduction to Public Speaking
COMM 2	Interpersonal Communications	COMM 2	Interpersonal Communications
COMM 8	Group Communication	COMM 8	Group Communication
COMM 12/TA 12	Fundamentals of Interpretation	COMM 12	Fundamentals of Interpretation
COMM 25	Argumentation	COMM 25	Argumentation

194 SCCCD Intra-District Articulated Courses

FRESNO CITY COLLEGE		REEDLEY COLLEGE		FRESNO CITY COLLEGE		REEDLEY COLLEGE	
Course	Title	Course	Title	Course	Title	Course	Title
COUN 53	College and Life Management	COUN 53	College and Life Management	ENGL 46A	English Literature to 1800	ENGL 46A	English Literature to 1800
COUN 147AB	College Study Skills	COUN 47	Learning Strategies	ENGL 46B	English Literature from 1800 to Present	ENGL 46B	English Literature from 1800 to Present
CRIM 1	Intro to Criminology	CRIM 1	Intro to Criminology	ENGL 47	Introduction to Shakespeare	ENGL 47	Shakespeare
CRIM 3	Legal Aspects of Evidence	CRIM 3	Legal Aspects of Evidence	ENGL 105	Grammar and Punctuation	ENGL 105	Grammar and Punctuation
CRIM 4	Principles & Procedures of the Justice System	CRIM 4	Principles & Procedures of the Justice System	ENGL 125	Writing Skills for College	ENGL 125	Writing Skills for College
CRIM 5	Community Relations	CRIM 5	Community Relations	ENGL 126	Reading Skills for College	ENGL 126	Reading Skills for College
CRIM 6	Concepts of Criminal Law	CRIM 6	Criminal Law	ENGL 250	Basic Writing	ENGL 250	Basic Writing
CRIM 7	Concepts of Enforcement Services	CRIM 7	Police Operations & Procedures	ENGL 252	Writing Improvement	ENGL 252	Writing Improvement
CRIM 8	Criminal Investigation	CRIM 8	Criminal Investigations	ENGL 260	Basic Reading	ENGL 260	Basic Reading
CRIM 11	Juvenile Delinquency	CRIM 11	Juvenile Procedures	ENGL 262	Reading Improvement	ENGL 262	Reading Improvement
CRIM 12	Criminal Justice Communications	CRIM 12	Justice System Communications	ENGR 2	Graphics	ENGR 2	Engineering Graphics
CRIM 13	The Constitution & Your Indiv Rights	CRIM 13	The Constitution & Your Indiv Rights	ENGR 4	Engineering Materials	ENGR 4	Engineering Materials
CRIM 15	Introduction to Police Ethics	CRIM 15	Introduction to Police Ethics	ENGR 6	Circuits with Lab	ENGR 6	Electrical Circuit Analysis with Lab
CRIM 19	Work Experience (Cooperative) Occupational	CRIM 19V	Cooperative Work Experience, Criminal Justice	ENGR 8	Statics	ENGR 8	Statics
CRIM 20	Intro to Corrections	CRIM 20	Intro to Corrections	ENGR 10	Introduction to Engineering	ENGR 10	Introduction to Engineering
CRIM 23	Correctional Interviewing & Counseling	CRIM 23	Correctional Interviewing & Counseling	ESL 264R	Intermediate Reading and Vocabulary	ESL 266R	Intermediate Academic Reading and Vocabulary
CRIM 24	Control & Supervision in Corrections	CRIM 24	Control & Supervision in Corrections	ESL 264W	Intermediate Writing and Grammar	ESL 266W	Intermediate Academic Writing and Grammar
CSCI 20	Programming in the FORTRAN Language	ENGR 22	FORTRAN 77 Programming	ESL 265R	High Intermediate Reading & Vocabulary	ESL 226R	High Intermediate Academic Reading
CSCI 26	Discrete Mathematics for Computer Science	CSCI 26	Discrete Mathematics for Computer Science	ESL 265W	High Intermediate Writing & Grammar	ESL 225W	High Intermediate Academic Writing
CSCI 40	Programming Concepts & Methods I	ENGR 40	Programming for Sci & Engin	EST 61	Networking Essentials	IS 49A	LAN Fundamentals - Cisco I
CSCI 40	Programming Concepts & Methods I	CSCI 40	Programming Concepts & Methods I	EST 62	Router Theory & Technology	IS 49B	Router Theory & Technology - Cisco II Technology
CSCI 41	Programming Concepts & Methods II	CSCI 41	Programming Concepts & Methods II	EST 63	Adv. Routing & Switching	IS 49C	Ad. Routing & Switching - Cisco III Switching
DANCE 9	Dance Conditioning	DANCE 9	Dance Conditioning	EST 64	Adv. Networking & Management	IS 49D	Adv. Networking & Mgmtnt - Cisco IV Mgmtnt
DANCE 10	Beg Modern Dance Techniques	DANCE 10	Modern Dance	FILM 1	Introduction to Film Studies	FILM 1	Introduction to Film Studies
DANCE 14	Beg Jazz Dance Techniques	DANCE 14	Beginning Jazz Dance	FILM 2B	History of Cinema 1960 to Present	FILM 2B	History of Cinema 1960 to Present
DEVSE 250	Workability Assessment & Career	DEVSE 250	Workability Assessment & Career	FILM 5	Digital Filmmaking	FILM 5	Digital Filmmaking
DEVSE 251	Workability Preparation & Job Placement	DEVSE 251	Workability Preparation & Job Placement	FN 35	Nutrition and Health	FN 35	Nutrition and Health
DEVSE 252	Workability Strategies & Job Maintenance	DEVSE 252	Workability Strategies & Job Maintenance	FN 40	Nutrition	FN 40	Nutrition
DEVSE 255	Workability Experience	DEVSE 255	Workability Experience	FN 41	Sports Nutrition	FN 41	Sports Nutrition
DEVSE 262	Group Interaction for Students with Disabilities	DEVSE 262	Group Interaction for Students with Disabilities	FRENCH 1	Beginning French	FRENCH 1	Beginning French
DEVSE 264	Transition to College for Students with Disabilities	DEVSE 240	Transition to College for Students with Disabilities	FRENCH 2	High Beginning French	FRENCH 2	High Beginning French
DEVSE 272	Consumer Skills	DEVSE 272	Consumer Skills	FRENCH 3	Intermediate French	FRENCH 3	Intermediate French
DEVSE 273	Independent Living Skills for DSP&S Students	DEVSE 273	Independent Living Skills	FRENCH 4	High Intermediate French	FRENCH 4	High Intermediate French
DEVSE 275	Horticulture Skills I	DEVSE 275	Horticulture Skills I	GEOL 1	Physical Geology	GEOL 1	Physical Geology
DEVSE 276	Horticulture Skills II	DEVSE 276	Horticulture Skills II	GEOL 2	Historical Geology	GEOL 2	Historical Geology
DEVSE 277	Adapted Computer Literacy	DEVSE 277	Adapted Computer Literacy	GEOL 9	Introduction to Earth Science	GEOL 9	Introduction to Earth Science
DS 23	Business Statistics	STAT 7	Elementary Statistics	GERMAN 1	Beginning German	GERMAN 1	Beginning German
DS 117	Business Mathematics	DS 117	Business Mathematics	GERMAN 2	High Beginning German	GERMAN 2	High Beginning German
ECON 1A	Intro to Macroeconomics	ECON 1A	Intro to Macroeconomics	GERMAN 3	Intermediate German	GERMAN 3	Intermediate German
ECON 1B	Intro to Microeconomics	ECON 1B	Intro to Microeconomics	GERMAN 4	High Intermediate German	GERMAN 4	High Intermediate German
EDUC 30	Survey of American Education	EDUC 10	Introduction to Teaching	HIST 1	Western Civilization to 1648	HIST 1	Western Civilization to 1648
ENGL 1A	Reading and Composition	ENGL 1A	Reading and Composition	HIST 2	Western Civilization Since 1648	HIST 2	Western Civilization Since 1648
ENGL 1AH	Honors Reading and Composition	ENGL 1AH	Honors Reading and Composition	HIST 11	History of the United States to 1877	HIST 11	History of the United States to 1877
ENGL 1B	Intro to the Study of Literature	ENGL 1B	Intro to the Study of Literature	HIST 12	History of the United States Since 1877	HIST 12	History of the United States Since 1877
ENGL 1BH	Honors Intro to the Study of Literature	ENGL 1BH	Honors Intro to the Study of Literature	HIST 20	Comparative World Civilizations to 1600	HIST 20	Comparative World Civilizations to 1600
ENGL 3	Critical Reading and Writing	ENGL 3	Critical Reading and Writing	HIST 22	History of American Women	HIST 22	History of American Women
ENGL 3H	Honors Critical Reading and Writing	ENGL 3H	Honors Critical Reading and Writing	HLTH 1	Contemporary Health Issues	HLTH 1	Contemporary Health Issues
ENGL 15A	Creative Writing: Poetry	ENGL 15A	Creative Writing: Poetry	HLTH 2	First Aid and Safety	HLTH 2	First Aid and Safety
ENGL 15B	Creative Writing: Fiction	ENGL 15B	Creative Writing: Fiction	HS 19	Work Experience (Cooperative) Occup	HS 19V	Work Experience (Cooperative) Occup
ENGL 44A	World Literature to the Renaissance	ENGL 44A	World Literature to the Renaissance	HS 20	Introduction to Social Work	HS 20	Introduction to Social Work
ENGL 44B	World Literature Since the Renaissance	ENGL 44B	World Literature Since the Renaissance	HS 24	Fund of Interviewing and Counseling	HS 24	Fund of Interviewing and Counseling
				HS 30	Group and Community Social Services	HS 30	Group and Community Social Services
				INTRDSN 7	Interior Design	FM 30	Interior Design
				JOURN 1	Introduction to Mass Communication	JOURN 1	Introduction to Mass Communication
				JOURN 3	Newswriting	JOURN 3	Newswriting

FRESNO CITY COLLEGE		REEDLEY COLLEGE		FRESNO CITY COLLEGE		REEDLEY COLLEGE	
Course	Title	Course	Title	Course	Title	Course	Title
JOURN 19	Work Experience (Coop), Occupational	JOURN 19V	Cooperative Work Experience, Journalism	PE 33A	Theory of Football	PE 33A	Theory of Football
LING 10	Introduction to Language	LING 10	Introduction to Language	PE 33B	Competitive Football	PE 33B	Competitive Football
LING 11	Intro to Language for Educators	LING 11	Introduction to Language	PE 33C	Off-Season Conditioning for Football	PE 33C	Off-Season Conditioning for Football
MATH 4A	Trigonometry	MATH 4A	Trigonometry	PE 34A	Theory of Golf	PE 34A	Theory of Golf
MATH 4B	Pre-Calculus	MATH 4B	Precalculus	PE 34B	Competitive Golf	PE 34B	Competitive Golf
MATH 5A	Math Analysis I	MATH 5A	Math Analysis I	PE 34C	Off-Season Conditioning for Golf	PE 34C	Off-Season Conditioning for Golf
MATH 5B	Math Analysis II	MATH 5B	Math Analysis II	PE 35B	Pep and Cheer	PE 35B	Pep and Cheer
MATH 6	Math Analysis III	MATH 6	Math Analysis III	PE 37A	Theory of Softball	PE 37A	Theory of Softball
MATH 7	Introduction to Differential Equations	MATH 7	Diff Equations & Linear Alg	PE 37B	Competitive Softball	PE 37B	Competitive Softball
MATH 10A	Structure and Concepts in Mathematics I	MATH 10A	Structure and Concepts in Mathematics I	PE 37C	Off-Season Conditioning for Softball	PE 37C	Off-Season Conditioning for Softball'
MATH 10B	Structure and Concepts in Mathematics II	MATH 10B	Structure and Concepts in Mathematics II	PE 38A	Theory of Tennis	PE 38A	Theory of Tennis
MATH 11	Elementary Statistics	MATH 11/STAT 7	Elementary Statistics	PE 38B	Competitive Tennis	PE 38B	Competitive Tennis
MATH 45	Contemporary Mathematics	MATH 45	Contemporary Mathematics	PE 38C	Off-Season Conditioning for Tennis	PE 38C	Off-Season Conditioning for Tennis
MATH 102	Plane Geometry	MATH 102	Plane Geometry	PE 39A	Theory of Track & Field	PE 39A	Theory of Track & Field
MATH 103	Intermediate Algebra	MATH 103	Intermediate Algebra	PE 39B	Competitive Track & Field	PE 39B	Competitive Track & Field
MATH 250	College Arithmetic	MATH 250	College Arithmetic	PE 39C	Off-Season Conditioning for Track & Field	PE 39C	Off-Season Conditioning for Track & Field
MATH 255	Pre-Algebra	MATH 256	Algebra Topics	PE 40A	Theory of Volleyball	PE 40A	Theory of Volleyball
MKTG 10	Principles of Marketing	MKTG 10	Marketing	PE 40B	Competitive Volleyball	PE 40B	Competitive Volleyball
MKTG 11	Salesmanship	MKTG 11	Salesmanship	PE 40C	Off-Season Conditioning for Volleyball	PE 40C	Off-Season Conditioning for Volleyball
MKTG 12	Advertising and Promotion	MKTG 12	Advertising and Promotion	PE 62	Introduction to Kinesiology	PE 22	Introduction to Physical Education
MKTG 14	Retailing	MKTG 14	Retailing	PHIL 1A	Theories of Knowledge and Reality	PHIL 1	Introduction to Philosophy
MUS 1A	Music Theory I	MUS1A	Music Theory I	PHIL 1C	Ethics	PHIL 1C	Ethics
MUS 1B	Music Theory II	MUS 1B	Music Theory II	PHIL 1C	Ethics	PHIL 1CH	Honors Ethics
MUS 2A	Music Theory III	MUS 2A	Music Theory III	PHIL 1D	World Religions	PHIL 1D	World Religions
MUS 2B	Music Theory IV	MUS 2B	Music Theory IV	PHIL 4	Critical Reasoning	PHIL 4	Critical Reasoning
MUS 3	Music Fundamentals	MUS 3	Music Fundamentals	PHIL 6	Introduction to Logic	PHIL 6	Introduction to Logic
MUS 7A	Ear Training: Level I	MUS 7A	Ear Training: Level I	PHOTO 5	Introduction to Photography	PHOTO 1	Basics of Photography
MUS 7B	Ear Training: Level II	MUS 7B	Ear Training: Level II	PHYS 2A	General Physics 1	PHYS 2A	General Physics 1
MUS 12	Music Appreciation	MUS 12	Music Appreciation	PHYS 2B	General Physics 2	PHYS 2B	General Physics 2
MUS 16	Jazz History and Appreciation	MUS 16	Jazz History and Appreciation	PHYS 4A	Physics for Scientists & Engineers	PHYS 4A	Physics for Scientists & Engineers
MUS 18	Basic Conducting and Score Reading	MUS 18	Basic Conducting and Score Reading	PHYS 4B	Physics for Scientists & Engineers	PHYS 4B	Physics for Scientists & Engineers
MUS 20	Beginning Piano: Level I	MUS 20	Beginning Piano: Level I	PHYS 4C	Physics for Scientists & Engineers	PHYS 4C	Physics for Scientists & Engineers
MUS 21	Beginning Piano: Level II	MUS 21	Beginning Piano: Level II	POLSCI 2	American Government	POLSCI 2	American Government
MUS 22	Intermediate/Advanced Piano	MUS 22	Intermediate/Advanced Piano	POLSCI 2H	Honors American Government	POLSCI 2H	Honors American Government
MUS 24	Elementary Voice: Level I	MUS 24	Elementary Voice: Level I	POLSCI 5	Comparative Government	POLSCI 5	Comparative Government
MUS 27	Beginning Guitar: Level I	MUS 27	Beginning Guitar: Level I	PSY 2	General Psychology	PSY 2	General Psychology
MUS 28	Beginning Guitar: Level II	MUS 28	Beginning Guitar: Level II	PSY 2H	Honors General Psychology	PSY 2H	Honors General Psychology
MUS 30	College Choir	MUS 31	Concert Choir	PSY 5	Social Psychology	PSY 5	Social Psychology
MUS 40	Concert Band	MUS 40	Concert Band	PSY/CHDEV 12	Child Abuse	CHDEV 12	Child Abuse
MUS 41	Jazz Ensemble	MUS 41	Jazz Ensemble	PSY 16	Abnormal Psychology	PSY 16	Abnormal Psychology
NATSCI 1A	Integrated Sci: Physics & Chemistry	SCI 1A	Introductory Chemical & Physical Science	PSY 25	Human Sexuality	PSY 25	Human Sexuality
PE 4	Badminton	PE 4	Badminton	PSY/CHDEV 38	Lifespan Development	PSY/CHDEV 38	Lifespan Development
PE 5	Basketball	PE 5	Basketball	RE 40	Real Estate Principles	RE 140	Real Estate Principles
PE 6	Fitness and Health	PE 6	Fitness and Health	RE 41	Real Estate Practice	RE 141	Real Estate Practice
PE 7	Golf	PE 7	Golf	RE 42	Legal Aspects of Real Estate	RE 142	Legal Aspects of Real Estate
PE 12	Swimming	PE 12	Swimming	RE 43	Real Estate Appraisal I	RE 143	Real Estate Appraisal
PE 13	Tennis	PE 13	Tennis	RN 33	Transcultural Health Care	RN 78	Foundations of Multicultural Nursing Care
PE 14	Volleyball	PE 14	Volleyball	SOC 1A	Introduction to Sociology	SOC 1A	Introduction to Sociology
PE 20	Athletic Training	PE 20	Athletic Training	SOC 1B	Critical Thinking about Social Problems	SOC 1B	Critical Thinking about Social Problems
PE 30A	Theory of Baseball	PE 30A	Theory of Baseball	SOC 2	American Minority Groups	SOC 2	American Minority Groups
PE 30B	Competitive Baseball	PE 30B	Competitive Baseball	SOC 32	Introduction to Marriage and Family	SOC 32	Courtship, Marriage, Divorce: Family & Interpersonal Relationships
PE 30C	Off-Season Conditioning for Baseball	PE 30C	Off-Season Conditioning for Baseball	SPAN 1	Beginning Spanish	SPAN 1	Beginning Spanish
PE 31A	Theory of Basketball	PE 31A	Theory of Basketball	SPAN 2	High Beginning Spanish	SPAN 2	High Beginning Spanish
PE 31B	Competitive Basketball	PE 31B	Competitive Basketball	SPAN 3	Intermediate Spanish	SPAN 3	Intermediate Spanish
PE 31C	Off-Season Conditioning for Basketball	PE 31C	Off-Season Conditioning for Basketball				

SPAN 3NS	Spanish for Spanish Speakers	SPAN 3NS	Spanish for Spanish Speakers
SPAN 4	High Intermediate Spanish	SPAN 4	High Intermediate Spanish
SPAN 4NS	Spanish for Spanish Speakers	SPAN 4NS	Spanish for Spanish Speakers
WTD 106	Basic Wastewater Treatment	WTD 106	Basic Wastewater Treatment & Distribution
WTD 107	Advanced Wastewater Treatment	WTD 107	Advanced Wastewater Treatment
WTD 114	Water Mathematics	WTD 114	Water Mathematics
WKEXP 19	Work Experience (Cooperative), General	COTR 19G	Cooperative Work Experience, Education

COURSE DESCRIPTIONS

ACCOUNTING (ACCTG)

4A FINANCIAL ACCOUNTING

4 units, 4 lecture hours, 1 lab hour

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended. Enrolled or previously completed Computer Information Technology 12 or 15.

Explores what financial accounting is, why it is important, and how it is used by investors and creditors to make decisions. Covers the accounting information system and the recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the classified financial statements, and statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls and ethics. (TCSU BUS 110) (A, CSU, UC)

4AH HONORS FINANCIAL ACCOUNTING

4 units, 4 lecture hours, 1 lab hour

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended. Enrolled or previously completed Computer Information Technology 12 or 15. Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

Explores what financial accounting is, why it is important, and how it is used by investors and creditors to make decisions. Covers the accounting information system and the recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the classified financial statements, and statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls and ethics. Honors program will require additional analysis of subject material involving research and presentations. (TCSU BUS 110) (A, CSU, UC)

4B MANAGERIAL ACCOUNTING

4 units, 4 lecture hours, 1 lab hour

PREREQUISITE: Accounting 4A.

Examination of how managers use accounting information in decision-making, planning, directing operations, and controlling. Focus on cost terms and concepts, cost behavior, cost structure, and cost-volume-profit analysis. Examination of profit planning, standard costs, operations, and capital budgeting, cost control, and accounting for costs in manufacturing organizations. (TCSU BUS 120) (A, CSU, UC)

4BH HONORS MANAGERIAL ACCOUNTING

4 units, 4 lecture hours, 1 lab hour

PREREQUISITE: Accounting 4A or 4AH. ADVISORY: Meet the requirements for consideration for acceptance into the Honors Program. See Honors Program listing in the college catalog.

Examination of how managers use accounting information in decision-

making, planning, directing operations, and controlling. Focus on cost terms and concepts, cost behavior, cost structure, and cost-volume-profit analysis. Examination of profit planning, standard costs, operations and capital budgeting, cost control, and accounting for costs in manufacturing organizations. Honors program will require additional analysis of subject material involving research and presentations. (TCSU BUS 120) (A, CSU, UC)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL 1-8 units, (Repeats = 2)

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, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

32A COMPUTERIZED ACCOUNTING

1 unit, 1 lecture hour, .5 lab hour, (Formerly Accounting 31 and 32)

PREREQUISITE: Accounting 4A or Business & Technology 131. ADVISORY: Computer Information Technology 15, or equivalent, and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to accounting procedures and applications on microcomputer based software for accountants and business managers including general ledger, accounts receivable, accounts payable, inventory, and payroll. Utilize Integrated Accounting Software. (A, CSU)

34 ACCOUNTING SPREADSHEETS

2 units, 2 lecture hours, 1 lab hour

COREQUISITE: Accounting 4A or Business & Technology 131.

Spreadsheets applied to accounting problems. Creating a worksheet, formatting the worksheet, using formulas and functions, creating reports and graphs, and applying advanced Excel applications to accounting problems. (A, CSU)

51 INTERMEDIATE ACCOUNTING

3 units, 3 lecture hours, 1 lab hour, (Formerly Accounting 51 and 151)

PREREQUISITE: Accounting 4A. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Preparation and analysis of the balance sheet, income statement, and statement of cash flows. The following areas will be covered in this course: basic accounting theory, the conceptual framework underlying financial accounting, the time value of money, accounting theory underlying current and fixed assets, and accounting theory applicable to current liabilities, contingencies, and long-term liabilities. (A, CSU)

52 COST ACCOUNTING

3 units, 3 lecture hours, 1 lab hour, (Formerly Accounting 52 and 152)

PREREQUISITE: Accounting 4B. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Emphasis is given to the three functions of management which include planning, organizing, and controlling. In-depth examination of job order, process, and activity based cost systems; standard costing; completion of the master budget; flexible budgeting; capital budgeting. Computer spreadsheets will be utilized in this course. (A, CSU)

53 TAX ACCOUNTING—MANUAL AND COMPUTERIZED
3 units, 3 lecture hours, 1 lab hour, (Formerly Accounting 53 and 153)

PREREQUISITE: Accounting 4A or Business & Technology 131. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Covers individual income taxes including calculation of gross income, exclusions, deductions, losses, and property transactions. Requires students to utilize a computerized tax system to reinforce concepts and methodology presented in the course. (A, CSU)

55 ACCOUNTING METHODS
1.5 units, 1.5 lecture hours

COREQUISITE: Accounting 4A or Business & Technology 131.

Accepted accounting methods for accounts receivable, notes receivable, inventory and fixed assets, including their impact on reported profitability and financial position. (A, CSU)

56 PAYROLL ACCOUNTING
2 units, 2 lecture hours, 1 lab hour

PREREQUISITE: Accounting 4A or Business & Technology 131.

Payroll accounting including computing gross wages, tax withholdings and net pay; maintaining payroll records; journalizing payroll transactions; and preparing federal tax forms. (A, CSU)

57 GOVERNMENTAL ACCOUNTING
3 units, 3 lecture hours

PREREQUISITE: Accounting 4A or Business & Technology 131.

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)

58 ACCOUNTING PRACTICUM I
1 unit, .5 lecture hour, 1 lab hour

PREREQUISITE: Accounting 4A or Business & Technology 131.

Designed to help students have greater understanding of the basic accounting process through the use of assigned practical, real-world accounting problems (also called practice sets). (A, CSU)

59 ACCOUNTING PRACTICUM II
1 unit, .5 lecture hour, 1 lab hour

PREREQUISITE: Accounting 51.

Designed to help students have optimal understanding of the accounting process through the use of advanced practical, real-world accounting problems (also called practice sets). (A, CSU)

70 QUICKBOOKS FUNDAMENTALS
2 units, 2 lecture hours, 1 lab hour

COREQUISITE: Accounting 4A or Business & Technology 131.

QuickBooks applications including setting up companies, general ledger, sales processing, accounts receivable, purchasing, accounts payable, bank reconciliation, and payroll. (A, CSU)

73 MAS90 FUNDAMENTALS
2 units, 2 lecture hours, 1 lab hour

PREREQUISITE: Accounting 4A or Business & Technology 131.

MAS90 applications including setting up companies, general ledger, sales order processing, accounts receivable, purchasing, accounts payable, payroll, and inventory management. (A, CSU)

260 ACCOUNTING SKILLS LAB

1 unit, 3 lab hours, (Repeats = 3), (Formerly Accounting 60)
COREQUISITE: Accounting 4A or Business & Technology 131.

Supervised application of accounting principles and concepts. Students will reinforce accounting concepts learned in the classroom and develop problem-solving abilities. Final grade will be based on hours worked in lab.

270 ACCOUNTING MATH SKILLS

1.5 units, 1.5 lecture hours, (Formerly Decision Science 70 and 270)

PREREQUISITE: None.

Review of math fundamentals with emphasis on application problems related to accounting. Utilization of business-oriented word problems, percentages, and decimals in common business applications.

ADMINISTRATION OF JUSTICE
SEE CRIMINOLOGY

ADMINISTRATION OF JUSTICE (AJ)
POLICE ACADEMY

204 INSTRUCTOR TRAINING

1 unit, 25.2 lecture hours, 8.4 lab hours, (1 week), (Pass/No Pass), (Repeats = 3), (Formerly Administration of Justice 104)
PREREQUISITE: None.

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

.5 unit, 6.4 lecture hours, 10.6 lab hours, (1 week), (Pass/No Pass), (Repeats = 3)

PREREQUISITE: Administration of Justice 270B or equivalent.

Designed to train officers to instruct department personnel in the use of the expandable and straight baton.

217 BACKGROUND INVESTIGATION

1 unit, 28.2 lecture hours, 5.4 lab hours, (1 week), (Pass/No Pass), (Repeats = 4), (Formerly Administration of Justice 117)

PREREQUISITE: Open to all California law enforcement agencies including

Police, Sheriff, Corrections and Probation or Administration of Justice 270B.

Basic techniques and procedures for background investigators.

219 REQUALIFICATION—BASIC COURSE

3 units, 11.4 lecture hours, 5.4 lab hours, (9 weeks), (Pass/No Pass), (Unlimited Repeats), (Formerly Administration of Justice 119)

PREREQUISITE: Administration of Justice 270B California POST Basic Certificate or, for those from 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, etc.

198 Administration of Justice

220 RADAR OPERATOR

0.5 unit, 21 lecture hours, 4.2 lab hours, (1 week), (Pass/No Pass), (Repeats = 3)

PREREQUISITE: Sworn peace officer or Administration of Justice 270B.

Proper operation of police radar devices including history of radar operation, principles of operation and laws relevant to radar operation.

221 EXPLOSIVE RECOGNITION FOR FIRST RESPONDERS

0.5 unit, 8.4 lecture hours, 8.4 lab hours, (1 week), (Pass/No Pass), (Repeats = 3)

PREREQUISITE: Administration of Justice 270B or equivalent.

Basic techniques and procedures for explosives recognition for the first responder. Materials and range fee will be charged.

268 PRE-POLICE ACADEMY PHYSICAL CONDITIONING

1 unit, .5 lecture hour, 3.5 lab hours, (10 weeks), (Pass/No Pass), (Repeats = 3)

PREREQUISITE: Physical exam, including an electrocardiogram (EKG) printout.

Expose future FCC Police Academy students to the physical demands, bringing them to a higher level of physical conditioning, as well as the disciplined and structured environment of the Police Academy.

269A ADVANCED OFFICER TOPICS #2

0.1-2 units, 2.33 lecture hours, 2.33 lab hours, (1-18 weeks), (Pass/No Pass), (Open Entry/Open Exit), (Unlimited Repeats)

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

10 units, 20.3 lecture hours, 8.8 lab hours, (19 weeks), (Pass/No Pass), (Repeats = 3)

PREREQUISITE: Possess a valid Class C California Driver's License. Proof of a Department of Justice criminal history clearance to possess a firearm (PC 13511.5) or be sponsored by a law enforcement agency.

Satisfies the required prerequisite for Administration of Justice 270B when taken in tandem without a time separation between courses (Administration of Justice 270A and 270B). Materials, health, and parking fees will be charged. Applicants must successfully complete: (1) POST Standardized Reading Comprehension and Writing Skills Test; (2) POST Physical Agility Test; and (3) Physical Exam, including an electrocardiogram (EKG) printout.

270B BASIC POLICE ACADEMY – PART 2

13 units, 18 lecture hours, 11.1 lab hours, (23 weeks), (Pass/No Pass), (Repeats = 3)

PREREQUISITE: Successful completion of Administration of Justice 270A when taken in tandem without a time separation between courses (Administration of Justice 270A and 270B).

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 unit, 31.5 lecture hours, 10.5 lab hours, (1 week), (Pass/No Pass), (Repeats = 3)

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. Materials fee will be charged.

271B PC 832 FIREARMS

.5 unit, 4.2 lecture hours, 21 lab hours, (1 week), (Repeats = 3), (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

4 units, 9 lecture hours, 3.4 lab hours, (Repeats = 3)

PREREQUISITE: Valid Class C California Driver's License. Proof of a Department of Justice criminal history clearance to possess a firearm (PC 13511.5) or be sponsored by a law enforcement agency.

Satisfies mandatory training requirements for Level III Reserve Peace Officer and is the mandatory prerequisite for the Administration of Justice 272 (Level II module). Must provide a handgun, ammo, and safety equipment associated with a firearms course.

273 REGULAR BASIC COURSE – MODULAR FORMAT – MODULE II

5.5 units, 11.1 lecture hours, 6.1 lab hours, (17 weeks), (Repeats = 3)

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

11 units, 18 lecture hours, 8.7 lab hours, (22 weeks), (Repeats = 3)

PREREQUISITE: Successful completion of Administration of Justice 272 and 273 (Modules III and II). Current (within last 3 years) in PC 832, Arrest and Firearms, training requirements. Passage of the POST Constructed Comprehensive Module II End-of-Course Proficiency Test within the preceding 12 months. Successful completion of the POST Standardized Reading Comprehension and Writing Skills Test and the POST Physical Agility Test. Proof of Department of Justice criminal history clearance to possess a firearm (PC 13511.5) Physical exam, including an electrocardiogram (EKG) printout. Or, be sponsored by a law enforcement agency.

Satisfies training requirements mandatory for every full-time peace officer under Penal Code section 30.6(a)(1) and 832.6(a)(1). Completion of all three modules satisfies the Regular Basic Course training requirement.

276 BASIC SUPERVISORS

2 units, 21 lecture hours, 21 lab hours, (2 weeks), (Repeats = 3), (Formerly Administration of Justice 73 and 76)

PREREQUISITE: Substantiated service in a supervisory capacity within a criminal justice agency, or expected service within a one-year period, or authorization by the agency head, or Administration of Justice 270B.

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.

279 CITIZENS' POLICE ACADEMY

1 unit, 3.2 lecture hours, (17 weeks), (Pass/No Pass), (Repeats = 3), (Formerly Administration of Justice 79)

PREREQUISITE: None.

To educate and inform citizens regarding the function and duties of law enforcement personnel. Materials fee will be charged.

279A CITIZENS ON PATROL

0.5 unit, 4 lecture hours, 2.4 lab hours, (5 weeks), (Pass/No Pass)

PREREQUISITE: None.

Introduction/orientation to the mission, policies, and procedures of a law enforcement department. Prepares students for service as a department volunteer.

280 ADULT CORRECTIONAL OFFICER CORE

4 units, 33.6 lecture hours, 8.4 lab hours, (5 weeks), (Pass/No Pass), (Repeats = 3), (Formerly Administration of Justice 74 and 80)

PREREQUISITE: None.

Satisfies the requirements for Standards and Training for Corrections (STC), basic correctional academy training. Materials fee will be charged.

281 ADVANCED CORRECTIONAL OFFICER ACADEMY

1 unit, 25.2 lecture hours, 8.4 lab hours, (1 week), (Pass/No Pass), (Repeats = 3), (Formerly Administration of Justice 75 and 81)

PREREQUISITE: Administration of Justice 270B or 280 or be employed and/or affiliated with a criminal justice agency with the experience equivalent to a Basic Correctional Academy.

Satisfies the requirement of Standard and Training for Corrections (STC). Advanced concepts and training in leadership, personnel motivation, law, promotional preparation, and information pertaining to duties of a correctional officer. Materials will be charged.

285 PROBATION CORE COURSE

4 units, 33.6 lecture hours, 8.4 lab hours, (5 weeks), (Pass/No Pass), (Repeats = 3), (Formerly Administration of Justice 85)

PREREQUISITE: None.

Knowledge and skills essential for newly hired probation officers. Materials fee will be charged.

286 JUVENILE CORRECTIONAL OFFICER CORE

3 units, 27.3 lecture hours, 14.7 lab hours, (4 weeks), (Pass/No Pass), (Repeats = 3), (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 unit, 22 lecture hours, 20 lab hours, (1 week), (Pass/No Pass), (Repeats = 3), (Formerly Administration of Justice 90)

PREREQUISITE: Administration of Justice 270B or equivalent.

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. A materials fee will be charged.

291 FIELD TRAINING OFFICER

1 unit, 33.4 lecture hours, 8.6 lab hours, (1 week), (Repeats = 3), (Formerly Administration of Justice 91)

PREREQUISITE: Administration of Justice 270 or equivalent.

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. A materials fee will be charged.

293 DRUG INFLUENCE - H&S 11550

1 unit, 29.4 lecture hours, 4.2 lab hours, (1 week), (Pass/No Pass), (Repeats = 3), (Formerly Administration of Justice 84 and 93)

PREREQUISITE: Administration of Justice 270B or equivalent.

An elementary introduction to controlled substances and how they affect the human body both psychologically and physiologically. Completion of this course will enable student to recognize, photograph, and document H & S 11550 suspects and prepare the officer for court. A materials fee will be charged.

295 TRAFFIC COLLISION INVESTIGATION

1 unit, 33.6 lecture hours, 8.4 lab hours, (1 week), (Pass/No Pass), (Repeats = 3), (Formerly Administration of Justice 81 and 95)

PREREQUISITE: Administration of Justice 270B or equivalent.

Training in proper traffic collision investigations procedures and proper recording format as prescribed by the Collision Investigation Manual (HPN 110.5) for statewide use. Satisfies requirements of Police Officer Standards and Training (POST) and California Vehicle Code Section 40600a. Materials fee will be charged.

298 SEXUAL ASSAULT INVESTIGATION

1 unit, 42 lecture hours, (1 week), (Pass/No Pass), (Repeats = 3), (Formerly Administration of Justice 98)

PREREQUISITE: Administration of Justice 270B or equivalent.

Statutes related to sexual assaults and how violations of these laws must be proven in court. Materials fee will be charged.

299 BASIC BICYCLE PATROL

1 unit, 9.6 lecture hours, 24 lab hours, (1 week), (Pass/No Pass), (Repeats = 3), (Formerly Administration of Justice 99)

PREREQUISITE: Administration of Justice 270B or equivalent.

Designed to familiarize the bike officer in the daily operation of the bicycle in a patrol function and to provide the student with skills and techniques used in bicycle patrol. Materials fee will be charged.

369A ADVANCED OFFICER TOPICS

0-1.17 lecture hours, 0-1.17 lab hours, (Pass/No Pass),
(Unlimited Repeats)

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 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

COREQUISITE: Aerospace 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

COREQUISITE: Aerospace 3.

The Air Force in the contemporary world. Focuses more on leadership and followership than 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

COREQUISITE: Aerospace 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

COREQUISITE: Aerospace 3.

Detailed look at strategy, doctrine, and evolution of the art and science of air, space and cyberspace power after 1960; history, political science, and leadership studies; basic communication skills training and evaluation in terms of improving professional writing and speaking. (A, CSU, UC)

3 LEADERSHIP LABORATORY

1 unit, 4 lab hours, (Pass/No Pass), (Repeats = 3)

COREQUISITE: Aerospace 1A, or 1B, or 2A, or 2B. (Note: if a cadet has taken all 4 of the possible corequisite courses, they do not need to enroll in a corequisite course again. They can then take Aerospace 3 as a stand-alone course.)

A practicum of Air Force customs and courtesies, issuing military commands, instructing, directing and evaluating the preceding skills, studying the environment of an Air Force officer and learning about areas of opportunity available to commissioned officers. (A, CSU, UC)

5 DRILL AND CEREMONY FUNDAMENTALS

1 unit, .5 lecture hour, .5 lab hour, (Repeats = 3)

COREQUISITE: Aerospace 1A, or 1B, or 2A, or 2B. (Note: if a cadet has taken all 4 of the possible corequisite courses, they do not 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 AFRICAN-AMERICAN CULTURE

3 units, 3 lecture hours, (Formerly Cultural Studies 1)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The African-American in American society: an interdisciplinary approach using anthropology, history, sociology, literature, art, and music. (TCSU AFAM 119) (A, CSU-GE, UC, I)

2 CULTURAL ADAPTATION OF THE AFRICAN-AMERICAN

3 units, 3 lecture hours, (Formerly Cultural Studies 20)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The African-American cultural system: problems and conflicts with the dominant culture. (TCSU AFAM 219) (A, CSU, UC)

3 AFRICAN-AMERICAN ART

3 units, 3 lecture hours, (Formerly Cultural Studies 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The creative products of Black people in Africa and America: painting, architecture, sculpture, drawing and printing. (TCSU AFAM 119) (A, CSU-GE, UC, I)

4 AFRICAN CIVILIZATION

3 units, 3 lecture hours, (Formerly Cultural Studies 4)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Earliest times until the colonial period. (A, CSU-GE, UC, I)

5 THE AFRICAN IN THE NEW WORLD

3 units, 3 lecture hours, (Formerly Cultural Studies 5)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

History and contributions of African people in South America, the Caribbean, and the United States. (A, CSU, UC)

6 AFRICAN CULTURES AND LANGUAGES

3 units, 3 lecture hours, (Formerly Cultural Studies 6)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

African language structures: ethnological and historical implications. (A, CSU, UC)

- 8 AFRICAN-AMERICAN CREATIVE WORKSHOP**
 3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Cultural Studies 8)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 A creative multi-discipline workshop based on the history and culture of the African-American. (TCSU AFAM 119) (A, CSU-GE)
- 13 AFRICAN-AMERICAN MUSIC FROM PRE-SLAVERY TO 1940** **TIMES**
 3 units, 3 lecture hours, (Formerly African-American Studies 7)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 The evolution of African-American music from African rhythms to spirituals, gospel music, blues, ragtime, jazz, and the big bands of the 1940s. (TCSU AFAM 119) (A, CSU-GE, UC, I)
- 15 AFRICAN-AMERICAN MUSIC FROM 1940 TO THE PRESENT**
 3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 African-American music from 1940 to the present. (TCSU AFAM 119) (A, CSU-GE, UC, I)
- 17 AFRICAN-AMERICAN LITERATURE**
 3 units, 3 lecture hours, (See also English 17)
 PREREQUISITE: English 1A or equivalent. English 1B is not a prerequisite for this course.
 Reading critical works of African and African-American writers and understanding cultural values and themes as expressed in essays, short stories, novels, poetry, and plays. (TCSU AFAM 119) (A, CSU-GE, UC, I)
- 21 BEGINNING SWAHILI**
 4 units, 3 lecture hours, 2 lab hours, (See also Swahili 1), (Formerly African-American Studies 21A)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 First semester beginning Swahili: listening, speaking, grammar, writing, reading, and vocabulary. Designed for students with no knowledge of Swahili. (A, CSU-GE, UC, I)
- 22 HIGH-BEGINNING SWAHILI**
 4 units, 3 lecture hours, 2 lab hours, (See also Swahili 2)
 PREREQUISITE: Swahili 1/African-American Studies 21, or two years of high school Swahili, or equivalent.
 Second Semester Swahili: listening, speaking, grammar, reading, writing, comprehension, and vocabulary. (A, CSU-GE, UC, I)
- 36 CONTEMPORARY AFRICA**
 3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 An analysis of Africa's struggle for political independence, economic development, cultural identity, and the democratic process. (A, CSU, UC)

- 41 THE AFRICAN-AMERICAN WOMAN**
 3 units, 3 lecture hours, (See also Women's Studies 41), (Formerly Cultural Studies 41)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Examination of the roles and status of African-American women within the larger U.S. social structure. Diversified roles of women in Africa from antiquity through the period of slavery and colonization, including contemporary issues among African-American women and the impact African-American women have had on the U.S. and the world. (A, CSU, UC)
- 49 BLACK GOSPEL CHOIR**
 2-3 units: 3 units, 2 lecture hours, 4 lab hours;
 2 units, 1 lecture hour, 3 lab hours, (Repeats = 3), (Formerly Cultural Studies 9ABCD)
 ADVISORY: Previous or concurrent enrollment in Music 24 recommended.
 African-American experience through musical theory and performance: gospel and spiritual. (A, CSU-GE, UC)

AIR CONDITIONING (AC)

- 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 air conditioning. Collaborative learning objectives established specific to air conditioning. 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. May be repeated for not more than 16 units total. (A, CSU)
- 50 PRINCIPLES OF MECHANICAL REFRIGERATION**
 3 units, 3 lecture hours
 ADVISORY: Applied Technology 10, eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.
 Refrigerant system components and principles of operation. Refrigerants, temperature pressure relationships, sensible and latent heat transfer in the refrigeration process. Analysis of system operation as a diagnostic tool. (A, CSU)
- 51 ELECTRICAL SYSTEMS**
 7 units, 5 lecture hours, 5 lab hours
 ADVISORY: Applied Technology 10, eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.
 Theory and application of electrical principles. Single and three phase power, transformers, wiring diagrams, control logic, test instruments, single-phase motors and controls. Brazing, evacuation, charging, recovery, wiring and testing of refrigerant systems. (A, CSU)
- 52 HEATING SYSTEMS**
 7 units, 5 lecture hours, 5 lab hours
 ADVISORY: Air Conditioning 50, 51, 53, Applied Technology 10 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.
 Theory of operation, diagnosis, service and repair of natural and induced draft heaters, condensing furnaces, resistance heaters and heat pumps. Electromechanical

202 Air Conditioning

and solid state controls, ignition systems, flame sensing, gas controls and venting. (A, CSU)

53 MEASUREMENTS AND DIAGNOSIS

7 units, 5 lecture hours, 5 lab hours

ADVISORY: Air Conditioning 50 or concurrent enrollment, Applied Technology 10 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.

Diagnosis of the refrigerant systems through the analysis of pressures, temperatures, and current draw. Airflow measurement, analysis of heat content, and test procedures. Use of the volt, ohm and amp meters, manifold gauge, incline manometer, magnehelic gage, pitot tubes, anemometers digital/sling psychrometer and the psychrometric chart as diagnostic tools. (A, CSU)

54 COMMERCIAL SYSTEMS

7 units, 5 lecture hours, 5 lab hours

ADVISORY: Air Conditioning 50, 51, Applied Technology 10 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.

Operation and diagnosis of three-phase motors, solid state and electromechanical controls and refrigerant flow controls. Sizing of related electrical and gas distribution systems. (A, CSU)

55 TECHNICIAN TESTING AND CERTIFICATION

1 unit, 2 lecture hours, (9 weeks)

ADVISORY: Air Conditioning 50, 51, 52, 53, 54, 56, and eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 or Applied Technology 130 recommended. Air Conditioning 53, 54 and 56 may be taken concurrently.

Prepares students/technicians for specific HVAC industry competency, licensing, and certification examinations. Those exams may include, but are not necessarily limited to, EPA Section 608 (proper refrigerant handling techniques), R-410A safety certification, Air-Conditioning and Refrigeration Institute's (ARI) Industry Competency Exam(s) (ICE) and North American Technician Excellence (NATE) Installation/Service Technician Certification(s). Substantial out-of-class study will be required to prepare for each exam. The exams are an integral part of the course and will be conducted by an approved proctor for each organization. In addition to normal registration fees, all test fees imposed by competency, licensing and certifying organizations are the responsibility of the student. (A, CSU)

56 DUCT SYSTEMS

3 units, 2 lecture hours, 3 lab hours

ADVISORY: Air Conditioning 50 or concurrent enrollment, and eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.

Layout, design, installation and testing of duct systems. Basic sheet metal fabrication, soldering and spot welding. Estimating and bidding projects. (A, CSU)

57 SYSTEM CONFIGURATION AND CONTROL

2 units, 2 lecture hours

ADVISORY: Applied Technology 10, eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 or Applied Technology 130 recommended.

Uses energy management software to identify air conditioning system configurations and control strategies. (A, CSU)

60A FUNDAMENTALS OF REFRIGERATION

3 units, 3 lecture hours

ADVISORY: Applied Technology 10, eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.

The physics of mechanical refrigeration, temperature pressure relationships, system components and principles of operation. (A, CSU)

250 DIGITAL UNITARY CONTROLS

2 units, 2 lecture hours, 1 lab hour

ADVISORY: Applied Technology 10, Air Conditioning 57, eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 or Applied Technology 130 recommended.

Principles and application of unitary digital controls.

251 DIGITAL VAV CONTROLS

1 unit, .75 lecture hour, .75 lab hour

ADVISORY: Applied Technology 10, Air Conditioning 57, eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 or Applied Technology 130 recommended.

Principles and application of digital variable air volume controls.

252 DDC NETWORK CONTROLLERS

2 units, 2 lecture hours, 1 lab hour

ADVISORY: Applied Technology 10, Air Conditioning 57, eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 or Applied Technology 130 recommended.

Principles and application of network controllers.

260B ELECTRICITY FOR AIR CONDITIONING

3 units, 3 lecture hours, (Formerly Air Conditioning 60B)

ADVISORY: Applied Technology 10, eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.

Theory and application of electrical principles. Induction motors, wiring diagrams, control logic and test instruments.

260C RESIDENTIAL HEATING

3 units, 3 lecture hours, (Formerly Air Conditioning 60C)

ADVISORY: Air Conditioning 260B, Applied Technology 10, eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.

Principles of combustion, furnace controls and system diagnosis. Properties of air, measurements and analysis.

260D TROUBLESHOOTING PROCEDURES

2 units, 2 lecture hours, 1 lab hour, (Formerly Air Conditioning 60D)

ADVISORY: Air Conditioning 60A, 260B, Applied Technology 10, Air Conditioning 57, and eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 or equivalent recommended.

Troubleshooting and analysis of air, electrical and refrigeration systems using computer simulations. Introduction to residential duct system design and airflow measurement.

353 PRINCIPLES OF INDUSTRIAL REFRIGERATION

3 lecture hours, (Open Entry/Open Exit)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.

Principles of Ammonia based Industrial Refrigeration Systems with emphasis on standards for Refrigeration Engineers & Technicians Association (RETA) "Certified Assistant Refrigeration Operator" (CARO) and EPA-section 608 certification.

AMERICAN INDIAN STUDIES (AMIND)
FORMERLY NATIVE AMERICAN STUDIES

31 AMERICAN INDIAN CULTURE
3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU NAS 109) (A, CSU-GE, UC, I)

32 AMERICAN INDIAN HISTORY
3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.

American Indians in North America after the Second World War; emphasis on current events and legislation; issues involving the inherent sovereignty of American Indian nations and their place in modern global society. (TCSU NAS 109) (A, CSU-GE, UC, I)

35 AMERICAN INDIAN ART
3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Cultural perspective on the antiquity and continuity of American Indian arts, focusing on their ideography and iconography. Emphasis on North, Central and South America. (A, CSU-GE, UC, I)

AMERICAN SIGN LANGUAGE
SEE FOREIGN LANGUAGES

AMERICAN STUDIES (AMST)

10 AMERICAN PLURALISM: A SEARCH FOR COMMON GROUND IN A MULTICULTURAL SOCIETY
3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU ETHN 110) (A, CSU-GE, UC, I)

ANTHROPOLOGY (ANTHRO)

1 BIOLOGICAL ANTHROPOLOGY
3 units, 3 lecture hours
 ADVISORY: Eligibility for English 1A.

The concepts, methods of inquiry, and theory of biological evolution and their application to the human species. A specific focus on molecular, Mendelian and population genetics, mechanisms of evolution, primatology, paleoanthropology, biocultural adaptations, human variation, and current bioethical issues. The philosophy of science and the scientific method serve as foundations to the course. (A, CSU-GE, UC, I)

2 CULTURAL ANTHROPOLOGY
3 units, 3 lecture hours
 ADVISORY: Eligibility for English 1A.

Principles, methods, and concepts of cultural anthropology. The relationship between culture, society, and the individual. A cross-cultural, integrated analysis of human social institutions including religion and ideology, political organization and social control, social inequality, economic systems, subsistence strategies, marriage and family, child rearing, personality development, kinship, gender, ethnicity, language and communication, artistic expression, and cultural change. (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.

Principles, methods, and concepts of cultural anthropology. The relationship between culture, society, and the individual. A cross-cultural, integrated analysis of human social institutions including religion and ideology, political organization and social control, social inequality, economic systems, subsistence strategies, marriage and family, child rearing, personality development, kinship, gender, ethnicity, language and communication, 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. (A, CSU-GE, UC, I)

3 ARCHAEOLOGY AND WORLD PREHISTORY
3 units, 3 lecture hours
 ADVISORY: Eligibility for English 1A.

A broad survey of physical and cultural evolution of the human species from the earliest signs of "humanness" through the rise of civilization as understood through the archaeological record. Includes a brief introduction to the methods of archaeology and the interdisciplinary nature of archaeological research. (A, CSU-GE, UC, I)

4 INTRODUCTION TO ARCHAEOLOGY
3 units, 3 lecture hours
 ADVISORY: Mathematics 102 and 250 and eligibility for English 1A.

An introduction to the study of concepts, theories, and methods of anthropological archaeology. The course includes a discussion of the history and interdisciplinary nature of archaeological research; dating techniques and methods of survey, excavation, and analysis; cultural resources management; and a review of significant archaeological data and models that contribute to our understanding of human culture. (A, CSU-GE, UC, I)

204 Anthropology

4L ARCHAEOLOGICAL FIELD METHODS

1 unit, 3 lab hours, (Repeats = 2), (Formerly Anthropology 27)

COREQUISITE: Anthropology 4. ADVISORY: Mathematics 102 and 250 and eligibility for English 1A.

Hands-on training in 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 Universal Transverse Mercator and Public Lands Survey grid systems. (A, CSU, UC)

5 ARCHAEOLOGICAL LABORATORY METHODS

4 units, 3 lecture hours, 3 lab hours, (Repeats = 2)

ADVISORY: Mathematics 102 and 250 and eligibility for English 1A.

The archaeological laboratory and its relationship to archaeological project development and organization; artifact identification, analysis, and cataloging processes including lithic, ceramic, bone, shell, fiber, and historic artifact types. (A, CSU)

6 FIELD ARCHAEOLOGY

1-3 units, 1-2 lecture hours, 3-9 lab hours, (Repeats = 3)

COREQUISITE: Anthropology 4. ADVISORY: Mathematics 102 and 250 and eligibility for English 1A.

Field experience in archaeology. Development of practical skills including archaeological survey, excavation, mapping, and site recordation, artifact, feature, site, and cultural landscape identification in field situations; and logistics of archaeological projects, including planning for transportation, equipment, supplies, food, water, and shelter required to complete an archaeological project. Required orientation meeting prior to field trip. (A, CSU, UC)

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)

20 NATIVE PEOPLES OF CALIFORNIA

3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A.

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, contemporary issues, and the relationship between indigenous peoples and anthropology. (A, CSU, UC)

28 ANCIENT MEXICO

3 units, 3 lecture hours, (See also Chicano-Latino Studies 28)

ADVISORY: Eligibility for English 1A.

A survey of history, geography, socio-political, religious systems, and cultural achievements of Mesoamerican civilizations such as the Olmec, Zapotec, Teotihuacano, Mayan, Toltec, and Aztec/Mexican. (A, CSU, UC)

30 TOPICS IN ANTHROPOLOGY

1-4 units, 1-3 lecture hours, 0-9 lab hours, (Repeats = 3)

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

2 units, 1 lecture hour, 2 lab hours, (Repeats = 3), (Formerly Industrial Education 23)

PREREQUISITE: None.

An introduction to computers, their use, and the development of general computer skills for technical programs. Fulfills the computer literacy graduation requirement. (A, CSU)

11 BASIC ELECTRICITY

3 units, 3 lecture hours, (Formerly Industrial Education 11)

PREREQUISITE: None.

Fundamental concepts of electricity and its applications. Lecture/demonstration. (A, CSU)

21 OCCUPATIONAL SAFETY AND HEALTH

2 units, 2 lecture hours, (Formerly Industrial Education 36)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended

Employer and employee responsibility, federal and state legislation, accident reports, industrial hygiene, personal protective equipment, materials handling and storage, hazard communication, guarding machines and mechanisms, hand and portable power tools, electrical safety, and fire protection. (A, CSU)

40 PREPARING FOR EMPLOYMENT OPPORTUNITIES

3 units, 3 lecture hours, (Formerly Industrial Education 37)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Preparing resumes, portfolios, and improving employment-seeking 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 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.

Force, work, rate, resistance, energy, power, force transformers, energy converters, and transducers in the mechanical, fluid, electrical, and thermal systems. Applications to the trades. (A)

130 INDUSTRIAL MATHEMATICS

3 units, 3 lecture hours, (Formerly Industrial Education 60)

PREREQUISITE: Mathematics 260C or 250 or designated math score.

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Industrial technology and trade-related math problems. The use of signed numbers, algebraic expressions, exponents, polynomials, factoring, algebraic fractions, graphing, radical expressions, quadratic equations and particular emphasis on practical problems common to technical industrial trades. (A)

131 TECHNICAL REPORT WRITING

3 units, 3 lecture hours, (Formerly Drafting 43 and Applied Technology 31)

PREREQUISITE: English 252, English as a Second Language 265W, or designated score on English placement test.

Content, organization, style, and format. Business correspondence, tables and figures. (A)

212 COMPUTER SKILLS LAB

1 unit, 3 lab hours, (Pass/No Pass), (Repeats = 3) (Formerly Industrial Education 50)

PREREQUISITE: None.

Supervised use of computers. Reinforcement of concepts from classroom studies. Problem-solving skills.

APPRENTICESHIP TRAINING (APP)

Apprenticeship training courses are designed for those currently employed and indentured in the specific trade.

For specific apprenticeship training program requirements refer to the Associate Degree and Certificate Programs section of this catalog.

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

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 apprenticeship. Collaborative learning objectives established specific to apprenticeship... 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. May be repeated for not more than 16 units total. (A, CSU)

260 APPRENTICESHIP-FIRST AID

.5 unit, 6 lecture hours, 2 lab hours, (1 week), (Repeats = 1), (Formerly Apprenticeship 360)

PREREQUISITE: Apprenticeship status.

First aid for identifying, preventing, and caring for bleeding, sudden illness, and injuries. CPR for adult breathing, choking, and cardiac emergencies.

AUTOMOTIVE AND HEAVY-DUTY ELECTRICAL

Courses required for this apprenticeship program are listed on page 104.

AUTOMOTIVE MECHANICS

Courses required for this apprenticeship program are listed on page 105.

BODY AND FENDER

Courses required for this apprenticeship program are listed on page 105.

DIESEL AND HEAVY-DUTY MECHANICS

Courses required for this apprenticeship program are listed on page 106.

MACHINE SHOP

Courses required for this apprenticeship program are listed on page 106.

PARTS CLERK

Courses required for this apprenticeship program are listed on page 106.

ROOFING

Courses required for this apprenticeship program are listed on page 107.

361/7J ROOFING

3 lecture hours, 1 lab hour, (Open Entry/Open Exit), (Formerly Apprenticeship Training 61/66J and 361/6J)

PREREQUISITE: Apprenticeship status.

History, materials, tools, and roof preparation. Built-up roofing, dampproofing, waterproofing, composition shingling, and rigid roofing. Blueprint reading and estimating. Characteristics of built-up roofing, insulation, and temperature control. Steep roofing and metal roofing. Reroofing, repairing, plastics, drainage, and estimating.

STATIONARY ENGINEERS

Courses required for this apprenticeship program are listed on page 107.

WELDING

Courses required for this apprenticeship program are listed on page 108.

ARCHITECTURE (ARCH)

10 ARCHITECTURAL DESIGN AND VISUALIZATION I

3 units, 2 lecture hours, 2 lab hours

ADVISORY: Architecture 14 concurrently strongly recommended for architecture majors. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Basic principles and concepts of design while concurrently addressing the skills of freehand drawing, manual drafting and visualization. History and development of perspective during the Renaissance. (A, CSU, UC)

11 INTRODUCTION TO ARCHITECTURE AND ENVIRONMENTAL DESIGN

2 units, 2 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 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)

206 Architecture

14 DIGITAL TOOLS FOR ARCHITECTS

3 units, 2 lecture hours, 2 lab hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Digital tools in the context of architectural practice. Basic 3D modeling and image manipulation. Presentation layout and output. (A, CSU)

20 ARCHITECTURAL DESIGN AND VISUALIZATION II

3 units, 2 lecture hours, 3 lab hours

PREREQUISITE: Architecture 10 and 14.

Continuation of Architecture 10. Extended development of the content of Architecture 10 plus the introduction of color theory. Principles and means for the creation of two dimensional and three dimensional organizations. (A, CSU, UC)

21 MATERIALS OF CONSTRUCTION

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 and Computer Aided Drafting and Design 14.

Continuation of Architecture 12. Further development of drafting practices and contract documents. Emphasis on light commercial materials and construction. Computer-aided drafting in commercial architectural applications. (A, CSU)

24 ARCHITECTURAL CAD I

3 units, 2 lecture hours, 2 lab hours

PREREQUISITE: Architecture 14. ADVISORY: Computer Aided Drafting and Design 14.

Continuation of Arch 14. Further development of CAD and 3D modeling for architectural drawing and presentation. Architectural plans, dimensions, blocks, and wblocks. Use of components, materials and tileable patterns. Modeling of terrain, slopes and meshes. (A, CSU)

30 ARCHITECTURAL DESIGN AND VISUALIZATION III

3 units, 2 lecture hours, 3 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, (Repeats = 3), (See also Building Safety and Code Administration 10), (Formerly Architecture 24)

PREREQUISITE: None.

International building codes and local building zoning ordinances. (A, CSU)

32 STATICS AND STRENGTH OF MATERIALS

3 units, 3 lecture hours, (Formerly Architecture 31)

ADVISORY: Eligibility for Mathematics 101 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 ARCHITECTURAL CAD II

3 units, 2 lecture hours, 2 lab hours

PREREQUISITE: Architecture 24.

Continuation of Architecture 24. Further development of CAD and 3D modeling for architectural drawing and presentation. Includes basic template setup, detail libraries and office standards. Create 3d model from photo and animated walk-through. (A, CSU)

40 ARCHITECTURAL DESIGN AND VISUALIZATION IV

3 units, 2 lecture hours, 3 lab hours

PREREQUISITE: Architecture 30.

Continuation of Architecture 30. Extended development of the content of Architecture 30 with emphasis on the design process. Projects of an architectonic nature will be completed. Development of an educational portfolio. (A, CSU)

41A OFFICE PRACTICES

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 125 or English as a Second Language 67 and 68 and Mathematics 101 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, 2 lecture hours, 2 lab hours, (Formerly Architecture 32)

PREREQUISITE: Architecture 32.

Calculation and design of timber and steel structures. Engineering of connections. Completion of structural framing plans. (A, CSU)

ARMENIAN

SEE FOREIGN LANGUAGES

ART (ART)

2 ART APPRECIATION

3 units, 3 lecture hours, (Formerly Art 10)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to the visual arts through lectures/discussions covering: a) the way artists speak through the formal Elements and Principles of Visual Language as well as through their choices of art Media and subject matter; b) how these formal properties contribute to the content and meaning of artwork; and c) the evolution of these formal properties through the history of the visual arts in Western European culture as well as their relationships to the art of the Americas, Asia, Africa, the Pacific Islands, and the Islamic world. (A, CSU-GE, UC, I)

3 TWO-DIMENSIONAL DESIGN

3 units, 2 lecture hours, 4 lab hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC)

4 THREE-DIMENSIONAL DESIGN**3 units, 2 lecture hours, 4 lab hours**

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC)

5 ART HISTORY 1**3 units, 3 lecture hours, (Formerly Art 25)**

ADVISORY: Eligibility for English 1A recommended.

A survey of the Western Art from prehistory to the Gothic period that may include one or more areas of non-Western art during the same eras. (A, CSU-GE, UC, I)

5H HONORS ART HISTORY 1**3 units, 3 lecture hours, (Formerly Honors 5A)**

ADVISORY: English 1AH. Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

A survey of the Western Art from prehistory to the Gothic period that may include one or more areas of non-Western art during the same eras. Honors sections will include additional readings of primary and secondary source material. (A, CSU-GE, UC, I)

6 ART HISTORY 2**3 units, 3 lecture hours, (Formerly Art 26)**

ADVISORY: Eligibility for English 1A recommended.

A survey of Western Art from the beginning of the Renaissance to the present that may include one or more areas of non-Western Art from the same time periods. (A, CSU-GE, UC, I)

6H HONORS ART HISTORY 2**3 units, 3 lecture hours, (Formerly Honors 6A)**

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

A survey of Western Art from the beginning of the Renaissance to the present that may include one or more areas of non-Western Art from the same time periods. Honors sections will include a special introduction for non-art majors into the characteristics and components of art and a brief introduction into art criticism. (A, CSU-GE, UC, I)

7 BEGINNING DRAWING**3 units, 2 lecture hours, 4 lab hours, (Formerly Art 7A)**

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to the creation of visual images through drawing. Emphasis on observational drawing, drawing media (traditional and nontraditional), the formal elements of visual language (line, value, texture, shape, volume, color), composition, and meaning in visual image making. (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 125 and 126 or English as a Second Language 67 and 68 recommended.

Human anatomy for artists with the practice of drawing the human figure from the model. (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 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to the creative act of painting through exploration of representational, abstract, and non-objective forms. Emphasis on oil/acrylic media. (A, CSU-GE, UC)

10 BEGINNING CERAMICS**3 units, 2 lecture hours, 4 lab hours, (Formerly Art 11A)**

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to history of humanity through the achievements and cultural diversity recorded in fired clay artifacts. Through construction of ceramic vessels and the study of clay, glaze, and decorative processes, the importance of ceramics as a major medium of expression will be revealed. (A, CSU-GE, UC)

11 BEGINNING SCULPTURE**3 units, 2 lecture hours, 4 lab hours, (Formerly Art 17A)**

ADVISORY: Art 4. Eligibility for English 125 and 126, or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Introduction to creative self-expression in a variety of sculptural media which may include but is not limited to clay, steel fabrication, bronze casting, glass casting, stone, wood, plaster, and new media such as installation and 3D printing/scanning. (A, CSU-GE, UC)

12A CRAFT WORKSHOP: LIVING TRADITIONS**3 units, 2 lecture hours, 4 lab hours, (Formerly Art 48 and 12)**

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to the materials, tools, processes and concepts of a variety of craft media (may include work in fibers, metal, wood, glass or clay). Cultural and historical traditions as well as contemporary work will be studied. (A, CSU-GE)

12B INTERMEDIATE CRAFT WORKSHOP: LIVING TRADITIONS**3 units, 2 lecture hours, 4 lab hours, (Repeats = 3)**

PREREQUISITE: Art 12A.

Further advanced exploration into the tools, materials, and processes of a variety of craft media (may include work in fibers, textiles, paper making, metal, wood, glass or leather). Cultural and historical traditions as well as contemporary work will continue to be studied. (A, CSU-GE)

13 BEGINNING WATERCOLOR PAINTING**3 units, 2 lecture hours, 4 lab hours**

ADVISORY: Art 3 and 7 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to the basic methods and materials of watercolor painting through creative, visual problem-solving exercises. (A, CSU, UC)

14 BEGINNING PRINTMAKING**3 units, 2 lecture hours, 4 lab hours, (Formerly Art 23)**

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An introduction to traditional and contemporary fine art printmaking practices. Topics may include relief, intaglio, silk screen and planographic printing. Students will produce editions that demonstrate a basic understanding of the technical and aesthetic dimensions of this art form. (A, CSU-GE, UC)

15 CERAMIC SCULPTURE**3 units, 2 lecture hours, 4 lab hours, (Formerly Art 12)**

PREREQUISITE: None.

Creative self-expression in sculpture using clay and related materials as the media. (A, CSU-GE, UC)

16 LIFE PAINTING

3 units, 2 lecture hours, 4 lab hours, (Repeats = 2)

PREREQUISITE: Art 8 and 9. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The creative act of figurative painting, using the live model as subject matter. (A, CSU, UC)

17 INTERMEDIATE DRAWING

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 7B)

PREREQUISITE: Art 7 or demonstration of comparable skill level to be determined by testing and/or portfolio of past drawing work.

A further exploration of the creation of drawn images as effective vehicles for visual communication. (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.

Further study, theory, and practice of drawing the human figure from life. (A, CSU, UC)

19 INTERMEDIATE PAINTING: OIL/ACRYLIC

3 units, 2 lecture hours, 4 lab hours, (Formerly Art 14B)

PREREQUISITE: Art 9 or demonstration of comparable skill level to be determined by testing and/or portfolio of past oil/acrylic painting work.

A further exploration of the creative act of painting using representational, abstract, and non-objective forms. Emphasis on oil/acrylic media. (A, CSU, UC)

20 INTERMEDIATE CERAMICS

3 units, 2 lecture hours, 4 lab hours, (Repeats = 3), (Formerly Art 11B)

PREREQUISITE: Art 10 or demonstration of comparable skill level to be determined by testing and/or portfolio of past ceramic work. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Construction and decorative processes used in ceramics. Throwing on the potters wheel, hand building, and exploration of clay and glaze chemistry. Historic and contemporary study of ceramics as a major medium of expression. (A, CSU, UC)

21 INTERMEDIATE SCULPTURE

3 units, 2 lecture hours, 4 lab hours, (Repeats = 2), (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, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 (Repeats = 2)

PREREQUISITE: Art 13 or demonstration of comparable skill level to be determined by testing and/or portfolio of past watercolor work.

Further methods and materials of watercolor painting through creative, visual problem-solving assignments. (A, CSU, UC)

24A INTAGLIO PRINTMAKING

3 units, 2 lecture hours, 4 lab hours, (Repeats = 3)

PREREQUISITE: Art 14 or demonstration of comparable skill level to be determined by testing and/or portfolio of past printmaking work.

Intermediate-level intaglio printmaking. Topics may include etching, engraving, drypoint, aquatinting and photo-etching in creating editions of fine art prints. Emphasis is placed upon mastery and the creative use of these techniques. (A, CSU, UC)

24B LITHOGRAPH PRINTMAKING

3 units, 2 lecture hours, 4 lab hours, (Repeats = 3)

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, (Repeats = 3)

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, (Repeats = 3)

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, (Repeats = 2). Offered 1 semester each academic year.

PREREQUISITE: Art 7 and 9. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended. Mathematics 260A.

An exploration of the aesthetic and practical applications of mural painting, including historical background, planning, techniques and execution. (A, CSU, UC)

28 ADVANCED FIGURE DRAWING AND ANATOMY

3 units, 2 lecture hours, 4 lab hours, (Repeats = 1)

PREREQUISITE: Art 18 or demonstration of comparable skill level to be determined by testing and/or portfolio of past figure drawing and anatomy work.

Advanced study, theory, and practice of drawing the human figure from life. (A, CSU, UC)

29 ADVANCED PAINTING: OIL/ACRYLIC

3 units, 2 lecture hours, 4 lab hours, (Repeats = 3)

PREREQUISITE: Art 19 or demonstration of comparable skill level to be determined by testing and/or portfolio of past oil/acrylic painting work.

Advanced studies in the creative act of painting. Emphasis on oil/acrylic media. (A, CSU, UC)

- 31 ADVANCED SCULPTURE**
 3 units, 2 lecture hours, 4 lab hours, (Repeats = 3)
 PREREQUISITE: Art 21 or demonstration of comparable skill level to be determined by testing and/or portfolio of past sculpture work.
 Development of a portfolio of sculptural work through concentrated advanced self-expression in a variety of sculptural media which may include but is not limited to clay, steel fabrication, bronze casting, stone, wood, plaster, and new media such as installation and 3D printing/scanning. (A, CSU, UC)
- 32A BEGINNING JEWELRY AND METALSMITHING**
 3 units, 2 lecture hours, 4 lab hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Introduction to wide-range of methods, techniques, and materials used to create jewelry and small metal objects. Introduction to the history of jewelry-making as well as to its cultural expressiveness worldwide. (A, CSU)
- 32B INTERMEDIATE JEWELRY AND METALSMITHING**
 3 units, 2 lecture hours, 4 lab hours, (Repeats = 3)
 PREREQUISITE: Art 32A.
 Further exploration into a wide-range of methods, techniques and materials used to create jewelry and small metal objects. Advanced exploration and research into the history of jewelry-making as well as to its cultural expressiveness worldwide. (A, CSU)
- 49 STUDIO TOPICS: ART EXHIBITION AND PRESENTATION PRACTICES**
 3 units, 2 lecture hours, 4 lab hours, (Repeats = 3), (Formerly Art 9)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Introduction to studio practices in exhibition, presentation and art research not covered in regular course offerings. Course content relates to a variety of areas: drawing, design, ceramics, crafts, fibers, jewelry & metalsmithing, sculpture, painting and printmaking. (A, CSU)
- 55 INTRODUCTION TO ASIAN ART**
 3 units, 3 lecture hours
 ADVISORY: Eligibility for English 1A recommended.
 Introduction to the arts of Asia, including China, Japan, India, and Southeast Asia. (A, CSU-GE, UC, I)
- 60 PRE-COLUMBIAN ART**
 3 units, 3 lecture hours, (See also Chicano-Latino Studies 22)
 ADVISORY: Eligibility for English 1A recommended.
 A historical survey of the art of Mesoamerican and Andean ancient cultures. The art and architecture of the Olmec, Toltec, Aztec, Moche, Nazca, Inca, and other ancient civilizations of the New World. (A, CSU, UC)
- 251 OPEN ART STUDIO**
 1 unit, 3 lab hours, (Pass/No Pass), (Repeats = 3), (Formerly Art 51)
 COREQUISITE: Art 3, 4, 7, 8, 9, 10, 11, 12A, 12B, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24A, 24B, 24C, 24D, 25, 27, 28, 29, 31, 32A 32B, or 49.
 Supervised art practice for students concurrently enrolled in studio art classes.

ASIAN-AMERICAN STUDIES (ASAMER)

- 1 INDO-CHINESE AMERICANS**
 3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)
- 10 HMONG CULTURE**
 3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Explore historical and cultural background of Hmong people who have migrated into the United States of America. Examine their cultural identity, acculturation process, clan system, family dynamics, influential factors that shape their culture, and successes in America. (A, CSU, UC)
- 15 INTRODUCTION TO ASIAN-AMERICANS**
 3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)
- 20 ASIAN-AMERICAN LITERATURE**
 3 units, 3 lecture hours, (See also English 20)
 PREREQUISITE: English 1A or the equivalent. English 1B is not a prerequisite for this course.
 Survey of Asian-American classic and contemporary literature. Reading and writing critical analysis of novels, short stories, poems and plays. (A, CSU, UC)
- 25 ASIAN-AMERICAN SOCIAL ISSUES**
 3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Issues of contemporary relevance related to Asian Americans: gender inequality, media representation, workplace concerns, crime, anti-Asian violence, race relations, the changing Asian American family and community, homosexuality, issues in education, teen suicide, and political involvement. (A, CSU, UC)
- 30 ASIAN-AMERICAN WOMEN**
 3 units, 3 lecture hours, (See also Women's Studies 30)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Historical experiences of early and later Asian immigrant women. Emphasis is on Asian American women today. Topics include growing up Asian American, relationship with parents, marriage, identity, raising children, doll image, voice, and American feminism. (A, CSU, UC)

ASTRONOMY (ASTRO)

10 BASIC ASTRONOMY

3 units, 2 lecture hours, 2 lab hours, (generally evening only)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

The night sky from our local solar system to the most distant objects in the universe, including observational and theoretical methods. The history of astronomical discovery, current investigations, cosmology, solar system dynamics, life cycle of stars and galaxies, constellation lore, and the role of gravity on a local and cosmic scale. Optional field trips. (A, CSU-GE, UC, I)

AUTOMOTIVE COLLISION REPAIR TECHNOLOGY (ACRT) FORMERLY BODY AND FENDER

51 BASIC ACR

9 units, 4 lecture hours, 16 lab hours, (Day Program), (Formerly Body-Fender 51/52)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 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 with credit in ACRT 51A and/or ACRT 51B. (A, CSU)

53 ADVANCED ACR

9 units, 4 lecture hours, 16 lab hours, (Day Program), (Formerly Body-Fender 53/54)

PREREQUISITE: Automotive Technology Collision Repair 51 or Automotive Technology Collision Repair 51A and 51B. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 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. Not open to students with credit in ACRT 53A and/or ACRT 53B. (A, CSU)

55 SPRAY REFINISHING

2 units, 1 lecture hour, 3 lab hours, (Repeats = 3)(Formerly Body-Fender 55)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.

Modern spray refinishing equipment and methods. (A, CSU)

AUTOMOTIVE COLLISION REPAIR (ACRCTC)

371 FUNDAMENTALS OF WELDING TECHNOLOGY AND WORKING SHEET METAL

5 lecture hours, 25 lab hours, (10 weeks), (300 total hours), (Repeats = 3), (Open Entry/Open Exit)

PREREQUISITE: None.

Theory and practice in MIG welding, oxyacetylene welding, steel rod, brazing rod, plasma cutter, metal shrinking, working sheet metal, welded panel replacement,

restoring corrosion protection, hand tool technology, shop safety and efficiency, job success and ASE certification.

372 BODY WORK TECHNOLOGY

5 lecture hours, 25 lab hours, (10 weeks), (300 total hours), (Repeats = 3), (Open Entry/Open Exit)

PREREQUISITE: None.

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

373 AUTOMOTIVE REFINISHING TECHNOLOGY

5 lecture hours, 25 lab hours, (10 weeks), (300 total hours), (Repeats = 3), (Open Entry/Open Exit)

PREREQUISITE: None.

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

AUTOMOTIVE TECHNOLOGY (AUTOT)

9 AUTOMOTIVE ESSENTIALS

3 units, 3 lecture hours

PREREQUISITE: None.

Automotive components, service tools, and equipment. Designed for the prospective industrial arts teacher and students needing an exploratory course in the automotive field. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

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, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

51 PRINCIPLES OF ENGINE THEORY AND SERVICE

3 units, 6 lecture hours, (9 weeks), (Repeats = 3), (See also Automotive Technology GM 51), (Formerly Automotive Mechanics 51)

COREQUISITE: Automotive Technology 9 and 51L. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Engine design and operation including diagnosis, failure analysis, and service practices. (A, CSU)

51L AUTOMOTIVE ENGINE LABORATORY

2 units, 14 lab hours, (9 weeks), (Repeats = 3), (See also Automotive Technology GM 51L), (Formerly Automotive Mechanics 51L)

COREQUISITE: Automotive Technology 9 and 51. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Engine laboratory for the Automotive Technology major. Use of engine related equipment. Emphasis on engine rebuilding and machining practices. (A, CSU)

52 AUTOMOTIVE ELECTRICAL SYSTEMS

5 units, 4 lecture hours, 16 lab hours, (9 weeks), (Repeats = 3), (See also Automotive Technology GM 52), (Formerly Automotive Mechanics 52)

COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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. (A, CSU)

53 ENGINE PERFORMANCE

5 units, 4 lecture hours, 16 lab hours, (9 weeks), (Repeats = 3), (See also Automotive Technology GM 53)

COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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. (A, CSU)

54 SUSPENSION, STEERING, AND WHEEL ALIGNMENT

5 units, 4 lecture hours, 16 lab hours, (9 weeks), (Repeats = 3), (See also Automotive Technology GM 54), (Formerly Automotive Mechanics 53)

COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Theory and practical application of basic 4-wheel alignment, steering, and suspension systems. Operating principles, component description, diagnosis, repair, and service adjustments. (A, CSU)

55 POWER TRAINS: TRANSMISSIONS/TRANSAXLES, DIFFERENTIALS, AND DRIVEAXLES

6 units, 5 lecture hours, 20 lab hours, (9 weeks), (Repeats = 3), (See also Automotive Technology GM 55), (Formerly Automotive Mechanics 54)

COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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. (A, CSU)

56 AUTOMOTIVE BRAKING SYSTEMS

5 units, 4 lecture hours, 16 lab hours, (9 weeks), (Repeats = 3), (See also Automotive Technology GM 56)

COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Complete disassembly and reassembly of various automotive braking systems. Operating principles, component description, diagnosis, repair, and service adjustments. (A, CSU)

57 AUTOMOTIVE HEATING, VENTILATION, AIR CONDITIONING, AND ADVANCED ELECTRONICS

5 units, 4 lecture hours, 16 lab hours, (9 weeks), (Repeats = 3), (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 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 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, 8 lab hours, (9 weeks), (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 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, 8 lab hours, (9 weeks), (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Designed for students to complete assigned automobile manufacturers' training modules in Advanced Chassis Systems: Hands-On (HO), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Automotive Technology. Designed to accompany work experience in the trade. (A, CSU)

58B INDIVIDUALIZED SKILLS TRAINING (IST) ENGINE/PROPULSION SYSTEMS LABORATORY

1 unit, 8 lab hours, (9 weeks), (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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)

212 Automotive Technology

58C INDIVIDUALIZED SKILLS TRAINING (IST) POWER TRAIN SYSTEMS LABORATORY

1 unit, 8 lab hours, (9 weeks), (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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)

161A BASIC CLEAN AIR CAR COURSE (BCACC)

2 units, 4.5 lecture hours, 4.5 lab hours, (9 weeks), (Repeats = 3), (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 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Prepares students/technicians for the Bureau of Automotive Repair (BAR) emission testing procedures and guidelines. Emphasis on theory, diagnosis, and repair of emission related systems and components in the On Board Diagnostics system. 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 and/or intern Technician license. (Note: Basic Area Technician training program certified.) (A)

161B ADVANCED CLEAN AIR CAR COURSE (ACACC)

1 unit, 3 lecture hours, 3 lab hours, (5 weeks), (Repeats = 3), (Formerly Automotive Technology 61B and 261B)

PREREQUISITE: Automotive Technology 161A. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Prepares students/technicians for the Bureau of Automotive Repair (BAR) Enhanced Area emission testing procedures and guidelines. Emphasis on theory, diagnosis, and repair of emission related systems and components in the On Board Diagnostics system. 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. (Note: Enhanced Area Technician training program certified.) (A)

161C BAR UPDATE TRAINING

1 unit, 18 lecture hours, 6 lab hours, (2 weeks), (Repeats = 3)

PREREQUISITE: Automotive Technology 161B. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 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)

261 CLEAN AIR CAR - DIAGNOSIS AND REPAIR

3 units, 4.5 lecture hours, 4.5 lab hours, (9 weeks), (Repeats = 3), (Formerly Automotive Technology 61)

PREREQUISITE: Automotive Technology 52 or 53 or 9 semester units, 13 quarter units, or 180 hours of instruction at a NATEF certified and/or bureau recognized college or trade school in the areas of electrical and engine performance. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Introduction to Smog Check Program diagnosis and repair procedures; engine theory and electrical systems; automotive computer control system operations; on-vehicle diagnosing and repair mandated by the Bureau of Automotive Repair. (Note: Basic Area Technician training program certified.)

262A (A6) ELECTRICAL/ELECTRONIC TRAINING BAR/ASE (ALTERNATIVE)

1 unit, 6 lecture hours, 2 lab hours, (3 weeks), (Repeats = 3), (Formerly Automotive Technology 62A)

PREREQUISITE: Automotive Technology 52 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Prepares students/technicians for the Bureau of Automotive Repair (BAR) and National Institute for Automotive Service Excellence (ASE) examination. Testing, diagnosing, and repairing electrical components and systems including automotive computer controls using necessary equipment as mandated by the BAR. Those who do not meet the prerequisites are allowed to take this course but will not be certified by the Bureau of Automotive Repair and/or the National Institute for Automotive Service Excellence (ASE) in the A6-Electrical/Electronic area.

262B (A8) ENGINE PERFORMANCE TRAINING BAR/ASE (ALTERNATIVE)

1 unit, 6 lecture hours, 2 lab hours, (3 weeks), (Repeats = 3), (Formerly Automotive Technology 62B)

PREREQUISITE: Automotive Technology 53 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Prepares students/technicians for the Bureau of Automotive Repair (BAR) and National Institute for Automotive Service Excellence (ASE) examination. Testing, diagnosing, and repairing fuel, emission, and ignition systems including automotive computer controls using necessary equipment as mandated by the BAR. Those who do not meet the prerequisites are allowed to take this course but will not be certified by the Bureau of Automotive Repair and/or the National Institute for Automotive Service Excellence (ASE) in the A8-Engine Performance area.

262C (L1) ADVANCED ENGINE PERFORMANCE TRAINING BAR/ASE (ALTERNATIVE)

1 unit, 6 lecture hours, 2 lab hours, (4 weeks), (Repeats = 3), (Formerly Automotive Technology 62C)

PREREQUISITE: Automotive Technology 52 and 53 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Prepares students/technicians for the Bureau of Automotive Repair (BAR) and National Institute for Automotive Service Excellence (ASE) examination. Testing, diagnosing, and repairing fuel, emission, and ignition systems including automotive computer controls using necessary equipment as mandated by the BAR. Those who do not meet the prerequisites are allowed to take this course but will not be certified by the Bureau of Automotive Repair and/or the National Institute for Automotive Service Excellence (ASE) in the L1-Advanced Engine Performance area.

281A AUTOMOTIVE POWER TRAINS I

3 units, 3 lecture hours, (Repeats = 3), (Formerly Automotive Technology 81A)

PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

The principles of automotive power train systems: automotive transmissions, drivelines, and differentials. Diagnosis and service methods.

281B AUTOMOTIVE POWER TRAINS II

3 units, 3 lecture hours, (Repeats = 3), (Formerly Automotive Technology 81B)

PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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, (Repeats = 3), (Formerly Automotive Technology 82A)

PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Theory of basic 4-wheel alignment and suspension systems. Operating principles, component description, diagnosis, and service adjustment spec.

282B AUTOMOTIVE BRAKING SYSTEMS

3 units, 3 lecture hours, (Repeats = 3), (Formerly Automotive Technology 82B)

PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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, (Repeats = 3), (Formerly Automotive Technology 83A)

PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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, (Repeats = 3), (Formerly Automotive Technology 83B)

PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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, (Repeats = 3), (Formerly Automotive Technology 84)

PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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, (Repeats = 3), (Formerly Automotive Technology 85)

PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Engine design and operation including diagnosis, failure analysis, and service practices.

286 AUTOMOTIVE INFORMATION SYSTEMS

3 units, 3 lecture hours, (Repeats = 3), (Formerly Automotive Technology 86)

PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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, (Repeats = 3)

PREREQUISITE: None.

Modification of older vehicles to incorporate new technology from newer vehicles.

292 ASE CERTIFICATION PREPARATORY

2 units, 4 lecture hours, (9 weeks), (Repeats = 3), (Formerly Automotive Technology 92)

PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

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 LAMP AND BRAKE ADJUSTMENT/CERTIFICATION PREPARATION

1.5 units, 3 lecture hours, (9 weeks), (Repeats = 3), (Formerly Automotive Technology 94)

PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Preparation for the State of California Automotive Technician Lamp and Brake Adjustment/Certification examination.

AUTOMOTIVE MECHANICS (AMCTC)

371 ENGINE REPAIR

10 lecture hours, 20 lab hours, (20 weeks), (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

10 lecture hours, 20 lab hours, (30 weeks), (900 total hours), (Pass/No Pass), (Repeats = 3), (Open Entry/Open Exit), (Formerly AMVTC 72)

Basic skills necessary for an entry level job. Competency-based similar to those operations performed by automotive shop professionals. Prepares students to take the ASE certification tests.

**AUTOMOTIVE TECHNOLOGY:
GENERAL MOTORS ASEP PROGRAM (ATGM)**

51 PRINCIPLES OF ENGINE THEORY AND SERVICE

3 units, 6 lecture hours, (9 weeks), (Repeats = 3), (See also Automotive Technology 51)

COREQUISITE: Automotive Technology 9 and Automotive Technology GM 51L. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Engine design and operation including diagnosis, failure analysis, and service practices. Designed to accompany work experience in the trade. (A, CSU)

51L AUTOMOTIVE ENGINE LABORATORY

2 units, 14 lab hours, (9 weeks), (Repeats = 3), (See also Automotive Technology 51L)

COREQUISITE: Automotive Technology 9 and Automotive Technology GM 51. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Engine laboratory for the Automotive Technology major. Use of engine related equipment. Emphasis on engine rebuilding and machining practices. Designed to accompany work experience in the trade. (A, CSU)

52 AUTOMOTIVE ELECTRICAL SYSTEMS

5 units, 4 lecture hours, 16 lab hours, (9 weeks), (Repeats = 3), (See also Automotive Technology 52), (Formerly Automotive Technology General Motors 32)

COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Basic electrical theory and operation of the automotive electrical components and systems. Testing, diagnosing, and repairing electrical components and systems including automotive computer controls using necessary equipment. Designed to accompany work experience in the trade. (A, CSU)

53 ENGINE PERFORMANCE

5 units, 4 lecture hours, 16 lab hours, (9 weeks), (Repeats = 3), (See also Automotive Technology 53), (Formerly Automotive Technology General Motors 35)

COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Engine theory and construction related to engine performance. History and theory of operation for the different types of automotive systems. Latest technologies in automotive fuel delivery, emission control, and ignition systems. Testing, diagnosing, and repairing fuel, emission, and ignition systems. Use of necessary test equipment. Designed to accompany work experience in the trade. (A, CSU)

54 SUSPENSION, STEERING, AND WHEEL ALIGNMENT

5 units, 4 lecture hours, 16 lab hours, (9 weeks), (Repeats = 3), (See also Automotive Technology 54), (Formerly Automotive Technology General Motors 31)

COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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, 5 lecture hours, 20 lab hours, (9 weeks), (Repeats = 3), (See also Automotive Technology 55), (Formerly Automotive Technology General Motors 36)

COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

The principles of automotive power train systems: automatic and manual transmissions/transaxles, transfer cases, clutch assemblies, driveaxles, drivelines, and differentials. Diagnosis, service, and repair. Designed to accompany work experience in the trade. (A, CSU)

56 AUTOMOTIVE BRAKING SYSTEMS

5 units, 4 lecture hours, 16 lab hours, (9 weeks), (Repeats = 3), (See also Automotive Technology 56)

COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Complete disassembly and reassembly of various automotive braking systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. (A, CSU)

57 AUTOMOTIVE HEATING, VENTILATION, AIR CONDITIONING, AND ADVANCED ELECTRONICS

5 units, 4 lecture hours, 16 lab hours, (9 weeks), (Repeats = 3), (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 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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)

1 PRINCIPLES OF BIOLOGY

4 units, 3 lecture hours, 2 lab hours

PREREQUISITE: Mathematics 103. ADVISORY: Eligibility for English 125 and English 126 or English as a Second Language 67 and 68 recommended.

Introduction to the principles and unifying concepts of life science including the chemical basis of life, cell structure and function, genetics and principles of inheritance, evolution, biological classification and diversity, and ecology. Intended for science majors and for pre-medical, pre-veterinary, pre-dental, pre-optometry, and pre-pharmacy majors. (TCSU BIOL SEQ A = BIOL 1+BIOL 4+BIOL 6) (A, CSU-GE, UC, I)

1H HONORS PRINCIPLES OF BIOLOGY

4 units, 3 lecture hours, 2 lab hours, (Formerly Honors 1B)

PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Introduction to the principles and unifying concepts of life science including the chemical basis of life, cell structure and function, genetics and principles of inheritance, evolution, biological classification and diversity, and ecology. Applications of the above topics to human health and environmental issues are stressed. Field trips, guest speakers, literature and scientific research, use of technology, and student presentations are included in this honors level course. Intended for science majors and for pre-medical, pre-veterinary, pre-dental, pre-optometry, and pre-pharmacy majors. (TCSU BIOL SEQ A=BIOL 1H+BIOL 4+BIOL 6) (A, CSU-GE, UC, I)

3 INTRODUCTION TO LIFE SCIENCE

4 units, 3 lecture hours, 2 lab hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introductory course exploring biological concepts as they relate to organismal structure and function, inheritance, ecology, and evolution. Recommended for non-biological science majors and liberal studies majors. Field trips required. (A, CSU-GE, UC, I)

3H HONORS INTRODUCTION TO LIFE SCIENCE

4 units, 3 lecture hours, 2 lab hours

ADVISORY: Meet the qualifications for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

Introductory course exploring biological concepts as they relate to organismal structure and function, inheritance, ecology, and evolution. Recommended for non-biological science majors and liberal studies majors. Field trips, guest speakers, literature and scientific research, use of technology and student presentations are included in this honors level course. (A, CSU-GE, UC, I)

4 PRINCIPLES OF ZOOLOGY

5 units, 3 lecture hours, 6 lab hours, (Formerly Zoology 1)

PREREQUISITE: Biology 1 or 3 or 11A or equivalent, and Mathematics 103 or equivalent, each with a grade of "C" or better. Completion within the last five years recommended. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Animal forms using the phylogenetic approach including morphology, physiology, and ecology relative to the major phyla. Field trips required. (TCSU BIOL SEQ A = BIOL 1/1H + BIOL 4 + BIOL 6) (A, CSU-GE, UC, I)

5 HUMAN BIOLOGY

4 units, 3 lecture hours, 2 lab hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 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, 24, 31. (TCSU BIOL 110) (A, CSU-GE, UC, I)

6 PRINCIPLES OF BOTANY

5 units, 3 lecture hours, 6 lab hours, (Formerly Botany 1)

PREREQUISITE: Biology 1 or 3 or 11A or equivalent, and Mathematics 103 or equivalent, each with a grade of "C" or better. Completion within the last five years recommended. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Morphological, physiological, ecological, genetic, and taxonomic relationships with emphasis on seed plants. Field trips required. (TCSU BIOL SEQ A = BIOL 1/1H + BIOL 4 + BIOL 6) (A, CSU-GE, UC, I)

7 FIELD BIOLOGY

4 units, 3 lecture hours, 3 lab hours, (Spring)

PREREQUISITE: Biology 1 or 3 or 11A or equivalent, with a grade of "C" or better. Completion within the last five years recommended. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Field investigations of plants, animals, and fungi emphasizing natural history, taxonomy, and ecology of local species. Field trips required. (A, CSU-GE, UC)

11A BIOLOGY FOR SCIENCE MAJORS I

5 units, 4 lecture hours, 3 lab hours

PREREQUISITE: Mathematics 103 with a grade of "C" or better. Completion within the last five years recommended. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, Biology 3 or High School Biology recommended.

The first class in a two semester sequence of general biology for science majors: 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. (A, CSU-GE, UC, I)

11AH HONORS BIOLOGY FOR SCIENCE MAJORS I

5 units, 4 lecture hours, 3 lab hours

PREREQUISITE: Mathematics 103 with a grade of "C" or better. Completion within the last five years recommended. ADVISORY: Meet the qualifications for acceptance into the Honors Program. 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. (A, CSU-GE, UC, I)

11B BIOLOGY FOR SCIENCE MAJORS II

5 units, 3 lecture hours, 6 lab hours

PREREQUISITE: Biology 11A. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The second course of a two semester sequence of general biology: 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. (A, CSU-GE, UC, I)

216 **Biology**

20 HUMAN ANATOMY

4 units, 3 lecture hours, 3 lab hours

PREREQUISITE: Biology 1 or 5 or 11A or equivalent, with a grade "C" or better. Completion within the last year recommended. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC, I)

21A HUMAN ANATOMY & PHYSIOLOGY I

4 units, 3 lecture hours, 3 lab hours

PREREQUISITE: Biology 1 or 5 or 11A and Chemistry 3A with a grade "C" or better.

The first class in a two semester human anatomy and physiology sequence. Biology 21A and 21B are designed to prepare students planning careers in healthcare including nursing. (A, CSU-GE, UC, I)

21B HUMAN ANATOMY & PHYSIOLOGY II

5 units, 4 lecture hours, 3 lab hours

PREREQUISITE: Biology 21A with a grade "C" or better.

The second class in the semester anatomy and physiology sequence. Biology 21A and 21B are designed to prepare students planning careers in healthcare, including nursing. (A, CSU-GE, UC, I)

22 HUMAN PHYSIOLOGY

5 units, 4 lecture hours, 3 lab hours

PREREQUISITE: Biology 20 or equivalent and Chemistry 3A or equivalent, each with a grade "C" or better. Completion within the last year recommended. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An examination of the functional relationships of the human body at the system, organ, and cellular levels, utilizing homeostasis as a unifying theme. Fulfills the physiology requirement for many nursing and other health-related programs. Three units of credit for student with credit in Biology 24. (A, CSU-GE, UC, I)

24 HUMAN ANATOMY AND PHYSIOLOGY

5 units, 4 lecture hours, 3 lab hours

PREREQUISITE: Biology 1 or 5 or 11A or equivalent, with a grade "C" or better. Completion within the last year recommended. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Systematic relationship of the gross and microscopic structures of the human body and their functional relationships. Intended primarily for students enrolled in or planning to enroll in college-level allied health programs. Not open to students with credit in both Biology 20 and 22. (A, CSU-GE)

31 MICROBIOLOGY

5 units, 3 lecture hours, 5 lab hours

PREREQUISITE: Biology 1 or 5 or 11A or equivalent and Chemistry 3A or equivalent, each with a grade "C" or better. Completion within the last five years recommended. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Classification, morphology, identification, physiology, and genetics, host 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 125 and 126 or English as a Second Language 67 and 68 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, (Repeats = 2)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Current topics of biological importance and concern outside the regular biology curriculum or topics that will be covered in greater depth than in a regularly offered course. Presented by biology faculty. (A, CSU)

261 INTERNET AND COMPUTER SKILLS LABORATORY

.2-1 unit, 3-6 lab hours, (16 weeks), (Pass/No Pass),

(Repeats = 3)

PREREQUISITE: None.

Supervised use of microcomputer and the Internet. Reinforcement of concepts from classroom studies and development of problem solving abilities on an independent basis. Units based on hours worked in lab:

- (a) .2 units for minimum of 11 hours;
- (b) .4 units for minimum of 22 hours;
- (c) .6 units for minimum of 33 hours;
- (d) .8 units for minimum of 44 hours;
- (e) 1 unit for minimum of 54 hours.

BODY AND FENDER

SEE AUTOMOTIVE COLLISION REPAIR TECHNOLOGY

BOTANY SEE BIOLOGY

BUILDING SAFETY AND CODE ADMINISTRATION (BCSA)

10 BUILDING CODES

3 units, 3 lecture hours, (Repeats = 3), (See also Architecture 31)

PREREQUISITE: None.

International building codes and local building zoning ordinances. (A, CSU)

12 PLANS EXAMINING

3 units, 3 lecture hours, (Repeats = 3)

ADVISORY: Building Safety and Code Administration 10 recommended.

International residential codes and local building zoning ordinances for single family housing and light commercial construction. (A, CSU)

14 BUILDING INSPECTION

3 units, 3 lecture hours, (Repeats = 3)

ADVISORY: Building Safety and Code Administration 10 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)

15 PLUMBING CODE AND INSPECTION

3 units, 2 lecture hours, 4 lab hours, (Repeats = 3) (See also Construction 56)

ADVISORY: Construction 50A and eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to residential plumbing: lay out and installation of a residential plumbing system. Familiarization with uniform plumbing code, construction and inspection, to prepare for I.A.P.M.O. and/or I.C.C. certification. (A, CSU)

16 MECHANICAL CODE AND INSPECTION

3 units, 3 lecture hours, (Repeats = 3)

PREREQUISITE: None.

Familiarization with uniform mechanical code, construction supervision, and inspection in preparation for I.A.P.M.O. and/or I.C.C. certification. (A, CSU)

17 NATIONAL ELECTRICAL CODE PART 1

3 units, 3 lecture hours, (Repeats = 3), (See also Electrical Systems Technology 96A)

PREREQUISITE: None.

Application of all rules for engineering, designing, installing, maintaining, and inspecting electrical systems. Designed for newcomers and professionals seeking preparation for obtaining additional certifications or further knowledge. Branch circuits, electrical services, overcurrent protection and grounding Part I. (A, CSU)

18 CALIFORNIA DISABLED ACCESS REGULATIONS

3 units, 3 lecture hours, (Repeats = 3)

PREREQUISITE: None.

Familiarization with disabled access codes in California Code of Regulations, Title 24, Part 2, Federal Americans with Disabilities Act of 1990 and Federal Fair Housing Act Amendments of 1988. (A, CSU)

20 ADVANCED BUILDING CODE

3 units, 3 lecture hours, (Repeats = 3)

ADVISORY: Building Safety and Code Administration 10 recommended.

International building codes and local building zoning ordinances for light commercial buildings and industrial buildings. (A, CSU)

22 ADVANCED PLANS EXAMINING

3 units, 3 lecture hours, (Repeats = 3)

COREQUISITE: Building Safety and Code Administration 20. ADVISORY: Building Safety and Code Administration 12 recommended.

The application of uniform building codes, zoning ordinances, energy conservation and state handicap requirements to commercial and industrial construction. To prepare for I.C.C. certification. (A, CSU)

24 ADVANCED BUILDING INSPECTION

3 units, 3 lecture hours, (Repeats = 3)

ADVISORY: Building Safety and Code Administration 10 and 14 recommended.

Advanced Building Inspection based on the International Building Code and local zoning ordinances for light-commercial construction. (A, CSU)

27 NATIONAL ELECTRICAL CODE PART 2

3 units, 3 lecture hours, (Repeats = 3), (See also Electrical Systems Technology 96B)

PREREQUISITE: None.

Application of the rules for engineering, designing, installing, maintaining and inspecting electrical systems. 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)

37 NATIONAL ELECTRICAL CODE PART 3

3 units, 3 lecture hours, (Repeats = 3), (See also Electrical Systems Technology 96C)

PREREQUISITE: None.

Application of the rules for engineering, designing, installing, maintaining and inspecting electrical systems. 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)

47 NATIONAL ELECTRICAL CODE-ELECTRICAL SAFETY

3 units, 3 lecture hours, (Repeats = 3), (See also Electrical Systems Technology 96D)

PREREQUISITE: None.

Fundamentals of electrical safety as required by NFPA Document 70E. (A, CSU)

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 125 and 126 or English as a Second Language 67 and 68 recommended. Business & Technology 1 or knowledge of proper business letter format and ability to type 25 words per minute recommended.

Professional workplace communication including written, oral, and presentation fundamentals with emphasis on organization, correctness, completeness, conciseness, and tone. (A, CSU)

8 BUSINESS PROTOCOL AND ETIQUETTE

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Dress and attire, office etiquette, disciplining employees, cafeteria and restaurant courtesies, business greetings and introductions (including handshakes), business etiquette in correspondence, ethics, tattoos and body piercing, and international etiquette. (A, CSU)

10 INTRODUCTION TO BUSINESS

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

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, organized labor practices; marketing; organizational communication; technology; entrepreneurship; legal, accounting, financial practices; and therefore affect a business' ability to achieve its organizational goals in the U.S. economic system. (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 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, organized labor practices; marketing; organizational communication; technology; entrepreneurship; legal, accounting, 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. (A, CSU, UC)

11 INTRODUCTION TO HOSPITALITY MANAGEMENT

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

A comprehensive tour of the fascinating and dynamic hospitality industry from a marketing and management perspective: travel and tourism, lodging, foodservice, meetings, conventions and expositions, leisure and recreation. (A, CSU)

13 MANAGING QUALITY ORGANIZATIONS — AN INTRODUCTION

3 units, 3 lecture hours

ADVISORY: Business Administration 10 and eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Provides a systematic approach to constant improvement throughout an organization. An introduction to the themes, teams, and tools and techniques of continuous quality improvement. Emphasis on the quality systems approach to customer focus, continuous improvement, and employee involvement. (A, CSU)

14 MANAGING QUALITY ORGANIZATIONS — THE TEAMS

3 units, 3 lecture hours

ADVISORY: Business Administration 13 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Develop skills in team building, group problem solving, and facilitating. Study techniques utilized by creative organizations that empower employees to meet the quality challenge. Emphasis is on team development and group dynamics. (A, CSU)

18 BUSINESS AND THE LEGAL ENVIRONMENT

4 units, 4 lecture hours, (Formerly Business Administration 18A)

ADVISORY: Business Administration 10 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Law and the legal system: administrative, tort, criminal, contracts, agency, labor and employment, and international business law. Case studies utilized. (A, CSU, UC)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL 1-8 units, (Repeats = 2)

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, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

20 LAW AND THE LEGAL SYSTEM

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

21 BUSINESS LAW

3 units, 3 lecture hours, (Formerly Business Administration 18B)

PREREQUISITE: Business Administration 18. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Prepares prospective owners, managers, and consumers to cope with legal business decisions regarding negotiable instruments, personal property, bailments, and sales. Case studies utilized. (A, CSU, UC)

22 CONSUMER RIGHTS

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

What every consumer should know about his/her legal rights and remedies regarding routine daily personal and business transactions/events. Specific topics include consumer warranties, automobile accidents, credit card laws, consumer credit reports, residential leases, unlawful detainer, driver's license rights and responsibilities, employment and labor laws, small claims court procedures, repossessions of personal property, buying and leasing of automobiles, Internet shopping and mail order. (A, CSU)

25 INTERNATIONAL BUSINESS — AN INTRODUCTION

3 units, 3 lecture hours

ADVISORY: Business Administration 10 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

A study of the theory and practice of global business. Within the context of a multinational business a study of the functional areas of production, marketing, finance, human resource management, accounting, technology, legal issues and the impact of culture on the business practices. (A, CSU)

27 COLLEGIATE ENTREPRENEURS ORGANIZATION (CEO)/ STUDENTS IN FREE ENTERPRISE (SIFE)

1-3 units: 1 unit, 1 lecture hour, 1 lab hour; 2 units, 1 lecture hour, 3 lab hours; 3 units, 1 lecture hour, 6 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Business leadership training, experience, knowledge and practical experience in entrepreneurship and business using the student organizations Students in Free Enterprise and/or Collegiate Entrepreneurs Organization which are affiliated with the international organizations of the same name. Students in Free Enterprise, Inc. and Collegiate Entrepreneurs Organization participate in intercollegiate competitions, events and conferences to acquire knowledge and skills regarding teaching, mentoring, service, leadership, organization, networking, communication, presentation skills, business management skills and entrepreneurial skills as they relate to community economic development. Students manage and participate in student organized fund raising events and student run business ventures. CEO students attend the national CEO annual conference to advance the knowledge and skills required to become successful student entrepreneurs. (A, CSU)

28 E-LAW AND ETHICS

3 units, 3 lecture hours

ADVISORY: Computer Information Technology 15 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An introduction to the legal and ethical issues involving technology and the use of the Internet. (A, CSU)

30 PERSONAL FINANCE

4 units, 4 lecture hours

ADVISORY: Business Administration 10 and eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Examines the integration of personal financial management with physiological and psychological well-being and 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)

31 HUMAN RESOURCE MANAGEMENT

4 units, 4 lecture hours

ADVISORY: Business Administration 10 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Examines major functions of human resource management including planning, recruitment, selection, training and development, evaluation, compensation, labor relations, and motivation. (A, CSU)

32 LABOR RELATIONS

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

History and present status of the labor movement. (A, CSU)

33 HUMAN RELATIONS IN THE WORKPLACE

3 units, 3 lecture hours

ADVISORY: Business Administration 10 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 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, interpersonal relations, motivation, leadership, attitude, and group dynamics. (A, CSU)

34 FUNDAMENTALS OF INVESTING

3 units, 3 lecture hours

ADVISORY: Business Administration 10 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Study of basic investment theory and practice including security valuation. Includes strategies for investments in government securities, corporate bonds, stocks, mutual funds and basic derivatives. (A, CSU)

35 FINANCIAL MANAGEMENT FOR ENTREPRENEURS AND SMALL BUSINESS

3 units, 3 lecture hours

ADVISORY: Business Administration 10 and eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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)

37 FRANCHISING

3 units, 3 lecture hours

ADVISORY: Business Administration 51, 18, Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduces prospective franchisees to opportunities and challenges associated with franchising. Topics include the nature of franchising; entering into a franchise agreement; franchisor operations; contracts and legal implications; the association between the franchisor and franchisee; and trends and issues in franchising. (A, CSU)

38 OPERATION OF THE SMALL BUSINESS

3 units, 3 lecture hours

ADVISORY: Business Administration 10 and eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68; and Mathematics 101 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)

50 BUSINESS CONCEPTS

1.5 units, 1.5 lecture hours, (Formerly Business Administration 9)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

220 Business Administration

51 BUSINESS PLANNING AND NEW VENTURE LAUNCH

1.5 units, 1.5 lecture hours, (Repeats = 1)

ADVISORY: Business Administration 50 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Review of resources available to assist entrepreneurs in developing and launching a business including sources of funding. Business plan development. (A, CSU)

52 INTRODUCTION TO ENTREPRENEURSHIP

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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)

55 INTRODUCTION TO LOGISTICS

3 units, 3 lecture hours

ADVISORY: Business Administration 10, and eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

An exploration of contemporary logistics and supply chain management from a managerial perspective. The fundamentals of modern logistics are covered. (A, CSU)

56 INVENTORY CONTROL MANAGEMENT

3 units, 3 lecture hours

ADVISORY: Business Administration 10, and eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

A concise, practical survey of the fundamental principles of production, planning control, and inventory management. (A, CSU)

57 SECURITY AND LOSS PREVENTION MANAGEMENT

1.5 units, 1.5 lecture hours

ADVISORY: Business Administration 10, and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

A comprehensive overview of the interdisciplinary field of security management and loss prevention. Identifies and addresses common security applications and examines the issues encountered within each area. (A, CSU)

58 BUSINESS MORALITY AND ETHICS

1.5 units, 1.5 lecture hours

ADVISORY: Business Administration 10, and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Applied business ethics and its relationship to free markets, marketing, finance, and the law. Topics cover key issues including management's responsibility for accountability, corporate governance, accounting practices, stakeholder relations, and ethical decision. (A, CSU)

BUSINESS & TECHNOLOGY (BT)

1 COMPUTER DOCUMENT PROCESSING I

3 units, 2 lecture hours, 3 lab hours, (Formerly BSS 1A and Business Information Processing 1)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Business & Technology 106 or keyboarding at 20wpm at 96% accuracy on a 3-minute timed writing recommended.

Producing basic correspondence, letters, memos, tables, and reports, using current word processing program. Developing keyboarding speed and accuracy. Fulfills the computer literacy graduation requirement. (A, CSU)

2 COMPUTER DOCUMENT PROCESSING II

3 units, 2 lecture hours, 3 lab hours, (Formerly Business Information Processing 2)

PREREQUISITE: Business & Technology 1 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Producing and formatting advanced 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)

4 TEN-KEY CALCULATION

2 units, 2 lecture hours, 1 lab hour, (Formerly Business General Office 8)

ADVISORY: Eligibility for Mathematics 101 recommended.

The operation of electronic desktop calculators and the application of these calculators to business-oriented problems. The development of an employable ten-key touch skill on the ten-key keyboard. (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 125 and 126 or English as a Second Language 67 and 68 recommended. Business & Technology 1 or knowledge of proper business letter format and ability to type 25 words per minute 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 125 and 126 or English as a Second Language 67 and 68 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)

7 WORDPERFECT I

2 units, 3 lecture hours, 2 lab hours, (9 weeks), (Repeats = 3), (Formerly Business Information Processing 7, Business & Technology 7 and 107)

PREREQUISITE: Business & Technology 106 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Basic features of WordPerfect word processing computer software. (A, CSU)

8 WORDPERFECT II

2 units, 3 lecture hours, 2 lab hours, (9 weeks), (Repeats = 3), (Formerly Business Information Processing 8 and Business & Technology 8 and 108)

PREREQUISITE: Business & Technology 7 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended. Advanced features of WordPerfect word processing computer software. (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 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.
An introduction to integrated software for office application using microcomputers, including the concepts of 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.
Intermediate level topics in integrated software for office applications using microcomputers, including word processing, spreadsheets, graphics, database, and electronic communication, using Microsoft Office. 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 125 and 126 or English as a Second Language 67 and 68 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.
Identifying problems in business correspondence and then rewriting. Constructing effective segments and writing short business letters, memos, and reports that are accurate, complete, and well organized. (A, CSU)
- 14 WINDOWS**
2 units, 3 lecture hours, 2 lab hours, (9 weeks), (Repeats = 1), (Formerly Business Information Processing 14)
ADVISORY: Business & Technology 106 or Business & Technology 1 or equivalent. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Hands-on operation of Microsoft Windows. (A, CSU)
- 18 SPREADSHEET FUNDAMENTALS**
2 units, 3 lecture hours, 1 lab hour, (9 weeks), (See also Computer Information Technology 23), (Formerly Business Information Processing 18)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.
Creating formatting a worksheet, using formulas and functions, and creating graphs, integrating spreadsheets with other programs and the World Wide Web; and creating macros. Additional lab hours in CIT 260 or BT 250 available for students to complete homework assignments. (A, CSU)
- 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL**
1-8 units, (Repeats = 2), (Formerly Secretarial Science 19 and Business General Office 19)
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.
Supervised employment extending the classroom based on occupational learning related to business & technology. Collaborative learning objectives established specific to business & technology. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester, 16 units total. May be repeated for not more than 16 units total. (A, CSU)
- 20 RESUME/INTERVIEW**
1.5 units, 3 lecture hours, (9 weeks), (Formerly Business General Office 59 and 59A)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Development of job-seeking skills for students preparing to enter the workforce. Creating marketable resumes and practicing steps for winning interviews. (A, CSU)
- 21 WORKING RELATIONSHIPS**
1.5 units, 3 lecture hours, (9 weeks), (Formerly Business General Office 59B)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Development of human relations competencies in the world of work for greater on-the-job happiness, productivity, and career success. (A, CSU)
- 23 JOB SEARCH AND WORKPLACE SKILLS**
3 units, 3 lecture hours
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU)
- 24 BEGINNING EXCEL**
1 unit, 1 lecture hour, 2 lab hours, (9 weeks), (See also Computer Information Technology 31), (Formerly Business Information Processing 24)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.
Creating a worksheet, formatting the worksheet, using formulas and functions, and creating graphs. Additional lab hours in CIT 260 and BT 250 available for students to complete homework assignments. (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 12 or 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)

222 Business & Technology

- 26 DATABASE FUNDAMENTALS**
2 units, 3 lecture hour, 1 lab hour, (9 weeks), (See also Computer Information Technology 26), (Formerly Business Information Processing 26)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Creating database files, entering data, modifying database file structure, designing queries, reports and forms. (A, CSU)
- 27 MICROSOFT OUTLOOK**
1 unit, 1 lecture hour, 2 lab hours, (9 weeks), (Repeats = 3)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Using the Microsoft Outlook computer program to manage e-mail, appointments, contacts, and tasks; and to make notes and journal entries. (A, CSU)
- 28 MICROSOFT WORD I**
2 units, 1.5 lecture hours, 1 lab hour, (Formerly Business Information Processing 28)
ADVISORY: Business & Technology 106 or equivalent. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Basic features of MS Word. Designed to equip students with the skills to prepare personal correspondence and reports. Fulfills the computer literacy graduation requirement. (A, CSU)
- 29 MICROSOFT WORD II**
2 units, 1.5 lecture hours, 1 lab hour, (Formerly Business Information Processing 29)
PREREQUISITE: Business & Technology 28 or Business & Technology 9 or equivalent recommended. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Advanced features of Microsoft Word. Designed for office personnel using Microsoft Word on the job. Fulfills the computer literacy graduation requirement. (A, CSU)
- 30 MACHINE TRANSCRIPTION**
2 units, 1 lecture hour, 2 lab hours, (Formerly Business Information Processing 11)
ADVISORY: Business & Technology 2 or equivalent.
Machine transcription procedures and problems, proofreading, punctuation, and spelling. (A, CSU)
- 33 EMERGING TECHNOLOGIES FOR THE BUSINESS PROFESSIONAL**
3 units, 2 lecture hours, 2 lab hours
ADVISORY: Business & Technology 106. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Project-based course providing dynamic coverage of current information available on emerging technologies for today's workplace environments. Includes researching and applying the latest tools toward office and administrative problem solving. (A, CSU)
- 43 MEDICAL OFFICE VOCABULARY**
1 unit, 1 lecture hour
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Develop the ability to pronounce, spell, define, and use medical terms in a medical office. (A, CSU)
- 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 as a Second Language 67 and 68 recommended.
Development of keyboarding skills by touch using 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 as a Second Language 67 and 68 recommended.
Review for business use the basic mechanics of English grammar, parts of speech, sentence structure, punctuation, and capitalization. (A)
- 115 REFRESHER MATH**
3 units, 3 lecture hours, (Formerly Business General Office 53 and Business & Technology 15)
PREREQUISITE: None.
Review of math fundamentals involving fractions, decimals, percents, and measurements with application problems related to business and technology. (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 as a Second Language 67 and 68 recommended.
A rules approach to spelling; study of homonyms, commonly confused words, word prefixes and suffixes, and some specialized vocabulary. (A)
- 122 TYPING SKILLBUILDING**
.5 unit, 1.5 lab hours, (Pass/No Pass), (Formerly Business Information Processing 51A and Business & Technology 22)
PREREQUISITE: Business & Technology 1 or equivalent.
Techniques and practice for improving keyboard speed and accuracy in order to meet certificate requirements. (A)
- 123 TEN-KEY SKILLBUILDING**
.5 unit, 1.5 lab hours, (Pass/No Pass)
PREREQUISITE: None.
Techniques and practice for improving ten-key speed and accuracy in order to meet degree and certificate requirements. (A)
- 131 APPLIED ACCOUNTING**
4 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 as a Second Language 67 and 68 recommended.
Practical accounting for service and merchandising businesses involving classification of accounts, relationship of assets, liabilities, and owner's equity; posting, accounts receivable, accounts payable, financial reports, the accounting cycle, and payroll. (A)
- 140 LEGAL OFFICE ADMINISTRATION**
3 units, 2 lecture hours, 2 lab hours, (See also Paralegal 156), (Formerly BSS 57A and Business General Office 56 and Business & Technology 40)
ADVISORY: Business & Technology 2 or ability to type 40 words per minute recommended. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Legal vocabulary, ethics, and law office practices and procedures. Preparation of correspondence and client documents. (A)

144 MEDICAL ADMINISTRATIVE ASSISTANT

3 units, 2 lecture hours, 3 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 as a Second Language 67 and 68 recommended. Business & Technology 1 or equivalent.

Procedures in a paramedical facility. Attitudes, behavior, ethics, records, and office duties. (A)

145 MEDICAL TRANSCRIPTION I

2 units, 1 lecture hour, 2 lab hours, (Formerly BSS 60A and Business Information Processing 60 and Business & Technology 45)

PREREQUISITE: Business & Technology 43 or Health Information Technology 10. ADVISORY: Business & Technology 30, Business & Technology 2 or equivalent, and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to medical transcription; preparation of medical case histories, reports, and correspondence. (A)

146 MEDICAL TRANSCRIPTION II

2 units, 1 lecture hour, 2 lab hours, (Formerly BSS 60B and Business Information Processing 61 and Business & Technology 46)

PREREQUISITE: Business & Technology 145 or equivalent. ADVISORY: Business & Technology 2 or equivalent, and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Advanced medical terminology; transcription of advanced medical documents. (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 48 or equivalent work experience, and Business & Technology 1 or equivalent.

Familiarization with computerized account management program to develop confidence and skill necessary to become a successful user of medical management software. (A)

148 MEDICAL INSURANCE FORMS

3 units, 2 lecture hours, 3 lab hours, (Formerly BSS 64 and Business General Office 64 and Business & Technology 48)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended. Business & Technology 1 or equivalent.

Health insurance plans; insurance claims forms used in a medical office, complete with coding. (A)

206 AUTOMATED BUSINESS RECORDS

1 unit, 1 lecture hour, 1 lab hour

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Develop knowledge of record keeping by transferring data from paper accounting forms into a database, entering accounting information (customers, vendors, suppliers, etc.), modifying file structures, designing queries to produce accounting reports, and printing reports, all using the database software.

240 LEGAL ISSUES IN MEDICAL BILLING

1 unit, 1 lecture hour

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Legal and ethical issues pertaining to medical billing. Designed to ensure patient confidentiality through HIPAA compliance and avoid medical fraud and abuse.

250 OFFICE SKILLS LAB

1 unit, 3 lab hours, (Repeats = 3), (16 weeks), (Pass/No Pass), (Open Entry/Open Exit), (Formerly Business General Office 3 and Business & Technology 50)

PREREQUISITE: None.

Supervised use of computers and ten-key calculators. Grade based on hours worked in lab.

251 OFFICE APPLICATION SKILLS LAB

0.2-1 unit, 0.6-3 lab hours, (16 weeks), (Pass/No Pass), (Repeats = 3), (Open Entry/Open Exit)

PREREQUISITE: None.

Supervised use of ten-key calculators, typing software or office computer applications. Reinforcement of concepts from classroom studies and development of problem solving abilities on an independent basis. Grade based on hours worked in lab.

(a) .2 units for minimum of 10 hours, maximum of 12 hours

(b) .4 units for minimum of 19 hours, maximum of 21 hours

(c) .6 units for minimum of 29 hours, maximum of 31 hours

(d) .8 units for minimum of 39 hours, maximum of 44 hours

(e) 1 unit for minimum of 48 hours

270 BUSINESS MATH & TEN KEY

2 units, 2 lecture hours, 1 lab hour, (Formerly Business General Office 70 and Business & Technology 70)

PREREQUISITE: None.

Review of math fundamentals with emphasis on application problems to office occupations. Operation of electronic desktop calculators and the application of these calculators to business-oriented problems. Development of an employable ten-key skill on the ten-key keyboard.

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 as a Second Language 67 and 68 recommended.

Introduction to or review of basic areas of business English: basic sentence structure, punctuation, capitalization, expression of numbers, spelling; also vocabulary developing, proofreading, and editing.

272 OFFICE PROCEDURES

1 unit, 1 lecture hour, (Formerly Business Information Processing 72 and Business & Technology 72)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Telephone techniques and general duties of a receptionist/secretary in a business office.

224 Business & Technology

273 FILING

1 unit, 1 lecture hour, (Formerly Business Information Processing 70 and Business & Technology 73)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to classifying, arranging, and storing of records utilizing a manual system.

274 INTRODUCTION TO MICROSOFT OUTLOOK

1 unit, 1 lecture hour, (Repeats = 3), (Formerly Business & Technology 74)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Using Microsoft Outlook as an integrated task, scheduling, and communications management software program.

277 ACCELERATED EXCEL

2 units, 3 lecture hours, 2 lab hours, (9 weeks), (Formerly Business Information Processing 77 and Business & Technology 77)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Creating a spreadsheet, formatting the spreadsheet, using formulas and functions, printing a spreadsheet, and creating graphs.

280 BASIC OFFICE PROCEDURES

2 units, 2 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Basic office procedures and duties including basic communication skills, proper use of the telephone, handling mail, scheduling appointments, and introduction to filing records utilizing a manual system, arranging, and storing files.

370A OFFICE ASSISTANT APPLICATIONS

5 lecture hours, 10 lab hours, (20 weeks), (300 total hours), (Repeats = 3), (Formerly CTVTC 70, CTCTC 370 and Business & Technology 370)

COREQUISITE: Business & Technology 370B.

Develop and improve skills for those desiring office employment. Emphasis on records management, keyboarding, grammar, 10-key, MS Word, MS Excel, telephone techniques, and computer literacy. Must be taken concurrently with BT 370B.

370B OFFICE ASSISTANT APPLICATIONS

5 lecture hours, 10 lab hours, (20 weeks), (300 total hours), (Repeats = 3)

COREQUISITE: Business & Technology 370A.

Develop and improve skills for those desiring office employment. Emphasis on human relations, career document preparation, resume and interview and professional appearance. Must be taken concurrently with BT 370A.

CARPENTRY SEE CONSTRUCTION

CHEMISTRY (CHEM)

1A GENERAL CHEMISTRY

5 units, 3 lecture hours, 6 lab hours

PREREQUISITE: High school chemistry with laboratory component, or Chemistry 3A or equivalent, and Mathematics 103 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU CHEM 110, TCSU CHEM SEQ A=CHEM 1A+CHEM 1B) (A, CSU-GE, UC, I)

1B GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS

5 units, 3 lecture hours, 6 lab hours

PREREQUISITE: Chemistry 1A. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU CHEM 120, TCSU CHEM SEQ B = 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 125 and 126 or English as a Second Language 67 and 68 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, gas laws, solutions, acid-base theories, oxidation-reduction, equilibrium, nuclear chemistry, and qualitative and quantitative theories and techniques. (TCSU CHEM 130, TCSU CHEM SEQ B = CHEM 3A +CHEM 3B) (A, CSU-GE, UC, I)

3B INTRODUCTORY ORGANIC & BIOLOGICAL CHEMISTRY

3 units, 2 lecture hours, 3 lab hours, (Replaces Chemistry 3)

PREREQUISITE: Chemistry 3A. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU CHEM SEQ B = CHEM 3A + 3B) (A, CSU-GE, UC)

8A ELEMENTARY ORGANIC CHEMISTRY

3 units, 3 lecture hours

PREREQUISITE: Chemistry 1A or 3A. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

28A ORGANIC CHEMISTRY I

3 units, 3 lecture hours

PREREQUISITE: Chemistry 1B. COREQUISITE: Chemistry 29A. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC, I)

28B ORGANIC CHEMISTRY II

3 units, 3 lecture hours

PREREQUISITE: Chemistry 28A. COREQUISITE: Chemistry 29B. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. Multistep synthesis, separation, identification, and reaction mechanisms of representative compounds. Protecting groups in multistep synthesis. (A, CSU-GE, UC, I)

29A ORGANIC CHEMISTRY LABORATORY I

2 units, 6 lab hours

PREREQUISITE: Chemistry 1B. COREQUISITE: Chemistry 28A. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (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 125 and 126 or English as a Second Language 67 and 68 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 GC-MS data. (A, CSU-GE, UC, I)

101P PREPARATION FOR GENERAL CHEMISTRY

3 units, 3 lecture hour

PREREQUISITE: Mathematics 101. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introductory chemistry for students who plan to major in a scientific field. Appropriate for students desiring to prepare themselves for CHEM 1A. Emphasizes chemical nomenclature and techniques of chemical problem solving. Topics covered include: dimensional analysis; conversions between measuring units; mass, mole and

volume calculations; chemical equations; density; heat and temperature; solutions. Students must demonstrate a minimum of 80% competency in dimensional analysis, nomenclature, and mole calculations, as demonstrated on department approved proficiency quizzes, in order to pass. (A)

CHICANO-LATINO STUDIES (CLS)**FORMERLY CULTURAL STUDIES, LARAZA STUDIES****11 INTRODUCTION TO CHICANO-LATINO STUDIES**

3 units, 3 lecture hours, (Formerly Cultural Studies 11)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The Chicano-Mexican American community, culture, and heritage in American society. Using an interdisciplinary approach, the focus is on society and culture; social and cultural change; social and cultural conflict. Examines the roots of Chicano-Mexicano culture and heritage from the pre-Columbian Indian civilizations to the present. (A, CSU-GE, UC, I)

12 MEXICAN AMERICAN HISTORY

3 units, 3 lecture hours, (Formerly Cultural Studies 12)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

A survey of Mexican American and Latino history from the indigenous cultural roots to the present. History and heritage of the Chicano-Latino community. (A, CSU-GE, UC, I)

13 POLITICS AND THE CHICANO-LATINO COMMUNITY

3 units, 3 lecture hours, (Formerly Cultural Studies 13)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.

Sociological examination of the Chicano-Latino in American society: family, religious, educational, economic, and political social institutions. Social problems, social issues, and social change. (A, CSU, UC)

17 BEGINNING MEXICAN FOLKLORICO DANCE

4 units, 3 lecture hours, 2 lab hours, (Repeats = 3), (See also Dance 17), (Formerly Cultural Studies 17)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

History and origin of Mexican dance. Mexican songs and folktales and how they are interpreted through Mexican dance. Dances practiced and performed at the beginning level. (A, CSU-GE, UC)

226 Chicano-Latino Studies

- 18 LATIN JAZZ ENSEMBLE**
2 units, 1 lecture hour, 3 lab hours, (Repeats = 3), (Formerly Cultural Studies 18), (See also Music 48)
ADVISORY: Advanced high school band, orchestra, or jazz ensemble experience or the equivalent performance skills as determined by audition recommended.
Study and performance of Latin-jazz or salsa and Afro-Cuban music. Participation in concerts and jazz festivals required. (A, CSU, UC)
- 20 CHICANO ART**
3 units, 3 lecture hours, (Formerly Cultural Studies 20)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Mexican, Chicano, and Latino art from the historical to the contemporary. Contemporary art forms and their ancestral cultural base. Survey of Mexican, Chicano and Latino artistic expressions. (A, CSU-GE, UC, I)
- 21 CHICANO LITERATURE**
3 units, 3 lecture hours, (Spring), (Formerly Cultural Studies 21)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Survey of Chicano-Latino classic and popular literature. Reading and critical analysis of novels, short stories, poetry, and plays. (A, CSU-GE, UC, I)
- 22 PRE-COLUMBIAN ART**
3 units, 3 lecture hours, (See also Art 60)
ADVISORY: Eligibility for English 1A recommended.
A historical survey of the art of Mesoamerican and Andean ancient cultures. The art and architecture of the Olmec, Toltec, Aztec, Moche, Nazca, Inca, and other ancient civilizations of the new World. (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 125 and 126 or English as a Second Language 67 and 68 recommended.
A sociological analysis of the Mexican American female in contemporary society. Special emphasis on her role in the family, church, education, economics, and politics. (A, CSU, UC)
- 27 ADVANCED MEXICAN FOLKLORIC DANCE**
4 units, 3 lecture hours, 2 lab hours, (Repeats = 3), (See also Dance 27)
PREREQUISITE: Chicano-Latino Studies/Dance 17, or demonstration of comparable skill level to be determined by testing at first class session. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
History and origin of Mexican dance. Mexican songs and folktales, and how they are interpreted through Mexican dance. Dances practiced and performed at the advanced level. (A, CSU-GE, UC)
- 28 ANCIENT MEXICO**
3 units, 3 lecture hours, (Formerly Cultural Studies 28), (See also Anthropology 28)
ADVISORY: Eligibility for English 1A.
A survey of history, geography, socio-political, religious systems, and cultural achievements of Mesoamerican civilizations such as the Olmec, Zapotec, Teotihuacano, Mayan, Toltec, and Aztec/Mexican. (A, CSU, UC)
- 29 HISTORY OF MEXICO, COLONIAL TO CONTEMPORARY PERIOD**
3 units, 3 lecture hours, (Formerly Cultural Studies 29), (See also History 29)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
A social, economic, and political survey of Mexican history from the colonial (1521) to the contemporary period. (A, CSU-GE, UC, I)
- 30 THE MEXICAN AMERICAN FAMILY: SOCIAL AND PSYCHOLOGICAL PERSPECTIVES**
3 units, 3 lecture hours, (Formerly Cultural Studies 30)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Chicano social and psychological perspectives. Analysis of the dynamics of personality development and its relationship with the Chicano and Mexican family. Emphasis on culture, socialization, personality, and mental health. (A, CSU, UC)
- 33 COMMUNITY LEADERSHIP**
3 units, 3 lecture hours
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Personal development, community and civic development, public policy development and analysis, and leadership theory. A working understanding of international, national, state and local issues impacting the political, economic, and social fabric of the Latino community. (A, CSU)

CHILD DEVELOPMENT (CHDEV)

- 1 PRINCIPLES AND PRACTICES OF TEACHING YOUNG CHILDREN**
3 units, 3 lecture hours
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
An examination of the underlying theoretical principles of developmentally appropriate practices applied to programs and environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectual development for all children. Includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics and professional identify. (A, CSU)
- 3 INTRODUCTION TO CURRICULLUM**
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Verification of freedom from tuberculosis. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68.
An overview of knowledge and skills related to providing appropriate curriculum and environments for young children from birth through age 6. Examination of a teacher's role in supporting learning and development in young children with an emphasis on the essential role of play. Study of content areas including, but not limited to: Language and literacy, social and emotional learning, sensory learning, art and creativity, math and science. The "To Be Arranged" hours may include observation of and participation in planning learning environments and curriculum. (A, CSU)
- 5 PARENT EDUCATION**
3 units, 3 lecture hours
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Skills needed for effective parenting; the developmental needs of children; effective communication skills; effective use of discipline; and effective control of the environment. (A, CSU)

6 HEALTH, SAFETY AND NUTRITION IN EARLY CHILDHOOD EDUCATION

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU)

8A SCHOOL AGE CHILD: GROWTH AND DEVELOPMENT

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Growth and development from age six to fourteen years. School age child care settings; issues facing school-age children in contemporary society; strategies for working effectively with children in out-of-school care settings. (A, CSU)

8B PROGRAMS FOR SCHOOL-AGE CHILD CARE

3 units, 3 lecture hours, (Formerly Child Development 8)

PREREQUISITE: Child Development 8A. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Quality child care and program options for school age child care. Activities, materials, and interaction appropriate for children ages 5 to 14. Program planning, curriculum and environmental design. (A, CSU)

9 MUSIC, MOVEMENT, AND DRAMA FOR YOUNG CHILDREN

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Basic skills, methods and theory in music, movement and drama for the young child. Emphasis on integrating music, movement and drama into the early childhood curriculum and developing a repertoire of music, movement and drama materials. (A, CSU)

10 SCIENCE AND MATH FOR YOUNG CHILDREN

3 units, 3 lecture hours, (Formerly Child Development 27)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Basic skills, methods and theory in science, math and cooking for the young child. Emphasis on integrating science, math and cooking 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 125 and 126 or English as a Second Language 67 and 68 recommended.

An overview of issues surrounding young children with disabilities and special needs. The study of current trends, theories and legislation affecting early intervention, teaching and inclusion will be explored. Includes the study of change within the family; community resources; teaching strategies for including children with disabilities. (A, CSU)

12 CHILD ABUSE

3 units, 3 lecture hours, (See also Psychology 12)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 CARE AND EDUCATION PROGRAMS

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Examination of the development of social identities in diverse societies including theoretical and practical implications of oppression and privilege as they apply to young children, families, program, classroom and teaching. Various classroom strategies will be explored emphasizing culturally and linguistically appropriate anti-bias approaches supporting all children in becoming competent members of a diverse society. Course includes self examination and a reflection on the issues related to social identity, stereotypes and bias, social and educational access, media and schooling. (A, CSU)

16 INTRODUCTION TO EARLY INTERVENTION

3 units, 2 lecture hours, 3 lab hours

PREREQUISITE: Child Development/Psychology 39, verification of freedom from tuberculosis. ADVISORY: Child Development 17A, 11 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

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 DEVELOPMENT – BIRTH TO AGE THREE

3 units, 2 lecture hours, 3 lab hours, (Formerly Child Development 7 and 38)

PREREQUISITE: Child Development 39. Verification of freedom from tuberculosis. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Infant development from birth to three years. Meeting individual needs in family and group care settings. Role of the caregiver, the effects of the environment, routines as infant/toddler curriculum. Concepts of primary care, continuity of care, early intervention, and group size in the context of quality care. Relating to families and recognizing cultural differences/similarities. 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 TODDLER DEVELOPMENT AND CARE

3 units, 3 lecture hours, (Formerly Child Development 7A)

PREREQUISITE: Child Development 17A. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Infant development, caregiving and early intervention as it relates to program design. Exploration of brain development and discoveries in infancy. Issues related to working with families effectively and cultural sensitivity in the early care and education setting. (A, CSU)

228 Child Development

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

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, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

20 OBSERVATION AND ASSESSMENT

3 units, 3 lecture hours

PREREQUISITE: Child Development 1, 3, and 39. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Appropriate use of assessment, observation, and recording strategies; documentation of development, growth, play and learning; partnerships with families and professionals; use of rating systems, portfolios, and multiple assessment tools. (A, CSU)

30 CHILD, FAMILY, AND COMMUNITY

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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, showing the importance of respectful, reciprocal relationships that support and empower families. (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 or Child Development 150. Verification of freedom from tuberculosis. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (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. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Supervised experience as a teacher in an early childhood education program: developing environments for learning, child observation and assessment, documentation of children's work, behavior guidance, group management, collaborative teaching, building relationships with families, and effective preparation and implementation of curriculum using the project approach. 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 125 and 126 or English as a Second Language 67 and 68 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. (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 125 and 126 or English as a Second Language 67 and 68 recommended. Verification of freedom from tuberculosis is recommended.

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. (A, CSU-GE, UC, I)

40A ADMINISTRATION OF EARLY CHILDHOOD PROGRAMS

3 units, 3 lecture hours, (Formerly Child Development 36A)

ADVISORY: Eligibility for English 125 and 125 or English as a Second Language 67 and 68 recommended. Completion of 12 units in Child Development (recommended Child Development 39 or 150, Child Development 30, 3, 37A) plus one year teaching experience in an early care and education program recommended.

Principles and practices in organization, management and supervision of various kinds of early care and childhood programs. Program planning, organization, budgeting, personnel policy, record-keeping, legal requirements and relationships with community, parents and regulatory agencies. (A, CSU)

40B ADVANCED ADMINISTRATION OF EARLY CHILDHOOD PROGRAMS

3 units, 3 lecture hours, (Formerly Child Development 36B)

PREREQUISITE: Child Development 40A. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Procedures for program development. Preparation of staff schedules; orientation and in-service programs; staff handbooks; parent handbooks and parent in-services; marketing strategies; business plans; financial reports; evaluation and accreditation. (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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.

Selection and presentation of literature for the child from infancy to eight years. Storytelling, emergent literacy and awareness regarding multicultural and nonsexist perspectives. Emphasis on supporting the child's emotional, social and intellectual growth through experience with books. (A, CSU)

45 ADULT SUPERVISION IN EARLY CHILDHOOD EDUCATION CLASSROOMS

2 units, 2 lecture hours

PREREQUISITE: Child Development 1, 3, 30, and 39, and one year of teaching experience in an early care and education setting.

Methods and principles of supervising student teachers and other adults in early care and education classrooms. Emphasis on the role of experienced classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of culturally diverse children, parents, and other staff. (A, CSU)

46 COMPUTERS IN EARLY CHILDHOOD EDUCATION

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to the basic technology and applications of the computer in Early Childhood Education. Includes computer-aided instruction (CAI) for program management in areas of record keeping, inventory, newsletters, state reports, mailing lists, and budgeting. CAI will allow students to explore applications for children to enhance learning, creativity, problem-solving, art concepts, literature, and language. Fulfills the computer literacy graduation requirement for Child Development majors only. (A, CSU)

47 EMERGENT LITERACY

3 units, 3 lecture hours, (Formerly Child Development 47A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Research-based principles and practices for providing children birth through age five 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 125 and 126 or English as a Second Language 67 and 68 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; needs of children at risk, in trauma and/or deprivation. Particular 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 125 and 126 or English as a Second Language 67 and 68 recommended.

Basic information on 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)

150 BASIC CHILD GROWTH AND DEVELOPMENT

3 units, 3 lecture hours, (Formerly Child Development 50)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Principles of child growth and development; stages of physical, emotional, social and mental growth from conception through eleven years. (Not open to students with credit in Child Development/Psychology 39.) (A)

161 INTRODUCTION TO FOSTER CARE

1 unit, 1 lecture hour, (Formerly Child Development 61 and 261)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The process of how children become involved in the Child Welfare System. Parenting skills specific to the needs of foster children. Agency resources of and right of foster parents, biological parents and the foster child. The process of foster home licensing. (A)

162 INDEPENDENT LIVING SKILLS

1 unit, 1 lecture hour, (Formerly Child Development 62 and 262)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Child development, parent-child communication, choices and consequences and skill acquisition necessary for successful independent living by teens preparing to leave foster care and the foster parents who care for adolescents. (A)

165A TOPICS IN CHILD DEVELOPMENT: CURRICULUM

1-3 units, 1-3 lecture hours, (Repeats = 3), (Formerly Child Development 65A)

PREREQUISITE: None.

Examination of new topics and trends in curriculum for early childhood programs. (A)

165B TOPICS IN CHILD DEVELOPMENT: FAMILY AND COMMUNITY

1-3 units, 1-3 lecture hours, (Repeats = 3), (Formerly Child Development 65B)

PREREQUISITE: None.

Examination of contemporary trends and issues in family life that affect home-school-community relationships. (A)

165C TOPICS IN CHILD DEVELOPMENT PROGRAM ADMINISTRATION

1-3 units, 1-3 lecture hours, (Repeats = 3), (Formerly Child Development 65C)

PREREQUISITE: None.

Current issues in early childhood program administration and supervision. (A)

CHINESE SEE FOREIGN LANGUAGES

CISCO SEE ELECTRICAL SYSTEMS TECHNOLOGY (EST)

COMMUNICATION (COMM) FORMERLY SPEECH

1 INTRODUCTION TO PUBLIC SPEAKING

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU COMS 110) (A, CSU-GE, UC, I)

230 Communication

2 INTERPERSONAL COMMUNICATION

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU COMS 130) (A, CSU-GE)

4 PERSUASION

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Theories and practice of influence, advocacy, and reasoning from the perspective of both persuader and audience. Practice preparing effective, ethical persuasive appeals. (A, CSU-GE, UC, I)

8 GROUP COMMUNICATION

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU COMS 140) (A, CSU-GE, UC, I)

12 FUNDAMENTALS OF INTERPRETATION

3 units, 3 lecture hours, (See also Theatre Arts 12)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An introduction to orally interpreting works of literary art in their intellectual, emotional, and aesthetic entirety. Class readings include poetry, prose, and drama. (A, CSU-GE, UC)

20 COMMUNITY INVOLVEMENT

1-3 units, 1 lecture hour, 3-6 lab hours,
(Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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

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. (TCSU COMS 120) (A, CSU-GE, UC, I)

26 INTERCOLLEGIATE FORENSICS LABORATORY

1-3 units: 1 unit, 1 lecture hour, 1 lab hour; 2 units, 1
lecture hour, 3 lab hours; 3 units, 1 lecture hour, 6 lab hours,
(Repeats = 3)

PREREQUISITE: None.

Competitive and practical experience in debate and public speaking. In addition to the class or activity hour each week on campus, students must either attend intercollegiate tournaments for a specified number of weekends or participate in on-campus intramural contests. (A, CSU)

COMPUTER AIDED DRAFTING AND DESIGN (CADD) SEE ALSO DRAFTING

14 2D CAD I

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly
Drafting 42 and 32)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.

Creating and modifying digital drawings for the architectural, engineering, mechanical and other related industries. (A, CSU)

16 3D SOLID MODELING I

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly
Drafting 20 and Computer Aided Drafting and Design 26 and
34)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.

CAD generated 2D sketches, 3D solid models, assemblies and detailed drawings for the mechanical industry. (A, CSU)

22 MECHANICAL DRAWING I

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Computer Aided Drafting and Design 14 and Drafting 12.

Advanced mechanical drawings covering orthographic projections, sections, auxiliaries and pictorials. Precision measurement, tolerances, and design will also be explored. (A, CSU)

24 2D CAD II

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Computer Aided Drafting and Design 14.

Advanced 2D CAD topics for the computer aided draftsman in the disciplines of architecture, engineering, mechanical and other related industries. (A, CSU)

26A 3D SOLID MODELING II

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Computer Aided Drafting and Design 16.

3D sketching, advanced drawings, legacy data import, design table configurations and subassemblies using 3D solid modeling techniques for the mechanical industry. (A, CSU)

28 RAPID PROTOTYPING I

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Computer Aided Drafting and Design 16.

Realistic rapid prototyping from digital solid models using processes such as 3D printing, silicone molds, casting resins, vacuum forming, laser cutting and engraving and the application of finishes. (A, CSU)

32 MECHANICAL DRAWING II

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly
Drafting 22 and Computer Aided Drafting and Design 24)

PREREQUISITE: Computer Aided Drafting and Design 16 and 22.

Mechanical drawings covering sheet metal, fasteners, thread, springs, gears, cams, and welding. 2D and 3D CAD are used. (A, CSU)

36A 3D SOLID MODELING III

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Computer Aided Drafting and Design 26A and 28.

Animation, rendering, simulation, analysis and reverse engineering applied to solid model parts and assemblies, for the mechanical industry. Rapid prototype project. (A, CSU)

40 CIVIL DRAFTING APPLICATIONS

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Drafting 30)

PREREQUISITE: Drafting 160 and Computer Aided Drafting and Design 14.

Traverse calculation, preparation of plat maps, record of surveys, and other contour plotting. (A, CSU)

42 MECHANICAL DRAWING III

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Computer Aided Drafting and Design 32 and 36A.

Project design using various CAD systems. Portfolio creation including presentation models. (A, CSU)

COMPUTER AIDED MANUFACTURING (CAM)

1A CAM & CABINetry OPERATION I

13 units, 10 lecture hours, 10 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Application of Computer Aided Design (CAD) Software and Computer Aided Manufacturing (CAM) Software and Computer Numerical Control (CNC) Router and HAAS Machines to design and manufacture product for plastic, aluminum, and wood fabrication. Specialized activities related to the field of CNC cabinetmaking: 32-mm system, edge banding, and sign design. (A, CSU)

1B MILL AND LATHE OPERATION II

13 units, 10 lecture hours, 10 lab hours, (Repeats = 3)

PREREQUISITE: Computer Aided Manufacturing 1A.

3D Solid Design using MasterCAM Mill and Lathe software for machine tool programming, multi operation set-up, advance set up on a HAAS Mill/Lathe, FAGOR 5-AXIS and Akira Seiki Mill/Lathe CNC machines and shop safety. (A, CSU)

10 CNC MILL PROGRAMMING & OPERATION I

7 units, 5 lecture hours, 5 lab hours, (Repeats = 3), (Formerly Drafting and Computer Aided Drafting and Design 44)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Application of Computer Aided Design (CAD) Software and Computer Aided Manufacturing (CAM) Software and Computer Numerical Control (CNC) Router Machines to design and manufacture product for plastic and wood fabrication. Specialized activities related to the field of CNC cabinetmaking: 32-mm system, edge banding, and sign design. (A, CSU)

20 CNC MILL PROGRAMMING & OPERATION II

7 units, 5 lecture hours, 5 lab hours, (Repeats = 3)

PREREQUISITE: Computer Aided Manufacturing 10.

3D wire-frame and 3D Solid designing in MasterCAM Software for Mill and Lathe machine tool programming; operation and set-up of Computer Numerical Control (CNC) HAAS Mill/Lathe, Akira Seiki Mill/Lathe machines and shop safety. (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 125 and 126 or English as a Second Language 67 and 68 recommended.

Basic introduction to computers and their usage. Basic principles of hardware and software; shopping for a personal computer; social issues associated with the role of computers in the world today; and an introduction to word processing, spreadsheets, and Internet principles and usage. Fulfills the computer literacy graduation requirement. (A, CSU, UC)

15 COMPUTER CONCEPTS

3 units, 3 lecture hours, 1 lab hour, (Formerly Computer Information Systems 15 and Information Systems 15)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 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. (TCSU IS 120) (A, CSU, UC)

17 WINDOWS VISTA BASICS

2 units, 3 lecture hours, 1 lab hour, (9 weeks), (Repeats = 1), (Formerly Computer Information Systems 14 and Information Systems 14)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Basic introduction to Microsoft Windows. Introductory hands-on operations for students who want to learn how to manage files, run applications, customize desktops, browse the internet, use email, and work with pictures and music. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2), (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, 16 units total. May be repeated for not more than 16 units total. (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 12 or 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)

232 Computer Information Technology

- 21 ADVANCED MICROSOFT OFFICE**
3 units, 3 lecture hours, 1 lab hour, (Formerly Information Systems 46)
PREREQUISITE: Computer Information Technology 20. ADVISORY: Computer Information Technology 60 recommended.
An advanced course in integrating the major software components of Microsoft Office Suite: Word, Excel, Access, PowerPoint, and Outlook. Includes the use of Visual Basic for Applications (VBA) to create macros. Covers advanced topics such as style sheets, 3-D workbooks, file linking, multiple table queries, macros, and prototyping. (A, CSU)
- 23 SPREADSHEET FUNDAMENTALS**
2 units, 3 lecture hours, 1 lab hour, (9 weeks), (See also Business & Technology 18), (Formerly Information Systems 5 and 18)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 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. Additional lab hours in CIT 260 or BT 250 available for students to complete homework assignments. (A, CSU)
- 24 ADVANCED SPREADSHEETS**
2 units, 3 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, 3 lecture hours, 1 lab hour, (9 weeks), (See also Business & Technology 26), (Formerly Information Systems 6 and 26)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Creating database files, entering data, modifying database file structure, designing queries, reports and forms. (A, CSU)
- 27 ADVANCED DATABASE**
2 units, 3 lecture hours, 1 lab hour, (9 weeks), (Formerly Computer Information Systems 40 and Information Systems 27)
PREREQUISITE: Computer Information Technology 26 or Business & Technology 26.
Using a database program to perform advanced queries, automate tasks using macros, customize toolbars and menus, using Visual BASIC for applications to customize Access. (A, CSU)
- 28 CLIENT/SERVER DATABASES**
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: None.
Fundamentals of relational database systems. Learn how to design, program and administer a client/server database. (A, CSU)
- 29 POWERPOINT**
1 unit, 1 lecture hour, 2 lab hours, (9 weeks), (Formerly Information Systems 32)
PREREQUISITE: None.
Using PowerPoint to create presentations. Topics include designing presentations, creating presentations, adding effects, running a presentation, and creating support documents for the presentation. (A, CSU)
- 31 BEGINNING EXCEL**
1 unit, 1 lecture hour, 2 lab hours, (9 weeks), (See also Business & Technology 24), (Formerly Information Systems 24 and 74)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.
Creating a worksheet, formatting the worksheet, using formulas and functions, and creating graphs. Additional lab hours in CIT 260 and BT 250 available for students to complete homework assignments. (A, CSU)
- 40 COMPUTER OPERATING SYSTEMS**
4 units, 3 lecture hours, 2 lab hours, (Repeats = 1), (Formerly Information Systems 22)
PREREQUISITE: Computer Information Technology 12 or 15.
Principles of computer operating systems. A survey and comparison of the graphical user interface along with the command line interface using various operating systems such as Microsoft Windows and Linux, etc. (A, CSU)
- 45 DATA COMMUNICATIONS**
3 units, 3 lecture hours, 1 lab hour, (Repeats = 1), (Formerly Computer Information Systems and Information Systems 17)
PREREQUISITE: Computer Information Technology 15.
Essential elements that make up data communications including transmission media, local area networks, wide area networks, network interconnections, network management, security, network applications, and related technologies. (A, CSU)
- 46 NETWORK+ PREPARATION**
2 units, 3 lecture hours, 1 lab hour, (9 weeks), (Repeats = 1), (Formerly Information Systems 231 and 237)
PREREQUISITE: Computer Information Technology 15. COREQUISITE: Computer Information Technology 45.
Networking communications as they relate to analyzing and evaluating accountability of new technology, network engineering and documentation, telephone systems and telecommunications, synchronous optical networks, training, ISDN lines, and satellite communications. (A, CSU)
- 48 A+ AND SERVER+ SYSTEMS FUNDAMENTALS**
3 units, 3 lecture hours, 1 lab hour, (Repeats = 1), (Formerly Information Systems 238 and Computer Information Technology 238)
PREREQUISITE: Computer Information Technology 15.
Skills for personal computer software and hardware support; server software and hardware support: installation, configuration, diagnosing and troubleshooting system software, basic networking, memory management, server principles and configuration and customer satisfaction. (A, CSU)
- 49 INET+ PREPARATION**
3 units, 3 lecture hours, 1 lab hour, (Repeats = 1), (Formerly Information Systems 239 and Computer Information Technology 239)
PREREQUISITE: Computer Information Technology 15.
Internet basics, Internet clients, Web development, networking, Internet security, and business concepts. (A, CSU)

50 FUNDAMENTALS OF NETWORKING

4 units, 4 lecture hours, 1 lab hour, (Repeats = 2), (Formerly Information Systems 28, 30 and 30A.)

PREREQUISITE: Computer Information Technology 45.

Implementing and supporting a Microsoft Windows network infrastructure.

For product support professionals who will be responsible for installing, configuring and supporting a Microsoft Windows network infrastructure. Prepare students for the MCSE exam. Fundamentals of UNIX using Solaris. (A, CSU)

51 MCSE NETWORK INFRASTRUCTURE

4 units, 4 lecture hours, 1 lab hour, (Repeats = 2), (Formerly Information Systems 30B)

PREREQUISITE: Computer Information Technology 45. ADVISORY: Computer Information Technology 50 recommended.

Implementing and supporting a Microsoft Windows network infrastructure.

For product support professionals who will be responsible for installing, configuring and supporting a Microsoft Windows network infrastructure. Prepare students for the MCSE exam. (A, CSU)

52 MCSE DIRECTORY SERVICES

4 units, 4 lecture hours, 1 lab hour, (Repeats = 2), (Formerly Information Systems 30C)

PREREQUISITE: Computer Information Technology 45. ADVISORY: Computer Information Technology 50 recommended.

Install, configure, and administer "Active Directory" directory services, which is the directory service for Microsoft Windows. Implementing and configuring "Group Policy" to centrally manage large numbers of users and computers. Prepare students for the MCSE exam. (A, CSU)

53 MCSE DIRECTORY INFRASTRUCTURE

2 units, 4 lecture hours, 1 lab hour, (9 weeks), (Repeats = 2), (Formerly Information Systems 30D)

PREREQUISITE: Computer Information Technology 45. ADVISORY: Computer Information Technology 50 recommended.

Design a Microsoft Windows directory services infrastructure in an enterprise environment. Identify the business and administrative needs of an organization that impact the design of Active Directory. Key decision points for naming, delegation of authority, domain design, and site topology design. Prepare students for the MCSE exam. (A, CSU)

54 MCSE NETWORK SERVICES

2 units, 4 lecture hours, 1 lab hour, (9 weeks), (Repeats = 2), (Formerly Information Systems 30E)

PREREQUISITE: Computer Information Technology 45. ADVISORY: Computer Information Technology 50 recommended.

Design a Microsoft Windows networking services infrastructure that supports the required network applications. Basic functionality, security, availability, and performance features of each networking service as aspects of a networking services design. Prepares students for the MCSE exam. (A, CSU)

55 MCSE NETWORK SECURITY

4 units, 4 lecture hours, 1 lab hour, (Repeats = 2), (Formerly Information Systems 30F)

PREREQUISITE: Computer Information Technology 45. ADVISORY: Computer Information Technology 50 recommended.

Design a security framework for small, medium, and enterprise networks by using Microsoft Windows technologies. Prepare students for the MCSE exam. (A, CSU)

56 MCSE ISA

4 units, 4 lecture hours, 1 lab hour, (Repeats = 2), (Formerly Information Systems 30G)

PREREQUISITE: Computer Information Technology 45. ADVISORY: Computer Information Technology 50 recommended.

Implement, administer, and support a Microsoft Internet Acceleration Server (IAS). Install, configure and support a Microsoft ISA Server. Prepare students for the MCSE exam. (A, CSU)

57 WIRELESS NETWORKING FOR HOME AND OFFICE

3 units, 3 lecture hours, 1 lab hour

PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

Basic understanding of wireless networking. Plan, design, and configure wireless networks and equipment. Basic security for wireless networks. Prepare for the Certified Wireless Network Administrator (CWNA) exam. (A, CSU)

58A PRINCIPLES OF INFORMATION SECURITY

3 units, 3 lecture hours, 1 lab hour

PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

Basic understanding information security in a business environment. Prepares students to become CISSP (certified information systems security professional) certified. Introduces the Sec SDLC (Security Systems development life cycle) and uses the cycle to build a security system. Examines both managerial and technical components of security. Lay a foundation from which managerial strategies can be formulated and technical solutions selected. (A, CSU)

58B OPERATING SYSTEM SECURITY

3 units, 3 lecture hours, 1 lab hour

PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

A full range of security concepts and techniques used in the business environment. Prepares students to become Security+ certified. Covers desktop and network server security concepts using windows, Linux and the Mac OS X. Examines all aspects of operating system security from how attackers operate to how viruses strike. Introduces operating system hardening to repel attacks on both business networks and workstations. (A, CSU)

58C NETWORK SECURITY FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour

PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

Provides a comprehensive overview of network security. Covers a full range of security concepts and techniques used in the business environment. Prepares students to become CompTIA Security+ certified. Covers authentication methods and common network attacks with strategies to protect a business against these attacks. Explores various network devices and media, and the proper use of perimeter topologies, extranets, and intranets to establish network security. Introduces basic cryptography and basic operational and organizational security measures. (A, CSU)

58D NETWORK DEFENSE AND COUNTERMEASURES

3 units, 3 lecture hours, 1 lab hour

PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

Examines the practice and techniques of intrusion detection to deter network attacks against business information technologies. Provides a comprehensive overview of intrusion detection design, and implementation, virtual private networks, packet filters, and network traffic signatures. Prepares students to take the network defense and countermeasures exam for the security certified professional (SCP) which is an industry standard security certification. (A, CSU)

58E FIREWALLS AND NETWORK SECURITY

3 units, 3 lecture hours, 1 lab hour

PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

Comprehensive overview of firewalls and their use with other network security components. Perimeter devices and concepts are covered to provide a secure business environment. Prepares students for industry standard security certifications. Covers authentication methods, packet filtering, proxy servers, and encryption strategies to protect business information systems. (A, CSU)

58F ETHICAL HACKING

3 units, 3 lecture hours, 1 lab hour

PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 40, 45, and 50 recommended.

Basic understanding of the ethics involved in testing systems and networks using hacking tools to judge the level of vulnerability. Penetration testing methodologies, security certification programs, laws governing hacking, tools such as port scanners and network sniffers as well as spyware, adware, worms, and viruses. (A, CSU)

60 BEGINNING VISUAL BASIC

3 units, 3 lecture hours, 1 lab hour, (Formerly Information Systems 35 and 47)

PREREQUISITE: Computer Information Technology 15.

Introduction to programming in Visual Basic. Development of applications using standard Windows elements such as command buttons, and check, option and list boxes. Emphasis on structured program design, including debugging, testing, and documentation. (A, CSU, UC)

61 ADVANCED VISUAL BASIC

3 units, 3 lecture hours, 1 lab hour, (Formerly Information Systems 49)

PREREQUISITE: Computer Information Technology 60.

Introduction to programming databases in Visual Basic. Beginning or intermediate students will receive a solid foundation working with database theory and use this knowledge to create a fully database-enabled Visual Basic application. Course content includes database tutorials, database basics, tables, records, fields, field types, primary and foreign keys, referential integrity, using Microsoft Access, and the Visual Basic Data Control. (A, CSU, UC)

63 BEGINNING JAVA PROGRAMMING

4 units, 3.5 lecture hours, 1 lab hour, (Formerly Information Systems 33 and 39)

PREREQUISITE: Computer Information Technology 15.

Developing Java Applets and applications using the Java programming language. Emphasis on object-orientated programming, control structures, methods, arrays, strings, inheritance, and graphics. (TCSU IS 110) (A, CSU, UC)

64 ADVANCED JAVA PROGRAMMING

4 units, 3.5 lecture hours, 1 lab hour, (Formerly Information Systems 34)

PREREQUISITE: Computer Information Technology 63.

Extends programming concepts and techniques covered in the beginning Java programming class. Design and code Java programs, applets and servlets using proper object oriented techniques including inheritance, encapsulation and polymorphism. Design and implement data structures and abstract data types. Use multidimensional arrays, Java collections, external data files and exception handling to create meaningful Java programs. (A, CSU, UC)

66 BEGINNING C++ PROGRAMMING

4 units, 3.5 lecture hours, 1 lab hour, (Formerly Information Systems 36)

PREREQUISITE: Computer Information Technology 15.

Software development using the C++ programming language. Emphasis on object-oriented design, computations, strings, pointers, functions, classes, and objects. (A, CSU, UC)

67 ADVANCED C++ PROGRAMMING

4 units, 3.5 lecture hours, 1 lab hour, (Formerly Information Systems 37)

PREREQUISITE: Computer Information Technology 66.

Build on the C++ programming concepts covered in the beginning class. How to design and use loops, decisions, structures, functions, objects, and classes. How to use arrays, pointers, memory allocation, linked lists, sorting techniques, operator overloading, inheritance, and graphics. (A, CSU, UC)

68 ADVANCED PROGRAMMING APPLICATIONS

4 units, 3.5 lecture hours, 1 lab hour, (Repeats = 1)

PREREQUISITE: Computer Information Technology 60, 63, or 66.

Developing programming applications using a variety of programming languages such as Java, C++ .NET, Visual Basic.NET. Application development will emphasize the use of object-orientated programming, control structures, methods, arrays, inheritance, and graphical-user interface, etc. (A, CSU, UC)

80 INTERNET BASICS

2 units, 3 lecture hours, 1 lab hour, (9 weeks), (Formerly Information Systems 7 and 40)

PREREQUISITE: None.

Introduction to the Internet and the World Wide Web, including the use of e-mail, discussion boards, browser basics, FTP, searching the Web, History of the Internet, Internet ethics, e-commerce, and Netiquette. (A, CSU)

81 WORLD WIDE WEB RESEARCH

2 units, 3 lecture hours, 1 lab hour, (9 weeks), (Formerly Information Systems 8 and 41)

ADVISORY: Computer Information Technology 12 or 15 recommended.

Using the World Wide Web for research. Topics include browsers, search engines, Boolean logic, and URLs. Requires preparing and presenting reports from the research. (A, CSU)

82 WEB TECHNOLOGIES

3 units, 3 lecture hours, 1 lab hour

PREREQUISITE: None.

Survey of contemporary web technologies in authoring, distributing, and browsing. Topics include: web servers, scripting, protocols, E-Commerce, information architecture, website traffic analysis, search engine optimization, and website usability. (A, CSU)

85 CREATING WEBSITES

3 units, 3 lecture hours, 1 lab hour

ADVISORY: Computer Information Technology 15 is recommended.

Design web pages for the Internet using a web page design language. (A, CSU)

90 DATA DRIVEN WEBSITES

4 units, 3.5 lecture hours, 1 lab hour, (Formerly Information Systems 28)

PREREQUISITE: Computer Information Technology 15. ADVISORY: Computer Information Technology 85 recommended.

Developing dynamic websites using server-side scripting and a database. (A, CSU)

- 93 CLIENT SIDE SCRIPTING**
 3 units, 3 lecture hours, 1 lab hour
 ADVISORY: Computer Information Technology 85.
 Fundamentals of JavaScript to add interactivity to HTML/XML web pages and web sites on the Internet. Topics include writing functions, using data from forms, buttons, menus, and text boxes, and using if conditional statements and program loops to make web pages “smarter”. (A, CSU)
- 94 SERVER SIDE SCRIPTING**
 3 units, 3 lecture hours, 1 lab hour
 PREREQUISITE: None.
 Dynamic web pages from the server side perspective. Create server side scripting application in language such as PHP, ASP, JSP. Scripting fundamentals, stateless session management, and database connectivity. Exception handling, debugging, testing, and maintenance. Object-oriented design and programming. Document Object Model. (A, CSU)
- 202 INTRODUCTION TO ONLINE LEARNING**
 1 unit, 1 lecture hour, 3 lab hours, (9 weeks), (Pass/No Pass), (Open Entry/Open Exit)
 PREREQUISITE: None.
 Learn the skills necessary to take classes online.
- 205 COMPUTER BASICS**
 2 units, 2 lecture hours, 1 lab hour, (12 weeks)
 PREREQUISITE: None.
 Introduction to basic computer terminology and skills. Includes introduction to word processing and spreadsheet programs.
- 260 COMPUTER SKILLS LAB**
 1 unit, 3 lab hours, (16 weeks), (Pass/No Pass), (Repeats = 3), (Open Entry/Open Exit), (Formerly Computer Information Systems 60, Information Systems 60, and Information Systems 260)
 PREREQUISITE: None.
 Supervised use of microcomputers. Reinforcement of concepts from classroom studies and development of problem solving abilities on an independent basis. Grade based on hours worked in lab.
- 261 INTERNET SKILLS LAB**
 0.2-1 unit, 0.6-3 lab hours, (16 weeks), (Pass/No Pass), (Repeats = 3), (Open Entry/Open Exit), (Formerly Information Systems 61 and 261)
 PREREQUISITE: None.
 Supervised use of the Internet. Reinforcement of concepts from classroom studies and development of problem solving abilities on an independent basis. Grade based on hours worked in lab.
 (a) .2 units for minimum of 10 hours, maximum of 12 hours;
 (b) .4 units for minimum of 19 hours, maximum of 21 hours;
 (c) .6 units for minimum of 29 hours, maximum of 31 hours;
 (d) .8 units for minimum of 39 hours, maximum of 44 hours;
 (e) 1 unit for minimum of 48 hours.

COMPUTER SCIENCE (CSCI)

- 20 PROGRAMMING IN THE FORTRAN LANGUAGE**
 3 units, 2 lecture hours, 2 lab hours, (Formerly Computer Science 16)
 PREREQUISITE: Mathematics 103 or equivalent. COREQUISITE: Mathematics 4A or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Introduction to programming in FORTRAN with emphasis on program design, debugging, testing, and documentation; elementary applications and structured programming for algorithm development. (A, CSU, UC)
- 26 DISCRETE MATHEMATICS FOR COMPUTER SCIENCE**
 4 units, 3 lecture hours, 2 lab hours
 PREREQUISITE: Computer Science 40 or 40J, and Mathematics 5A.
 Elements of discrete mathematics which have applications to computer science. Topics include sets, propositional and predicate logic, relations and functions, mathematical induction, graphs, and trees. (A, CSU-GE, UC, I)
- 30 PROGRAMMING IN THE PASCAL LANGUAGE**
 3 units, 2 lecture hours, 2 lab hours
 PREREQUISITE: Mathematics 103 or equivalent. COREQUISITE: Mathematics 4A or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Introduction to programming in PASCAL; syntax; control and data structures; design development, style, documentation, testing, and maintenance of software; arrays, functions, procedures, records, and files. Students who have limited programming experience are advised to take this course prior to Computer Science 40. (A, CSU)
- 40 PROGRAMMING CONCEPTS AND METHODOLOGY I**
 4 units, 3 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 125 and 126 or English as a Second Language 67 and 68 recommended; Computer Science 30 or equivalent recommended.
 Introduction to problem solving, algorithm development, procedural and data abstraction using the C++ language; program design, coding, debugging, testing, and documentation. (TCSU CSCI 110) (A, CSU, UC)
- 40J PROGRAMMING CONCEPTS AND METHODOLOGY IN JAVA**
 4 units, 3 lecture hours, 2 lab hours
 PREREQUISITE: Mathematics 103 or equivalent. COREQUISITE: Mathematics 4A or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended; Computer Science 30 or equivalent recommended.
 Introduction to problem solving, algorithm development, procedural and data abstraction using the high level computer programming language JAVA; program design, coding, debugging, testing, and documentation. (TCSU CSCI 110) (A, CSU, UC)
- 41 PROGRAMMING CONCEPTS & METHODOLOGY II**
 4 units, 3 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 125 and 126 or English as a Second Language 67 and 68 recommended.
 Programming methodology, program correctness, and review of data types; data structures; linear and nonlinear structures, lists, stacks,

queues, trees, and files; implementation of data structures; recursion, searching, and sorting. C++ language is used. (TCSU CSCI 120) (A, CSU, UC)

261 INTERNET AND COMPUTER SKILLS LABORATORY

.2-1 unit, 3-6 lab hours, (16 weeks), (Pass/No Pass),

(Repeats = 3)

PREREQUISITE: None.

Supervised use of microcomputers and the Internet. Reinforcement of concepts from classroom studies and development of problem solving abilities on an independent basis. Grade based on hours worked in lab:

- (a) .2 units for minimum of 10 hours;
- (b) .4 units for minimum of 19 hours;
- (c) .6 units for minimum of 29 hours;
- (d) .8 units for minimum of 39 hours;
- (e) 1 unit for minimum of 48 hours.

CONSTRUCTION – CARPENTRY (CONS)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to construction. Collaborative learning objectives established specific to construction. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

50A BASIC RESIDENTIAL CONSTRUCTION

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Construction 50)

ADVISORY: Eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

General introductory and basic skills in residential construction. Emphasis on hand and power tools, foundations, framing, and materials. (A, CSU)

50B BASIC RESIDENTIAL CONSTRUCTION

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

General introductory and basic skills in residential construction. Emphasis on hand and power tools, interior and exterior finish, finish carpentry, roofing, and plumbing. (A, CSU)

51 RESIDENTIAL CONSTRUCTION: FOUNDATIONS AND FRAMING

9 units, 4 lecture hours, 16 lab hours, (Repeats = 3), (Formerly Construction 51/52)

ADVISORY: Construction 50A and eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

51A RESIDENTIAL CONSTRUCTION: FOUNDATIONS

5 units, 2 lecture hours, 8 lab hours, (Repeats = 3), (9 weeks), (Formerly Construction 51)

ADVISORY: Construction 50A and eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Site preparation, location of building lines, construction of forms for a slab on grade, and material calculation. Waste plumbing lay out and construction. Hands-on placing and finishing of a slab on grade. (A, CSU)

51B RESIDENTIAL CONSTRUCTION: FRAMING

5 units, 2 lecture hours, 8 lab hours, (Repeats = 3), (9 weeks), (Formerly Construction 52)

ADVISORY: Construction 50A and eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Lay out and construction of wall framing, lay out and installation of roof trusses, construction of all associated hand stack roof framing, and application of the roof sheathing and roofing on a residential house. (A, CSU)

52A INTRODUCTORY CONSTRUCTION MANAGEMENT 1

9 units, 4 lecture hours, 16 lab hours

ADVISORY: Construction 51 and 53 and eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Students will learn basic construction management skills while taking on the role of lead carpenter during the construction of the construction program's project house. (A, CSU)

52B INTRODUCTORY CONSTRUCTION MANAGEMENT 2

9 units, 4 lecture hours, 16 lab hours

ADVISORY: Construction 51 and 53 and eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Students will learn basic construction management skills while taking on the role of lead carpenter during the construction of the construction program's project house. (A, CSU)

53 RESIDENTIAL CONSTRUCTION: EXTERIOR AND INTERIOR FINISH

9 units, 4 lecture hours, 16 lab hours, (Repeats = 3), (Formerly Construction 53/54)

ADVISORY: Construction 50B and eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

53A RESIDENTIAL CONSTRUCTION: EXTERIOR FINISH

5 units, 2 lecture hours, 8 lab hours, (Repeats = 3), (9 weeks), (Formerly Construction 53)

ADVISORY: Construction 50B and eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Installation of windows and exterior doors, installation of exterior siding, stucco lathing, concrete flat work, and painting on a residential home on a building site. (A, CSU)

53B RESIDENTIAL CONSTRUCTION: INTERIOR FINISH

5 units, 2 lecture hours, 8 lab hours, (Repeats = 3), (9 weeks), (Formerly Construction 54)

ADVISORY: Construction 50A and eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Drywall hanging and finishing, interior door hanging, cabinet and hardware installation, finish carpentry, and interior painting. (A, CSU)

55 ROOF FRAMING SYSTEMS

3 units, 1 lecture hour, 5 lab hours, (Repeats = 3)

ADVISORY: Construction 50A and eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to conventional roof framing with common rafters, hip and valley rafters, jack rafters, lay out of rafter locations, roof trusses, roof sheathing, and stairs. (A, CSU)

56 RESIDENTIAL PLUMBING

3 units, 2 lecture hours, 4 lab hours, (Repeats = 1) (See also Building Safety and Code Administration 15)

ADVISORY: Construction 50A and eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to residential plumbing; lay out and installation of a residential plumbing system. Familiarization with uniform plumbing code, construction and inspection, to prepare for I.A.P.M.O. and/or I.C.C. certification. (A, CSU)

57 CONSTRUCTION SURVEYING

2 units, 1 lecture hour, 3 lab hours, (Repeats = 3), (Formerly Building Technology 4)

ADVISORY: Mathematics 4A or Drafting 160 and eligibility for English 125 or 126 or English as a Second Language 67 and 68 recommended.

Operation of common surveying equipment, site layout, building layout, grades and benchmarks, and setting line and grade for columns and beams. (A, CSU)

149 INTRODUCTION TO CONSTRUCTION

3 units, 2 lecture hours, 3 lab hours

PREREQUISITE: None.

Overview of trades and careers related to the construction industry. Hands on lab activities related to selected areas of construction. (A)

175 RESIDENTIAL WIRING

4 units, 3 lecture hours, 4 lab hours, (Repeats = 3), (See also Electrical Systems Technology 175), (Formerly Construction 75)

ADVISORY: Eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 or 68 recommended.

Introduction, technique and installation of the electrical wiring system for a single family residence. Students will install the actual wiring system for the Fresno City College construction department's single family residence at an off-campus location. Emphasis on current wiring practices and electrical codes. (A)

175A RESIDENTIAL WIRING 1

4 units, 3 lecture hours, 3 lab hours

PREREQUISITE: None.

Introduction to electrical code, installation methods. Electrical circuits hands on practice. Installation of the rough electrical system in the Fresno City College construction program's project house at an off campus location. Construction 175AL must be taken concurrently with Construction 175A. (A)

175AL RESIDENTIAL WIRING LAB 1

.5 unit, 1.5 lab hours

PREREQUISITE: None.

Hands on Rough Wiring of a residential building. Course must be taken concurrently with Construction 175A. (A)

175B RESIDENTIAL WIRING 2

4 units, 3 lecture hours, 3 lab hours

PREREQUISITE: None.

Electrical code. Emphasis on finish equipment installation, trouble shooting. Specialty circuits. Installation of the finish materials in the City College construction program's project house. Construction 175BL must be taken concurrently with Construction 175B. (A)

175BL RESIDENTIAL WIRING LAB 2

.5 unit, 1.5 lab hours

PREREQUISITE: None.

Students will apply classroom knowledge and gain hands on experience during installation of finish apparatus in the FCC project house. Course must be taken concurrently with Construction 175B. (A)

196 BUILDING CONSTRUCTION INSPECTION

3 units, 3 lecture hours, (Repeats = 3), (Formerly Building Technology 96A-96B and Construction 96)

ADVISORY: Background and experience in construction or related trade areas recommended.

National codes, blueprints and specifications, materials, site development and location of project and human relations. (A)

COUNSELING (COUN)

43 GROUP DYNAMICS AND SELF UNDERSTANDING

2 units, 2 lecture hours, (Formerly Guidance Studies 43)

PREREQUISITE: None.

An in-depth look at concepts key to self-understanding and successful relationships with a focus on building self-confidence, self-esteem, assertiveness, and interpersonal skills while also identifying barriers to communication and healthy dynamics. Emphasis may include: Interpersonal Abuse and Trauma, Peer Mentoring, Substance Abuse, and/or Social Anxiety. (A, CSU)

48 CAREER PLANNING AND DEVELOPMENT

1 unit, 1 lecture hour, (Formerly Guidance Studies 48)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Designed to focus on career building, career pathways, which includes self assessment, career exploration, occupational outlook, computerized resources and career information systems. (A, CSU)

53 COLLEGE AND LIFE MANAGEMENT

3 units, 3 lecture hours, (Formerly Guidance Studies 53)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Exploration and development of student's personal strengths, personality types, learning styles, values, levels of attribution, success skills; including defining personal, educational, and career goals through various teaching methodologies to increase life-long learning. (A, CSU)

54 CIVIC RESPONSIBILITY AND LEADERSHIP

1 unit, 1 lecture hour, (Formerly Guidance Studies 54)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Designed to assist students with the transition process from college to other life roles. Understanding role responsibilities to self and the community. Soft skills, leadership development, and life planning. (A, CSU)

141 ACADEMIC TRANSITION

3 units, 3 lecture hours, (Formerly Guidance Studies 41 and Counseling 41)

PREREQUISITE: None.

Required for probation students on progress or academic disqualification or any level of probation. Provide understanding of institutional policies and procedures governing students and incorporated a comprehensive course integration of personal, academic and career development with an emphasis in utilizing strategies to get off probation and address issues that hinder success. Designed to enable students to accept responsibility and accountability to stay off probation and apply skills and tools to promote academic success. (A)

147A COLLEGE STUDY SKILLS, GENERAL HABITS

1 unit, 2 lecture hours, (9 weeks), (Formerly Guidance Studies 47A and 52)

PREREQUISITE: None.

Establishing effective success strategies such as study habits, goal-setting, time and life management, improving concentration, active listening, college resources and educational planning. (A)

147B COLLEGE STUDY SKILLS, ACADEMIC SKILLS

1 unit, 2 lecture hours, (9 weeks), (Formerly Guidance Studies 47B and 52)

PREREQUISITE: None.

Lecture note taking, textbook study, memorization techniques, test taking, vocabulary building, and other study methods. (A)

149 JOB PREPARATION

1 unit, 1 lecture hour, (Formerly Guidance Studies 49)

PREREQUISITE: None.

Development of positive coping strategies and interpersonal relationships in the workplace. Practice interview techniques and positive workplace behaviors. Exploring career implications and the job market. (A)

167 FINANCIAL AID MONEY MANAGEMENT

1 unit, 1 lecture hour, (Formerly Guidance Studies 167)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Recommended for financial aid eligible college students. Designed to help develop a basic awareness of financial aid money management skills including personal student budgeting, and the nature and purpose of financial aid assistance. (A)

200 COLLEGE ORIENTATION

1 unit, 2 lecture hours, (9 weeks)

PREREQUISITE: None.

College success strategies to assist students effectively maneuver through the college environment, including understanding the college's catalog, policies and procedures, library and additional resources. Identification and matriculation to next educational/vocational endeavors.

250 STUDENT READINESS SEMINAR

1 unit, 2 lecture hours, (9 weeks), (Formerly Guidance Studies 50 and 150)

PREREQUISITE: None.

Recommended for freshman students entering college for the first time. Develop supportive services, self-assessment, success planning, time management, campus resources, catalog information, educational planning, and career awareness. Introduces techniques to improve learning strategies along with academic and personal growth.

CRIMINOLOGY (CRIM)

FORMERLY ADMINISTRATION OF JUSTICE

1 INTRODUCTION TO CRIMINOLOGY

3 units, 3 lecture hours, (Formerly Administration of Justice 1)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The history and philosophy of the criminal justice systems; role expectations and their interrelationships; theories of crime, punishment, and rehabilitation; and ethics, education, and training for professionalism. Review criminological research and theory. Analyze patterns and types of criminal behavior. Explore cross cultural dynamics of criminality in other countries. (TCSU CJ 110) (A, CSU, UC)

3 LEGAL ASPECTS OF EVIDENCE

3 units, 3 lecture hours, (Formerly Administration of Justice 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The origin, history, and development of the rules of evidence. Covers the kinds of evidence, the constitutional and procedural considerations relating thereto, the rules governing admissibility or exclusion, witness competency, privileged communications, self-incrimination, hearsay, chain of custody, identification procedures, and the judicial decisions interpreting the individual and societal rights involved. (A, CSU)

4 PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM

3 units, 3 lecture hours, (Formerly Administration of Justice 4)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Procedural roles and responsibilities of the criminal justice system agencies with emphasis on legal directives to law enforcement agencies, including arrest and search and seizure. Emphasis on constitutional and judicial interpretation of proceedings. (A, CSU)

5 COMMUNITY RELATIONS

3 units, 3 lecture hours, (Formerly Administration of Justice 5)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The professional image of the criminal justice system and its positive relationship with the public. (A, CSU, UC)

- 6 CONCEPTS OF CRIMINAL LAW**
3 units, 3 lecture hours, (Formerly Administration of Justice 6)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Elements of California Penal Code criminal law violations; case law; practical aspects of the law. (A, CSU)
- 7 CONCEPTS OF ENFORCEMENT SERVICES**
3 units, 3 lecture hours, (Formerly Administration of Justice 7)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Exploration of theories, philosophies, and concepts related to the role expectations of the line enforcement officer. Emphasis is placed upon the patrol, traffic, and public service responsibilities and their relationship to the administration of justice system. Physical as well as psychological officer survival will be stressed. (A, CSU)
- 8 CRIMINAL INVESTIGATION**
4 units, 3 lecture hours, 3 lab hours, (Formerly Administration of Justice 8)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Criminal investigation as practiced in the administration of justice system. Preliminary and follow-up investigations; case documentation and preparation for court presentation. (A, CSU)
- 9 CRIME SCENE FORENSIC EVIDENCE**
3 units, 3 lecture hours
PREREQUISITE: Criminology 8 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Proper methods utilized in locating, identifying, handling, and analyzing physical evidence found at the scene of a crime. (A, CSU)
- 11 JUVENILE DELINQUENCY**
3 units, 3 lecture hours, (Formerly Administration of Justice 11)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Theories of cause, prevention, and treatment of juvenile delinquency; practical relationships among theory, law, policy, and existing practice in delinquency; juvenile law, juvenile procedure, rights and responsibilities of juveniles; case studies. (A, CSU)
- 12 CRIMINAL JUSTICE COMMUNICATIONS**
3 units, 3 lecture hours, (Formerly Administration of Justice 12)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
The fundamentals of information gathering and organization, as well as the conventional rules associated with the preparation of reports in the criminal justice system. Prepares the student to testify in court with respect to a criminal event or incident, and utilize self-generated reports for that purpose. (A, CSU)
- 13 THE CONSTITUTION AND YOUR INDIVIDUAL RIGHTS**
3 units, 3 lecture hours, (Formerly Administration of Justice 13)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
The history and development of the United States Constitution with an emphasis upon notable Supreme Court cases, their logic, and the interpretative reasoning used by the justices in making constitutional judgments. Concentration on our historic protection of individual rights and the ability of government to limit those prerogatives. (A, CSU-GE, UC)
- 15 INTRODUCTION TO POLICE ETHICS**
3 units, 3 lecture hours, (Formerly Administration of Justice 15)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
The philosophical and theoretical issues relating to frequent ethical violations throughout the criminal justice system. Structured to be a primer on morality, ethics, and human behavior. (A, CSU)
- 16 INTRODUCTION TO VICTIMOLOGY**
3 units, 3 lecture hours, (Formerly Administration of Justice 16)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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
ADVISORY: Eligibility for English 125 and 126.
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, (Repeats = 2)
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.
Supervised employment extending the classroom based on occupational learning related to criminology. Collaborative learning objectives established specific to criminology. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

240 Criminology

20 INTRODUCTION TO CORRECTIONS

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Overview of the history and trends of adult and juvenile corrections including probation and parole. Focus on the legal issues, specific laws, and general operation of correctional institutions. The relationship between corrections and other components of the judicial system will also be examined. (A, CSU)

21 CORRECTIONAL REPORT WRITING

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.

Specialized knowledge relating to the correctional impact of gangs. The history of gangs and the issues associated with the development of gangs. Focus on the emergence of prison gangs following a series of changes within correctional systems. Review of the types of gangs and the criminal activities associated with the gang. Special emphasis on the prison gang and correctional issues including identification, intake, classification, communication, and trends. Psychological and sociological dynamics. Institutional management and future trends. (A, CSU)

CULTURAL STUDIES (CULTS)

7 INTRODUCTION TO BRITISH CULTURE

3 units, 3 lecture hours, (See also Humanities 7)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An examination of British society and culture, including historical roots as well as contemporary institutions and practices. Topics include language, geography, religion, transportation, economics, politics, mass media, family patterns, immigration and ethnic diversity, education, health care, theater, literature, music, art and architecture. Designed primarily for students in the Semester in England Program. (A, CSU-GE)

7H HONORS INTRODUCTION TO BRITISH CULTURE

3 units, 3 lecture hours, (See also Humanities 7H)

ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors program listing in the college catalog.

An examination of British society and culture, including historical roots as well as contemporary institutions and practices. Topics include language, geography, religion, transportation, economics, politics, mass media, family patterns, immigration and ethnic diversity, education, health care, theater, literature, music, art and architecture. Designed primarily for students in the Semester in England Program. (A, CSU-GE)

10 ISLAMIC CULTURE

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The foundation of Islam, Islamic beliefs, the expansion of Islamic culture throughout the world, the relationships within Moslem family and society. Twentieth century issues and contemporary conflicts. (A, CSU)

11 ISLAMIC CIVILIZATION

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Islam: its meaning and message. Islamic ideology and culture. Islamic values, science, civilization, social principles, cultural institutions, and contemporary problems. (A, CSU, UC)

DANCE (DANCE)

9 DANCE CONDITIONING

1 unit, 3 lab hours, (Repeats = 3)

PREREQUISITE: None.

Conditioning techniques which promote body awareness, improve body alignment, enhance and expedite body ability for dance skills, and aid in preventing injuries common to various dance styles. (A, CSU, UC)

10 BEGINNING MODERN DANCE TECHNIQUE

1 unit, 3 lab hours, (Repeats = 3), (Formerly Physical Education 4)

ADVISORY: Eligibility for English 125 and 126 or English as a Second language 67 and 68 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)

11 INTRODUCTION TO SOCIAL DANCE

1 unit, 3 lab hours, (Repeats = 3)

PREREQUISITE: None.

Introduction to basic social dances; such as, swing, waltz, cha cha, tango, mixer, and line dances. (A, CSU, UC)

12A BEGINNING BALLET PART 1

1 unit, 3 lab hours, (Repeats = 3), (Formerly Dance 12 and Physical Education 26)

PREREQUISITE: None.

Fundamental technique of classical Ballet using barre exercises and center work, basic concept of Ballet dance vocabulary learning Ballet terminology for the beginning student. (A, CSU, UC)

12B BEGINNING BALLET PART 2

1 unit, 3 lab hours, (Repeats = 3)

PREREQUISITE: Dance 12A or equivalent as demonstrated through testing and recommended by instructors.

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)

13 INTERMEDIATE BALLET

1 unit, 3 lab hours, (Repeats = 3)

PREREQUISITE: Dance 12B or equivalent as demonstrated through testing and recommended by instructors.

Intermediate-level technique using barre exercises and center work. (A, CSU, UC)

14 BEGINNING JAZZ DANCE TECHNIQUE

1 unit, 3 lab hours, (Repeats = 3), (Formerly Physical Education 27)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

A contemporary dance style, modified from ballet and modern dance, utilizing basic steps and isolated body parts; conditioning exercises for strength, flexibility, balance, and alignment done in a rhythmic form to jazz and other contemporary music. (A, CSU, UC)

15 INTERMEDIATE JAZZ DANCE TECHNIQUE

1 unit, 3 lab hours, (Repeats = 3)

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 125 and 126 or English as a Second Language 67 and 68 recommended.

A progressive refinement of jazz dance technique, building upon skills and techniques covered in Dance 14. Presentation of different jazz styles. (A, CSU, UC)

16 BEGINNING TAP DANCE

1 unit, 2 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An introduction of various tap styles, sequences, and dance patterns to develop rhythm, coordination, and balance. (A, CSU, UC)

17 BEGINNING MEXICAN FOLKLORICO DANCE

4 units, 3 lecture hours, 2 lab hours, (Repeats = 3), (See also Chicano-Latino Studies 17)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

History and origin of Mexican dance. Mexican songs and folktales and how they are interpreted through Mexican dance. Dances practiced and performed at the beginning level. (A, CSU-GE, UC)

18 INTERMEDIATE TAP DANCE

1 unit, 2 lab hours, (Repeats = 3)

PREREQUISITE: Dance 16. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Progressive refinement of tap dance technique, building upon skills and techniques covered in Dance 16. Presentation of different tap styles. (A, CSU, UC)

20A BEGINNING MODERN DANCE COMPOSITION

3 units, 2 lecture hours, 3 lab hours, (Formerly Physical Education 20A)

ADVISORY: Dance 10 recommended, eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

ADVISORY: Dance 20A. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Modern dance technique warm up and exercises for development of movement vocabulary, strength, flexibility, alignment, range of motion, and rhythmic coordination. Guided group improvisations will be used for development of personal movement vocabulary, creative outlet, and to hone in on intermediate improvisational skills. Dance composition theories and conceptual approaches. Creation of solo and group work on a complex and multi-dimensional level. Hone in on one's own artistic voice and to be able to articulate their reasons for creation in an intelligent, comprehensive manner. (A, CSU, UC)

21 DANCE WORKSHOP PERFORMANCE

2-4 units, 1 lecture hour, 3-9 lab hours per unit, (Repeats = 3), (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: For choreographers: Eligibility for English 1A recommended.

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. (A, CSU, UC)

242 Dance

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, (Repeats = 3), (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: For choreographers: 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)

25 INTERMEDIATE SOCIAL DANCE

1 unit, 3 lab hours, (Repeats = 3)

PREREQUISITE: Dance 11 or the equivalent as demonstrated by testing.

Intermediate level dance technique and patterns for social dances; such as, rumba, fox trot, swing, waltz, cha cha, tango, mixers, and selected line dances. (A, CSU, UC)

26 AMERICAN COLLEGE DANCE FESTIVAL

2 units, 2 lecture hours, 5 lab hours, (9 weeks), (Repeats = 3)

COREQUISITE: Dance 21 or 22. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

27 ADVANCED MEXICAN FOLKLORICO DANCE

4 units, 3 lecture hours, 2 lab hours, (Repeats = 3), (See also Chicano-Latino Studies 27)

PREREQUISITE: Chicano-Latino Studies/Dance 17, or demonstration of comparable skill level to be determined by testing at first class session. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

History and origin of Mexican dance. Mexican songs and folktales and how they are interpreted through Mexican dance. Dances practiced and performed at the advanced level. (A, CSU-GE, UC)

28 INTERMEDIATE MODERN DANCE TECHNIQUE

1 unit, 3 lab hours, (Repeats = 3)

ADVISORY: Dance 10. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Intermediate-level modern dance, emphasis on up-side down movement, fast-pace locomotor patterns, and weight sharing. (A, CSU, UC)

30 DANCE APPRECIATION

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

DECISION SCIENCE (DS)

21 FINITE MATHEMATICS

3 units, 3 lecture hours, (Formerly Decision Science 22)

PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Applications of linear, exponential, and logarithmic functions, matrix operations, and inverse matrices. Linear programming techniques, mathematics of finance, probability, and counting theory. Limits, rates of change, and derivatives. (A, CSU-GE, UC, I)

23 BUSINESS STATISTICS

4 units, 4 lecture hours, (Formerly Business Administration 23)

PREREQUISITE: Mathematics 103 or equivalent.

Descriptive measures including central tendency and dispersion, probability theory, discrete and continuous probability distributions, sampling distributions, central limit theorem, time series, index numbers, one and two sample hypothesis tests, estimation, correlation, regression, analysis of variance, and nonparametric methods. (TCSU STAT 110) (A, CSU-GE, UC)

117 BUSINESS MATHEMATICS

3 units, 3 lecture hours, (Formerly Decision Sciences 17 and 21)

PREREQUISITE: Mathematics 250 or appropriate placement test score.

Formulas and organizing procedures for solving business and consumer math applications. Signed numbers, linear equations, graphing, systems of equations, inequalities, exponents, polynomials, evaluating and simplifying algebraic expressions, and word problems. (A)

DENTAL HYGIENE (DH)

1A ORAL BIOLOGY

2 units, 2 lecture hours, 1 lab hour, (Fall, first year)

PREREQUISITE: Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Dental Hygiene 3A, 4, and 10.

Anatomy of orofacial structures; study of the physiological and structural functions of the teeth and supporting tissues; embryology and histology of oral structural formation; oral anatomy relative to administration of local anesthetic agents. (A, CSU)

1B GENERAL AND ORAL PATHOLOGY

4 units, 4 lecture hours, (Spring, first year)

PREREQUISITE: English 125 and Dental Hygiene 1A, each with a grade of "C" or better. COREQUISITE: Dental Hygiene 2, 5A, 6A, 8A, and 11. ADVISORY: English 1A with a grade of "C" or better strongly advised.

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 with a grade of "C" or better. COREQUISITE: Dental Hygiene 5B.

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 with a grade of "C" or better.

COREQUISITE: Dental Hygiene 5C.

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 3A and 1A, each with a grade of "C" or better.

COREQUISITE: Dental Hygiene 1B, 5A, 6A, 8A, and 11.

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: Acceptance into the Dental Hygiene Program. Biology 31 and Communication 1 or 2, each with a grade of "C" or better. COREQUISITE: Dental Hygiene 1A, 4, and 10.

Medical and dental histories; extra and intraoral examination; patient education; patient and operator positioning; clinical operations and appointment procedures; use and care of instruments; patients records; equipment maintenance and sterilization; asepsis and infection control procedures. (A, CSU)

3B DENTAL SPECIALTIES

1 unit, 2 lecture hours, (9 weeks), (Spring, second year)

PREREQUISITE: Dental Hygiene 3A with a grade of "C" or better. COREQUISITE: Dental Hygiene 5C.

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: Acceptance into the Dental Hygiene Program. Biology 31 with a grade of "C" or better. COREQUISITE: Dental Hygiene 1A, 3A, and 10.

History and physics of radiation; radiation protection; use of standard, panoramic, and computerized digital radiographic equipment; use of the intraoral camera; duplication of radiographic images; exposure, processing, mounting, and identification of standard, panoramic, and computerized radiographs and intraoral images; critiquing of oral radiographic images of normal and abnormal anatomy and artifacts; interpretation of radiographic and pictorial pathology of the hard and soft structures of the oral cavity. (A, CSU)

5A CLINICAL DENTAL HYGIENE I

3 units, 8 lab hours, (Spring, first year), (Pass/No Pass)

PREREQUISITE: Dental Hygiene 3A and 4, each with a grade of "C" or better.

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 5A with a "Pass" grade. COREQUISITE: Dental Hygiene 1C, 6B, 7A, and 13.

Intermediate experiences in the treatment of dental hygiene patients; includes principles and procedures of Dental Hygiene 5A plus techniques for administering local anesthetics; various field experiences. (A, CSU)

5C CLINICAL DENTAL HYGIENE III

5 units, 16 lab hours, (Spring, second year), (Pass/No Pass)

PREREQUISITE: Dental Hygiene 5B with a "Pass" grade.

COREQUISITE: Dental Hygiene 1D, 3B, 7B, 8B, 9, and 14.

Advanced experience in patient treatment procedures; includes principles and procedures of Dental Hygiene 5A and Dental Hygiene 5B plus the techniques of soft tissue curettage, nitrous oxide-oxygen analgesia, and nutritional counseling. (A, CSU)

6A MEDICAL EMERGENCIES IN THE DENTAL OFFICE

1 unit, 2 lecture hours, (9 weeks), (Spring, first year)

PREREQUISITE: Dental Hygiene 3A with a grade of "C" or better. COREQUISITE: Dental Hygiene 1B, 2, 5A, 8A, and 11.

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 6A with a grade of "C" or better. COREQUISITE: Dental Hygiene 5B.

Sources, dosages, therapeutic action, and side effects of drugs used in dentistry; classification, administration, and effects of drugs; pharmacology, pharmacokinetics, and physiology of local anesthetic agents and nitrous oxide gas. Fulfills the computer literacy graduation requirement for Dental Hygiene majors only. (A, CSU)

7A COMMUNITY DENTAL HEALTH I

2 units, 2 lecture hours, (Fall, second year)

PREREQUISITE: Psychology 2 each with a grade of "C" or better. COREQUISITE: Dental Hygiene 5B.

Procedures for improving public health, community dental health, and target group selection. Introduction to biostatistics and dental research techniques. Principles of education. (A, CSU)

7B COMMUNITY DENTAL HEALTH II

1 unit, 1 lecture hour, (Spring, second year)

PREREQUISITE: Dental Hygiene 7A and Sociology 1A, each with a grade of "C" or better. COREQUISITE: Dental Hygiene 5C.

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 3A with a grade of "C" or better. 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)

244 Dental Hygiene

8B PRACTICE AND FINANCIAL MANAGEMENT

2 units, 2 lecture hours, (Spring, second year)

PREREQUISITE: Dental Hygiene 8A with a grade of "C" or better. COREQUISITE: Dental Hygiene 5C.

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: Chemistry 3B and Food and Nutrition 40, each with a grade of "C" or better.

Nutrition as it relates to dentistry; nutritional counseling and dietary surveys with clinical patients. (A, CSU)

10 HEAD AND NECK ANATOMY

2 units, 1 lecture hour, 2 lab hours, (Fall, first year)

PREREQUISITE: Acceptance into the Dental Hygiene Program. Biology 24, with a grade of "C" or better, or Biology 20 and 22, each with a grade of "C" or better. 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 and 3A, each with a grade of "C" or better. COREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, and 8A.

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 3A with a grade of "C" or better. COREQUISITE: Dental Hygiene 5A.

Seminar format with discussion of various topics dealing with beginning clinical practice of dental hygiene. Beginning level decision making, dental hygiene diagnosis, treatment planning, implementation of dental hygiene therapy and problem solving of clinical issues encountered in DH 5A, Clinical Dental Hygiene I. Instrument sharpening, beginning instrument sequencing, periodontal assessment charting, and dental computer technology. (A, CSU)

13 CLINICAL SEMINAR TOPICS II

1 unit, 2 lecture hours, (9 weeks), (Fall, second year)

PREREQUISITE: Dental Hygiene 12. COREQUISITE: Dental Hygiene 5B.

Seminar format with discussion of various topics dealing with intermediate clinical practice of dental hygiene. Intermediate level decision making, clinical judgment, dental hygiene diagnosis, and problem solving of clinical issues encountered in DH 5B, Clinical Dental Hygiene II. Use of diagnostic technology for caries detection, computerized delivery systems for local anesthetics, intermediate instrument sequencing, subgingival irrigation therapy, ultrasonic instrumentation, ergonomics and magnification. (A, CSU)

14 CLINICAL SEMINAR TOPICS III

1 unit, 2 lecture hours, (9 weeks), (Fall, second year)

PREREQUISITE: Dental Hygiene 13 with a grade of "C" or better. COREQUISITE: Dental Hygiene 5C.

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), (Repeats = 3)

PREREQUISITE: Graduation from an accredited Dental Hygiene Program. ADVISORY: Dental Hygiene 5C.

Advanced experience in patient treatment procedures. Principles and procedures of Dental Hygiene 5A, 5B, and 5C. Provides treatment opportunities that allow students to maintain and perfect their dental hygiene skill level between program graduation and successful completion of clinical licensing examinations. Students must have current CPR certification and malpractice insurance.

DEVELOPMENTAL SERVICES (DEVSER)

250 WORKABILITY ASSESSMENT AND CAREER AWARENESS

3 units, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 3)

PREREQUISITE: Student must have a diagnosed verifiable disability.

Designed for students with severe disabilities and/or learning disabilities. Emphasizes developing skills in the areas of career assessment, career awareness, career exploration, and career development. Designed to prepare students for employment opportunities.

251 WORKABILITY PREPARATION AND JOB PLACEMENT

3 units, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 3)

PREREQUISITE: Student must have a diagnosed verifiable disability.

Designed for students with severe disabilities and/or learning disabilities. Emphasize work preparation, job development, compensatory skills in preparation for work. Disability issues related to employment. Complete an employment portfolio, gain interviewing skills, and become familiar with the Americans with Disabilities Act and disability related issues in the hiring process.

252 WORKABILITY STRATEGIES AND JOB MAINTENANCE

3 units, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 3)

PREREQUISITE: Student must have a diagnosed verifiable disability.

Designed for students with severe disabilities and/or learning disabilities. Give students compensatory skills in strategies in the workplace related to personal disability, work ethics, and socialization. Disability issues related to accommodations on the job will be addressed. Assist students with strategies and techniques to obtain and keep employment opportunities.

255 WORKABILITY EXPERIENCE

1-4 units, 60-240 volunteer or 75-300 paid employment lab hours, (Pass/No Pass), (Repeats = 3)

PREREQUISITE: Student must have a diagnosed disability.

Designed for students with severe disabilities and/or learning disabilities. Emphasizes developing skills through work experience in the areas of time management, following directions and instructions, appropriate work behaviors, and selecting and planning vocational choices.

260 WORKABILITY

3 units, 3 lecture hours, (Pass/No Pass),
(Repeats = 3), (Formerly Developmental Services 60)
PREREQUISITE: Students must have a diagnosed disability.

Offers students with disabilities the opportunity to make successful occupational choices through career exploration, decision-making, and work experience/employment. Designed for students with physical, communicative, and/or learning limitations.

262 GROUP INTERACTION FOR STUDENTS WITH DISABILITIES

2 units, 2 lecture hours, (Pass/No Pass),
(Repeats = 1), (Formerly Developmental Services 62)
PREREQUISITE: None.

Development and improvement of self-understanding through group interactions. Designed for students with physical, communicative, developmental, and/or learning limitations.

264 TRANSITION TO COLLEGE FOR STUDENTS WITH DISABILITIES

1 unit, 1 lecture hour, (Pass/No Pass),
(Repeats = 3)
PREREQUISITE: Student must have a diagnosed verifiable disability.

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), (Repeats = 3), (Formerly
Developmental Services 72)
PREREQUISITE: None.

Emphasis on home and money management, health, hygiene and safety, and food and nutrition. Designed for the severely disabled and/or developmentally delayed learner.

273 INDEPENDENT LIVING SKILLS FOR DSP&S STUDENTS

2 units, 6 lab hours, (Pass/No Pass), (Repeats = 3), (Formerly
Developmental Services 73)
PREREQUISITE: None.

Basic independent living skills. Including appropriate social interaction, self-advocacy, self-care, community involvement, personal choice and managing life events. Designed for students with severe disabilities and/or the developmentally delayed learner.

275 HORTICULTURE SKILLS I

2 units, 6 lab hours, (Pass/No Pass),
(Repeats = 3), (Formerly Developmental Services 75)
PREREQUISITE: None.

Basic techniques of foliage plant care and growing vegetables and ornamentals, with emphasis on transferable employment skills. Designed for students with mental health, physical, learning and/or developmental disabilities.

276 HORTICULTURE SKILLS II

2 units, 6 lab hours, (Pass/No Pass), (Repeats = 3), (Formerly
Developmental Services 76)
PREREQUISITE: None.

Intermediate techniques of foliage plant care and growing vegetables and ornamentals, with emphasis on transferable employment skills. Designed for students with mental health, physical, learning and/or developmental disabilities.

277 ADAPTED COMPUTER LITERACY

2 units, 1 lecture hour, 3 lab hours (Pass/No Pass), (Repeats
= 3), (Formerly Developmental Services 77)
PREREQUISITE: None.

Introduction to computers and commonly used microcomputer applications. Emphasis on computer use and adaptation. In depth coverage of computers and their impact in society. Designed for students with physical, communicative, and/or learning limitations.

278 MODIFIED WORD PROCESSING

2 units, 1 lecture hour, 3 lab hours, (Pass/No Pass), (Repeats
= 3), (Formerly Developmental Services 78)
PREREQUISITE: None.

Basic word processing terminology and understanding of Microsoft Word. Designed for the student with physical, communicative, and/or learning limitations.

279 MODIFIED COMPUTER APPLICATIONS

2 units, 1 lecture hour, 3 lab hours, (Pass/No Pass), (Repeats
= 3), (Formerly Developmental Services 79)
PREREQUISITE: None.

Expansion and enhancement of word processing, data management, spreadsheet, and other highly marketable microcomputer applications. Designed for students with physical, communicative, and/or learning limitations.

281 PROFESSIONAL PREPARATION FOR STUDENTS WITH DISABILITIES

1 unit, 3 lab hours, (Pass/No Pass), (Repeats = 3), (Formerly
Developmental Services 81)
PREREQUISITE: None.

Specifically designed for students with disabilities to job shadow with various community agencies. Emphasis on developing skills in the areas of time management, following directions and instructions, and demonstrating appropriate behaviors in professional social settings.

282 GREENHOUSE WORKFORCE PREP

3 units, 9 lab hours, (Pass/No Pass), (Repeats = 3), (Formerly
Developmental Services 82)
PREREQUISITE: None.

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 mental health, physical, learning and/or developmental disabilities.

291 STRATEGIES FOR ACADEMIC SUCCESS

2 units, 2 lecture hours, (Pass/No Pass) (Repeats = 3)
PREREQUISITE: None.

Identification of learning strengths and weaknesses, educational, personal, career goals, study principles, methods and strategies to achieve them. Designed for students with communicative, and/or learning disabilities.

292 COLLEGE AWARENESS SURVIVAL SKILLS

2 units, 2 lecture hours, (Pass/No Pass) (Repeats = 3)
PREREQUISITE: None.

Development of college survival skills. Emphasis on time management, note-taking, test taking, library skills, improvement of communication skills, and career exploration. Designed for students with communicative, and/or a learning disability.

246 Developmental Services

359 DIFFERENTIAL LEARNING DIAGNOSIS

8 lab hours, (Pass/No Pass), (Repeats = 3), (Open Entry/Open Exit), (Formerly Developmental Services 59)

PREREQUISITE: None.

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. Designed for the student with physical, communicative, and/or learning limitations.

DRAFTING (DRAFT)

SEE ALSO COMPUTER AIDED DRAFTING AND DESIGN

12 DRAFTING PRACTICES

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 or Applied Technology 130 recommended.

Freehand sketching, orthographic projection, measuring devices, geometric construction, pictorial drawing and dimensioning in preparation for computer aided drafting and design. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

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 drafting. Collaborative learning objectives established specific to drafting. 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. May be repeated for not more than 16 units total. (A, CSU)

160 MATHEMATICS OF DRAFTING

3 units, 3 lecture hours, (Formerly Drafting 60)

PREREQUISITE: Eligibility for Mathematics 101 or Applied Technology 130.

Elementary algebra review, measurements, logarithms, and trigonometric ratios. (A)

ECONOMICS (ECON)

1A INTRODUCTION TO MACROECONOMICS

3 units, 3 lecture hours

Prerequisite: Mathematics 103. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU ECON 110) (A, CSU-GE, UC, I)

1AH HONORS INTRODUCTION TO MACROECONOMICS

3 units, 3 lecture hours

Prerequisite: Mathematics 103. ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

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. (TCSU ECON 110) (A, CSU-GE, UC, I)

1B INTRODUCTION TO MICROECONOMICS

3 units, 3 lecture hours

Prerequisite: Mathematics 103. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU ECON 120) (A, CSU-GE, UC, I)

1BH HONORS INTRODUCTION TO MICROECONOMICS

3 units, 3 lecture hours

Prerequisite: Mathematics 103. ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

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. (TCSU ECON 120) (A, CSU-GE, UC, I)

25 INTRODUCTION TO ECONOMICS

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Survey of the development of economic ideas and theories in the context of economic history. Analysis of major economic thinkers. Introduction to contemporary economic issues and policy controversies. This course is primarily for students planning to major in Social Work at CSU Fresno. Other students should consult their counselor before enrolling. (A, CSU-GE)

EDUCATION (EDUC)

30 SURVEY OF AMERICAN EDUCATION

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to concepts and issues related to teaching diverse learners in contemporary schools: Teaching as a profession and career, contemporary educational issues, California's content and performance standards and frameworks, and requirements for earning a teaching credential. Meets California Teaching Commission (CTC) requirements when combined with EDA 19, Educational Aide. (A, CSU, UC)

200A CBEST PREPARATION: ENGLISH

.5 unit, 3 lecture hours, (3 weeks), (Repeats = 3), (Pass/No Pass), (Formerly Education 100 and 100A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and recommended.

A review of reading comprehension and essay writing designed to assist students preparing for the California Basic Education Skills Test (CBEST). Successful passage of CBEST is a requirement for entry into a California K-12 teacher credential program and for employment as a substitute teacher in a California public K-12 school. (The CBEST test also includes mathematics: EDUC 200B.)

200B CBEST PREPARATION: MATHEMATICS

1 unit, 3 lecture hours, (6 weeks), (Pass/No Pass), (Repeats = 3), (Formerly Education 100 and 100B)

ADVISORY: Eligibility for Mathematics 101 recommended.

A review of mathematics designed to assist students preparing for the California Basic Educational Skills Test (CBEST). Successful passing of the CBEST is a California requirement for entry into a K-12 public school teacher credential program and for substitute teaching. (The CBEST test is divided into three sections. The other sections, reading and writing, are covered in EDUC 200A.)

EDUCATIONAL AIDE (EDA)

1 TUTOR TRAINING

1 unit, 1 lecture hour, 1 lab hour, (Repeats = 3)

PREREQUISITE: None.

Concepts, principles, and methods of one-on-one and group tutoring with supervised practice. Designed for tutors working in college tutorial, math, and English learning centers, and for students employed or desiring future employment as educational or instructional aides or as teachers. (A, CSU)

6 SURVEY OF SPECIAL EDUCATION

3 units, 3 lecture hours, (Formerly Educational Aide 60)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The role of the special education assistant in the training of students with disabilities. Special education history, philosophy, goals, schools, curriculum, evaluation methods and entry requirements into educational aide positions. Field trips required. (A, CSU)

7 EDUCATIONAL AIDE TRAINING — LEARNING DISABILITIES

3 units, 3 lecture hours, (Formerly Educational Aide 61)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The focus is on the field of special education with emphasis on the role of the Special Education Aide in educating learning disabled students. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

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, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

ELECTRICITY

SEE ELECTRICAL SYSTEMS TECHNOLOGY

ELECTRICAL SYSTEMS TECHNOLOGY (EST)

FORMERLY ELECTRONIC TECHNOLOGY

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2), (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, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

50 INTRODUCTION TO ELECTRONICS

2.5 units, 5 lecture hours, (9 weeks), (Formerly Electronic Technology 50)

PREREQUISITE: None.

An introduction to the electrical systems technology program. Intensive review and practice in the reading and math skills necessary for success in this career field. (A, CSU)

51 DIRECT CURRENT FUNDAMENTALS OF ELECTRONICS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3), (Formerly Electronic Technology 51)

ADVISORY: Electrical Systems Technology 53.

Fundamental principles and applications of direct current circuits. Emphasis on properties of conductors, insulators, and basic components and circuit theory. (A, CSU)

52 ALTERNATING CURRENT FUNDAMENTALS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

PREREQUISITE: None.

Alternating current fundamentals including applicable laws, principles and devices. Designed to meet the needs of industry and for more advanced electronic courses. (A, CSU)

53 LAB SAFETY PRACTICES

2 units, 2 lecture hours, 1 lab hour, (Repeats = 3), (Formerly Electronic Technology 57)

PREREQUISITE: None.

Introduction to the proper and safe use of hand tools, electrical devices/instruments, and component identification, and general circuit assembly procedures. (A, CSU)

54 INTEGRATED DEVICES

3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 52)

ADVISORY: ELECTRICAL SYSTEMS TECHNOLOGY 51 AND 52.

Fundamentals of integrated devices and their applications. Proper and safe use of test equipment. (A, CSU)

248 Electrical Systems Technology

55A DIGITAL CONCEPTS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3), (Formerly Electronic Technology 53)

PREREQUISITE: None.

Introduction to digital systems and subcomponents. Introduction to analog vs. digital world, numbering systems, logic gates, digital transmission and communication, decoders, encoders, multiplexer and multiplexed transmission, registers and memory devices, as well as, digital circuit design on computers. (A, CSU)

55B FACILITY AUTOMATION

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

PREREQUISITE: None.

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, (Repeats = 3)

ADVISORY: Electrical Systems Technology 51, 55A, and 58.

Principles and application of SCADA. Aspects of the data acquisition system from specification and application. Gives a solid understanding of interfacing a PC to real world measurement devices. (A, CSU)

56A WIRING METHODS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

ADVISORY: Electrical Systems Technology 54.

Introduction and application of electrical wiring methods as recognized by the National Electrical Code. Includes wiring methods and procedures for residential, commercial and industrial applications. Major emphasis will be placed upon electrical safety as applied to electrical power systems. (A, CSU)

56B MOTOR CONTROLS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

ADVISORY: Electrical Systems Technology 54.

Investigation and implementation of motor control. Emphasis on the fundamentals of motor operation, electrical systems, controls as well as the National Electrical Code. (A, CSU)

56C INDUSTRIAL ELECTRONICS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

ADVISORY: Electrical Systems Technology 54 and 58.

Application of electronic principles in the industrial environment. Emphasis on power circuits, control circuits and electronic components. (A, CSU)

57A ANALOG COMMUNICATIONS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

ADVISORY: Electrical Systems Technology 54 and 55.

Analog modulation techniques and the frequency spectrum. (A, CSU)

57B DIGITAL COMMUNICATIONS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

PREREQUISITE: Electrical Systems Technology 55A. ADVISORY: Electrical Systems Technology 54.

Digital multiplexing, digital conversions, and modems. (A, CSU)

57C VOICE AND DATA CABLING

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

ADVISORY: Electrical Systems Technology 54.

The course focuses on cabling issues related to data and voice connections and provides an understanding of the industry and its worldwide standards, types of media and cabling, physical and logical networks, as well as signal transmission. (A, CSU)

58 PROGRAMMABLE LOGIC CONTROLLERS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3), (Formerly Electronic Technology 58)

PREREQUISITE: None.

Programmable controllers, basic programming of programmable logic controllers, and input/output device interfacing. (A, CSU)

59 INSTRUMENTATION SYSTEMS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3), (Formerly Electronic Technology 60)

PREREQUISITE: None.

Basic instrumentation and control concepts with application in process control systems. Calibrating, terminology, and Piping and Instrument Diagram (P&ID) symbols as established by the Instrumentation, Systems, and Automation Society. (A, CSU)

60 A+PC MAINTENANCE

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3), (Formerly Electronic Technology 61)

PREREQUISITE: None.

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, (Repeats = 3) (Formerly Electronic Technology 59)

ADVISORY: Electrical Systems Technology 55A, 60 and Applied Technology 10 strongly recommended.

Local Area Networks fundamentals. Providing a theoretically rich, hands-on introduction to networking and the Internet. First class in a series of four in preparation for the CISCO CCNA Certification. (A, CSU)

62 ROUTER PROTOCOLS AND CONCEPTS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

PREREQUISITE: Electrical Systems Technology 61.

Local Area Network routers, including basic router configuration and routing protocols. Second class in a series of four for preparation for the Cisco CCNA Certification. (A, CSU)

63 ADVANCED ROUTING AND SWITCHING

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

PREREQUISITE: Electrical Systems Technology 62.

How to configure a switch for basic functionality and how to implement Virtual LANs, VTP, and Inter-VLAN routing in a converged network. The different implementations of Spanning Tree Protocol in a converged network are presented, and students develop the knowledge and skills necessary to implement a WLAN in a small-to-medium network. The third class in a series of four in preparation for the CISCO CCNA Certification. (A, CSU)

64 ADVANCED NETWORKING AND MANAGEMENT

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

PREREQUISITE: Electrical Systems Technology 63.

WAN technologies and network services; implementation and configure of data link protocols and WAN security concepts, principles of traffic, access control, and addressing services. Fourth class in a series of four in preparation for the CISCO CCNA Certification. (A, CSU)

65 BUILDING SCALABLE INTERNETWORKS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

PREREQUISITE: Electrical Systems Technology 64 or CISCO CCNA Certification (Industry Standard/Certification).

Teaches students about the deployment of state-of-the-art campus LANs and WANs. Students will develop skills in the following areas: Campus Networks, configuring EIGRP, OSPF, IS-IS, and BGP routing protocols and how to manipulate and optimize routing updates between routing protocols. Other topics include multicast routing, IPv6, and DHCP configuration. First class in a series of four in preparation for the CISCO CCNP Certification. (A, CSU)

66 BUILDING MULTILAYER SWITCHED NETWORKS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

PREREQUISITE: Electrical Systems Technology 65.

Multilayer Switching teaches students about the deployment of state-of-the-art campus LANs. Students will develop skills in the following areas: Campus Networks, Virtual Local Area Networks (VLANs), Spanning Tree Protocol, Inter-VLAN Routing, and Configuring Switches to Support Voice. Second class in a series of four in preparation for the CISCO CCNP Certification. (A, CSU)

67 IMPLEMENTING SECURE CONVERGED WANS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

PREREQUISITE: Electrical Systems Technology 65.

An introduction to secure enterprise-class networks, including VPNs, MPLS, and IPsec protocols. Third class in a series of four in preparation for the CISCO CCNP Certification. (A, CSU)

68 OPTIMIZING CONVERGED NETWORKS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

PREREQUISITE: Electrical Systems Technology 66 and 67.

Introduces students to optimizing and providing effective QoS techniques in converged networks operating voice, wireless and security applications. Fourth class in a series of four in the preparation for the CISCO CCNP Certification. (A, CSU)

80 INTRODUCTION TO ENERGY SYSTEMS OF PAST, PRESENT AND FUTURE

2 units, 2 lecture hours, (Repeats = 3)

PREREQUISITE: None.

An introduction to energy systems (transportation, generation, and lifestyle systems) of the past, present and future. Includes the need to evaluate future energy systems for sustainability and their impact on man and the environment. (A, CSU)

81 PHOTOVOLTAIC SYSTEMS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

ADVISORY: Electrical Systems Technology 54 and 96D.

Introduction of photovoltaic system requirements, design and configurations, installation techniques, and their application in residential and commercial construction. Entry-level Certification Exam from NABCEP may be an option. (A, CSU)

82A INTRODUCTION TO ROBOTICS

4 units, 3 lecture hours, 2 lab hours, (Repeats = 3)

PREREQUISITE: None.

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

4 units, 3 lecture hours, 2 lab hours, (Repeats = 3)

PREREQUISITE: Electrical Systems Technology 82A or with instructor approval.

Introduction to the applications of robotics in industry, with emphasis on automated work cells set-up, programming and operations. Course topics will include basic concepts and components of a typical automated work cells end effector designs and production line interfacing are studied. Students will design work cells and develop functional work cell simulators. (A, CSU)

96A NATIONAL ELECTRICAL CODE PART 1

3 units, 3 lecture hours, (Repeats = 3), (See also Building Safety and Code Administration 17)

PREREQUISITE: None.

Application of all rules for engineering, designing, installing, maintaining, and inspecting electrical systems. Designed for newcomers and professionals seeking preparation for obtaining additional certifications or further knowledge. Branch circuits, electrical services, overcurrent protection and grounding Part I. (A, CSU)

96B NATIONAL ELECTRICAL CODE PART 2

3 units, 3 lecture hours, (Repeats = 3), (See also Building Safety and Code Administration 27)

PREREQUISITE: None.

Application of the rules for engineering, designing, installing, maintaining and inspecting installations. Designed for newcomers to the electrical industry and professional seeking preparation for obtaining additional certifications or further knowledge. General wiring, motors, controls, transformers, other equipment and grounding, Part II. (A, CSU)

96C NATIONAL ELECTRICAL CODE PART 3

3 units, 3 lecture hours, (Repeats = 3), (See also Building Safety and Code Administration 37)

PREREQUISITE: None.

Application of the rules for engineering, designing, installing, maintaining and inspecting electrical installations. Designed for newcomers to the electrical industry and professionals seeking preparation for obtaining additional certifications or further knowledge. General wiring, motors, controls, transformers, other equipment and grounding. (A, CSU)

96D NATIONAL ELECTRICAL CODE—ELECTRICAL SAFETY

3 units, 3 lecture hours, (Repeats = 3), (See also Building Safety and Code Administration 47)

PREREQUISITE: None.

Fundamentals of electrical safety as required by NFPA Document 70E. (A, CSU)

175 RESIDENTIAL WIRING

4 units, 3 lecture hours, 4 lab hours, (Repeats = 3), (See also Construction 175), (Formerly Electronic Technology 75 and Electrical Systems Technology 75)

ADVISORY: Eligibility for Applied Technology 130 or Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 or 68 recommended.

Introduction, technique and installation of the electrical wiring system for a single-family residence. Installation of the actual wiring system for the Fresno City College construction department's single-family residence at an off-campus location. Emphasis on current wiring practices and electrical codes. (A)

250 Electrical Systems Technology

269A FUNDAMENTALS OF NETWORK SECURITY–FIREWALLS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 1)

PREREQUISITE: Electrical Systems Technology 64 or equivalent.

Security policy design and management; security technologies, products, and solutions; firewall and secure router design, installation, configuration, and maintenance.

269B FUNDAMENTALS OF WIRELESS LANS

3 units, 3 lecture hours, 1 lab hour, (Repeats = 3)

PREREQUISITE: Electrical Systems Technology 62 or equivalent.

The design, planning, implementation, operation, and troubleshooting of Wireless LANS.

271 ELECTRICAL LINE/UTILITY WORKER

12 units, 20.9 lecture hours, 10 lab hours, (9 weeks),

(Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Specific electrical lineworker training to prepare students for direct entry/employment as a “Electrical Utility Worker” leading to an “Apprenticeship Lineworker”.

ELECTRONICS

SEE ELECTRICAL SYSTEMS TECHNOLOGY (EST)

ENGINEERING (ENGR)

1A ELEMENTARY PLANE SURVEYING 1

4 units, 3 lecture hours, 3 lab hours

PREREQUISITE: Mathematics 4A.

Principles and practice of surveying measurements, computation, and data analysis. Includes measurements of distance, angle and direction, error analysis, and topographic mapping. Application to the solution of surveying and construction field assignments. (A, CSU, UC)

1B ELEMENTARY PLANE SURVEYING 2

4 units, 3 lecture hours, 3 lab hours

PREREQUISITE: Engineering 1A.

Principles and practice of surveying measurement. Introduction to Global Positioning Systems (GPS), Geographical Information Systems (GIS), management and representation of surveying and mapping data, astronomy for surveying measurement. (A, CSU, UC)

2 GRAPHICS

4 units, 2 lecture hours, 6 lab hours

ADVISORY: Mathematics 4A and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Principles of orthographic and axonometric projection, sketching, dimensioning and tolerances. Introduction to computer aided design (CAD). Application to the solution of engineering problems. (A, CSU, UC)

4 ENGINEERING MATERIALS

3 units, 3 lecture hours, (Formerly Engineering 32)

PREREQUISITE: Chemistry 1A and Physics 4A.

Properties of engineering materials and their relation to atomic structure. The effect of microstructure on the mechanical, electrical, magnetic and thermal properties. Phase equilibria and strengthening processes for metals, ceramics, and polymers. (A, CSU, UC)

6 CIRCUITS WITH LAB

4 units, 3 lecture hours, 3 lab hours

PREREQUISITE: Physics 4B. COREQUISITE: Mathematics 7.

An introduction to the solution of the equations arising from the applications of Kirchoff's laws and Thevenin's theorem to DC and AC circuits. Topics include mesh and nodal analysis, periodic forcing functions, phasors, frequency response, resonant circuits, natural and complete response, analog signal systems, dependent sources, and the characteristics of operational amplifiers. (A, CSU, UC)

8 STATICS

3 units, 3 lecture hours, (Formerly Engineering 25)

PREREQUISITE: Physics 4A. COREQUISITE: Mathematics 6.

Rigid bodies in static equilibrium when acted upon by forces and couples in two- and three-dimensional space. Included are the equilibrium of rigid bodies, trusses, frames, and machines, as well as the calculations of the centers of mass, centroids, friction, and moments of inertia. Additional topics which may be covered include distributed forces in cables, beams, and fluid statics; mass moments of inertia; and virtual work. (A, CSU, UC)

10 INTRODUCTION TO ENGINEERING

2 units, 2 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An introduction to the engineering profession for students interested in a career in engineering or technology. Topics include analytical problem solving techniques, career opportunities, professional ethics, and the design process. Projects and field trips required. (A, CSU, UC)

11 MANUFACTURING PROCESSES

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Processing and manufacturing techniques for steel, ceramics, polymers, composites and other industrial materials. Topics include the capabilities and limitations of casting, welding, forming, and machining. Demonstrations and field trips may be included. (A, CSU)

ENGINEERING TECHNOLOGY

SEE DRAFTING

ENGLISH (ENGL)

1A READING AND COMPOSITION

4 units, 4 lecture hours

PREREQUISITE: A “pass” grade in English 125 or English as a Second Language 67 and English 126 or English as a Second Language 68 or appropriate score on reading and writing sections of the Placement Test.

Reading, analyzing, and writing college-level prose, with emphasis on the expository; studying writing as a process; exploring different writing strategies; summarizing, editing, and critiquing; conducting research (gathering, organizing, evaluating, integrating and documenting information). (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 as a Second Language 67 and English 126 or English as a Second Language 68 or appropriate score on reading and writing sections of the Placement Test. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Reading, analyzing, and writing college-level prose, with emphasis on the expository: studying writing as a process; exploring different writing strategies; summarizing, editing, and critiquing; conducting research (gathering, organizing, evaluating, integrating and documenting information). Honors sections may cover additional subject matter such as creative writing, peer response, the study of oral narrative and its relationship to writing and composing on the computer. (A, CSU-GE, UC, I).

1B INTRODUCTION TO THE STUDY OF LITERATURE

3 units, 3 lecture hours

PREREQUISITE: English 1A.

Reading and critical analysis of short stories, novels, poems, and plays. (A, CSU-GE, UC, I)

1BH HONORS INTRODUCTION TO THE STUDY OF LITERATURE

3 units, 3 lecture hours, (Formerly Honors 1F)

PREREQUISITE: English 1A or the equivalent. 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 short stories, novels, poems, and plays. (A, CSU-GE, UC, I).

3 CRITICAL READING & WRITING

3 units, 3 lecture hours

PREREQUISITE: English 1A.

Developing critical thinking skills in reading and writing beyond English 1A. Reasoning for analysis and argument writing based mainly on non-fiction readings. (A, CSU-GE, UC, I)

3H HONORS CRITICAL READING & WRITING

3 units, 3 lecture hours

PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Developing critical thinking skills in reading and writing beyond English 1A. Reasoning for analysis and argument writing based mainly on non-fiction readings. Honors sections may cover additional subject matter, such as more in-depth analytical research, extensive analysis of rhetorical discourse, and the study of how critical reasoning and argument is utilized in content area research and practice. (A, CSU-GE, UC, I)

12 THE BIBLE AS LITERATURE

3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent.

A survey of the Bible as literature. Reading and critical analysis of the Old and New Testaments. (A, CSU-GE, UC, I)

14 FOLKLORE

3 units, 3 lecture hours

PREREQUISITE: English 1A or the equivalent. English 1B is not a prerequisite for this course.

Reading and critical analysis of folklore and folk literature from around the world in literature, film, and the visual arts, including the cultural and literary roots of folklore and folk literature. (A, CSU-GE, UC, I)

15A CREATIVE WRITING: POETRY

3 units, 3 lecture hours, (Repeats = 1), (Formerly English 15)

PREREQUISITE: English 1A or the equivalent.

Writing poetry for critical review. (A, CSU, UC)

15B CREATIVE WRITING: FICTION

3 units, 3 lecture hours, (Repeats = 1)

PREREQUISITE: English 1A or the equivalent.

Writing fiction for critical review. (A, CSU, UC)

15C CREATIVE WRITING: PLAYWRITING

3 units, 3 lecture hours, (Repeats = 1), (See also Theatre Arts 15C)

PREREQUISITE: English 1A or the equivalent.

Writing plays for critical review. (A, CSU, UC)

15D CREATIVE WRITING: AUTOBIOGRAPHY

3 units, 3 lecture hours, (Repeats = 1)

PREREQUISITE: English 1A or the equivalent.

Writing autobiography for critical review. (A, CSU, UC)

17 AFRICAN-AMERICAN LITERATURE

3 units, 3 lecture hours, (See also African-American Studies 17)

PREREQUISITE: English 1A. English 1B is not a prerequisite for this course.

Reading critical works of African and African-American writers and understanding cultural values and themes as expressed in essays, short stories, novels, poetry, and plays. (A, CSU-GE, UC, I)

20 ASIAN-AMERICAN LITERATURE

3 units, 3 lecture hours, (See also Asian-American Studies 20)

PREREQUISITE: English 1A or the equivalent.

Survey of Asian-American classic and contemporary literature. Reading and writing critical analysis of novels, short stories, poems and plays. (A, CSU, UC)

36 WOMEN IN LITERATURE

3 units, 3 lecture hours, (See also Women's Studies 36)

PREREQUISITE: English 1A or equivalent. English 1B is not a prerequisite for this course.

Survey of literature by and about women in fiction, drama, poetry, biography, and essay. Covers multicultural and international literature from classical to contemporary periods, in addition to feminist and gender theory. (A, CSU-GE, UC, I)

40 CRITICAL THINKING ABOUT LITERATURE

3 units, 3 lecture hours, (Repeats = 1)

PREREQUISITE: English 1A. English 1B is not a prerequisite for this course.

Themes, authors, or genres through close readings, contextual approaches, interpretations, and critical evaluations. The subject will vary with the instructors, for example, "Rites of Passage in the American Consciousness," "The Detective as Hero"; Emily Dickinson, Carlos Fuentes; popular literature, science fiction. (A, CSU-GE, UC)

252 English

42 CLASSIC MYTHS

3 units, 3 lecture hours, (See also Humanities 42)

PREREQUISITE: English 1A. English 1B is not a prerequisite for this course.

Reading and critical analysis of basic mythic themes in literature, film, and the visual arts. The origin of myths in ritual, their development in western civilization, and their ultimate form and continued presence in the arts. (A, CSU-GE, UC, I)

44A WORLD LITERATURE TO THE RENAISSANCE

3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent. English 1B is not a prerequisite for this class.

A survey of the most enduring fiction, drama, and poetry from classical antiquity to the renaissance. (A, CSU-GE, UC, I)

44B WORLD LITERATURE SINCE THE RENAISSANCE

3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent. Neither English 1B nor English 44A is a prerequisite for this class.

A survey of the most enduring fiction, drama, and poetry from the neo-classic era to the present. (A, CSU-GE, UC, I)

45 CONTEMPORARY WORLD LITERATURE

3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent. English 1B is not a prerequisite for this class.

Contemporary works in world literature in fiction, drama, poetry, biography, and essay. (A, CSU-GE, UC, I)

46A ENGLISH LITERATURE TO 1800

3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent. English 1B is not a prerequisite for this class.

A survey of British and Irish fiction, poetry, and drama from the earliest writings through 1800. (A, CSU-GE, UC, I)

46B ENGLISH LITERATURE FROM 1800 TO THE PRESENT

3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent. Neither English 1B nor English 46A is a prerequisite for this class.

A survey of British and Irish fiction, poetry, and drama of the Romantic, Victorian, and Contemporary periods. (A, CSU-GE, UC, I)

47 INTRODUCTION TO SHAKESPEARE

3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent.

An introduction to the plays and poetry of William Shakespeare, including selections from the tragedies, comedies, histories, and sonnets. (A, CSU-GE, UC, I)

48A INTRODUCTION TO AMERICAN LITERATURE TO WORLD WAR I

3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent. English 1B is not a prerequisite for this class.

A survey of short stories, novels, poetry, essays, and plays produced by the greatest American writers of the period. (A, CSU-GE, UC, I)

48B INTRODUCTION TO AMERICAN LITERATURE FROM WORLD WAR I TO THE PRESENT

3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent. Neither English 1B nor English 48A is a prerequisite for this class.

A survey of short stories, novels, poetry, essays, and plays produced by the greatest American writers of the period. (A, CSU-GE, UC, I)

105 GRAMMAR AND PUNCTUATION

2 units, 2 lecture hours, (Formerly English 5)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Elements of basic sentence structure, including appropriate punctuation. (A)

125 WRITING SKILLS FOR COLLEGE

4 units, 4 lecture hours, (Formerly English A and 25)

PREREQUISITE: Designated score on English placement test or satisfactory completion of English 252 or 282. Not recommended for students learning English as a second language.

Develops the process of writing, revising and finishing short papers, including logical development and organization of ideas. Emphasizes avoiding common writing errors; develops critical thinking and writing by reading model essays by analyzing and utilizing rhetorical strategies appropriate to purpose and audience. Develops basic research skills. Prepares students for English 1A. (A)

126 READING SKILLS FOR COLLEGE

4 units, 4 lecture hours, (Formerly English 26)

PREREQUISITE: Designated score on English placement test with other relevant criteria or satisfactory completion of English 262. Not recommended for students learning English as a second language. Not recommended for students with identified learning disabilities.

Advances students' reading skills into college-level proficiencies in the areas of vocabulary usage, literal comprehension, and critical reading skills. Trains students to use various reading and reporting strategies for different writing styles. Emphasizes reading as a problem-solving process. (A)

250 BASIC WRITING

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 50)

PREREQUISITE: Designated score on English placement test with other relevant criteria. Not recommended for students learning English as a second language. Not primarily for students with identified learning disabilities.

Develops a basic understanding of paragraph and essay structures and an understanding that writing is for communication. Students will identify possible essay topics and develop a rudimentary ability to find and correct grammatical errors. This course prepares students for English 252. Students must satisfactorily complete coursework to receive credit for the course.

252 WRITING IMPROVEMENT

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 52)

PREREQUISITE: Designated score on English placement test with other relevant criteria or satisfactory completion of English 250 or 281. Not recommended for students learning English as a second language. Not primarily for students with identified learning disabilities.

Develops writing skills. Understanding, finding and correcting grammatical errors. Prepares students for English 125. Students must satisfactorily complete course work to receive credit for the class.

260 BASIC READING

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 60)

PREREQUISITE: Designated score on English placement test with other relevant criteria. Not recommended for students learning English as a second language. Not recommended for students with identified learning disabilities.

Developing comprehension. Determining main ideas and important details. Encouraging positive attitudes toward reading. Prepares students for English 262. Students must satisfactorily complete course work and pass a reading comprehension test to receive credit for the course.

262 READING IMPROVEMENT

4 units, 4 lecture hours, (Formerly English 62)

PREREQUISITE: Designated score on English placement test with other relevant criteria or satisfactory completion of English 260. Not recommended for students learning English as a second language. Not recommended for students with identified learning disabilities.

Developing vocabulary and reading comprehension skills. Fostering positive attitudes toward reading. Prepares students for English 126. Students must satisfactorily complete course work and pass a reading comprehension test to receive credit for the course.

277 READING SKILLS

3 units, 2 lecture hours, 2 lab hours, (Pass/No Pass), (Repeats = 3), (Formerly English 77)

PREREQUISITE: Designated score on English placement test with other relevant criteria. Not recommended for students learning English as a second language. Students must have a diagnosed verifiable disability.

Development of basic reading readiness skills through learning main ideas and important details. Prepares students for English 262 and 278.

278 READING COMPREHENSION

3 units, 2 lecture hours, 2 lab hours, (Pass/No Pass), (Repeats = 3), (Formerly English 78)

PREREQUISITE: Designated score on English placement test with other relevant criteria or satisfactory completion of English 277. Not recommended for students learning English as a second language. Students must have a diagnosed verifiable disability.

Development of reading skills through vocabulary usage, literal comprehension, and critical comprehension. Development of various strategies for comprehending different types of written material. Prepares students for English 126.

279 BEGINNING SPELLING, VOCABULARY, PENMANSHIP

2 units, 1 lecture hour, 3 lab hours, (Pass/No Pass), (Repeats = 3), (Formerly English 79)

PREREQUISITE: Students must have a diagnosed verifiable disability.

Spelling, vocabulary building, and penmanship at the 3rd to 6th grade level.

280 ADVANCED SPELLING AND VOCABULARY

2 units, 1 lecture hour, 3 lab hours, (Pass/No Pass), (Repeats = 3), (Formerly English 80)

PREREQUISITE: Students must have a diagnosed verifiable disability.

An emphasis on spelling and vocabulary building at 6th to 9th grade level.

281 GRAMMAR AND SENTENCE WRITING

3 units, 2 lecture hours, 2 lab hours, (Pass/No Pass), (Repeats = 3), (Formerly English 81)

PREREQUISITE: Designated score on English placement test with other relevant criteria. Not recommended for students learning English as a second language. Students must have a diagnosed verifiable disability.

Development of a basic understanding of paragraph and essay structures and an understanding that writing is for communication. Identification of possible essay topics and develop an ability to find and correct grammatical errors. Prepares students for English 252 or 282.

282 PARAGRAPH WRITING

3 units, 2 lecture hours, 2 lab hours, (Pass/No Pass), (Repeats = 3), (Formerly English 82)

PREREQUISITE: Designated score on English placement test with other relevant criteria or satisfactory completion of English 250 or 281. Not primarily recommended for students learning English as a second language. Students must have a diagnosed verifiable disability.

Development of writing skills through understanding, finding and correcting grammatical errors. Prepares students for English 125.

ENGLISH AS A SECOND LANGUAGE (ESL)

67 ADVANCED WRITING AND GRAMMAR

4 units, 4 lecture hours, (Formerly English 54D)

PREREQUISITE: Use of language other than English as a primary language. Designated score on the English as a Second Language placement test or completion of English as a Second Language 265W with a grade of "C" or better.

At an advanced level, develops the process of writing, revising and editing compositions, a process which includes logical development and organization of ideas; develops analytical and critical thinking skills by reading and responding to model essays; reinforces grammar skills; develops study skills for an academic environment; prepares students of other languages and English Language Learners (ELL) for English 1A and mainstream courses. (A, CSU)

68 ADVANCED READING AND VOCABULARY

4 units, 4 lecture hours

PREREQUISITE: Use of language other than English as a primary language.

Designated score on English as a Second Language placement test or completion of English as a Second Language 265R with a grade of "C" or better.

Advances students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for mainstream college classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare students of other languages and English Language Learners (ELL) for English 1A and mainstream courses. (A, CSU)

263R LOW INTERMEDIATE READING AND VOCABULARY

4 units, 4 lecture, (Pass/No Pass), (Formerly English as a Second Language 63R)

PREREQUISITE: None.

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 as a Second Language 264R and mainstream courses.

263W LOW INTERMEDIATE WRITING AND GRAMMAR

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 54A and English as a Second Language 63 and 63W)

PREREQUISITE: Use of language other than English as primary language.

Designated score on English as a Second Language 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 as a Second Language 264W.

254 English as a Second Language

264R INTERMEDIATE READING AND VOCABULARY

4 units, 4 lecture, (Pass/No Pass), (Formerly English as a Second Language 64R)

PREREQUISITE: Use of language other than English as a primary language. Designated score on English as a Second Language placement test or completion of English as a Second Language 263R with a grade of "C" or better.

Advances students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for mainstream college classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare students of other languages and English Language Learners (ELL) for English as a Second Language 265R and mainstream courses.

264W INTERMEDIATE WRITING AND GRAMMAR

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 54B and English as a Second Language 64 and 64W)

PREREQUISITE: Use of language other than English as primary language. Designated score on English as a Second Language placement test or completion of English as a Second Language 263W with a grade of "C" or better.

Develops the process of writing, revising, and editing at a low intermediate level. Includes the preparation for and composition of paragraphs and appropriate grammar as taught through model essays and exercises. Designed to prepare students of other languages and English Language Learners (ELL) for English as a Second Language 265W and mainstream courses.

265R HIGH INTERMEDIATE READING AND VOCABULARY

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English as a Second Language 65R)

PREREQUISITE: Use of language other than English as a primary language. Designated score on English as a Second Language placement test or completion of English as a Second Language 264R with a grade of "C" or better.

Advances students' skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for mainstream college classes. Improves students' reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare students of other languages and English Language Learners (ELL) for English as a Second Language 68 and mainstream courses.

265W HIGH INTERMEDIATE WRITING AND GRAMMAR

4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 54C and English as a Second Language 65 and 65W)

PREREQUISITE: Use of language other than English as a primary language. Designated score on English as a Second Language placement test or completion of English as a Second Language 264W with a grade of "C" or better.

Develops the process of writing, revising, and editing at a high-intermediate level. Includes the preparation for and composition of essays and use of appropriate grammar as taught through model essays and exercises. Designed to prepare students of other languages and English Language Learners (ELL) for English as a Second Language 67 and mainstream courses.

FASHION AND TEXTILES STUDIES (FSHTX)

20 TEXTILES

3 units, 3 lecture hours, 1 lab hour, (Formerly Home Economics 11 and 20 and Fashion Merchandising 20)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An introductory analysis of textile fibers, yarns, fabrications, dyestuffs, and finishes. Emphasis on selection, use, performance, suitability, and care of textiles for apparel and home furnishings. Legislation, labeling, simple testing, and evaluation of performance. Hands-on experience testing fiber characteristics and care. Appropriate for students in fashion merchandising, apparel construction, and interior design, as well as for all consumers who wear and care for apparel and furnishings. (A, CSU, UC)

22 FASHION ANALYSIS AND WARDROBE SELECTION

3 units, 3 lecture hours, (Formerly Retailing Fashion 8 and Fashion Merchandising 22)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

The function of clothing and its relationship to society and to individuals. The sociological, psychological, physical, and aesthetic aspects of apparel. Applied problems included to differentiate individual style needs based upon lifestyle, personal coloring, body proportions, and fashion personality. An introductory course for the fashion majors, home sewers, costume designers, and consumers seeking to explore apparel which is appropriate for various fashion images. (A, CSU)

24 BEGINNING SEWING

3 units, 2 lecture hours, 4 lab hours, (Repeats = 3), (Formerly Home Economics 24)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Basic techniques for developing skills in the construction of apparel or home furnishings including artistic and economic factors in the selection of fabric, patterns, notions, tools and equipment. Sizing, selection, simple adjustments, layout and cutting of patterns. Construction techniques including seams, seam finishing, darts, facings, hems, and standards of quality and fit in two completed projects. Accommodates students who have no prior sewing experience as well as sewers who desire to improve basic skills. (A, CSU)

25 PROFESSIONAL IMAGE

3 units, 3 lecture hours, (Formerly Retailing Fashion 12 and Fashion Merchandising 25)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Presents basic grooming and etiquette as well as, methods for the analysis, selection, coordination, and care of apparel and accessories suitable for the work environment. Topics include color and fabric style considerations for a basic wardrobe, fit and alterations; grooming of hair, nails and skin and business and table etiquette. Specific information for both men and women who seek to update their image. (A, CSU)

26 INTERMEDIATE SEWING

2 units, 6 lab hours, (Repeats = 3), (Formerly Home Economics 26)

PREREQUISITE: Home Economics 24 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Develop advanced skills in construction of apparel or home furnishings including custom couture techniques for seam, seam finishes, interfacings, hems,

collars, waistbands, pockets, and zippers; use special fabrics such as plaids, laces, sheers, and pile utilize; methods of individualizing clothing OR home fashions with structural and applied designs such as piping, fringe, quilting, or appliqué. Construction of two or more projects. (A, CSU)

30 ETHNIC DRESS
3 units, 3 lecture hours, (Repeats = 2), (Formerly Home Economics 30)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

The national costume in various cultures as reflected by apparel, accessories, and textiles. Examines geographic, sociological, psychological, economic, political, and technological factors affecting the development of cloth and clothing. Influences of various cultural customs and costumes on contemporary western fashion. (A, CSU, UC approved as variable topics; evaluation completed by individual campuses after admission.)

FASHION MERCHANDISING (FM)
FORMERLY RETAILING FASHION

10 PRINCIPLES OF MARKETING
3 units, 3 lecture hours, (See also Marketing 10), (Formerly Retailing Fashion 10)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Creative management and research of marketing involving pricing, promotion, place and physical distribution of products which maximize profitability and customer satisfaction while achieving organizational goals. (A, CSU)

14 RETAILING
3 units, 3 lecture hours, (See also Marketing 14), (Formerly Retailing Fashion 14)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An introduction to the basic retail store operation functions of personnel management, merchandise buying, merchandise promotion, security, and careers. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units, (Repeats = 2)

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, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

21 SALESMANSHIP
3 units, 3 lecture hours, (See also Marketing 11), (Formerly Retailing Fashion 21)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Personal selling and the development of techniques for a successful sales personality; buying motives, required product knowledge, and the selling process. Career opportunities in the sales field. (A, CSU)

27 INTRODUCTION TO FASHION INDUSTRY
3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Introduce steps in the production of apparel from concept to consumer. Identify skills and education required for careers in the fashion industry including those related to the design, manufacturing, distribution, and retailing of consumable goods. Compare methods of predicting consumer demand, buying, pricing and promoting. Recommended as a transfer course for Clothing and Textile, and Fashion majors. (A, CSU)

28 VISUAL MERCHANDISING
3 units, 2 lecture hours, 2 lab hours, (See also Marketing 17), (Formerly Retailing Fashion 17)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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 125 and 126 recommended.

Introduction to the study of film with emphasis on aesthetics, theory, and methods of critical analysis. Lectures, discussions, and readings are supplemented by screenings of representative films. (A, CSU-GE, UC, I)

2A HISTORY OF CINEMA 1895-1960
3 units, 3 lecture hours, (Formerly Film 1A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.

A survey of international film history from 1960 to the present; 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 125 and 126 recommended.

The relationship between film and culture, including the images of race, ethnicity, class, and gender in film; the ways in which ideologies are conveyed through popular film; 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, (Repeats = 3)
ADVISORY: Eligibility for English 125 and 126 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 125 and 126 recommended.
Genre study to provide a clear context for appreciating the fundamental components of film as art and as social expression. Investigates the origins, evolution and transformations of various film genres, including film noir, the Western, science-fiction, the musical, horror, war, or the crime film. Covers the formal and thematic conventions of each genre and the genre as a reflection of the social environments that produced them. (A, CSU-GE, UC, I)

FIRE TECHNOLOGY (FIRET)

1 FIRE PROTECTION ORGANIZATION
3 units, 8.4 lecture hours, (7 weeks), (Formerly Fire Science 1)
PREREQUISITE: None.
An introduction to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as a part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions. (A, CSU)

2 FIRE PREVENTION TECHNOLOGY
3 units, 8.4 lecture hours, (7 weeks), (Spring), (Formerly Fire Science 6)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
History and philosophy of fire prevention, organization, and operation of a fire prevention bureau; use of fire codes; identification and correction of fire hazards; the relationship of fire prevention with fire safety education; and understanding of detection and suppression systems. (A, CSU)

3 FIRE PROTECTION EQUIPMENT AND SYSTEMS
3 units, 8.4 lecture hours, (7 weeks), (Spring), (Formerly Fire Science 7)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.
Features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. (A, CSU)

4 BUILDING CONSTRUCTION FOR FIRE PROTECTION
3 units, 8.4 lecture hours, (7 weeks), (Spring), (Formerly Fire Science 5)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Components of building construction that relate to fire and life safety; focus on firefighter safety; elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. (A, CSU)

5 FIRE BEHAVIOR AND COMBUSTION
3 units, 8.4 lecture hours, (7 weeks), (Spring), (Formerly Fire Science 3)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Theory and fundamentals of how and why fires start, spread, and are controlled; fire chemistry and physics, fire characteristics of materials, extinguishing agents and fire control techniques. (A, CSU)

8 FIRE HYDRAULICS
3 units, 8.4 lecture hours, (7 weeks) (Spring), (Formerly Fire Science 8)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.
Hydraulic laws and formulas as applied to the fire service, including application of formulas and mental calculation to hydraulic problems, water supply problems, and underwriter's requirement for pumps. Reviews basic mathematics. (A, CSU)

9 FIRE FIGHTING PRACTICES
3 units, 8.4 lecture hours, (7 weeks), (Spring), (Formerly Fire Science 9)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

13 ARSON AND FIRE INVESTIGATION TECHNOLOGY
3 units, 8.4 lecture hours, (7 weeks), (Spring), (Formerly Fire Science 13)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Arson and incendiary, related laws, and types of incendiary fires; methods of determining fire cause, recognizing and preserving evidence, and interviewing and detaining witnesses; procedures in handling juveniles; court procedure and testimony. (A, CSU)

14 PRINCIPLES OF FIRE & EMERGENCY SERVICES SAFETY & SURVIVAL
3 units, 8.4 lecture hours, (7 weeks)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

130 BASIC FIRE ACADEMY
27 units, 10.38 lecture hours, 15.56 lab hours, (31 weeks), (Formerly Fire Science and Fire Technology 30)
PREREQUISITE: Medical exam conducted by a California licensed physician, including resting EKG and physician's written explanation of EKG printout. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Preparation of students for entry-level employment as a firefighter; provides students with entry-level skills in fire suppression, emergency medical care, hazardous materials spills, fire prevention, fire investigation, vehicle extrication, urban search and rescue, fire chemistry, fire apparatus driving, confined space rescue operations, incident command, and an intensive physical fitness training program; course is offered on an intensive daytime format or an extended evening and weekend format. (A)

130A BASIC FIRE ACADEMY - PART 1**13 units, 9 lecture hours, 16.2 lab hours, (16 weeks)**

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Prepares students for entry-level employment as a firefighter, provides students with entry-level skills in fire suppression, driver training, use of specialized fire equipment, salvage and overhaul; intensive physical fitness training program; course is offered on an intensive daytime format or an extended evening and weekend format. (A)

130B BASIC FIRE ACADEMY - PART 2**13 units, 10.1 lecture hours, 16.5 lab hours, (15 weeks)**

PREREQUISITE: Successful completion of Fire Technology 130A when taken in tandem without a time separation between courses (Fire Technology 130A and Fire Technology 130B).

Prepares students for entry-level employment as a firefighter, entry-level skills in low angle rope rescue, vehicle extrication, wildland fire control, hazardous materials operations, incident command, ventilation, confined space rescue operations, removing victims from entangled vehicles; an intensive physical fitness training program; course is offered on an intensive daytime format or an extended evening and weekend format. (A)

131 EMERGENCY MEDICAL TECHNICIAN I**10 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 125 and 126 or English as a Second Language 67 and 68 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 EMT 1 certificate.

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.

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**9 units, 32 lab hours, (15 weeks)**

PREREQUISITE: Fire Technology 133 and Fire Technology 134.

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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.

Designed to provide emergency personnel with information and experience in command and control techniques used at the scene of an emergency. Emphasis on decision making, the act of commanding, the authority or right to command, the personnel organization structure or area under an individual commander, and the preplanning and training requirements for effective performance as an officer. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)

150E FIRE COMMAND 1B**2 units, 8.4 lecture hours, (5 weeks), (Formerly Fire Science and Fire Technology 50E)**

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Provides fire emergency personnel with information and experience in command and control techniques used at the scene of hazardous materials, multi-casualty, and wildland fire emergencies; emphasizes decision making; act of commanding; authority or right to command; personnel, organization, structure or area under an individual commander, and preplanning and training requirements for effective performance as an officer. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)

150F FIRE INVESTIGATION 1A**2 units, 8.4 lecture hours, (5 weeks), (Formerly Fire Science and Fire Technology 50F)**

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 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. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

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, (5 weeks), (Formerly Fire Technology 50J)

PREREQUISITE: Fire Technology 150F. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The second class in a series of classes designed for career oriented or currently employed fire fighters; develops knowledge and skill in the area of fire investigation; legal codes and regulations governing the laws of evidence, interviews, and court proceedings; laboratory demonstrations. This is one of the California Fire Service Training and Education System classes needed for Fire Investigator I certification. (A)

150K FIRE COMMAND 1C

2 units, 8.4 lecture hours, (5 weeks)

PREREQUISITE: Fire Technology 150D. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Provide emergency personnel with information on the three elements of wildland fire behavior including fuel, weather, and topography, elements of the Incident Command System with an emphasis on Incident Action Planning, and duties and responsibilities of the Strike Team leader. I-Zone firefighting as it relates to the communications process, the elements of size-up, and the key components of a report on conditions. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)

150L TRAINING INSTRUCTOR 1A

2 units, 8.4 lecture hours, (5 weeks)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Methods and techniques for training in accordance with the latest concepts in career education; selecting adapting, organizing, and using instructional materials appropriate for teaching cognitive lessons; criteria and methods to evaluate teaching and learning through teaching demonstrations. Student instructor teaching demonstrations required. This course is one of the California Fire Service Training and Education System classes needed for Fire Officer certification and is the first of a three course series. (A)

150M TRAINING INSTRUCTOR 1B

2 units, 8.4 lecture hours, (5 weeks)

PREREQUISITE: Fire Technology 150L with a minimum grade of 80%.

Methods and techniques for training in accordance with the latest concepts in career education; selecting adapting, organizing, and using instructional materials appropriate for teaching psycho-motor lessons; criteria and methods to evaluate teaching and learning efficiency; apply major principles of learning through teaching demonstrations. Student teaching demonstrations required. This course is one of the California Fire Service Training and Education System classes needed for Fire Officer certification and is the second of a three course series. (A)

150N TRAINING INSTRUCTOR 1C

2 units, 8.4 lecture hours, (5 weeks)

PREREQUISITE: Fire Technology 150M with a minimum grade of 80%.

Methods and techniques for developing lesson plans, ancillary components, and tests in accordance with the latest concepts in career education; opportunity to develop, receive feedback, and finalize instructional materials; deliver a teaching demonstration. This course is one of the California Fire Service Training and Education System classes needed for Fire Officer certification and is the third of a three course series. (A)

261 EMERGENCY MEDICAL TECHNICIAN 1 REFRESHER

1 unit, 1.33 lecture hours, (Unlimited Repeats), (Open Entry/Open Exit), (Formerly Fire Science 61 and Fire Technology 61)

PREREQUISITE: Valid Emergency Medical Technician 1 course completion certificate.

A review of the topics covered in Fire Technology 131, changes in emergency medical protocol, and updates on new procedures authorized for use in the field. Meets the requirements for recertification as an EMT 1 that are set forth by the State of California and Fresno County.

265 I-300, INTERMEDIATE ICS

1 unit, 3 lecture hours, (7 weeks)

PREREQUISITE: Permission of the instructor and 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), (Unlimited Repeats), (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 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Basic food science and food preparation techniques. Emphasizes nutrition values, food safety, sanitation, food product standards, and aesthetic appeal. (TCSU NUTR 120) (A, CSU)

35 NUTRITION AND HEALTH

3 units, 3 lecture hours, (Formerly Home Economics 60)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU NUTR 110) (A, CSU, UC)

40 NUTRITION

3 units, 3 lecture hours, (Formerly Home Economics 40)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU NUTR 110) (A, CSU, UC)

41 SPORTS NUTRITION

2 units, 2 lecture hours, (Formerly Home Economics 41)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.

The relationship between nutrition and various contemporary health issues affecting women. Significance of nutrition as it relates to the health of women during specific stages of the life cycle. Current trends and research. (A, CSU)

45 THERAPEUTIC DIETS

3 units, 3 lecture hours, (Formerly Home Economics 5)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended. Food and Nutrition 40 or equivalent strongly recommended. Concurrent enrollment in Food Service Management 19 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 125 and 126 or English as a Second Language 67 and 68 and concurrent enrollment in Food Service Management 19 recommended.

Current methods of supervision and leadership which are applicable to the food service industry. Methods and techniques of recruitment, selection, training and evaluation of personnel. Record maintenance, enforcement of safety and sanitary standards and supervision of food service employees. (A, CSU)

15 FOOD PRODUCTION MANAGEMENT

2 units, 2 lecture hours, (Formerly Dietetic Services 15)

ADVISORY: Food Service Management 35 recommended. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended. Concurrent enrollment in Food Service Management 19 recommended.

Effective management of time, staff, equipment in quantity food preparation; supervisor responsibilities. Standards and criteria, menu planning, and systems of productions. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to food service management. Collaborative learning objectives established specific to food service management. Seventy-five hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

25 FOOD AND BEVERAGE PURCHASE AND CONTROL

2 units, 2 lecture hours, (Formerly Food Services 66)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Food purchasing policies and procedures with respect to budget. Basic marketing functions and selection of food products for commercial and institutional food service operations. Emphasis on developing standard purchase specification for various food service operations and on procedures for buying, receiving, storing and inventory management. (A, CSU)

35 FOOD SERVICES, SANITATION, SAFETY AND EQUIPMENT

2 units, 2 lecture hours, (Formerly Dietetic Services 35)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended. Concurrent enrollment in Food Service Management 19 recommended.

Food service employees' role in preventing foodborne illness. Supervisor's responsibilities in maintaining standards of health and safety. Selection and use of food service equipment for optimum safety and sanitation, and to meet federal, state and local regulations. Exam given for the National Restaurant Association ServSafe certificate. (A, CSU)

38 QUANTITY FOOD PREPARATION

3 units, 1 lecture hour, 6 lab hours, (Formerly Dietetic Services 58)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 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)

63 CHILD NUTRITION PROGRAM MANAGEMENT

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Overview of the components of model child nutrition programs including the application of current child health and nutrition principles, nutrition education practice, marketing procedures, communication strategies, and operation management skills. Management of nutritionally and fiscally sound child nutrition programs. Effective use of community and school partnership. (A, CSU)

260 Food Service Management

144 PRESENTING SERVICE FOR FOOD SERVICE PROFESSIONALS 2 units, 2 lecture hours, (Formerly Food Service Management 44)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Techniques, attitude, education and demeanor required for successful food service operations. (A)

146 ELEMENTARY FOOD SERVICE COMPUTATION I 1.5 units, 1.5 lecture hours, (Formerly Food Service Management 46)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 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 as a Second Language 67 and 68 and Mathematics 101 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)

149 FOOD SERVICE INTERNSHIP 3 units, 1 lecture hour, 6.67 lab hours, (Formerly Food Service Management 49)

ADVISORY: Food Service Management 35, Food and Nutrition 1 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Supervised work experience in an approved food service facility. (A)

160 BASIC SKILLS: BASIC FOODS 3 units, 1.5 lecture hours, 4.5 lab hours, (Formerly Food Services 54 and Food Service Management 60)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Overview of basic preparation skills in preparing and serving nutritious and acceptable foods in schools, child care centers, and family day care programs. (A)

161 INTRODUCTION TO THE CHILD NUTRITION PROGRAM 2 units, 2 lecture hours, (Formerly Food Service Management 61)

PREREQUISITE: None.

Overview of entry level skills in the child nutrition program including sanitation and safety, basic nutrition principles, record keeping, and food production. (A)

162 MENU PLANNING FOR CHILD NUTRITION 3 units, 3 lecture hours, (Formerly Food Services 62 and Food Service Management 62)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 and Food Service Management 160 recommended.

Overview of menu planning for child nutrition programs including menu planning options, nutrition standards, menu writing, student preferences, marketing and evaluation. Procedures for developing standardized products, budgetary controls, and evaluating procurement and delivery systems. Meets Federal, State, and Local Standards. (A)

FOREIGN LANGUAGES

AMERICAN SIGN LANGUAGE (ASL)

1 BEGINNING AMERICAN SIGN LANGUAGE 4 units, 4 lecture hours, (Formerly American Sign Language 1A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

First semester American Sign Language and its usefulness as a means of communication with the deaf and hard of hearing. An introduction to the culture of the deaf community and the literary and artistic contribution of this culture. Designed for students with no knowledge of ASL. (A, CSU-GE, UC, I)

2 HIGH-BEGINNING AMERICAN SIGN LANGUAGE, 4 units, 4 lecture hours, (Formerly American Sign Language 1B)

PREREQUISITE: American Sign Language 1 or two years high school American Sign Language or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Second semester beginning American Sign Language and the visual-gestural language used by the Deaf in the United States and Canada. Explores the culture of Deaf people in the United States. (A, CSU-GE, UC, I)

3 INTERMEDIATE AMERICAN SIGN LANGUAGE 4 units, 4 lecture hours, (Formerly American Sign Language 2A)

PREREQUISITE: American Sign Language 2 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 contribution of this culture. (A, CSU-GE, UC, I)

4 HIGH-INTERMEDIATE AMERICAN SIGN LANGUAGE 4 units, 4 lecture hours, (Formerly American Sign Language 2B)

PREREQUISITE: American Sign Language 3 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Fourth semester American Sign Language. A formal method of thinking, organizing, receiving, and sending non-verbal messages in American Sign Language. The cultural context of the Deaf community for which American Sign Language serves as the primary language. (A, CSU-GE, UC, I)

5 DEAF CULTURE

3 units, 3 lecture hours

PREREQUISITE: American Sign Language 4 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An in-depth study of Deaf culture and the Deaf community which will help students understand Deaf culture, values, language, identity, rules of interaction, and traditions. Students will learn about the deep-rooted ties that Deaf have with residential schools; Gallaudet University; and national, state, and local organizations. (A, CSU-GE)

6 STRUCTURE OF AMERICAN SIGN LANGUAGE

3 units, 3 lecture hours

PREREQUISITE: American Sign Language 4 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Examination of the parts of a sign; building words in American Sign Language; sentence structure (questions, statements, relative clauses, etc.) the meaning and issue of iconicity; organization of sentences according to old and new information; and the structure of stories. Emphasis in grammatical features of American Sign Language, such as classifiers, verbs modulations and aspects, and the role of facial expression. (A, CSU-GE, UC)

7 DEAF HISTORY

3 units, 3 lecture hours

PREREQUISITE: American Sign Language 4 or equivalent. ADVISORY: Eligibility for English 125 or 126 or English as a Second Language 67 and 68 recommended.

Examination of the historical eras of different stages in Deaf people's lives. Emphasis on deafness in historical perspective. (A, CSU-GE, UC, I)

8 AMERICAN SIGN LANGUAGE LITERATURE/FOLKLORE

3 units, 3 lecture hours

PREREQUISITE: American Sign Language 4 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 4 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to the role and responsibilities of interpreters, environments in which interpreters are involved and assessment within the profession. (A, CSU)

21 AMERICAN SIGN LANGUAGE TO ENGLISH TRANSLATION

3 units, 3 lecture hours

PREREQUISITE: American Sign Language 4 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to the cognitive processing skills and techniques used to translate American Sign Language to English. (A, CSU)

22 ENGLISH TO AMERICAN SIGN LANGUAGE TRANSLATION

3 units, 3 lecture hours

PREREQUISITE: American Sign Language 4 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

ARMENIAN (ARMEN)

1 BEGINNING ARMENIAN

4 units, 4 lecture hours, 1 lab hour, (Formerly Armenian 1A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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

4 units, 4 lecture hours, 1 lab hour, (Formerly Armenian 1B)

PREREQUISITE: Armenian 1 or two years of high school Armenian or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Second semester Armenian listening, speaking, grammar, writing, reading and vocabulary. (Offered infrequently) (A, CSU-GE, UC, I)

3 INTERMEDIATE ARMENIAN

4 units, 4 lecture hours, 1 lab hour

PREREQUISITE: Armenian 2 or equivalent. (Experience using Armenian at home, at work, or aboard.) ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Third semester Armenian listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)

CHINESE (CHIN)

1 BEGINNING CHINESE

4 units, 4 lecture hours, 1 lab hour, (generally evening only), (Formerly Chinese 1A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

First semester 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

4 units, 4 lecture hours, 1 lab hour, (generally evening only), (Formerly Chinese 1B)

PREREQUISITE: Chinese 1 or two years of high school Chinese or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Second semester Chinese listening, speaking, grammar, writing, reading, and vocabulary. (A, CSU-GE, UC, I)

262 Foreign Languages

3 INTERMEDIATE CHINESE

4 units, 4 lecture hours, 1 lab hour

PREREQUISITE: Chinese 2 or three years of high school Chinese, or equivalent (extensive living experience with the language). ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Third semester Chinese listening, speaking, grammar, reading, writing and vocabulary. (CHIN 3+CHIN 4= TCSU CHIN SEQ B) (A, CSU-GE, UC, I)

4 HIGH-INTERMEDIATE CHINESE

4 units, 4 lecture hours, 1 lab hour

PREREQUISITE: Chinese 3 or equivalent (extensive living experience with the language). ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Fourth semester Chinese listening, speaking, grammar, reading, writing, and vocabulary. (CHIN 3+CHIN 4= TCSU CHIN SEQ B) (A, CSU-GE, UC, I)

5 CHINESE SHORT STORIES AND CULTURE

3 units, 3 lecture hours, 1 lab hour

PREREQUISITE: Chinese 4 or equivalent (extensive living experience with the language). ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Advanced Chinese class with emphasis on reading and writing pertaining to Chinese literature and culture. The course will focus on continued development of Chinese language skills and critical analysis of Chinese literature and culture. (A, CSU-GE, UC, I)

FRENCH (FRENCH)

1 BEGINNING FRENCH

4 units, 4 lecture hours, 1 lab hour, (Formerly French 1A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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

4 units, 4 lecture hours, 1 lab hour, (Formerly French 1B)

PREREQUISITE: French 1 or two years of high school French or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Second semester French listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)

3 INTERMEDIATE FRENCH

4 units, 4 lecture hours, 1 lab hour, (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 125 and 126 or English as a Second Language 67 and 68 recommended.

Third semester French listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)

4 HIGH-INTERMEDIATE FRENCH

4 units, 4 lecture hours, 1 lab hour, (Formerly French 2B)

PREREQUISITE: French 3 or equivalent (Extensive living experience with the language). ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Fourth semester French listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)

GERMAN (GERMAN)

1 BEGINNING GERMAN

4 units, 4 lecture hours, 1 lab hour, (Formerly German 1A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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

4 units, 4 lecture hours, 1 lab hour, (Formerly German 1B)

PREREQUISITE: German 1 or two years of high school German or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Second semester German listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)

3 INTERMEDIATE GERMAN

4 units, 4 lecture hours, 1 lab hour, (Formerly German 2A)

PREREQUISITE: German 2 or three years of high school German or equivalent (Extensive living experience with the language). ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Third semester German listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)

4 HIGH-INTERMEDIATE GERMAN

4 units, 4 lecture hours, 1 lab hour, (Formerly German 2B)

PREREQUISITE: German 3 or three years of high school German or equivalent (Extensive living experience with the language). ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Fourth semester German listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)

HMONG (HMONG)

1 BEGINNING HMONG

4 units, 4 lecture hours, 1 lab hour, (Formerly Hmong 1A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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

4 units, 4 lecture hours, 1 lab hour, (Formerly Hmong 1B)

PREREQUISITE: Hmong 1 or two years of high school Hmong or equivalent.

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Second semester Hmong listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)

JAPANESE (JAPAN)

1 BEGINNING JAPANESE

4 units, 4 lecture hours, 1 lab hour, (Formerly Japanese 1A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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

4 units, 4 lecture hours, 1 lab hour, (Formerly Japanese 1B)

PREREQUISITE: Japanese 1 or two years of high school Japanese or equivalent.

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Second semester Japanese listening, speaking, grammar, writing, reading and vocabulary. (A, CSU-GE, UC, I)

PORTUGUESE (PORT)

1 BEGINNING PORTUGUESE

4 units, 4 lecture hours, 1 lab hour

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

First semester Portuguese listening, speaking, grammar, writing, reading, and vocabulary, Portuguese and Brazilian culture. (A, CSU-GE, UC, I)

2 HIGH-BEGINNING PORTUGUESE

4 units, 4 lecture hours, 1 lab hour

PREREQUISITE: Portuguese 1, or two years of high school Portuguese or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Second semester Portuguese listening, speaking, grammar, reading, writing, and vocabulary, Portuguese and Brazilian culture. (A, CSU-GE, UC, I)

3 INTERMEDIATE PORTUGUESE

4 units, 4 lecture hours, 1 lab hour

PREREQUISITE: Portuguese 2 or three years of high school Portuguese, or equivalent (extensive living experience with the language). ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Third semester Portuguese listening, speaking, grammar, reading, writing, vocabulary, and Portuguese and Brazilian culture. (A, CSU-GE, UC, I)

4 HIGH-INTERMEDIATE PORTUGUESE

4 units, 4 lecture hours, 1 lab hour

PREREQUISITE: Portuguese 3, or three years of high school Portuguese, or the equivalent (extensive living experience with the language). ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Fourth semester Portuguese listening, speaking, grammar, reading, writing, vocabulary, and Brazilian/Portuguese culture. (A, CSU-GE, UC, I)

RUSSIAN (RUSS)

1 BEGINNING RUSSIAN

4 units, 3 lecture hours, 2 lab hours, (Formerly Russian 1A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

First semester Russian listening, speaking, grammar, writing, reading, and vocabulary. Designed for students who have no knowledge of Russian. (A, CSU-GE, UC, I)

2 HIGH-BEGINNING RUSSIAN

4 units, 3 lecture hours, 2 lab hours, (Formerly Russian 1B)

PREREQUISITE: Russian 1 or two years of high school Russian or equivalent.

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Second semester Russian listening, speaking, grammar, writing, reading, and vocabulary. (A, CSU-GE, UC, I)

3 INTERMEDIATE RUSSIAN

4 units, 3 lecture hours, 2 lab hours, (Formerly Russian 2A)

PREREQUISITE: Russian 2 or three years of high school Russian or equivalent (Extensive living experience with the language.) ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Third semester Russian listening, speaking, grammar, writing, reading, and vocabulary. (A, CSU-GE, UC, I)

4 HIGH-INTERMEDIATE RUSSIAN

4 units, 3 lecture hours, 2 lab hours, (Formerly Russian 2B)

PREREQUISITE: Russian 3 or equivalent (Extensive living experience with the language.) ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Fourth semester Russian listening, speaking, grammar, writing, reading, and vocabulary. (A, CSU-GE, UC, I)

SPANISH (SPAN)

1 BEGINNING SPANISH

4 units, 4 lecture hours, 1 lab hour, (Formerly Spanish 1A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC, I)

2 HIGH-BEGINNING SPANISH

4 units, 4 lecture hours, 1 lab hour, (Formerly Spanish 1B)

PREREQUISITE: Spanish 1 or two years of high school Spanish or equivalent.

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC, I)

264 Foreign Languages

3 INTERMEDIATE SPANISH

4 units, 4 lecture hours, 1 lab hour (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 125 and 126 or English as a Second Language 67 and 68 recommended.

Third semester Spanish listening, speaking, grammar, reading, writing, and vocabulary. (TCSU SPAN 140, TCSU SEQ B=SPAN 3+4) (A, CSU-GE, UC, I)

3NS SPANISH FOR SPANISH SPEAKERS

4 units, 4 lecture hours, 1 lab hour, (Formerly Spanish 21)

PREREQUISITE: Three years of high school Spanish or a basic speaking knowledge of Spanish. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC, I)

4 HIGH-INTERMEDIATE SPANISH

4 units, 4 lecture hours, 1 lab hour, (Formerly Spanish 2B)

PREREQUISITE: Spanish 3 or 3NS or equivalent (Extensive living experience with the language.). ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Fourth semester Spanish listening, speaking, grammar, reading, writing, and vocabulary. (TCSU SPAN 140, TCSU SEQ B=SPAN 3+4) (A, CSU-GE, UC, I)

4NS SPANISH FOR SPANISH SPEAKERS

4 units, 4 lecture hours, 1 lab hour, (Formerly Spanish 22)

PREREQUISITE: Spanish 3NS or a basic speaking knowledge of Spanish. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC, I)

5 THE SHORT STORY: MEXICO, SPAIN, AND THE U.S.

3 units, 3 lecture hours, 1 lab hour, (Formerly Spanish 3A)

PREREQUISITE: Spanish 4 or Spanish 4NS or equivalent (Experience using Spanish at home, work, or abroad). ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

A selection of Hispanic short stories, culture and civilization. Continued development of Spanish language skills in reading, writing and speaking. Reading and discussing articles and short stories and viewing and discussing films. Includes presentation of oral and written reports. Emphasis on U.S., Mexico, and Spain. (A, CSU-GE, UC, I)

6 THE SHORT STORY: LATIN AMERICA

3 units, 3 lecture hours, 1 lab hour, (Formerly Spanish 3B)

PREREQUISITE: Spanish 4 or 4NS or equivalent (Experience using Spanish at home, work, or abroad). (Spanish 5 is not a prerequisite to Spanish 6.) ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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

3 units, 3 lecture hours, 1 lab hour

PREREQUISITE: Spanish 4 or 4NS or equivalent (Experience using Spanish at home, work, or abroad). ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

In depth development of Spanish writing and grammar. Designed for advanced students of Spanish who want to improve their writing skills. (A, CSU-GE, UC, I)

8 ADVANCED SPANISH CONVERSATION

3 units, 3 lecture hours, 1 lab hour

PREREQUISITE: Spanish 4 or 4NS or equivalent (Experience using Spanish at home, work, or abroad). ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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

3 units, 3 lecture hours, 1 lab hour

PREREQUISITE: Spanish 4 or Spanish 4NS, or equivalent (extensive living experience with the language.). ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

10 MANY MEXICOS: A CULTURAL OVERVIEW

1 unit, 1 lecture hour

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Culture of modern Mexico and its roots in pre-Columbian civilization. Designed for students enrolled in the Summer-in-Mexico Program. (A, CSU)

11 COSTA RICA: A CULTURAL OVERVIEW

1 unit, 1 lecture hour

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Culture of modern Costa Rica and its roots in pre-Columbian civilization. Designed for students enrolled in the Summer in Costa Rica Program. (A, CSU)

12 SPAIN: A CULTURAL OVERVIEW

2 units, 2 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Cultural overview of modern Spanish Speaking countries and their roots in pre-Hispanic civilization. Designed for students enrolled in the Summer Study Abroad Program. (A, CSU-GE)

13 CULTURAL OVERVIEW OF A SPANISH-SPEAKING COUNTRY

2 units, 2 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Cultural overview of a Spanish-speaking country and their roots in pre-Hispanic civilization. Designed for students enrolled in the Summer Study Abroad Program in a Spanish-speaking country. (A, CSU)

SWAHILI (SWAHLI)

- 1 BEGINNING SWAHILI**
 4 units, 3 lecture hours, 2 lab hours, (See also African-American Studies 21), (Formerly Swahili 1A)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 First semester beginning Swahili: listening, speaking, grammar, writing, reading, and vocabulary. Designed for students with no knowledge of Swahili. (A, CSU-GE, UC, I)
- 2 HIGH-BEGINNING SWAHILI**
 4 units, 3 lecture hours, 2 lab hours, (See also African-American Studies 22)
 PREREQUISITE: Swahili 1/African-American Studies 21 or two years of high school Swahili or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Second semester Swahili: listening, speaking, grammar, reading, writing, comprehension, and vocabulary. (A, CSU-GE, UC, I)

FRENCH SEE FOREIGN LANGUAGES

GEOGRAPHY (GEOG)

- 1 PHYSICAL GEOGRAPHY**
 3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC, I)
- 2 CULTURAL GEOGRAPHY**
 3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 The relationship between the cultural environment and the physical environment. Topics include language, religion, politics, population, economics, and urbanization. (TCSU GEOG 120) (A, CSU-GE, UC, I)
- 4A WORLD GEOGRAPHY**
 3 units, 3 lecture hours, (Formerly Geography 4)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Analysis of the spatial organization of people, places, and environments on the earth's surface. Covers Europe, the post-Soviet region, Asia, and Africa. Explores interconnections between physical setting, population patterns, natural resources, and economic and political status. (A, CSU-GE, UC, I)
- 4B WORLD GEOGRAPHY**
 3 units, 3 lecture hours, (Formerly Geography 5)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Analysis of the spatial organization of people, places, and environments on the earth's surface. Covers the Americas, Australia, New Zealand, and the Pacific Islands.

Explores interconnections between physical setting, population patterns, natural resources, and economic and political status. (A, CSU-GE, UC, I)

- 7 PHYSICAL GEOGRAPHY: EARTH'S SURFACE**
 4 units, 3 lecture hours, 2 lab hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Processes of formation: application of principles of physical geography to maps and photographs. Landform features (soils, natural vegetation and water bodies). (A, CSU-GE, UC, I)
- 8 PHYSICAL GEOGRAPHY: WEATHER AND CLIMATE**
 4 units, 3 lecture hours, 2 lab hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Map projections; location on the earth's surface, time, oceans, climatological methods; meteorological instruments; interpretation of weather maps. (A, CSU-GE, UC, I)
- 10 INTRODUCTION TO GIS**
 3 units, 2 lecture hours, 4 lab hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended. Computer Information Technology 15 is desirable.
 Introduction to the fundamental concepts of Geographic Information Systems (GIS) including familiarization with computers, data input, raster GIS, vector GIS, querying, methods of spatial analysis, and application of GIS. (A, CSU, UC)
- 20 GEOGRAPHY OF CALIFORNIA**
 3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 125 or English as a Second Language 67 and 68 recommended.
 California's physical, cultural, and regional elements. The physical geographic base includes: location; geological evolution; geomorphic provinces, natural hazards, and resources; climate, water resources, vegetation, and soils. Historically developed cultural themes include: Native American and Hispanic origins; migration patterns and settlements; population growth and ethnic diversity; land use and economic activities; and Pacific Rim connections. Human-environment interactions and issues are considered throughout. (A, CSU-GE, UC, I)
- 30 TOPICS IN GEOGRAPHY**
 1-4 units, 1-3 lecture hours, 0-9 lab hours, (Repeats = 3)
 ADVISORY: Eligibility for English 125 and 125 or English as a Second Language 67 and 68 recommended.
 Examination of topics, current trends, and/or issues in the subdisciplines of Geography not covered by regular catalog offerings. Course content and unit credit to be determined by faculty. May be offered in seminar, lecture, laboratory, and/or field studies format. Recommended preparation varies with topic. (A, CSU, UC approved as a variable topic; evaluation completed by individual campuses after admission.)
-
- GEOLOGY (GEOL)**
- 1 PHYSICAL GEOLOGY**
 4 units, 3 lecture hours, 2 lab hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC, I)

1H HONORS PHYSICAL GEOLOGY

4 units, 3 lecture hours, 2 lab hours

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Introduction to the principles and unifying concepts of earth science including geologic time, formation and internal structure of the Earth, plate tectonics, rock and mineral identification, weathering processes, landforms, earthquakes, volcanic activity, flooding, and groundwater resources. Laboratory exercises will include rock and mineral identification, and interpretation of topographic and geologic maps. Field trips to classic geologic locations, guest lectures, and student presentations are included in this honors course. (A, CSU-GE, UC, I)

2 HISTORICAL GEOLOGY

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC, I)

3 GEOLOGY FIELD STUDIES

1-2 units, .5-1 lecture hour, 1-2 lab hours, (Repeats = 3)

PREREQUISITE: Geology 1. ADVISORY: Eligibility of English 125 and 126 or English as a Second Language 67 and 68 recommended.

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 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC, I)

5 INTRODUCTION TO OCEANOGRAPHY

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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.

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.

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

3 units, 2 lecture hours, 2 lab hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to the earth sciences with an emphasis on basic topics and principles in geology, oceanography, meteorology, and astronomy. Optional field trips. For transfer Liberal Studies students. (A, CSU, UC)

11 INTERNATIONAL GEOLOGY FIELD STUDIES

1-3 units, 1-3 lecture hours, (Repeats=3), (Pass/No Pass)

PREREQUISITE: None.

Geologic field studies of an international location, such as Costa Rica, Galapagos Islands, Iceland, etc. Required field trips. Additional costs for travel abroad. (A, CSU)

GERMAN SEE FOREIGN LANGUAGES

GRAPHIC COMMUNICATIONS (GRC)

(FORMERLY PRINTING TECHNOLOGY)

5 INTRODUCTION TO MACINTOSH COMPUTER USE

1 unit, 2 lecture hours, (9 weeks), (Repeats = 3), (Formerly Printing Technology 5)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to Macintosh computer features and associated software. Systematic operation of filing structure and introductory assignments. Fulfills computer literacy graduation requirement. (A, CSU)

10 INTRODUCTION TO GRAPHIC COMMUNICATIONS

2 units, 2 lecture hours, (Repeats = 3), (Formerly Printing Technology 10)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Introduction to graphic communications methodology via print, web, and multimedia formats. History, requirements, limitations of production techniques, demonstrations, discussion, and basic project work. Fulfills computer literacy graduation requirement. (A, CSU)

13 INTRODUCTION TO IMAGE CAPTURE/SCANNING

1 unit, 2 lecture hours, (9 weeks), (Repeats = 3), (Formerly Printing Technology 13)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Image capture and scanning for print, multimedia, or web page production. Resolution, halftone specification, and tone manipulation. Fulfills computer literacy graduation requirement. (A, CSU)

14 ADOBE ACROBAT PROFESSIONAL

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Adobe Acrobat software and others used for the generation of portable file format (PDF) documents for the world wide web, distribute and print workflows, or inclusion in multimedia productions. Fulfills computer literacy graduation requirement. (A, CSU)

15 WEB PAGE CONSTRUCTION 1

4 units, 3 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Adobe Dreamweaver, CSS and traditional construction methods for web page and web site generation. Components of Fireworks and Photoshop included in exercises and project work. Students create web sites and post them online. Fulfills computer literacy graduation requirement. (A, CSU)

16 WEB DESIGN

4 units, 3 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Graphic Communications 15 or permission of instructor. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Adobe Dreamweaver, Fireworks, Photoshop and other supporting software for use in advanced web page design and site production methods. Project work includes dynamic elements, audio and video components. Students create and post web sites. Fulfills computer literacy graduation requirement. (A, CSU)

17 ADOBE ILLUSTRATOR

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Printing Technology 17)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Adobe Illustrator program for vector image development. Hands-on work creating projects for reproduction. Fulfills computer literacy graduation requirement. (A, CSU)

18 PRODUCTION METHODS

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Production methods of graphic communications systems with emphasis on print media. Project work explores considerations and limitations of software for output using the printing process. Fulfills computer literacy graduation requirement. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2), (Formerly Printing 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 graphic communications. Collaborative learning objectives established specific to graphic communications. Seventy-five hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

20 GRAPHIC COMMUNICATIONS

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Printing Technology 20)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Overview of graphic communication processes as related to the printing industry. Terminology, input/output considerations, current trends, and hands-on projects using each of the three major types of software; illustration, page layout, and image adjustment. Fulfills computer literacy graduation requirement. (A, CSU)

22 MULTIMEDIA 1

4 units, 3 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Introduction to multimedia. Project work using an assortment of current software. Combine images, audio and video into cross-platform productions. DVD authoring, podcasting, slide shows, image capture, and short films. Fulfills computer literacy graduation requirement. (A, CSU)

23 MULTIMEDIA 2

4 units, 3 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Graphic Communications 22.

Continued studies in multimedia publication. Terminology, input/output considerations and individual student project work using current software. Fulfills computer literacy graduation requirement. (A, CSU)

24 FLASH ANIMATION

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Adobe Flash animation program for multimedia. Design and production of interactive projects. Components from image adjustment and draw programs. Fulfills computer literacy graduation requirement. (A, CSU)

25 SPECIALIZED WEB TECHNIQUES

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Techniques, tips, and 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)

268 Graphic Communications

27 DIGITAL VIDEO PRODUCTION

4 units, 3 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Introduction to digital video production with emphasis on editing techniques. Units include planning, storytelling, vocabulary, camera handling, lighting, sound, logging/capturing, and working with professional editing software. Students complete short exercises and create video projects. Fulfills computer literacy graduation requirement. (A, CSU)

28 INDEPENDENT STUDY – GRAPHICS

1-3 units, 3-9 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Individual graphic projects designed to allow the student to expand on a specific area of previous study. The production of a pre-employment portfolio with field trips to professional studios, shops, television stations, newspapers or galleries. Fulfills computer literacy graduation requirement. (A, CSU)

30 ADOBE INDESIGN/PROFESSIONAL PUBLISHING

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Printing Technology 30)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Adobe InDesign page layout software. Emphasis on output for print technology, with multimedia inclusion. Components from image adjustment and draw programs. Fulfills computer literacy graduation requirement. (A, CSU)

31 PHOTOSHOP FOR GRAPHICS

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Adobe Photoshop with emphasis on graphic design and production. Units include print, web, multimedia, and video application. Fulfills computer literacy graduation requirement. (A, CSU)

32 VIDEO TECHNIQUES

4 units, 3 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Graphic Communications 27 or permission of instructor. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Production processes and non-linear editing style in greater detail than offered in Graphic Communications 27. Project work with attention to detail in all phases of production. Color correction, lighting, audio, and legal issues. Fulfills computer literacy graduation requirement. (A, CSU)

33 FLASH FOR THE WEB

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Adobe Flash software for web site publishing. Design, completion and posting of interactive web site. Components from Photoshop and Fireworks image adjusting, Illustrator draw program, and Dreamweaver web page generating software applications. Fulfills computer literacy graduation requirement. (A, CSU)

34 INTRODUCTION TO 3-D ANIMATION

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 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)

39A GRAPHIC DESIGN I

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Printing Technology and Graphic Communications 39)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

Principles and methods of graphic communication. Projects incorporate symbols and typography into visual design, exploring interrelationships between formal elements and symbolic content. Fulfills computer literacy graduation requirement. (A, CSU)

40A GRAPHIC DESIGN II

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Printing Technology and Graphic Communications 40)

PREREQUISITE: Graphic Communications 39A. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 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. (A, CSU)

41 VISUAL COMMUNICATIONS

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Printing Technology 41)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Communication theory, organization and delivery methods. Creating presentation materials with computer, video, and photographic techniques. Fulfills computer literacy graduation requirement. (A, CSU)

51 STORYBOARDING

1 unit, 2 lecture hours, (9 weeks), (Repeats = 3)

PREREQUISITE: None.

Pre-visualization for animation, video, web, and game production. Introduction to media-specific storyboarding processes and techniques. (A, CSU)

GUIDANCE STUDIES

SEE COUNSELING

HEALTH INFORMATION TECHNOLOGY (HIT)
FORMERLY MEDICAL RECORD TECHNOLOGY

- 1 INTRODUCTION TO HEALTH INFORMATION MANAGEMENT**
 3 units, 3 lecture hours, (Formerly Medical Record Technology 1)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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**
 2 units, 2 lecture hours, (Formerly Medical Record Technology 2)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Legal basis for the control, use and release of health information; concepts of consent for treatment and other procedures; 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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.
 General principles of pathophysiology; systematic study of symptoms, signs, etiologic factors, 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 125 and 126 or English as a Second Language 67 and 68 recommended.
 Introduction to ICD-9-CM code assignment; 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, ICD-O, and ICD-10-CM. This is the first of a two-course sequence. (A, CSU)

- 6 CODING AND REIMBURSEMENT**
 3 units, 3 lecture hours
 PREREQUISITE: Health Information Technology 5. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Advanced ICD-9-CM code assignment. Emphasis on case studies, health records, and federal regulations regarding prospective payment systems and methods of billing and reimbursement. Second of a two-course sequence. (A, CSU)
- 7 DIRECTED PRACTICE**
 5 units, 1 lecture hour, 12 lab hours, (Pass/No Pass)
 PREREQUISITE: Health Information Technology 3 and 6. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Practical application of advanced principles and practices of health information technology in a real or simulated work setting; supervised onsite 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 125 and 126 or English as a Second Language 67 and 68 recommended.
 Effective management of technical and human factors in health information services: planning, organizing, budgeting, strategic planning, work space design, recruitment, selection, training and development, evaluation, compensation, and labor relations. (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 125 and 126 or English as a Second Language 67 and 68 recommended.
 Basic hospital and health statistics including the sources, definitions, and calculations of common rates and percentages. Computerized and manual methods for collections, computation and presentation. Review of regulatory, accreditation, and vital statistics reporting; health care research data. (A, CSU)
- 10 MEDICAL TERMINOLOGY**
 3 units, 3 lecture hours, (Formerly Medical Record Technology 10)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 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)

270 Health Information Technology

12 HEALTH INFORMATION IN ALTERNATIVE SETTINGS

2 units, 2 lecture hours

PREREQUISITE: Health Information Technology 1. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.

Computer applications and information systems used in healthcare and health information management; system development, implementation, and analysis; data retrieval and reporting; HER migration and implementation. (A, CSU)

15 MEDICAL CODING DIRECTED PRACTICE

1 unit, 3 lab hours, (Pass/No Pass), (Repeats = 2)

PREREQUISITE: Health Information Technology 6. COREQUISITE: Health Information Technology 11.

Supervised practice in a healthcare setting or by virtual simulation of diagnostic and procedure coding; demonstration of knowledge in regulatory compliance, revenue cycle, and reimbursement methodologies. (A, CSU)

HEALTH SCIENCE (HLTH)

1 CONTEMPORARY HEALTH ISSUES

3 units, 3 lecture hours, (Formerly Health Education 1)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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

2 units, 2 lecture hours, (Formerly Health Education 2)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU, UC)

HISTORY (HIST)

1 WESTERN CIVILIZATION TO 1648

3 units, 3 lecture hours

ADVISORY: English 1A.

A survey of the political, social, economic, cultural, and intellectual developments of European civilization from its prehistoric antecedents in the Middle East to the rise of modern European nations in the seventeenth century. (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. (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. (A, CSU-GE, UC, I)

2H HONORS WESTERN CIVILIZATION SINCE 1648

3 units, 3 lecture hours, (Formerly Honors 2H)

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

The philosophical, political, and economic development of the European civilizations and their "offspring" in the New World and elsewhere from the 17th century to the present era. In addition, Honors sections take a greater cross-disciplinary perspective, critically evaluate issues and controversies in historiography, and place greater emphasis on the use of history in understanding the modern world. (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. (TCSU HIST 130) (A, CSU-GE, UC, I)

12 HISTORY OF THE UNITED STATES SINCE 1877

3 units, 3 lecture hours

ADVISORY: English 1A.

Political, social and economic development since Reconstruction Era; the US as a world power. Satisfies the US history requirement for BA degree. (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 ISLAM

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, UC)

18 HISTORY OF ANCIENT GREECE

3 units, 3 lecture hours

ADVISORY: English 1A and History 1.

An intensive survey of Greek history from the Bronze Age to the Hellenistic period. Discussion of the Homeric poems, the development of the polis system in Athens and Sparta, the Persian and Peloponnesian Wars, and Hellenistic science and technology. (A, CSU-GE, UC, I)

20 WORLD HISTORY I, TO 1600

3 units, 3 lecture hours

ADVISORY: English 1A.

Economic, political, and social developments in World Civilization from the emergence of human communities to around 1600. (This course is designed for transfer Liberal Studies Blended Major students.) (TCSU HIST 150) (A, CSU-GE, UC, I)

21 UNITED STATES CIVIL WAR

3 units, 3 lecture hours

ADVISORY: English 1A. Satisfactory completion of History 11 recommended.

Causes, events, and consequences of the American Civil War. (A, CSU-GE, UC, I)

22 HISTORY OF AMERICAN WOMEN

3 units, 3 lecture hours

ADVISORY: English 1A.

Women in American history: social, political, and economic actions and reactions of American women; racial, ethnic, religious, geographic, and class differences. (A, CSU-GE, UC, I)

23 WORLD HISTORY II, SINCE 1500

3 units, 3 lecture hours

ADVISORY: English 1A.

Economic, political, and social development in world history from around 1500 to the present. (A, CSU-GE, UC, I)

25 HISTORY OF RELIGION IN THE UNITED STATES

3 units, 3 lecture hours

ADVISORY: English 1A.

Survey of religion in the United States from the colonial period to the present. (A, CSU-GE, UC)

29 HISTORY OF MEXICO, COLONIAL TO CONTEMPORARY PERIOD

3 units, 3 lecture hours, (See also Chicano-Latino Studies 29)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

A social, economic and political survey of Mexican history from the colonial (1521) to the contemporary period (2000's). (A, CSU-GE, UC, I)

30 CALIFORNIA HISTORY

3 units, 3 lecture hours

ADVISORY: English 1A.

Growth and development of California politically, economically, and culturally from 1523 to the present, emphasizing 20th century issues. (A, CSU, UC)

34 HISTORY OF THE AMERICAN CIVIL RIGHTS MOVEMENT

3 units, 3 lecture hours

ADVISORY: English 1A.

History of the struggle for civil and human rights in American history, focusing on the African American movement. Legal, moral, ethical, religious and humanistic foundations of the Movement. Forms of discrimination, segregation and oppression and various forms of resistance to them. Efforts to protect human and civil rights in the United States. (A, CSU-GE, UC, I)

HMONG SEE FOREIGN LANGUAGES

HOME ECONOMICS SEE FASHION AND TEXTILES STUDIES AND INTERIOR DESIGN

HONORS (HONORS)

ACCOUNTING 4AH, HONORS FINANCIAL ACCOUNTING

4 units, 4 lecture hours, 1 lab hour

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended. Enrolled or previously completed Computer Information Technology 12 or 15. Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

Explores what financial accounting is, why it is important, and how it is used by investors and creditors to make decisions. Covers the accounting information system and the recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the classified financial statements, and statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls and ethics. Honors program will require additional analysis of subject material involving research and presentations. (A, CSU, UC)

4BH HONORS MANAGERIAL ACCOUNTING

4 units, 4 lecture hours, 1 lab hour

PREREQUISITE: Accounting 4A or 4AH. ADVISORY: Meet the requirements for consideration for acceptance into the Honors Program. See Honors Program listing in the college catalog.

Examination of how managers use accounting information in decision-making, planning, directing operations, and controlling. Focus on cost terms and concepts, cost behavior, cost structure, and cost-volume-profit analysis. Examination of profit planning, standard costs, operations and capital budgeting, cost control, and accounting for costs in manufacturing organizations. Honors program will require additional analysis of subject material involving research and presentations. (A, CSU, UC)

ANTHROPOLOGY 2H, HONORS CULTURAL ANTHROPOLOGY

3 units, 3 lecture hours, (Formerly Honors 2A)

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Principles, methods, and concepts of cultural anthropology. The relationship between culture, society, and the individual. A cross-cultural, integrated analysis of human marriage and family, child rearing, personality development, kinship, social institutions, ideology, politics and social control, economics and ecological adaption, language, artistic expression, and cultural change. In addition, the Honors course takes a greater cross-disciplinary perspective, places greater emphasis on the use of anthropology on the understanding of the modern world, and more critically evaluates the methods and theory of anthropology. (A, CSU-GE-UC, I)

ART 5H, HONORS ART HISTORY 1

3 units, 3 lecture hours, (Formerly Honors 5A)

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

A survey of the Western Art from prehistory to the Gothic period that may include one or more areas of non-Western art from the same time period. Honors sections will include special introduction for non-art majors into the characteristics and components of art and a brief introduction into art criticism. (A, CSU-GE, UC, I)

ART 6H, HONORS ART HISTORY 2

3 units, 3 lecture hours, (Formerly Honors 6A)

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

A survey of Western Art from the beginning of the Renaissance to the present that may include one or more areas of non-Western Art from the same time period. Honors sections will include a special introduction for non-art majors into the characteristics and components of art and a brief introduction into art criticism. (A, CSU-GE, UC, I)

BIOLOGY 1H, HONORS PRINCIPLES OF BIOLOGY

4 units, 3 lecture hours, 2 lab hours, (Formerly Honors 1B)

PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Introduction to the principles and unifying concepts of life science including the chemical basis of life, cell structure and function, genetics and principles of inheritance, biological classification and diversity, and ecology, with evolution as the unifying theme. Applications of the above topics to human health and environmental issues are stressed. Field trips, guest speakers, literature and scientific research, use of technology, and student presentations are included in this honors level course. Fulfills prerequisite for Biology 4, 6, 7, 20, 24, and 31. (A, CSU-GE, UC, I)

3H HONORS INTRODUCTION TO LIFE SCIENCE

4 units, 3 lecture hours, 2 lab hours

ADVISORY: Meet the qualifications for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

Introductory course exploring biological concepts as they relate to organismal structure and function, inheritance, ecology, and evolution. Recommended for non-biological science majors and liberal studies majors. Field trips, guest speakers, literature and scientific research, use of technology and student presentations are included in this honors level course. (A, CSU-GE, UC, I)

11AH HONORS BIOLOGY FOR SCIENCE MAJORS I

5 units, 4 lecture hours, 3 lab hours

PREREQUISITE: Mathematics 103 with a grade of "C" or better. Completion within the last five years recommended. COREQUISITE: Chemistry 1A. ADVISORY: Meet the qualifications for acceptance into the Honors Program. 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. (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. (A, CSU, UC)

CULTURAL STUDIES 7H, HONORS INTRODUCTION TO BRITISH CULTURE

3 units, 3 lecture hours, (See also Humanities 7H)

ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors program listing in the college catalog.

An examination of British society and culture, including historical roots as well as contemporary institutions and practices. Topics include language, geography, religion, transportation, economics, politics, mass media, family patterns, immigration and ethnic diversity, education, health care, theater, literature, music, art and architecture. Designed primarily for students in the Semester in England Program. (A, CSU-GE)

ECONOMICS 1AH, HONORS INTRODUCTION TO MACROECONOMICS

3 units, 3 lecture hours

PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

Principles of macroeconomics: consumers, business, and government in the United States economy. Alternative approaches and solutions to inflation and unemployment, fiscal and monetary policy in economic planning and management. In addition, Honors sections will discuss and analyze the works of historical economic figures. (A, CSU-GE, UC, I)

ECONOMICS 1BH, HONORS INTRODUCTION TO MICROECONOMICS

3 units, 3 lecture hours

PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.

The "free enterprise" system. Theories of consumer and individual firm behavior. Market structure analysis and comparison. Government programs to assist, regulate, and promote various industries. The American labor movement and international trade. In addition, Honors sections will discuss and analyze the works of historical economic figures. (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 as a Second Language 67, and English 126 or English as a Second Language 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. (A, CSU-GE, UC, I)

ENGLISH 1BH, HONORS INTRODUCTION TO THE STUDY OF LITERATURE

3 units, 3 lecture hours, (Formerly Honors 1F)

PREREQUISITE: English 1A or the equivalent. 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 short stories, novels, poems, and plays. (A, CSU-GE, UC, I)

ENGLISH 3H, HONORS CRITICAL READING & WRITING

3 units, 3 lecture hours

PREREQUISITE: English 1A . ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Developing critical thinking skills in reading and writing beyond English 1A. Reasoning for analysis and argument writing based mainly on non-fiction readings. Honors sections may cover additional subject matter, such as more in-depth analytical research, extensive analysis of rhetorical discourse, and the study of how critical reasoning and argument is utilized in content area research and practice. (A, CSU-GE, UC, I)

GEOLOGY 1H, HONORS PHYSICAL GEOLOGY

4 units, 3 lecture hours, 2 lab hours

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Introduction to the principles and unifying concepts of earth science including geologic time, formation and internal structure of the Earth, plate tectonics, rock and mineral identification, weathering processes, landforms, earthquakes, volcanic activity, flooding, and groundwater resources. Laboratory exercises will include rock and mineral identification, and interpretation of topographic and geologic maps. Field trips to classic geologic locations, guest lectures, and student presentations are included in this honors course. (A, CSU-GE, UC)

HISTORY 1H, HONORS WESTERN CIVILIZATION TO 1648

3 units, 3 lecture hours, (Formerly Honors 1H)

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

A survey of the political, social, economic, cultural, and intellectual developments of European civilization from its prehistoric antecedents in the Middle East to the rise of modern European Nations in the seventeenth century. In addition, Honors sections take a greater cross-disciplinary perspective, critically evaluate issues and controversies in historiography of the ancient-through-early-modern periods, and place greater emphasis on the use of history in understanding the modern world. (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. (A, CSU-GE, UC, I)

HONORS 1A, HONORS SCIENCE COLLOQUIUM: BIOLOGICAL SCIENCE THROUGH SCHOLARLY RESEARCH

1 unit, 1 lecture hour

COREQUISITE: Meet the qualifications for acceptance into the Honors Program. Biology 11AH or English 1AH. See Honors Program listing in college catalog.

Interdisciplinary approach to biological research integrating scientific writing and scholarly presentation methods. Critical topics and concepts beyond content offered in Biology 11A Honors. (A, CSU, UC approved as variable topics; evaluation completed by individual campuses after admission.)

HONORS 1C, HONORS HUMANITIES COLLOQUIUM: HUMANITIES THROUGH THE AGES

1 unit, 1 lecture hour

COREQUISITE: Meet the qualifications for acceptance into the Honors Program. Philosophy 1AH, History 1H or 2H, Art 5H or 6H, or English 1BH or 3H or Humanities 10H or 11H. See Honors Program listing in college catalog.

Interdisciplinary investigation of aspects of perceived reality. Examination of various concepts of reality as manifested in literature, critical thought, philosophy, religion, ideology, arts, politics, and socioeconomic systems. (A, CSU, UC)

HONORS 1D, HONORS BUSINESS AND ECONOMICS COLLOQUIUM: THE LOCAL ECONOMY AND AGRIBUSINESS

1 unit, 1 lecture hour

COREQUISITE: Meet the qualifications for acceptance into the Honors Program. Economics 1AH or 1BH, 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 business practices. Global and national economic and business theories applied to the economic cycles and business conditions of agribusiness of the San Joaquin Valley. (A, CSU)

HONORS 1E, HONORS SOCIAL SCIENCE COLLOQUIUM: CONTEMPORARY ISSUES IN SOCIAL SCIENCE

1 unit, 1 lecture hour

COREQUISITE: Meet the qualifications for acceptance into the Honors Program. Anthropology 2H or Psychology 2H. See Honors Program listing in college catalog.

Interdisciplinary investigation of a contemporary issue in society, culture, and human behavior. Topics studied and researched in relationship to anthropological and psychological theories. (A, CSU)

HONORS 1F, HONORS PHI THETA KAPPA COLLOQUIUM: PHI THETA KAPPA STUDY TOPICS

1 unit, 1 lecture hour, (Repeats = 1)

COREQUISITE: Meet the qualifications for acceptance into the Honors Program and enrollment in 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)

HONORS 1G, HONORS LEADERSHIP COLLOQUIUM: PHI THETA KAPPA LEADERSHIP TRAINING INSTITUTE

1 unit, 1 lecture hour

COREQUISITE: Meet the qualifications for acceptance into the Honors Program and enrollment in the Honors Program. See Honors Program listing in college catalog.

Interdisciplinary study of integrating concepts and materials requiring analysis of leadership styles and contexts from the Honors core courses in humanities, social sciences, and business. Development of student’s college and life-long leadership skills. (A, CSU)

HUMANITIES 7H, HONORS INTRODUCTION TO BRITISH CULTURE

3 units, 3 lecture hours, (See also Cultural Studies 7H)

ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors program listing in the college catalog.

An examination of British society and culture, including historical roots as well as contemporary institutions and practices. Topics include language, geography, religion, transportation, economics, politics, mass media, family patterns, immigration and ethnic diversity, education, health care, theater, literature, music, art and architecture. Designed primarily for students in the Semester in England Program. (A, CSU-GE)

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)

PHILOSOPHY 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 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. (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. (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. (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. (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 125 and 126 or English as a Second Language 67 and 68 recommended.

Overview of social, economic, biological and psychological functions of aging. Exploration of issues of the aged with emphasis on consumerism, housing, health, leisure time, family roles, retirement, widowhood and sexuality. (A, CSU-GE, UC, I)

18 ALCOHOL AND DRUG ABUSE COUNSELING: PROFESSIONAL AND PERSONAL GROWTH

2 units, 2 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Techniques to establish optimal performance and the well-being of the helping professional. (A, CSU)

19A WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

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, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

19B WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

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, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

- 20 INTRODUCTION TO SOCIAL WELFARE**
 3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Introduction to Social Welfare institutions, policies, and the social work profession. Emphasis on history, knowledge base, value systems, and specific fields of practice. (TCSU SW 110) (A, CSU, UC)
- 24 FUNDAMENTALS OF INTERVIEWING AND COUNSELING**
 3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.
 Methods of human services and social work intervention with individual, group, and community; problem analysis and available services. (A, CSU)
- 35 INTRODUCTION TO EATING DISORDERS**
 2 units, 2 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Compulsive overeating, bulimia, and anorexia nervosa. Selected research findings related to weight regulation, psychological variables, dieting, obesity, cultural factors, family dynamics, and medical complications. (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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 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)

HUMANITIES (HUMAN)

- 7 INTRODUCTION TO BRITISH CULTURE**
 3 units, 3 lecture hours, (See also Cultural Studies 7)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 An examination of British society and culture, including historical roots as well as contemporary institutions and practices. Topics include language, geography, religion, transportation, economics, politics, mass media, family patterns, immigration and ethnic diversity, education, health care, theater, literature, music, art and architecture. Designed primarily for students in the Semester in England Program. (A, CSU-GE)
- 7H HONORS INTRODUCTION TO BRITISH CULTURE**
 3 units, 3 lecture hours, (See also Cultural Studies 7H)
 ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors program listing in the college catalog.
 An examination of British society and culture, including historical roots as well as contemporary institutions and practices. Topics include language, geography, religion, transportation, economics, politics, mass media, family patterns, immigration and ethnic diversity, education, health care, theater, literature, music, art and architecture. Designed primarily for students in the Semester in England Program. (A, CSU-GE)
- 10 CLASSICAL HUMANITIES**
 3 units, 3 lecture hours
 PREREQUISITE: English 1A.
 An integrated study of the art, music, literature, philosophy, and drama of Western civilization from the Greeks through the Renaissance. (A, CSU-GE, UC, I)
- 10H HONORS CLASSICAL HUMANITIES**
 3 units, 3 lecture hours
 PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
 An integrated study of the art, music, literature, philosophy, and drama of Western civilization from the Greeks through the Renaissance. Honors sections may cover additional subject matter such as more extensive reading and research as well as additional writing. (A, CSU-GE, UC, I)

276 Humanities

11 MODERN HUMANITIES

3 units, 3 lecture hours

PREREQUISITE: English 1A. Humanities 10 is not a prerequisite for this course.

An integrated study of the art, music, literature, philosophy, and drama of the Western civilization from the seventeenth century to the present. (A, CSU-GE, UC, I)

11H HONORS MODERN HUMANITIES

3 units, 3 lecture hours

PREREQUISITE: English 1A. Humanities 10 is not a prerequisite for this course.

ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.

An integrated study of the art, music, literature, philosophy, and drama of Western civilization from the seventeenth century to the present. Honors sections may cover additional subject matter such as more extensive reading and research as well as additional writing. (A, CSU-GE, UC, I)

42 CLASSICAL MYTHS

3 units, 3 lecture hours, (See also English 42)

PREREQUISITE: English 1A.

Reading and critical analysis of basic mythic themes in literature, film, and the visual arts. The origin of myths in ritual, their development in western civilization, and their ultimate form and continued presence in the arts. (A, CSU-GE, UC, I)

INDIVIDUAL STUDY

49 (COURSE TITLE TO BE SELECTED)

1-3 units, minimum of 54 hours required per unit, (Repeats = 3)

PREREQUISITE: To be determined by the staff making application for Individual Study 49.

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 dean. (A, CSU, UC approved as variable topics; evaluation completed by individual campuses after admission.)

INDUSTRIAL EDUCATION SEE APPLIED TECHNOLOGY (AT)

INFORMATION SYSTEMS

SEE COMPUTER INFORMATION TECHNOLOGY (CIT)

INTERDISCIPLINARY STUDIES (INTDS)

1 MUSEUM STUDIES

3 units, 3 lecture hours, (Formerly Anthropology 7)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Survey of museum practice with introduction to history and ethics of acquisition; methods of museum and collections management, exhibit development, and museum administration. (A, CSU)

INTERIOR DESIGN (INTRDSN)

7 INTERIOR DESIGN

3 units, 3 lecture hours, 1 lab hour, (Formerly Home Economics 7 and 20)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

A comprehensive introduction to the economic, social, psychological, and aesthetic aspects of housing and interior design. Integration of design principles, space planning, furniture selection and creative expression with consumer information pertaining to living space. Laboratory experiences include space analysis, color and materials coordination, and furniture arrangement. Field trips required. (A, CSU)

JAPANESE SEE FOREIGN LANGUAGE

JOURNALISM (JOURN)

1 INTRODUCTION TO MASS COMMUNICATION

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

A study of the social, economic, political, cultural, and behavioral impacts of mass media both nationally and globally. From books through the internet, and from pop culture to advertising and public relations, 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. (A, CSU-GE, UC, I)

2 INTERPRETING CURRENT EVENTS

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU)

4 WRITING FOR THE COLLEGE NEWSPAPER

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 1A recommended, 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. (A, CSU)

5 NEWSPAPER PRODUCTION

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended. For photographers, demonstrated ability to use a camera. For artists and designers, demonstrated ability in the field of art or graphics.

Organize and publish a student newspaper on a regular schedule throughout the semester; participate in bi-weekly budget meetings for college newspaper content; edit news stories written by students in Journalism 4; produce accompanying photography and graphics; complete newspaper and advertising layout and design. (A, CSU)

6 MAGAZINE PRODUCTION

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended. For photographers, demonstrated ability to use a camera. For artists and designers, demonstrated ability in the field of art or graphics.

Introduction to magazine production with emphasis on developing, researching, interviewing and writing non-fiction articles. Includes complete presentation of stories, photos, design and layout. Students will edit and publish a magazine that can be adaptable for on-line publication. (A, CSU)

9 FEATURE WRITING

3 units, 2 lecture hours, 3 lab hours

ADVISORY: Journalism 3 or concurrent enrollment, and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Fundamentals in feature writing for magazines, newspapers and on-line publications. Special emphasis on profile and interpretative news features. Provides practical experience in interview and in-depth research techniques. (A, CSU)

15 BASIC EDITING FOR JOURNALISTS

2 units, 2 lecture hours

ADVISORY: Journalism 3 or concurrent enrollment, and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Skills building course for journalism students covers parts of speech, word use, sentence construction, spelling, punctuation, and principles of effective writing as it applies to journalistic proofreading and copyediting; emphasizes the set of rules for understanding how language works; and communicating clearly, concisely, and coherently. (A, CSU)

16 RACE, GENDER AND THE MEDIA

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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, a consideration 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, (Repeats = 2)

COREQUISITE: Journalism 4. Fall and Spring Semesters: Must be enrolled in at least one other course, including occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to journalism. Collaborative learning objectives established specific to journalism. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

LABORATORY ASSISTANT

159 LABORATORY ASSISTANT

1 unit, 3 lab hours, (Repeats = 3)

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)

LATIN AMERICAN STUDIES (LAST)

10 LATIN AMERICAN LITERATURE

3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A.

Representative works of various countries to show Latin American literature in its social, political and economic context. Historical coverage from pre-Columbian American peoples to contemporary writers. Course conducted in English. (A, CSU-GE, UC, I)

11 LATIN AMERICAN COLLOQUIUM

1 unit, 1 lecture hour

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An interdisciplinary study of selected Latin American topics. Whenever appropriate, the course will be taught by a team of instructors representing two or more disciplines. It will include discussions, readings, writing, projects, field trips and guest speakers. (A, CSU, UC approved as a variable topic; evaluation completed by individual campuses after admission.)

LEARNING ASSISTANCE (LA)

1 TUTOR TRAINING

1 unit, 1 lecture hour, 1 lab hour, (Repeats = 1)

PREREQUISITE: None.

Concepts, principles, and methods of one-on-one and group tutoring with supervised practice. Designed for tutors working in college tutorial, math, and English learning centers, and for students employed or desiring future employment as educational or instructional aides or as teachers. (A, CSU)

277A ESSENTIAL SKILLS WORKSHOP SERIES

.5 unit, .5 lecture hour, (Open Entry/Open Exit), (Pass/No Pass)

PREREQUISITE: None.

Designed to deliver specific learning skills in areas such as reading, writing, math, computer literacy, and student success strategies, which have been identified as necessary to assist students in learning the content taught in their coursework.

LIBRARY SKILLS (LIBSKL)

1 INFORMATION COMPETENCY/RESEARCH SKILLS

1 unit, 1 lecture hour

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to research skills for college students, including basic concepts of information, its organization, location, evaluation, and use. Students will learn how to use print resources, electronic information retrieval systems, the Internet as a reference tool, and style manuals. (A, CSU)

2 INFORMATION AND COMPUTER LITERACY

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. Fulfills the computer literacy graduation requirement. (A, CSU)

LIBRARY TECHNOLOGY (LITEC)**51 INTRODUCTION TO LIBRARY SERVICE**

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Explores the general organization of various types of libraries and their materials; library service from past to present and its role in society; basic duties of the library paraprofessional. (A, CSU)

52A ORGANIZATION OF INFORMATION

3 units, 3 lecture hours, (Formerly Library Technology 52)

ADVISORY: Library Technology 51 recommended.

Library technical services, cataloging of materials, Library of Congress and Dewey classification systems, indexing, abstracting and integrated library systems. (A, CSU)

52B COLLECTION MANAGEMENT

1 unit, 1 lecture hour

ADVISORY: Library Technology 51 and 52A recommended.

Library technical services, acquisitions and processing of materials, collection maintenance and materials repair. (A, CSU)

54 LITERATURE AND SERVICES FOR YOUTH

3 units, 3 lecture hours

ADVISORY: Library Technology 51 recommended.

Library services to children and young adults in the areas of literature, collection development, information services and programs. (A, CSU)

55 LIBRARY PUBLIC SERVICE

3 units, 3 lecture hours

ADVISORY: Library Technology 51 recommended.

Library services offered to the public, including readers' advisory, interlibrary loan, copyright issues, publicity, displays, public relations, conflict resolution, library security, overview of supervision, collection development, stack maintenance, and materials circulation policies and procedures. (A, CSU)

56 INFORMATION TECHNOLOGY

3 units, 3 lecture hours

ADVISORY: Library Technology 51 recommended.

Use and management of computers, computer networks, non-print materials and emerging technologies used in libraries. (A, CSU)

57 REFERENCE: PRINT AND ONLINE SOURCES

3 units, 3 lecture hours

PREREQUISITE: None.

Library reference services, research methodologies, standard reference sources, utilization of print, non-print and electronic format sources; reference interview techniques and style; collection development issues related to library reference services. (A, CSU)

LINGUISTICS (LING)**10 INTRODUCTION TO LANGUAGE**

3 units, 3 lecture hours

PREREQUISITE: Eligibility for English 125 and 126 or English as a Second Language 67 and 68. ADVISORY: Eligibility for English 1A recommended.

Examination of the nature of language, its historical development, its structural elements, and the stages of language acquisition. Emphasis on systematic linguistic description of language knowledge and usage. (TCSU ANTH 130) (A, CSU-GE, UC, I)

11 INTRODUCTION TO LANGUAGE FOR EDUCATORS

3 units, 3 lecture hours

PREREQUISITE: Eligibility for English 125 and 126 or English as a Second Language 67 and 68. ADVISORY: Eligibility for English 1A recommended.

Examination of the nature, history, development and acquisition of language and its structural elements. Emphasis on how language is used and learned. Contrastive analysis of English with other commonly spoken languages of the area. Special focus on the relationship between linguistic structure and the development of reading and writing. (A, CSU)

MANUFACTURING MECHANIC (MFGMCTC)**351 INTRODUCTION TO MANUFACTURING**

.5 lecture hour, (Pass/No Pass)

PREREQUISITE: None.

Career in manufacturing, local job market, pay scales; basic mechanical skills required throughout the industrial areas; safety and safe working environment will be stressed.

352A TRADE MATHEMATICS

1 lecture hour, (Pass/No Pass)

PREREQUISITE: None.

Industrial technology and trade-related math. The use of metric system of weights and measures, arithmetic application of integers and fractions, along with ruler and caliper readings commonly used in manufacturing trades.

352B PROGRAMMABLE CONTROLLERS

.25 lecture hour, .75 lab hour, (Pass/No Pass)

PREREQUISITE: None.

An introduction to the equipment and peripheral devices used to interface with industrial controlling devices.

352C JOB PREPARATION

.25 lecture hour, .75 lab hour, (Pass/No Pass)

ADVISORY: Completion of Manufacturing Mechanic CTC 352B.

Preparing resumes, portfolios, and improving employment-seeking skills.

352D TECHNICAL REPORT WRITING

.25 lecture hour, .75 lab hour, (Pass/No Pass)

ADVISORY: Completion of Manufacturing Mechanic CTC 352B.

Identify and write various types of reports; analyze data, and record information that are associated with production work.

353A FLUID POWER FUNDAMENTALS

.5 lecture hour, (Pass/No Pass)

PREREQUISITE: None.

Fundamentals of fluid power; physics principles pertaining to fluid power; various differences in hydraulics and pneumatics; characteristics of liquids and gases; how and why the fluid power industry was started.

353B PNEUMATIC FUNDAMENTALS

.25 lecture hour, .75 lab hour, (Pass/No Pass)

ADVISORY: Completion of Manufacturing Mechanic CTC 353A.

Theory and application in the operation, service, and function of pneumatic systems including design and application of systems in industrial environments.

353C HYDRAULIC FUNDAMENTALS

.25 lecture hour, .75 lab hour, (Pass/No Pass)

ADVISORY: Completion of Manufacturing Mechanic CTC 353A.

Theory and application in the operation, service, and function of hydraulic systems including design and application of systems in industrial environments.

354A POWER TRANSMISSION

.5 lecture hour, (Pass/No Pass)

PREREQUISITE: None.

Study and application of power transmission through chains, belts, gear trains and augers.

354B WELDING FUNDAMENTALS

.25 lecture hour, 2.25 lab hours, (Pass/No Pass)

ADVISORY: Completion of Manufacturing Mechanic CTC 354A.

Basic metallurgy and properties of metals, oxyacetylene welding and cutting processes, arc welding, and safety within the work environment.

354C ELECTRICAL FUNDAMENTALS

.25 lecture hours, 2.25 lab hours, (Pass/No Pass)

ADVISORY: Completion of Manufacturing Mechanic CTC 354A.

Introduction to the basics of electrical fundamentals, AC circuitry, as well as an instruction to motor control.

MARKETING (MKTG)

10 PRINCIPLES OF MARKETING

3 units, 3 lecture hours, (See also Fashion Merchandising 10)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Creative management and research of marketing involving pricing, promotion, place and physical distribution of products which maximize profitability and customer satisfaction while achieving organizational goals. (A, CSU)

11 SALESMANSHIP

3 units, 3 lecture hours, (Spring only), (See also Fashion

Merchandising 21)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Personal selling and the development of techniques for a successful sales personality; buying motives, required product knowledge and the selling process. Career opportunities in the sales field. (A, CSU)

12 ADVERTISING AND PROMOTION

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Consumer psychology, media study, and advertising budgets. Communication process; basic art layout and copy composition; speakers and films. (A, CSU)

14 RETAILING

3 units, 3 lecture hours, (See also Fashion Merchandising 14)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An introduction to the basic retail store operation functions of personnel management, merchandise buying, merchandise promotion, security, and careers. (A, CSU)

17 VISUAL MERCHANDISING

3 units, 2 lecture hours, 2 lab hours, (See also Fashion Merchandising 28)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

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 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, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

21 SOCIAL MARKETING

3 units, 3 lecture hours

ADVISORY: Business Administration 10 and Marketing 10.

Examines social media as a marketing tool. Special focus is placed on social networks, blogs, shared video/photos, SMS, Twitter, podcasts, and wikis. (A, CSU)

22 INTRODUCTION TO FASHION MERCHANDISING

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Provides students an introduction to the world of fashion merchandising. Includes the history/global perspectives, uniqueness, and opportunities in fashion. Also presents fundamentals of fashion, basic fashion terminology, and an overview of textiles and apparel. (A, CSU)

MATHEMATICS (MATH)

4A TRIGONOMETRY

4 units, 4 lecture hours, (Formerly Mathematics 4)

PREREQUISITE: Mathematics 102 and Mathematics 103 or equivalent.

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Angles, trigonometric and inverse trigonometric functions, right and oblique triangles, graphs, identities, trigonometric equations, vectors, polar coordinates, DeMoivre's Theorem, and applications. (A, CSU-GE)

280 Mathematics

4B PRE-CALCULUS

4 units, 4 lecture hours

PREREQUISITE: Mathematics 4A or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Equations and inequities; polynomial, rational, exponential, trigonometric functions; graphing, analytic geometry, and conic sections; vectors; matrices; systems of equations; the binomial theorem, sequences, and series. (A, CSU-GE, UC, I)

5A MATHEMATICAL ANALYSIS I

5 units, 5 lecture hours

PREREQUISITE: Mathematics 4B or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU MATH SEQ A=MATH 5A+5B) (A, CSU-GE, UC, I)

5B MATHEMATICAL ANALYSIS II

4 units, 4 lecture hours

PREREQUISITE: Mathematics 5A or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Applications and techniques of integration including logarithmic, exponential, trigonometric, and transcendental functions; conic sections; infinite series; differential equations; approximations. (TCSU MATH SEQ A=MATH 5A+5B) (A, CSU-GE, UC, I)

6 MATHEMATICAL ANALYSIS III

4 units, 4 lecture hours

PREREQUISITE: Mathematics 5B or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Solid analytic geometry; partial differentiation; integral calculus of multi-variable functions; two and three dimensional vectors; vector valued functions; topics in vector calculus including Green's, Divergence, and Stoke's Theorems. (A, CSU-GE, UC, I)

7 INTRODUCTION TO DIFFERENTIAL EQUATIONS

4 units, 4 lecture hours

PREREQUISITE: Mathematics 6 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction to ordinary differential equations; solutions by power series, phase planes, and Laplace Transforms; linear algebra; Fourier Series; complex variables. (A, CSU, UC)

10A STRUCTURE AND CONCEPTS IN MATHEMATICS I

3 units, 3 lecture hours

PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Development of computational and problem solving skills, number sequences, logic, set theory, functions, ancient numeration systems, real world applications, and technology. Designed for elementary credential candidates. (A, CSU-GE, UC, I)

10B STRUCTURE AND CONCEPTS IN MATHEMATICS II

3 units, 3 lecture hours

PREREQUISITE: Mathematics 10A and Mathematics 102, or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.

Descriptive measures, probability, probability distributions, sampling distributions, central limit theorem, one and two sample hypothesis tests, estimation, correlation, and regression. (A, CSU-GE, UC, I)

21 FINITE MATHEMATICS

3 units, 3 lecture hours, (Formerly Mathematics 31)

PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

26 ELEMENTARY LINEAR ALGEBRA

3 units, 3 lecture hours

PREREQUISITE: Mathematics 5A or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Matrices and linear transformations, vector spaces, determinants, eigenvalues and eigenvectors. (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 125 and 126 or English as a Second Language 67 and 68 recommended.

Descriptive statistics, sampling, hypothesis testing, estimation, selected non-parametric techniques, ANOVA, and regression, with applications from psychology, biology, and social sciences. (A, CSU-GE, UC, I)

45 CONTEMPORARY MATHEMATICS

3 units, 3 lecture hours

PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An introduction to mathematical problem solving: statistics, social choice, and management science. (A, CSU-GE, UC)

48A PRE-CALCULUS WORKSHOP

1 unit, 4 lab hours

PREREQUISITE: Mathematics 4A or equivalent. COREQUISITE: Mathematics 4B or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Methodology of solving math-based real-world application problems from pre-calculus reinforced through a small group collaborative learning environment, emphasizing the algebraic, graphic, numeric, and symbolic methodologies. Targets at-risk and underrepresented students. Not open to students who have satisfactorily completed Mathematics 4B. (A, CSU)

48B CALCULUS WORKSHOP I

1 unit, 4 lab hours

PREREQUISITE: Mathematics 4B or equivalent. COREQUISITE: Mathematics 5A or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Methodology of solving math-based real-world application problems from first semester calculus reinforced through a small group collaborative learning environment, emphasizing the algebraic, graphic, numeric, and symbolic methodologies. Targets at-risk and underrepresented students. Not open to students who have satisfactorily completed Mathematics 5A. (A, CSU)

48C CALCULUS WORKSHOP II

1 unit, 4 lab hours

PREREQUISITE: Mathematics 5A or equivalent. COREQUISITE: Mathematics 5B or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Methodology of solving math-based real-world application problems from the second semester calculus reinforced through a small group collaborative learning environment, emphasizing the algebraic, graphic, numeric, and symbolic methodologies. Targets at-risk and underrepresented students. Not open to students who have satisfactorily completed Mathematics 5B. (A, CSU)

101 ELEMENTARY ALGEBRA

5 units, 5 lecture hours, (Formerly Mathematics 1)

PREREQUISITE: Mathematics 255 or designated math placement. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Signed numbers, algebraic expressions, linear equations, exponents, polynomials, factoring, rational expressions and equations, graphing, inequalities, systems of equations, radicals, quadratic equations, and applications. (A)

102 PLANE GEOMETRY

3 units, 3 lecture hours, (Formerly Mathematics 2)

PREREQUISITE: Mathematics 101 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Angles; parallel lines; congruent and similar triangles; geometric constructions; right triangle trigonometry; application of formulas for perimeter, area, and volume of geometric figures; and inductive and deductive reasoning. (A)

103 INTERMEDIATE ALGEBRA

5 units, 5 lecture hours, (Formerly Mathematics 3)

PREREQUISITE: Mathematics 101 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Polynomial, rational, and algebraic expressions; linear, quadratic, exponential, and logarithmic functions; systems of equations and inequalities; matrices; conic sections; sequences and series; and the binomial theorem. (A)

250 COLLEGE ARITHMETIC

3 units, 3 lecture hours, (Formerly Mathematics 50)

PREREQUISITE: Mathematics 260A or equivalent or appropriate placement score. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Arithmetic operations of whole numbers, fractions, and decimals; ratio and proportions; percents; order of operations; the metric system; word problems and applications of arithmetic. Designed as a quick refresher of college arithmetic.

255 PRE-ALGEBRA

5 units, 5 lecture hours, (Formerly Mathematics 55)

PREREQUISITE: Mathematics 250 with a minimum grade of "C" or Mathematics 260D or a test score to place out of or above Mathematics 260D. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Designed to increase the student success in Elementary Algebra; ideal for students who have math anxiety or who do not feel ready for the fast pace of Mathematics 101. And introduction to selected topics that are often difficult for Mathematics 101 students (e.g., signed numbers, simplification, equations, word problems, factoring, and graphing).

260A ARITHMETIC REVIEW: WHOLE NUMBERS

2 units, 5 lecture hours, (6 weeks), (Pass/No Pass), (Formerly Mathematics 60A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Review of arithmetic involving computing with whole numbers. Emphasis on word problems and applications of whole numbers.

260B ARITHMETIC REVIEW: FRACTIONS

2 units, 5 lecture hours, (6 weeks), (Pass/No Pass), (Formerly Mathematics 60B)

PREREQUISITE: Mathematics 260A or appropriate placement score. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Review of arithmetic involving computing with fractions. Emphasis on word problems and applications of fractions.

260C ARITHMETIC REVIEW: DECIMALS

2 units, 5 lecture hours, (6 weeks), (Pass/No Pass), (Formerly Mathematics 60C)

PREREQUISITE: Mathematics 260B or appropriate placement score. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Review of arithmetic involving computing with decimals. Emphasis on word problems and applications of decimals.

260D ARITHMETIC REVIEW: RATIOS, PROPORTIONS, PERCENTS, AND GEOMETRY

2 units, 5 lecture hours, (6 weeks), (Pass/No Pass), (Formerly Mathematics 60D)

PREREQUISITE: Mathematics 260C or appropriate placement score. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Review of arithmetic involving ration, proportion, and percents. Introduction to basic geometry topics. Emphasis on word problems.

277 ARITHMETIC FOR THE LEARNING DISABLED

2 units, 6 lab hours, (Pass/No Pass), (Repeats = 3), (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.

MEDICAL ASSISTING (MA)

1 LEGAL AND ETHICAL CONCEPTS

2 units, 2 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

282 Medical Assisting

2 PHARMACOLOGY

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 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

4 units, 3 lecture hours, 3 lab hours

ADVISORY: Biology 5 or equivalent recommended. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 250 or 260A-260D 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

4 units, 3 lecture hours, 3 lab hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 250 or 260A-260D 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, (Formerly Medical Assisting 60A)

ADVISORY: Biology 5 or equivalent recommended. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Topics pertinent to medical assisting: microbiology, sterilization, aseptic technique, and assisting in physical examinations. (A, CSU)

6B ADVANCED TRAINING

3 units, 3 lecture hours, (Formerly Medical Assisting 60B)

PREREQUISITE: Medical Assisting 6A. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Medical assisting procedures in the specialty office, assisting in surgery, handling of medical emergencies. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

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, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

MEDICAL RECORD TECHNOLOGY

SEE HEALTH INFORMATION TECHNOLOGY

MILITARY SCIENCE (MILSC)

1 INTRODUCTION TO MILITARY SCIENCE

1 unit, 1 lecture hour

PREREQUISITE: None.

Organization and function of the US Army: basic traditions, customs, and protocol. Basic leadership skills, map reading, and management techniques. Adventure training participation. (A, CSU, UC)

2 GENERAL MILITARY SKILLS

1 unit, 1 lecture hour

PREREQUISITE: None.

Basic soldier skills and leadership doctrines. Emphasis on basic training skills, first-aid procedures, field crafts, and leadership techniques. (A, CSU, UC)

11 GENERAL LEADERSHIP SKILLS

2 units, 2 lecture hours

PREREQUISITE: None.

Institutional knowledge of the Army profession and introduction to a wide range of technical and tactical skills. Emphasizes the officer's role in the Army and offers tools for professional success. (A, CSU, UC)

12 BASIC LEADERSHIP AND MANAGEMENT

2 units, 2 lecture hours

PREREQUISITE: None.

Principles of leadership and resource management; mission planning and presentation of goals to groups. Emphasizes U.S. Army posture versus current threats faced. (A, CSU, UC)

20 ROTC LEADERSHIP TRAINING COURSE (LTC)

3 units, 4.5 lecture hours, 27 lab hours, (4 weeks), (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Eligibility criteria as set forth in US Army Regulation 145-1.

Summer training program at an active army military installation. This is a "no obligation" look at the U.S. Army's basic leadership skills and training overview. Provides credit for the Senior ROTC Basic Course (freshman/sophomore). (A, CSU)

21 ROTC LEADERSHIP DEVELOPMENT/ASSESSMENT COURSE (LDAC)

3 units, 3 lecture hours, 18 lab hours, (6 weeks), (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Eligibility criteria as set forth in U. S. Army Regulation 145-1.

Summer training course familiarizing students with Army weapons systems, military skills, confidence training, light infantry tactics, and leadership and management techniques. (A, CSU)

31 ADVANCED LEADERSHIP AND MANAGEMENT

3 Units, 3 Lecture hours

PREREQUISITE: Military Science 20 or prior military service.

Personnel management problems and techniques of motivation as applied to a military environment; techniques and methods of instruction; application of basic military skills; military law. (A, CSU)

- 32 SMALL UNIT LEADERSHIP**
 3 units, 3 lecture hours
 PREREQUISITE: Military Science 31.
 Principles of tactics and operations; organization of small units and their employment; field orders and instructions; small unit leadership techniques. (A, CSU)
- 41 ETHICS AND MILITARY PROFESSIONALISM**
 3 units, 3 lecture hours
 PREREQUISITE: Military Science 32 and 51B.
 Military professional ethics, military justice, command and staff functions, mission and organization of the U.S. Army and military correspondence. (A, CSU)
- 42 ADVANCED LEADERSHIP TRAINING**
 3 units, 3 lecture hours
 PREREQUISITE: Military Science 41 and 52A.
 Focus on transitioning cadets to lieutenants. Topics include responsibility of army officers, army leadership doctrine, and the army promotion system. (A, CSU)
- 50A FRESHMAN LEADERSHIP LABORATORY**
 1 unit, 3 lab hours, (Repeats = 1)
 PREREQUISITE: None.
 Practical work to augment classroom instruction by teaching leadership, tactics, and soldier skills. Weekly laboratories plus one field trip each semester. (A, CSU)
- 50B SOPHOMORE LEADERSHIP LABORATORY**
 1 unit, 3 lab hours, (Repeats = 1)
 PREREQUISITE: None.
 Practical work to augment classroom instruction by teaching intermediate leadership, tactics, and soldier skills. Weekly laboratories plus one field trip each semester. (A, CSU)
- 51A ROTC JUNIOR LEADERSHIP LAB I**
 1 unit, 3 lab hours
 PREREQUISITE: Military Science 20 or prior military service.
 Practical work to augment classroom instruction by teaching leadership, tactics, and soldier skills. Weekly laboratories plus one field trip each semester. (A, CSU)
- 51B ROTC JUNIOR LEADERSHIP LAB II**
 1 unit, 3 lab hours
 PREREQUISITE: Military Science 31 and 51A.
 Practical work to augment classroom instruction by teaching intermediate leadership, tactics, and soldier skills. Weekly laboratories plus one field trip each semester. (A, CSU)
- 52A ROTC SENIOR LEADERSHIP LAB I**
 1 unit, 3 lab hours
 PREREQUISITE: Military Science 32 and 51B.
 Practical work to augment classroom instruction by teaching leadership, tactics, and soldier skills. Weekly laboratories plus one field trip each semester. (A, CSU)
- 52B ROTC SENIOR LEADERSHIP LAB II**
 1 unit, 3 lab hours
 PREREQUISITE: Military Science 41 and 52A.
 Practical work to augment classroom instruction by teaching leadership, tactics, and soldier skills. Weekly laboratories plus one field trip each semester. (A, CSU)

MUSIC (MUS)

For information concerning course requirements for the major or minor, 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 125 and 126 or English as a Second Language 67 and 68 recommended.
 Writing and analysis; fundamentals of music. Designed for the music major. (TCSU MUS 130) (A, CSU, UC)
- 1B MUSIC THEORY II**
 3 units, 3 lecture hours, (Spring only)
 COREQUISITE: (Music majors only) Music 7A or 7B. ADVISORY: Music 1A. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Writing and analysis; functional tonality, harmonization, diatonic and dominant seventh chords, and secondary function. Designed for the music major. (A, CSU, UC)
- 2A MUSIC THEORY III**
 3 units, 3 lecture hours, (Fall only)
 COREQUISITE: (Music majors only) Music 7B. ADVISORY: Music 1B. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU, UC)
- 2B MUSIC THEORY IV**
 3 units, 3 lecture hours, (Spring only)
 COREQUISITE: (Music majors only) Music 7B. ADVISORY: Music 2A. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Writing and analysis; late 19th and 20th century compositional practices including serial procedures and indeterminacy. Designed for the music major. (A, CSU, UC)
- 3 MUSIC FUNDAMENTALS**
 3 units, 3 lecture hours, 1 lab hour
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Fundamental theory of music: pitch, rhythm, meters, scales, keys, key signatures, intervals, rhythm, and scale dictation. Designed for the general student, the music major with limited music theory experience, the commercial music student, and the classroom teacher. (A, CSU-GE, UC, I)
- 4 JAZZ THEORY**
 3 units, 3 lecture hours, (Fall only)
 ADVISORY: Ability to read and notate music. Familiarity with basic scale and chord construction.
 Chord, scale, and structural theory relating to the study, performance, and composition of jazz and contemporary music. (A, CSU, UC)

- 5 COMPUTER MUSIC PRODUCTION**
3 units, 2 lecture hours, 2 lab hours, (Spring only)
ADVISORY: Ability to read and play simple melodies on a keyboard. Basic computer skills.
Use of synthesizers, computers, sequencing and sound design software to compose, edit, and record music. (A, CSU)
- 6 JAZZ ARRANGING AND COMPOSITION**
3 units, 3 lecture hours, (Spring only)
ADVISORY: Ability to read and notate music in treble and bass clefs strongly recommended. Music 1A or 3 or 4 recommended.
Scoring and composing for jazz and popular vocal/instrumental combinations; emphasis on contemporary sound; projects will be performed. Designed for the commercial music student. (A, CSU)
- 7A EAR TRAINING: LEVEL I**
1 unit, 1 lecture hour, 1 lab hour, (Pass/No Pass)
ADVISORY: Music 1A or 3.
Dictation and sight-singing of simple rhythms, melodic intervals, and diatonic melodies. (A, CSU, UC)
- 7B EAR TRAINING: LEVEL II**
1 unit, 1 lecture hour, 1 lab hour, (Pass/No Pass)
PREREQUISITE: Music 7A. COREQUISITE: Music 1B, 2A or 2B.
Dictation and sight-singing of diatonic and chromatic melodies, harmonic intervals, compound and simple rhythms, and chords and chord progressions. (A, CSU, UC)
- 8 AUDIO ENGINEERING**
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
A basic view of the digital recording studio as a sound storage, manipulation, and reproduction facility. Designed for the music major and the commercial music student. (A, CSU)
- 9 COMPOSITION**
2 units, 2 lecture hours, (Spring only)
ADVISORY: Music 2A or the equivalent as determined by testing and examination of student's music theory and composition work.
Writing short musical compositions; emphasis on 20th century practices; compositions performed in recital. (A, CSU, UC)
- 111 THE MUSIC BUSINESS**
3 units, 3 lecture hours, (Formerly Music 11)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Survey of topics of importance to the professional musician: management, copyrights, publishing, contracts, promotion, and career development. (A)
- 112 INTRODUCTION TO FINALE**
2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to read music and basic computer skills recommended.
Use of Finale music notation software program for the creation of musical scores and parts. (A)

HISTORY & APPRECIATION

- 12 MUSIC APPRECIATION**
3 units, 3 lecture hours
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Middle Ages through the 21st century. Concert attendance required. Designed for the general student. (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 125 and 126 or English as a Second Language 67 and 68 recommended.
Music Literature of western civilization from ancient to the present; emphasis on listening. Designed for the music major and the general student with a music background. Outside listening and concert attendance required. (A, CSU-GE, UC, I)
- 14 OPERA APPRECIATION**
3 units, 3 lecture hours
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
The world of musical theatre from its early roots in medieval passion plays and liturgical dramas through opera and American musical theatre. Certain individual works will be studied in depth. (A, CSU-GE, UC, I)
- 16 JAZZ HISTORY AND APPRECIATION**
3 units, 3 lecture hours
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.
This course examines the music of the most important rock artists and groups from the 1950s through the present. The sociological, economic and cultural factors that shaped rock music, as well as the music's influence on popular culture, will also be covered. (A, CSU-GE, UC, I)

APPLIED MUSIC

- 10A BEGINNING JAZZ IMPROVISATION**
2 units, 1 lecture hour, 3 lab hours, (Formerly Music 10)
ADVISORY: Ability to play an instrument at the intermediate/advanced level is recommended. Ability to read music recommended.
Study of the fundamentals of jazz improvisation: scales, modes, the blues, simple chord progressions, ear training, development of melodic ideas. (A, CSU)
- 10B INTERMEDIATE/ADVANCED JAZZ IMPROVISATION**
2 units, 1 lecture hour, 3 lab hours, (Repeats = 3)
PREREQUISITE: Music 10A or equivalent as determined by audition. ADVISORY: Ability to read music, and to play an instrument at the intermediate/advanced level is recommended. Prior jazz improvisation experience recommended.

Study of intermediate and advanced concepts of jazz improvisation: altered scales, chordal extensions, alterations, and substitutions, and more complex jazz compositions. (A, CSU)

18 BASIC CONDUCTING AND SCORE READING

2 units, 2 lecture hours, (Spring only)

PREREQUISITE: Music 1A or 3 or the equivalent as determined by testing.

Fundamentals of conducting and score reading; standard patterns and baton technique; practice with recordings and large and small college ensembles. Designed for the music major and the commercial music student. (A, CSU, UC)

20 BEGINNING PIANO: LEVEL I

2 units, 1 lecture hour, 3 lab hours, (Formerly Music 20A)

PREREQUISITE: None.

Fundamentals, theory, and terminology; elementary piano techniques, scales, and keyboard harmony; repertoire of easy compositions. Designed for the general student and the classroom teacher. Not intended for students who have had previous piano instruction. (A, CSU-GE, UC)

21 BEGINNING PIANO: LEVEL II

2 units, 1 lecture hour, 3 lab hours, (Repeats = 2), (Formerly Music 20B)

PREREQUISITE: Music 20 or the equivalent as determined by testing.

Progressively advancing solo and ensemble work. Baroque, classic, romantic, and 20th century literature as appropriate to the student's development level. Fingering, harmonizing melodies, sight-reading, and duets. Designed for the general student and the classroom teacher. (A, CSU-GE, UC)

24 ELEMENTARY VOICE: LEVEL I

2 units, 1 lecture hour, 2 lab hours, (Formerly Music 25A)

PREREQUISITE: None.

Beginning tone production and technique using simple songs drawn from a variety of historical periods and cultures in a variety of languages. Designed for the student with little or no formal voice training. (A, CSU, UC)

25 ELEMENTARY VOICE: LEVEL II

1 unit, 1 lecture hour, 1 lab hour, (Repeats = 2), (Formerly Music 25B)

PREREQUISITE: Music 24 or the equivalent as determined by testing.

Progressively advancing solo and small ensemble work; tone production interpretation. Designed for the general student. (A, CSU, UC)

27 BEGINNING GUITAR: LEVEL I

2 units, 1 lecture hour, 2 lab hours, (Formerly Music 28A)

PREREQUISITE: Own instrument required.

Classical and social guitar playing styles: playing techniques, rhythms, theory, and note reading. Designed for the general student and classroom teacher. Not open to guitarists who read music. (A, CSU-GE, UC)

28 BEGINNING GUITAR: LEVEL II

2 units, 1 lecture hour, 2 lab hours, (Repeats = 2), (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 27. Emphasis on classical guitar techniques: reading, left- and right-hand techniques, positions, extension of the fingerboard, rhythms, meters, multi-line music, theory, and classical music styles. Designed for the serious student of guitar. (A, CSU-GE, UC)

INTERMEDIATE/ADVANCED ENSEMBLES AND INDIVIDUAL LESSONS

22 INTERMEDIATE/ADVANCED PIANO

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3), (Formerly Music 21)

PREREQUISITE: Music 21 or the equivalent as determined by testing.

Technical, stylistic and aesthetic elements of the performing repertoire from the standard literature of piano solo and ensemble music. Weekly individual instruction: ensemble and solo performance required. (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.

The 1-unit class is recommended for the general student. Studies in technical, stylistic, and aesthetic elements of performing repertoire from the standard literature of ensemble music. Ensemble performance required. The 2-unit class is recommended for the music major. Studies in technical, stylistic, and aesthetic elements of the performing repertoire from the standard literature of solo and ensemble music. Weekly individual instruction: ensemble and solo performance required; designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (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.

The 1-unit class is recommended for the non-music major; studies in technical, stylistic and aesthetic elements of the performing repertoire from the standard literature of guitar music. Ensemble performance required. The 2-unit class is recommended for the music major; studies in technical, stylistic, and aesthetic elements of the performing repertoire from the standard literature of solo and ensemble music. Weekly individual instruction; ensemble and solo performance required; designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (TCSU MUS 350 and MUS 360) (A, CSU, UC)

42A INTERMEDIATE/ADVANCED BRASS

(BRASS CHOIR)

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3), (Formerly Music 42)

ADVISORY: Ability to perform advanced high school band music or the equivalent performance skills as determined by audition recommended.

Emphasis on 20th and 21st century brass ensemble literature. Studies in technical, stylistic, and aesthetic elements of performing repertoire from the standard literature of ensemble music. Ensemble performance required. Designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (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: Ability to perform advanced high school band or orchestra music or the equivalent performance skills as determined by audition recommended.

The 1-unit class is recommended for the general student. Studies in technical, stylistic, and aesthetic elements of performing repertoire from the standard literature of woodwind ensemble music. Ensemble performance required. The 2-unit class

is recommended for the music major. Studies in technical, stylistic, and aesthetic elements of the performing repertoire from the standard literature of solo and ensemble music. Weekly individual instruction: ensemble and solo performance required; designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (A, CSU, UC)

**42C INTERMEDIATE/ADVANCED STRINGS
(STRING ORCHESTRA)**

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3),
(Formerly Music 44)

ADVISORY: Ability to perform advanced high school band or orchestra music or the equivalent performance skills as determined by audition recommended.

The 1-unit class is recommended for the general student. Studies in technical, stylistic, and aesthetic elements of performing repertoire from the standard literature of string ensemble music. Ensemble performance required. The 2-unit class is recommended for the music major. Studies in technical, stylistic, and aesthetic elements of the performing repertoire from the standard literature of solo and ensemble music. Weekly individual instruction: ensemble and solo performance required; designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (A, CSU, UC)

**42D INTERMEDIATE/ADVANCED PERCUSSION
(PERCUSSION ENSEMBLE)**

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3),
(Formerly Music 46)

ADVISORY: Ability to perform advanced high school band or orchestra music or the equivalent performance skills as determined by audition recommended.

Emphasis on modern 21st century music and percussion performance practice. Studies in technical, stylistic, and aesthetic elements of performing repertoire from the standard literature of ensemble music. Ensemble performance required. Ensemble and solo performance required; designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (TCSU MUS 350) (A, CSU, UC)

49 ADVANCED LARGE ENSEMBLES

1 unit, 3 lab hours, (Repeats = 3)

ADVISORY: Ability to perform advanced level large ensemble music (as determined by audition) recommended.

Study of large ensemble literature (vocal or instrumental). Designed for music major or transfer students. Audition required. (A, CSU, UC)

57 SOLO REPERTOIRE STUDIES I

1 unit, 3 lab hours, (Repeats = 3)

PREREQUISITE: Four semesters of Music 22, 26, or 29 or the equivalent as determined by audition. ADVISORY: Advanced vocal or instrumental performance skills recommended.

Vocal and instrumental solo music of the Baroque and Classical periods. (A, CSU)

59 ADVANCED CHAMBER ENSEMBLES

1 unit, 3 lab hours, (Repeats = 3)

ADVISORY: Ability to perform advanced level chamber music recommended. Audition required.

Study of vocal and instrumental chamber music, with emphasis on small ensembles. Designed for music major or transfer students. Audition required. (A, CSU)

73A INTERMEDIATE/ADVANCED CHAMBER ENSEMBLE (BRASS)

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3)

ADVISORY: Intermediate/advanced skill on a brass instrument recommended.

Emphasis on 19th century brass ensemble literature. Studies in technical, stylistic, and aesthetic elements of performing repertoire from the standard literature of ensemble music. Ensemble performance required. Designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (A, CSU)

**73B INTERMEDIATE/ADVANCED CHAMBER ENSEMBLE
(WOODWINDS)**

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3)

ADVISORY: Intermediate/advanced skill on a woodwind instrument recommended.

The 1-unit class is recommended for the general student. Application of woodwind techniques through the rehearsal and interpretation of woodwind chamber ensemble music. Emphasis placed on music of the Baroque, Classical, and Romantic eras. Ensemble performance required. The 2-unit class is recommended for the music major. Weekly individual instruction: ensemble and solo performance required; designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (A, CSU)

73C INTERMEDIATE/ADVANCED CHAMBER ENSEMBLE (STRINGS)

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3)

ADVISORY: Intermediate/advanced skill on a string instrument recommended.

The 1-unit class is recommended for the general student. Studies in technical, stylistic, and aesthetic elements of performing repertoire from the standard literature of string ensemble music with emphasis on music of the Baroque and Classical eras. Ensemble performance required. The 2-unit class is recommended for the music major. Studies in technical, stylistic, and aesthetic elements of the performing repertoire from the standard literature of solo and ensemble music. Weekly individual instruction: ensemble and solo performance required; designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (A, CSU)

**73D INTERMEDIATE/ADVANCED CHAMBER ENSEMBLE
(PERCUSSION)**

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3)

ADVISORY: Intermediate/advanced skill on percussion recommended.

Emphasis on 20th century music and mallet percussion literature. Studies in technical, stylistic, and aesthetic elements of performing repertoire from the standard literature of ensemble music. Ensemble performance required. Ensemble and solo performance required; designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (A, CSU)

74A INTERMEDIATE/ADVANCED BRASS PERFORMANCE PRACTICES

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3)

ADVISORY: Intermediate/advanced skill on a brass instrument recommended.

Emphasis on 17th and 18th century brass ensemble literature. Studies in technical, stylistic, and aesthetic elements of performing repertoire from the standard literature of ensemble music. Ensemble performance required. Designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (A, CSU)

74B INTERMEDIATE/ADVANCED WOODWIND PERFORMANCE PRACTICES

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3)

ADVISORY: Intermediate/advanced skill on a woodwind instrument recommended.

The 1-unit class is recommended for the general student. Studies in technical, stylistic, and aesthetic elements of performing repertory from the standard literature of woodwind ensemble music with emphasis on the Impressionist and 20th/21st century eras. Ensemble performance required. The 2-unit class is recommended for the music major. Studies in technical, stylistic, and aesthetic elements of the performing repertory from the standard literature of solo and ensemble music. Weekly individual instruction: ensemble and solo performance required; designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (A, CSU)

74C INTERMEDIATE/ADVANCED STRING PERFORMANCE PRACTICES

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3)

ADVISORY: Intermediate/advanced skill on a string instrument recommended.

The 1-unit class is recommended for the general student. Studies in technical, stylistic, and aesthetic elements of performing repertory from the standard literature of string ensemble music with emphasis on the Impressionist and 20th/21st century eras. Ensemble performance required. The 2-unit class is recommended for the music major. Studies in technical, stylistic, and aesthetic elements of the performing repertory from the standard literature of solo and ensemble music. Weekly individual instruction: ensemble and solo performance required; designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (A, CSU)

74D INTERMEDIATE/ADVANCED PERCUSSION PERFORMANCE PRACTICES

1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3)

ADVISORY: Intermediate/advanced skill on percussion recommended.

Emphasis on 19th century music and world music percussion literature. Studies in technical, stylistic, and aesthetic elements of performing repertory from the standard literature of ensemble music. Ensemble performance required. Ensemble and solo performance required; designed to help transferring music majors pass jury exams on their instruments at four-year colleges and universities. (A, CSU)

LARGE PERFORMING ORGANIZATIONS

30 COLLEGE CHOIR

2 units, 6 lab hours, (Repeats = 3)

ADVISORY: Ability to perform advanced high school choral music or the equivalent performance skills as determined through audition.

Study and performance of choral music for large ensemble. Concert, festival, and tour participation required. (TCSU MUS 410) (A, CSU, UC)

34 FRESNO CHORALE

2 units, 1 lecture hour, 2 lab hours, (Repeats = 3), (Formerly Music 31)

PREREQUISITE: None.

Study and performance of choral chamber music specializing in early music. Concert participation required. (A, CSU, UC)

35 CITY SINGERS

2 units, 6 lab hours, (Repeats = 3), (Formerly Music 33)

ADVISORY: Audition and approval. Ability to perform advanced high school choral music or the equivalent performance skills.

Study and performance of music literature for small vocal ensembles. Concert and tour participation required. (A, CSU, UC)

36 WOMEN'S CHORALE

2 units, 1 lecture hour, 2 lab hours, (Repeats = 3)

ADVISORY: Ability to perform advanced high school choral music or the equivalent performance skills as determined by audition recommended.

Study and performance of choral music from all periods specializing in repertoire for treble choirs. Concert performances required. (A, CSU, UC)

39 OPERA AND MUSICAL THEATRE WORKSHOP

2 units, 1 lecture hour, 3 lab hours, (Pass/No Pass), (Repeats = 3), (Formerly Music 27)

ADVISORY: Music 26 or the equivalent as determined by audition recommended.

The rehearsal, study, and performance of scenes and complete shows from opera and Broadway musicals. (A, CSU-GE, UC)

40 CONCERT BAND

2 units, 6 lab hours, (Repeats = 3)

ADVISORY: Ability to perform advanced high school band music or the equivalent performance skills as determined by audition recommended.

Modern literature with an emphasis on compositions of composers from the 20th and 21st century will be performed and studied. Performances at selected college events. Participation in all performances required. (TCSU MUS 410) (A, CSU, UC)

41 JAZZ ENSEMBLE

2 units, 1 lecture hour, 4 lab hours, (Repeats = 3)

ADVISORY: Advanced high school band or jazz ensemble experience or the equivalent performance skills as determined by audition recommended.

Study and performances of a broad range of jazz ensemble literature. Participation in concerts and jazz festivals required. (A, CSU, UC)

46 SYMPHONY ORCHESTRA

2 units, 1 lecture hour, 3 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.

The study and performance of orchestral literature of all eras. Combines college students and community members. Participation in all performances required (two or three each semester). (TCSU MUS 410) (A, CSU-GE, UC)

47 JAZZ COMBO

2 units, 1 lecture hour, 3 lab hours, (Repeats = 3)

PREREQUISITE: Ability to perform on instrument or voice at a college level as determined by audition. ADVISORY: Music 10A.

Performance and analysis of a variety of jazz literature for the small ensemble. Designed for the music major and the commercial music student. (A, CSU)

48 LATIN JAZZ ENSEMBLE

2 units, 1 lecture hour, 3 lab hours, (Repeats = 3), (See also Chicano-Latino Studies 18)

ADVISORY: Advanced high school band, orchestra, or jazz ensemble experience or the equivalent performance skills as determined by audition recommended.

Study and performance of Latin jazz and Afro-Cuban music. Participation in concerts and jazz festivals required. (A, CSU, UC)

53 LATIN JAZZ WORKSHOP

2 units, 1 lecture hour, 3 lab hours, (Repeats = 3)

ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills recommended.

Study and performance of contemporary jazz-based music based on Caribbean, Brazilian, other South American, and Afro-Cuban styles. Participation in concerts and jazz festivals required. (A, CSU, UC)

60 SYMPHONIC CHOIR

2 units, 6 lab hours, (Repeats = 3)

ADVISORY: Audition. Ability to perform advanced high school choral music or the equivalent performance skills.

Study and performance of choral music, with emphasis on major choral works of the nineteenth and twentieth centuries and orchestral/choral works. Participation in concerts and festivals required. (TCSU MUS 410) (A, CSU)

61 A CAPPELLA CHOIR

2 units, 6 lab hours, (Repeats = 3)

ADVISORY: Audition. Ability to perform advanced high school choral music or the equivalent performance skills.

Study and performance of choral music, with emphasis on a cappella choral works of the sixteenth through nineteenth centuries for large ensemble. Participation in concerts and festivals required. (TCSU MUS 410) (A, CSU)

63 CHAMBER SINGERS

2 units, 6 lab hours, (Repeats = 3)

ADVISORY: Audition and approval. Ability to perform advanced high school/collegial level choral music or equivalent performance skills.

Study and performance of choral chamber music, with emphasis on Renaissance and Classical works. Participation in concerts, festivals, and tours is required. (A, CSU)

64 VOCAL ENSEMBLE

2 units, 6 lab hours, (Repeats = 3)

ADVISORY: Audition and approval required. Ability to perform advanced high school and collegiate level choral music or the equivalent performance skills.

Study and performance of small ensemble vocal music, specializing in contemporary music of the 20th and 21st century. Participation in concerts, festivals and performance tours required. (A, CSU)

66 OPERA PERFORMANCE PRACTICES

2 units, 1 lecture hour, 3 lab hours, (Repeats = 3)

ADVISORY: Intermediate/advanced vocal performance skills recommended.

The study, rehearsal, and performance of a major operatic work. Participation in public performances is required. (A, CSU)

67 MUSICAL THEATER PERFORMANCE PRACTICES

2 units, 1 lecture hour, 3 lab hours, (Repeats = 3)

ADVISORY: Intermediate/advanced vocal performance skills recommended.

The study, rehearsal, and performance of a musical theater production or review, or of an operetta. Participation in public performances is required. (A, CSU)

68 SYMPHONIC BAND

2 units, 6 lab hours, (Repeats = 3)

ADVISORY: Intermediate/advanced level skill on a band instrument recommended.

Concepts of intonation, balance, blend, basic articulation and public performance. Rehearsal and performance of symphonic band literature with emphasis on 19th and 20th century works. (TCSU MUS 410) (A, CSU)

69 WIND BAND

2 units, 6 lab hours, (Repeats = 3)

ADVISORY: Intermediate/advanced level skill on a band instrument recommended.

Music literature including compositions and composers from the 18th and 19th century will be performed and studied. Concepts of technique, scales, harmony, expressive playing will be studied. Extensive sight reading and extensive public performance will be a significant part of the curriculum. (TCSU MUS 410) (A, CSU)

70 CONTEMPORARY JAZZ ENSEMBLE

2 units, 1 lecture hour, 4 lab hours, (Repeats = 3)

ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills (as determined by audition) are recommended.

Study and performance of contemporary jazz ensemble literature. Participation in concerts and festivals required. (A, CSU)

71 LAB JAZZ ENSEMBLE

2 units, 1 lecture hour, 4 lab hours, (Repeats = 3)

ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills (as determined by audition) are recommended.

Study and performance of jazz ensemble literature, with emphasis on traditional and mainstream composers. Participation in concerts and festivals required. (A, CSU)

72 JAZZ COMPOSER'S ORCHESTRA

2 units, 1 lecture hour, 4 lab hours, (Repeats = 3)

ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills (as determined by audition) are recommended.

Study and performance of complex, compositionally advanced, and professional level modern jazz ensemble literature. Participation in concerts and festivals required. (A, CSU)

75 COMMUNITY ORCHESTRA

2 units, 1 lecture hour, 3 lab hours, (Repeats = 3)

ADVISORY: Ability to perform advanced high school band or orchestra music or the equivalent performance skills (as determined by audition during the first two weeks) recommended.

Study and performance of orchestral music, with emphasis concerti featuring student and community soloists. Community musicians are encouraged to participate. Participation in all public performances is required. (TCSU MUS 410) (A, CSU)

76 COLLEGE PHILHARMONIC ORCHESTRA

2 units, 1 lecture hour, 3 lab hours, (Repeats = 3)

ADVISORY: Ability to perform advanced high school band or orchestra music or the equivalent performance skills (as determined by audition during the first two weeks) recommended.

Study and performance of orchestral music, with emphasis on major works of the eighteenth and nineteenth centuries. Participation in all public performances is required. (TCSU MUS 410) (A, CSU)

77 STUDIO JAZZ COMBO

2 units, 1 lecture hour, 3 lab hours, (Repeats = 3)

ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended.

Study and performance of mainstream jazz literature for the small ensemble. Participation in concerts and festivals required. (A, CSU)

78 LAB JAZZ COMBO

2 units, 1 lecture hour, 3 lab hours, (Repeats = 3)

ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended.

Study and performance of contemporary jazz literature for the small ensemble, with emphasis on original compositions. Participation in concerts and festivals required. (A, CSU)

90 JAZZ COMPOSERS WORKSHOP
2 units, 1 lecture hour, 4 lab hours, (Repeats = 3)
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills recommended.

Performance and analysis of original literature for the jazz ensemble/jazz orchestra, with an emphasis on student compositions. Participation in concerts and festivals required. (A, CSU, UC)

91 JAZZ COMPOSERS ENSEMBLE
2 units, 1 lecture hour, 4 lab hours, (Repeats = 3)
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills recommended.

Performance of original literature for contemporary jazz ensemble/jazz orchestra, featuring non-standard ensemble groupings, non-traditional instrumentation, and emphasis on contemporary performance practices. (A, CSU, UC)

92 VOCAL JAZZ ENSEMBLE
2 units, 1 lecture hour, 4 lab hours, (Repeats = 3)
ADVISORY: Advanced high school vocal experience or equivalent performance skills recommended.

Rehearsal and performance of vocal jazz ensemble literature. Participation in concerts and festivals required. (A, CSU, UC)

NATIVE AMERICAN STUDIES

SEE AMERICAN INDIAN STUDIES

NATURAL SCIENCE (NATSCI)

1A INTEGRATED SCIENCE: PHYSICS AND CHEMISTRY
4 units, 3 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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. (A, CSU, UC)

NURSING

REGISTERED NURSING (RN)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units, (Repeats = 2)
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, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

31 FOUNDATIONS AND INTRODUCTION TO MEDICAL SURGICAL NURSING
4 units, 4 lecture hours, (Formerly Registered Nursing 1)
PREREQUISITE: Acceptance into the Registered Nursing Program: English 1A; Mathematics 103; Biology 20 and Biology 22; Biology 31; Chemistry 3A; Psychology 2; and Sociology 1A or Anthropology 2. All course work must be completed with a grade of "C" or better. COREQUISITE: Registered Nursing 32 and 32A.

Introduction to registered nursing; the roles of the registered nurse, the nursing process, critical thinking, theoretical concepts and principles necessary to administer beginning level assessment and interventions (procedures) for adults. (A, CSU)

32 FOUNDATIONS AND INTRODUCTION TO MEDICAL SURGICAL NURSING CLINICAL
2 units, 12 lab hours, (9 weeks), (Formerly Registered Nursing 2)
PREREQUISITE: Registered Nursing 32A. COREQUISITE: Registered Nursing 31.

Clinical experiences to provide application of the nursing process, critical thinking, knowledge and basic skills necessary to administer beginning level assessment and interventions (procedures) for adults. (A, CSU)

32A FOUNDATIONS AND INTRODUCTION TO MEDICAL SURGICAL NURSING SKILLS
2 units, 12 lab hours, (9 weeks)

PREREQUISITE: Acceptance into the Registered Nursing Program: English 1A; Mathematics 103; Biology 20 and Biology 22; Biology 31; Chemistry 3A; Psychology 2; and Sociology 1A or Anthropology 2. All course work must be completed with a grade of "C" or better. COREQUISITE: Registered Nursing 31.

Basic nursing skills performance in a simulated clinical environment for the beginning nursing student. (A, CSU)

33 TRANSCULTURAL HEALTH CARE
1 unit, 1 lecture hour, (Formerly Registered Nursing 21)
COREQUISITE: Registered Nursing 31.
Cultural and spiritual concepts as they relate to the application of nursing care. (A, CSU)

35A PHARMACOLOGY A: INTRODUCTION TO PHARMACOLOGY
1 unit, 1 lecture hour
COREQUISITE: Registered Nursing 31, 32, and 32A.

General principles of pharmacology, legal, ethical and safety aspects of medication administration. Drug information includes pharmacotherapeutics, pharmacodynamics, pharmacokinetics, contraindications and precautions, adverse effects and drug interactions, as well as client variables such as health status, life span and gender, diet, lifestyle and habits, environment, and culture in relationship to drug therapy. (A, CSU)

35B PHARMACOLOGY B: NURSING PHARMACOLOGICAL APPLICATIONS
2 units, 2 lecture hours
PREREQUISITE: Registered Nursing 35A with a grade of "C" or better. COREQUISITE: Registered Nursing 41, 42, and 42A.

Methodical application of drug information that impacts physiologic body systems including contraindications and precautions, adverse effects and drug interactions. Emphasis is placed on nursing responsibilities such as maximizing therapeutic effects and minimizing adverse effects of drug therapy, appropriate client and family teaching, and ongoing assessment of the client. (A, CSU)

41 NURSING CARE OF THE ADULT WITH COMMON HEALTH PROBLEMS

2.5 units, 2.5 lecture hours

PREREQUISITE: Registered Nursing 31 and 35A with a grade of "C" or better. COREQUISITE: Registered Nursing 35B, 42 and 42A.

Theoretical concepts related to the registered nurse caring for the adult client with common health problems. Through utilization of the nursing process, the student will recognize alterations in functioning or illness and formulate client specific nursing interventions. (A, CSU)

42 NURSING CARE OF THE ADULT WITH COMMON HEALTH PROBLEMS CLINICAL

2 units, 6 lab hours

PREREQUISITE: Registered Nursing 31, 32, 32A, and 35A with a grade of "C" or better. COREQUISITE: Registered Nursing 35B, 41, and 42A.

Nursing care of the adult with common health problems in the acute care setting. Implementation of psychomotor skills associated with implementing client care, medication administration, and intravenous therapy. (A, CSU)

42A NURSING CARE OF THE ADULT WITH COMMON HEALTH PROBLEMS SKILLS

1 unit, 3 lab hours

PREREQUISITE: Registered Nursing 31, 32 and 32A with a grade of "C" or better. COREQUISITE: Registered Nursing 41 and 42.

Basic nursing skills performance in a simulated clinical environment for the registered nursing student caring for adults with common health problems. (A, CSU)

45 NURSING CARE OF THE CHILDBEARING FAMILY THEORY

2 units, 2 lecture hours, (Formerly Registered Nursing 5)

PREREQUISITE: Registered Nursing 31, 32, 32A, 33, and 35A with a grade of "C" or better. COREQUISITE: Registered Nursing 46.

Family centered nursing approach to the child bearing cycle, birth, the neonate, and family bonding; physiology of pregnancy, labor, and recovery. (A, CSU)

46 NURSING CARE OF THE CHILDBEARING FAMILY CLINICAL

2 units, 6 lab hours, (Formerly Registered Nursing 6)

PREREQUISITE: Registered Nursing 31, 32, 32A, 33 and 35A with a grade of "C" or better. COREQUISITE: Registered Nursing 45.

Clinical application of the principles and practices of nursing care of the child bearing family surrounding the ante-, intra-, and postpartum physical and psychosocial adaptations. (A, CSU)

51 NURSING CARE OF THE ADULT WITH COMPLEX HEALTH PROBLEMS

2.5 units, 2.5 lecture hours

PREREQUISITE: Registered Nursing 35B, 41, 42, and 42A with a grade of "C" or better. COREQUISITE: Registered Nursing 52, 52A and 53.

Synthesize and correlate nursing knowledge and skills in providing care to adults who have complex, multi-system illnesses. Focus will be for the registered nursing students to predict client needs and priorities, and evaluate outcomes on care. (A, CSU)

52 NURSING CARE OF THE ADULT AND OLDER ADULT WITH COMPLEX HEALTH PROBLEMS CLINICAL

2 units, 6 lab hours

PREREQUISITE: Registered Nursing 35B, 41, 42, and 42A with a grade of "C" or better. COREQUISITE: Registered Nursing 51, 52A, and 53.

Nursing care of the adult and older adult client with complex health problems in the acute hospital setting and community based support agencies. (A, CSU)

52A NURSING CARE OF THE ADULT AND OLDER ADULT WITH COMPLEX HEALTH PROBLEMS SKILLS

0.5 unit, 1.5 lab hours

PREREQUISITE: Registered Nursing 41, 42 and 42A with a grade of "C" or better. COREQUISITE: Registered Nursing 51, 52 and 53.

Advanced nursing skills performance in a simulated clinical environment for the advanced nursing student caring for the adult and older adult with complex health problems. (A, CSU)

53 NURSING CARE OF THE OLDER ADULT

1 unit, 1 lecture hour

PREREQUISITE: Registered Nursing 35B, 41, and 42 with a grade of "C" or better. COREQUISITE: Registered Nursing 51, 52, and 52A.

Theoretical concepts of the aging process and the Registered Nurse's role in meeting the needs of older adult clients in the community and acute care settings. (A, CSU)

55 NURSING CARE OF INFANTS AND CHILDREN

2 units, 2 lecture hours, (Formerly Registered Nursing 13)

PREREQUISITE: Registered Nursing 41, 42, 42A, 35B, 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

4 units, 12 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 coordinator 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
 .5 unit, 1.5 lab hours
 PREREQUISITE: Registered Nursing 51, 52, and 52A with a grade of “C” or better. COREQUISITE: Registered Nursing 61 and 62.

Advanced nursing skills performance in a simulated clinical environment for the advanced nursing student caring for critically ill clients. (A, CSU)

65 NURSING CARE OF THE CLIENT WITH BEHAVIORAL AND EMOTIONAL DISORDERS
 2 units, 2 lecture hours, (Formerly Registered Nursing 9)
 PREREQUISITE: Registered Nursing 35B, 51, 52, and 53 with a grade of “C” or better. COREQUISITE: Registered Nursing 66.

Theoretical concepts comprising a comprehensive overview of functional and dysfunctional human behavior, therapeutic communication, age related problems, treatment modalities, delivery of mental health care services, mental health legislation, and the role and responsibilities of the psychiatric/mental health nurse. (A, CSU)

66 NURSING CARE OF THE CLIENT WITH BEHAVIORAL AND EMOTIONAL DISORDERS CLINICAL
 2 units, 6 lab hours, (Formerly Registered Nursing 10)
 PREREQUISITE: Registered Nursing 35B, 51, 52, and 53 with a grade of “C” or better. COREQUISITE: Registered Nursing 65.

Clinical application of the nursing principles and practices of clients with emotional and behavioral disorders in the acute care and community settings. (A, CSU)

101 TRANSITION TO FRESNO CITY COLLEGE REGISTERED NURSING PROGRAM
 1.5 units, 1.5 lecture hours
 COREQUISITE: Registered Nursing 102.

Required for all students entering the Fresno City College Registered Nursing Program as an advanced placement student including LVN to RN and transfer students from other nursing programs. Focus on the theory and application of concepts of physical assessment, the nursing process, critical thinking, and the relationship of homeostatic mechanisms to fluids and electrolytes and nursing competencies in the professional roles of clinician, teacher, leader and advocate. (A)

102 TRANSITION TO FRESNO CITY COLLEGE REGISTERED NURSING PROGRAM SKILLS
 1-2 units, 3-6 lab hours
 COREQUISITE: Registered Nursing 101.

Required for all students entering the Fresno City College Registered Nursing Program as an advanced placement student including LVN to RN and transfer students from other nursing programs. Focus on skills acquisition and validation prior to entering the hospital setting. (A)

105 MEDICATION MATH
 0.5 unit, .5 lecture hour, (Pass/No Pass), (Repeats = 1)
 COREQUISITE: Acceptance into the Registered Nursing Program.
 Calculation of medication dosages, including review of mathematical concepts. (A)

107 INTRODUCTION TO NURSING PROCESS
 0.5 unit, .5 lecture hour, (Pass/No Pass), (Repeats = 1)
 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), (Repeats = 2)
 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), (Repeats = 2)
 PREREQUISITE: Admission 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 into the Registered Nursing program or 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.

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 125 and 126 or English as a Second Language 67 and 68 recommended.
 Overview of paralegal profession, including historical development, employment, ethics, job responsibilities, litigation process, legal analysis, and legal research and writing. (A, CSU)

2A LEGAL RESEARCH AND WRITING I
 3 units, 3 lecture hours
 PREREQUISITE: Paralegal 1
 Development of legal research skills through the use of primary and secondary sources. Development of legal writing skills through the preparation of various legal writing assignments. (A, CSU)

2B LEGAL RESEARCH AND WRITING II
 3 units, 3 lecture hours
 PREREQUISITE: Paralegal 2A.
 Development of advanced legal research skills using more sophisticated legal research tools. Development of more sophisticated legal writing skills through preparation of more advanced and specialized legal writing assignments. (A, CSU)

292 Paralegal

- 3 FAMILY LAW**
3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Marriage, divorce, nonmarital cohabitation, invalid marriages, separation, annulment, 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)
- 9 REAL PROPERTY**
3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Introduction to basic concepts of real property law including both ownership and use. Emphasis placed upon title, title insurance, landlord and tenant, land contracts, deeds, and security for loans. Preparation of real estate documents. (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)
- 16 ENVIRONMENTAL LAW**
3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Introduction to basic concepts of environmental law including zoning; environmental controls on land use; control of water, air, and noise pollution; nuisances; building regulations; Subdivision Map Act; and California Environmental Quality Act. (A, CSU)

17 ADMINISTRATIVE LAW/WORKERS' COMPENSATION

3 units, 3 lecture hours

PREREQUISITE: Paralegal 1.

Introduction to basic concepts of administrative law and workers' compensation law. Emphasis placed on agency rulemaking, agency investigations, agency adjudications, judicial review, compensable injuries, temporary disability, permanent disability, and Worker's Compensation Appeals Board proceedings. (A, CSU)

18 EMPLOYMENT LAW

3 units, 3 lecture hours

PREREQUISITE: Paralegal 1.

Overview of legal relationship between employer and employee. Emphasis placed on basic understanding of employment-related laws, and federal and state regulatory environment. Subjects covered include pre-employment concerns, legal aspects of the employer/employee relationship, discrimination issues and actions, terminations, and ethical issues in employment law. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

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, 16 units total. May be repeated for not more than 16 units total. (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 OFFICE ADMINISTRATION

3 units, 2 lecture hours, 2 lab hours, (See also Business & Technology 140), (Formerly Paralegal 56)

ADVISORY: Business & Technology 2 or ability to type 40 words per minute recommended. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Legal vocabulary, ethics, and law office practices and procedures. Preparation of correspondence and client documents. (A)

PHILOSOPHY (PHIL)

1A THEORIES OF KNOWLEDGE AND REALITY

3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent.

An introduction to traditional and contemporary views on the nature of knowledge, truth, and thought; alternative views of God, the universe, and human nature. Develops skills in philosophical analysis and logical thinking. (A, CSU-GE, UC, I)

1AH HONORS THEORIES OF KNOWLEDGE AND REALITY

3 units, 3 lecture hours, (Formerly Honors 1P)

PREREQUISITE: English 1A or equivalent. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

An introduction to traditional and contemporary views on the nature of knowledge, truth, and thought; alternative views of God, the universe and human nature. Develops skills in philosophical analysis and logical thinking. Honors sections may also focus on an historical overview or a more in-depth study of a significant branch of philosophy e.g. philosophy of language or philosophy of mind. (A, CSU-GE, UC, I)

1B SOCIAL AND POLITICAL PHILOSOPHY

3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent. Philosophy 1A is not a prerequisite to 1B.

An introduction to social and political philosophies, ancient and modern; inquiry into views of human nature, the nature and varieties of institutions, and the personal and social implications of the human experience. (A, CSU-GE, UC, I)

1C ETHICS

3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent. Neither Philosophy 1A nor Philosophy 1B is a prerequisite for this course.

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. (A, CSU-GE, UC, I)

1D WORLD RELIGIONS

3 units, 3 lecture hours, (Formerly Philosophy 10)

PREREQUISITE: English 1A or equivalent.

Basic beliefs and practices of Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam. (A, CSU-GE, UC, I)

4 CRITICAL REASONING

3 units, 3 lecture hours

PREREQUISITE: English 1A or equivalent.

Principles and methods of good reasoning, including identification of arguments, developing and assessing basic deductive and inductive reasoning, common fallacies, and application of each element to the student's major area of study, such as Liberal Studies. (A, CSU-GE, UC)

5 PHILOSOPHY OF RELIGION

3 units, 3 lecture hours

ADVISORY: English 1A recommended.

The rational scrutiny of the central claims of the Western monotheistic tradition. (A, CSU-GE, UC, I)

6 INTRODUCTION TO 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. (A, CSU-GE, UC)

PHOTOGRAPHY (PHOTO)**5 INTRODUCTION TO PHOTOGRAPHY**

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126.

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. Activities include, but not limited to homework readings, and writings, exams, shooting and sharing photography projects, required field trips, and discussing the images and contributions of major practitioners. Students must provide their own basic camera. (A, CSU-GE, UC)

6 DIGITAL CAMERA FUNDAMENTALS

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Entry-level non-lab course. Theories and practices of manually adjustable digital cameras; technical and creative use of manual camera controls and accessories. 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. Activities include: shooting, demonstrations, exams, and discussing the images and contributions of major practitioners. Students must provide their own manually adjustable digital camera or use a manual film camera provided by the Photography Department. (A, CSU)

7 APPLIED CAMERA FUNDAMENTALS

1.5 units, 3 lecture hours, (9 weeks)

PREREQUISITE: Photography 6 or equivalent.

Continuation of the non-lab Photography 6, Digital Camera Fundamentals, course. Exploration of increasing complex and technical problem solving projects using manual digital camera controls and accessories. Topics include: existing light, color design and composition, photographing people, flash, close-up photography, print workflow and legal and ethical aspects of photography. Activities include: shooting and sharing photography projects, homework and writing, exams, demonstrations, and discussing the images and contributions of major practitioners. Students must also provide their own manually adjustable digital camera or use a manual film camera provided by the Photography Department. (A, CSU)

12 PHOTOSHOP 1: PHOTOSHOP FOR PHOTOGRAPHERS

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Photography 22)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Photoshop in a photographer's workflow, including a variety of problem solving lessons and projects using: digital image capture, organization, basic tone and color adjustments, basic retouching, and printing techniques. Activities include: demonstrations, workbook lessons and worksheets, digital camera and scanning projects desktop printing and exams. (A, CSU)

15 PHOTOGRAPHY AND VISUAL LITERACY

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

COREQUISITE: Photography 5 or Photography 17 or equivalent. 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 execution of the photographic image are utilized in our culture.

Activities include: shooting and sharing photography projects, homework readings and writings, exams, demonstrations, discussing the images and contributions of major practitioners. The use of small format cameras and digital workflows. Field trips as required. (A, CSU)

17 CLASSIC BLACK AND WHITE PHOTOGRAPHY

3 units, 2 lecture hours, 3 lab hours, (Formerly Photography 10)

ADVISORY: Photography 5. Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Theories and practices of traditional 35mm and 4x5 black and white film photography; technical and creative use of a manual camera controls and accessories, film development, printing, and print presentation techniques and legal and ethical aspects of photography. Projects emphasize aesthetics and photographic problem solving utilizing text and classroom information. Activities include, but not limited to shooting and sharing photography projects, homework readings and writings, exams, demonstrations, and discussing the images and contributions of major practitioners. Course may be used as an elective for the Commercial Photography Degree or Certificate. (A, CSU, UC)

18 DIGITAL BLACK AND WHITE PHOTOGRAPHY

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Photography 20)

PREREQUISITE: Photography 12 or equivalent.

Interpreting reality through the many pathways to digital black and white photography using Adobe Photoshop and other software applications on a variety of projects emphasizing the vision, language, and technique of black and white print along with legal and ethical issues. Activities include: demonstrations, workbook lessons and worksheets, camera and scanning projects, desktop printing, field trips, exams, and discussion of the images and contributions of major practitioners and student projects. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

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 photography. Collaborative learning objectives established specific to photography. Seventy-five hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester, 16 units total. May be repeated for not more than 16 units total. (A, CSU)

23 PHOTOSHOP 2: DIGITAL DARKROOM

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Photography 12 or equivalent.

Concepts and techniques focusing on professional digital image optimization and printing techniques, including completion of a variety of real world photographic retouching lessons and projects. Emphasis will also be on non-destructive workflows, evaluating and choosing digital imaging technology and establishing a color managed workflow. Activities include: demonstrations, workbook lessons and worksheets, digital camera and scanning projects, desktop printing, and exams. (A, CSU)

26 LIGHTING PRINCIPLES

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Photography 24 and 35)

PREREQUISITE: Photography 5 or equivalent. ADVISORY: Photography 12.

Photographic lighting qualities, characteristics, and styles. Using studio lighting techniques, tabletop still life subjects will be photographed to emphasize problem

solving and personal expression. Activities include: demonstrations, audio/video and Internet presentations, digital camera shooting projects, sharing of photography projects, Adobe Photoshop workflow, desktop printing, exams, and discussing the images and contributions of major practitioners. (A, CSU)

27 ALTERNATIVE PHOTOGRAPHIC PROCESSES

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Photography 30, 33 and 40)

PREREQUISITE: Photography 5 or equivalent. ADVISORY: Photography 12 and 17.

Developing a personal vision by seeing and working with non-traditional methods for creating photographic images. Historical silver, non-silver, and digital processes will be used and combined for representational and non-representational images. Activities include: shooting and sharing photography projects, homework readings and writings, exams, demonstrations, and discussion of the images and contributions of major practitioners. Field trips as required. May be used as an elective for the Commercial Photography Degree or Certificate. (A, CSU)

30 EDITORIAL PHOTOGRAPHY

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Photography 5 or equivalent. ADVISORY: Photography 12 and 15 or equivalent.

Theories and practices of photography in the field of mass communication. Photography as it is applied to: newspapers, magazines, public relations, websites, business and publishing applications. Emphasis on communication of ideas, storytelling, and social reportage using the power of traditional film and digital still photographs as well as legal and ethical aspects of photography. Activities include: demonstrations, audio/video and Internet presentations, digital camera shooting projects, sharing and critiquing photography projects, desktop printing, exams, and discussion of the images and contributions of major practitioners. (A, CSU)

32 COMMERCIAL PORTRAITURE

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3), (Formerly Photography 23 and 25)

PREREQUISITE: Photography 5 or equivalent. ADVISORY: Photography 12 and 26.

Studio and environmental commercial portraiture. Emphasis on style and the psychology of body language, lighting, composition, and facial expression. Portrait subjects include: individuals, couples, groups, and weddings. Activities include: demonstrations, audio/video and Internet presentations, digital camera shooting projects, sharing of photography projects, homework readings and writings, exams, Adobe Photoshop workflow, desktop printing, required field trips to studios, and discussion of the images and contributions of major practitioners. (A, CSU)

37 EDITORIAL PORTRAITURE

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Photography 5 or equivalent. ADVISORY: Photography 12 and 32.

Theories and practices using the location portrait as a powerful editorial tool in visual reportage. Emphasis will be on subject relationships, location lighting setups, design, critical lens choice, and color utilization to create an accurate interpretation of the subject. Activities include: demonstrations, audio/video and Internet presentations, digital camera portrait projects, sharing of photography projects, desktop printing, exams, and discussion of the images and contributions of major practitioners. Course may be used as an elective for the Commercial Photography Degree or Certificate. (A, CSU)

40 PROFESSIONAL PHOTOGRAPHIC PRACTICES

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Photography 5 or equivalent. ADVISORY: Photography 12, 15, or equivalent.

Theories and practices of picture selection for portfolios and other visual environments such as publishing, gallery presentations, annual reports, websites, magazines, commercial clients or visual media of any kind. Topics include advanced theory in communication with emphasis on visual language, legal and ethical considerations, organization and design in developing a professional portfolio strategy to be successful in both traditional and online marketplaces. Activities include: demonstrations, audio/video and Internet presentations, digital camera shooting projects, sharing of photography projects, desktop printing, exams, and discussion of the images and contributions of major practitioners. (A, CSU)

45 ADVANCED PROJECTS

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Photography 18 or 23 or 26 or 27 or 30 or 37 or 47. ADVISORY: Photography 40.

Limited enrollment course open only to those students who have completed the prerequisite for their proposed project. Projects must emphasize advanced approaches not covered in the prerequisite courses. Students will research their topic and present their work and findings in progress to the class. Independent study contract between instructor and student required. (A, CSU)

47 BOOK/VIDEO PUBLISHING

3 units, 2 lecture hours, 3 lab hours, (Repeats = 3)

PREREQUISITE: Photography 5. ADVISORY: Photography 15 and 30.

Principles and theories of photographic book publishing and design concepts relating to content, flow, legal and ethical considerations, composition and design of a photographic book and video. Emphasis will be on a single themed project with two distinct media presentations; a hardcover finished book and a simultaneously produced four to five minute video using the same subject matter, set to music. Course may be used as an elective for the Commercial Photography Degree or Certificate. (A, CSU)

PHYSICAL EDUCATION (PE)

GENERAL ACTIVITY COURSES

3 ARCHERY

1 unit, 2 lab hours, (Formerly Physical Education ACT 14)

PREREQUISITE: None.

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, 2 lab hours, (Formerly Physical Education ACT 1)

PREREQUISITE: None.

Strokes, rules, etiquette, and strategy. Singles and doubles game experience. (A, CSU, UC)

5 BASKETBALL

1 unit, 2 lab hours, (Formerly Physical Education ACT 5A)

PREREQUISITE: None.

Basic skills, rules, strategy, offense and defense. Tournaments according to skill level of students. (A, CSU, UC)

296 Physical Education

- 6 FITNESS AND HEALTH**
1 unit, 2 lab hours, (Formerly Physical Education ACT 15A)
PREREQUISITE: None.
Activities offered to meet individual needs in posture, strength, flexibility, endurance, and relaxation. Universal weight machines not used. (A, CSU, UC)
- 7 GOLF**
1 unit, 2 lab hours, (Formerly Physical Education ACT 10)
PREREQUISITE: None.
Grip, stance, and swing fundamentals. Instruction on irons, woods, putting, and sand play. Swing evaluation for each student. Course play and conduct etiquette. Golf range practice included; golf course assignments; range & golf course fee is student's responsibility. (A, CSU, UC)
- 9 PHYSICAL FITNESS**
1 unit, 3 lab hours, (Formerly Physical Education ACT 17A)
PREREQUISITE: None.
Designed to test individuals, assign an exercise program and re-test to note progress. Emphasis on individual training. Use of weightlifting machines. (A, CSU, UC)
- 11 SEASONAL SPORTS**
1 unit, 2 lab hours, (Formerly Physical Education ACT 5)
PREREQUISITE: None.
Recreational skills of baseball, football, soccer, and softball. (A, CSU, UC)
- 12 SWIMMING**
1 unit, 2 lab hours, (Formerly Physical Education ACT 16A)
PREREQUISITE: None.
Techniques of swimming and conditioning for beginning and advanced swimmers. Stroke technique drills and conditioning workouts. (A, CSU, UC)
- 13 TENNIS**
1 unit, 2 lab hours, (Formerly Physical Education ACT 7)
PREREQUISITE: None.
Strokes, rules, etiquette and game strategy for singles and doubles. (A, CSU, UC)
- 14 VOLLEYBALL**
1 unit, 2 lab hours, (Formerly Physical Education ACT 5G)
PREREQUISITE: None.
Basic skills, rules, strategy, offense and defense. Tournaments according to skill level of students. (A, CSU, UC)
- 15A WEIGHT TRAINING (WOMEN)**
1 unit, 2 lab hours, (Formerly Physical Education ACT 11B)
PREREQUISITE: None.
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, 2 lab hours, (Formerly Physical Education ACT 11A)
PREREQUISITE: None.
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, 5 lab hours; 1 unit, 2 lab hours, (Formerly Physical Education ACT 11C)
PREREQUISITE: None.
Total body development by exercising against weighted resistance; isotonic and circuit exercises. Class is structured to satisfy the body building needs of both men and women as they participate in the same environment. Use of weight lifting equipment. Safety methods of lifting and the use of equipment. (A, CSU, UC)
- 17 HATHA YOGA**
1 unit, 2 lab hours, (Formerly Physical Education ACT 28)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Fundamental exercises for flexibility, strength, relaxation, and improvement of concentration drawn largely from the Hatha Yoga tradition. (A, CSU, UC)
- 50 ADAPTED FITNESS AND FLEXIBILITY**
1 unit, 1 lecture hour, 1 lab hour, (Repeats = 3)
PREREQUISITE: None.
Designed for students with disabling conditions. Development and/or maintenance of basic physical/mental skills with an introduction to basic nutrition, disability and pharmaceutical issues. Measured cardiovascular fitness, stretching, nutritional evaluation and current disability/pharmaceutical topics. (A, CSU, UC)
- 51 ADAPTED AQUATICS**
1 unit, 2 lab hours, (Repeats = 3)
PREREQUISITE: None.
Designed for students with disabling conditions. Development and/or maintenance of basic physical skills, knowledge, and attitude for successful participation in aquatics. Measured skill performance and cardiovascular fitness. (A, CSU, UC)
- 52 ADAPTED SPORTS**
1 unit, 2 lab hours, (Repeats = 3)
PREREQUISITE: None.
Designed for students with disabling conditions. Sports skills of Frisbee, Frolf, Bocci, Horseshoe. (A, CSU, UC)
- 53 ADAPTED STRENGTH TRAINING**
1 unit, 2 lab hours, (Repeats = 3)
PREREQUISITE: None.
Designed for students with disabling conditions. Development and/or maintenance of strength. Adapted fundamental/advanced strength, flexibility, and cardiovascular endurance. (A, CSU, UC)
- 54 ADAPTED WALKING AND CONDITIONING**
1 unit, 1 lecture hour, 1 lab hour, (Repeats = 3)
PREREQUISITE: None.
Designed for students with disabling conditions. Development and/or maintenance of basic physical/mental conditioning skills with and introduction to basic nutrition, disability and pharmaceutical issues. Measured cardiovascular fitness, stretching, nutritional evaluation and current disability/pharmaceutical topics. (A, CSU, UC)
- 55 ADAPTED FLEXIBILITY AND STRENGTH**
1 unit, 1 lecture hour, 1 lab hour, (Repeats = 3)
PREREQUISITE: None.
Designed for students with disabling conditions. Development and/or maintenance of flexibility, strength, and fitness using progressive resistance, stretching, and cardiovascular fitness activities. A very basic introduction to nutrition and current disability/pharmaceutical issues. (A, CSU, UC)

PREPROFESSIONAL COURSES

20 ATHLETIC TRAINING

4 units, 3 lecture hours, 2 lab hours, (Formerly Physical Education PRE 32)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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, 2 lab hours, (Formerly Physical Education PRE 31A)

PREREQUISITE: Intermediate swimming test: freestyle, elementary backstroke, breaststroke, and sidestroke. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.

Understanding and interpreting the rules and regulations of officiating one or more of the following activities: baseball, basketball, football, soccer, softball, track, volleyball, and wrestling. (A, CSU, UC)

25 WATER SAFETY INSTRUCTOR

3 units, 2 lecture hours, 2 lab hours, (Formerly Physical Education PRE 31B)

PREREQUISITE: Intermediate swimming test: freestyle, elementary backstroke, breaststroke, and sidestroke. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Teaching methods: all levels of swimming and diving. (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 125 and 126 or English as a Second Language 67 and 68 recommended.

Nature and scope of physical education and its sub-disciplines. Historical background, philosophy, curriculum, current problems, issues, and career options. (A, CSU, UC)

INTERCOLLEGIATE ACTIVITY COURSES

Medical clearance resulting from a physical examination by the college's team physician is required prior to a student's first enrollment in any intercollegiate activity course.

29A THEORY OF BADMINTON

1 unit, 1 lecture hour, 1 lab hour

Techniques, strategies, and biomechanics of badminton. (A, CSU, UC)

29B COMPETITIVE BADMINTON

3 units, 9.5 lab hours, (Repeats = 2)

Designed primarily for students possessing the desire, ability and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

29C OFF-SEASON CONDITIONING FOR BADMINTON

1 unit, 3 lab hours, (Repeats = 2)

Off-season conditioning activities for badminton players. (A, CSU, UC)

30A THEORY OF BASEBALL

1 unit, 1 lecture hour, 1 lab hour, (Formerly Physical Education PRE 33B)

Techniques, strategies, and biomechanics of baseball. (A, CSU, UC)

30B COMPETITIVE BASEBALL

3 units, 9.5 lab hours, (Spring), (Repeats = 2), (Formerly Physical Education INT 41)

Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

30C OFF-SEASON CONDITIONING FOR BASEBALL

1 unit, 3 lab hours, (Repeats = 2)

Off-season conditioning activities for baseball players. (A, CSU, UC)

31A THEORY OF BASKETBALL

1 unit, 1 lecture hour, 1 lab hour, (Formerly Physical Education PRE 33A)

Techniques, strategies, and biomechanics of basketball. (A, CSU, UC)

31B COMPETITIVE BASKETBALL

3 units, 9.5 lab hours, (Fall and Spring), (Repeats = 2), (Formerly Physical Education INT 40)

Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

31C OFF-SEASON CONDITIONING FOR BASKETBALL

1 unit, 3 lab hours, (Repeats = 2)

Off-season conditioning activities for basketball players. (A, CSU, UC)

32A THEORY OF CROSS COUNTRY

1 unit, 1 lecture hour, 1 lab hour

Techniques, strategies, and biomechanics of cross country. (A, CSU, UC)

32B COMPETITIVE CROSS COUNTRY

3 units, 9.5 lab hours, (Fall), (Repeats = 2), (Formerly Physical Education INT 48)

Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

32C OFF-SEASON CONDITIONING FOR CROSS COUNTRY

1 unit, 3 lab hours, (Repeats = 2)

Off-season training for cross country runners with an emphasis on developing a high mileage base. (A, CSU)

298 Physical Education

33A THEORY OF FOOTBALL

1 unit, 1 lecture hour, 1 lab hour, (Formerly Physical Education PRE 33C)

Techniques, strategies, and biomechanics of football. (A, CSU, UC)

33B COMPETITIVE FOOTBALL

3 units, 9.5 lab hours, (Fall), (Repeats = 2), (Formerly Physical Education INT 42)

Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

33C OFF-SEASON CONDITIONING FOR FOOTBALL

1 unit, 3 lab hours, (Repeats = 2)

Off-season conditioning activities for football players. (A, CSU, UC)

34A THEORY OF GOLF

1 unit, 1 lecture hour, 1 lab hour

Techniques, strategies, and biomechanics of golf. (A, CSU, UC)

34B COMPETITIVE GOLF

3 units, 9.5 lab hours, (Repeats = 2), (Formerly Physical Education INT 46)

Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

34C OFF-SEASON CONDITIONING FOR GOLF

1 unit, 3 lab hours, (Repeats = 2)

Off-season conditioning activities for golfers. (A, CSU, UC)

35B PEP AND CHEER

2 units, 6 lab hours, (Repeats = 2), (Formerly Physical Education PRE 38)

Designed primarily for students possessing the desire, ability, and skills necessary to participate in cheer and pep on the college level. Prospective participants should confer with the instructor before enrollment. (A, CSU, UC)

36A THEORY OF SOCCER

1 unit, 1 lecture hour, 1 lab hour

Techniques, strategies, and biomechanics of soccer. (A, CSU, UC)

36B COMPETITIVE SOCCER

3 units, 9.5 lab hours, (Fall), (Repeats = 2), (Formerly Physical Education INT 39)

Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

36C OFF-SEASON CONDITIONING FOR SOCCER

1 unit, 3 lab hours, (Repeats = 2)

Off-season conditioning activities for soccer players. (A, CSU, UC)

37A THEORY OF SOFTBALL

1 unit, 1 lecture hour, 1 lab hour

Techniques, strategies, and biomechanics of softball. (A, CSU, UC)

37B COMPETITIVE SOFTBALL

3 units, 9.5 lab hours, (Spring), (Repeats = 2), (Formerly Physical Education INT 36)

Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

37C OFF-SEASON CONDITIONING FOR SOFTBALL

1 unit, 3 lab hours, (Repeats = 2)

Off-season conditioning activities for softball players. (A, CSU, UC)

38A THEORY OF TENNIS

1 unit, 1 lecture hour, 1 lab hour

Techniques, strategies, and biomechanics of tennis. (A, CSU, UC)

38B COMPETITIVE TENNIS

3 units, 9.5 lab hours, (Spring), (Repeats = 2), (Formerly Physical Education INT 44)

Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

38C OFF-SEASON CONDITIONING FOR TENNIS

1 unit, 3 lab hours, (Repeats = 2)

Off-season conditioning activities for tennis players. (A, CSU, UC)

39A THEORY OF TRACK AND FIELD

1 unit, 1 lecture hour, 1 lab hour, (Formerly Physical Education PRE 33D)

Techniques, strategies, and biomechanics of track and field. (A, CSU, UC)

39B COMPETITIVE TRACK AND FIELD

3 units, 9.5 lab hours, (Spring), (Repeats = 2), (Formerly Physical Education INT 43)

Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

39C OFF-SEASON CONDITIONING FOR TRACK AND FIELD

1 unit, 3 lab hours, (Repeats = 2)

Off-season conditioning activities for track and field team members. (A, CSU, UC)

40A THEORY OF VOLLEYBALL

1 unit, 1 lecture hour, 1 lab hour

Techniques, strategies, and biomechanics of volleyball. (A, CSU, UC)

40B COMPETITIVE VOLLEYBALL

3 units, 9.5 lab hours, (Fall), (Repeats = 2), (Formerly Physical Education INT 37)

Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

40C OFF-SEASON CONDITIONING FOR VOLLEYBALL

1 unit, 3 lab hours, (Repeats = 2)

Off-season conditioning activities for volleyball players. (A, CSU, UC)

41A THEORY OF WRESTLING

1 unit, 1 lecture hour, 1 lab hour
Techniques, strategies, and biomechanics of wrestling. (A, CSU, UC)

41B COMPETITIVE WRESTLING

3 units, 9.5 lab hours, (Fall), (Repeats = 2), (Formerly Physical Education INT 45)
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

41C OFF-SEASON CONDITIONING FOR WRESTLING

1 unit, 3 lab hours, (Repeats = 2)
Off-season conditioning activities for wrestlers. (A, CSU, UC)

42A THEORY OF WATER POLO

1 unit, 1 lecture hour, 1 lab hour
Techniques, strategies, and biomechanics of water polo. (A, CSU, UC)

42B COMPETITIVE WATER POLO

3 units, 9.5 lab hours, (Repeats = 2)
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

42C OFF-SEASON CONDITIONING FOR WATER POLO

1 unit, 3 lab hours, (Repeats =2)
Off-season conditioning activities for water polo players. (A, CSU, UC)

PHYSICAL SCIENCE (PHYS)

7 ENVIRONMENTAL SCIENCE

3 units, 3 lecture hours, (Formerly Environmental Studies 7)
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended.

The application of basic scientific principles to the understanding of environmental problems. Topics include urban land planning and usages, air and water pollution, water usages and management, food production, wildlife management, and population studies. Optional field trips may be offered. (A, CSU-GE, UC, I)

11 INTRODUCTORY PHYSICAL SCIENCE

3 units, 3 lecture hours
ADVISORY: Mathematics 101 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 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), (Repeats = 3)
PREREQUISITE: None.
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 125 and 126 or English as a Second Language 67 and 68 recommended.
Mechanics, thermal physics, oscillations, and waves. Designed primarily for life science and related majors. (A, CSU-GE, UC, I)

2B GENERAL PHYSICS 2

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Physics 2A.
Electricity and magnetism, optics, and introduction to modern physics. Designed primarily for life science and related majors. (A, CSU-GE, UC, I)

4A PHYSICS FOR SCIENTISTS AND ENGINEERS

4 units, 3 lecture hours, 3 lab hours
COREQUISITE: Mathematics 5B. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
Classical mechanics and mechanical waves. Designed primarily for physics, engineering, and related majors. (A, CSU-GE, UC, I)

4B PHYSICS FOR SCIENTISTS AND ENGINEERS

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Physics 4A.
Thermodynamics, electricity, and magnetism. Designed primarily for physics, engineering, and related majors. (A, CSU-GE, UC, I)

4C PHYSICS FOR SCIENTISTS AND ENGINEERS

4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Physics 4A. Physics 4B is not a prerequisite.
Electromagnetic waves, optics, relativity, quantum mechanics, nuclear physics, and elementary particles. Designed primarily for physics, engineering, and related majors. (A, CSU-GE, UC, I)

POLITICAL SCIENCE (POLSCI)

1 MODERN POLITICS

3 units, 3 lecture hours
ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Political concepts and processes through a survey of the literature of the subfields of political science: political philosophy, international relations, constitutional law, American politics, public administration, and behavioral studies methodology. (A, CSU-GE, UC, I)

2 AMERICAN GOVERNMENT

3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
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. (TCSU POLS 110) (A, CSU-GE, UC, I)

300 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. (TCSU POLS 110) (A, CSU-GE, UC, I)

5 COMPARATIVE GOVERNMENT

3 units, 3 lecture hours

ADVISORY: Political Science 2 and eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Introduction to comparative governmental, political, economic and ideological arrangements in selected countries or contexts. (A, CSU-GE, UC, I)

13 LEGAL AND JUDICIAL REASONING

3 units, 3 lecture hours

ADVISORY: Eligibility for English 1A recommended.

Statutory, common law and constitutional interpretation; examination of judicial and legal reasoning and the evolution of fundamental constitutional rights and principles. (A, CSU-GE, UC)

24 INTERNATIONAL RELATIONS

3 units, 3 lecture hours, (See also Political Science 174)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU, UC)

25 MODEL UNITED NATIONS

3 units, 3 lecture hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 or English as a Second Language 67 and 68 recommended.

Current problems of American and California government. Federal, state and local institutions. Does not satisfy the U.S. history constitution transfer requirements for a BA degree under Section 40404. Satisfies Fresno City College graduation requirement. (A)

174 INTERNATIONAL RELATIONS

3 units, 3 lecture hours, (See also Political Science 24), (Formerly Political Science 74)

PREREQUISITE: None.

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. (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. (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. (TCSU PSY 110)(A, CSU-GE, UC, I)

5 SOCIAL PSYCHOLOGY

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

A systematic analysis of the social determinants of behavior and mental processes, including the ways in which individuals are influenced by, and influence, their social environment. Emphasis is placed on the critical analysis of methodology, theory, and empirical findings related to social perception and cognition, attitudes, roles, conformity and obedience, attraction, aggression, prejudice and discrimination, prosocial behavior, behavior in groups, and behavior in built environments. (A, CSU, UC)

12 CHILD ABUSE

3 units, 3 lecture hours, (See also Child Development 12)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 PSYCHOLOGY OF RELIGION

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Psychological consequences of religion on thinking, emotions, moral and social behavior. Topics include the science-religion conflict, a comparison of selected Eastern and Western approaches to human identity and social relationships, and an examination of the impact of religion on experience, attitudes, behavior, and mental health. (A, CSU, UC)

16 ABNORMAL PSYCHOLOGY

3 units, 3 lecture hours

ADVISORY: Psychology 2 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Psychological, social, and biological bases of abnormal behavior. Definitions of abnormality; current models of etiology, classification, therapy, and prevention; critical analysis of research techniques and findings. (A, CSU, UC)

25 HUMAN SEXUALITY

3 units, 3 lecture hours

ADVISORY: Psychology 2 and eligibility for English 125 and 126 or English as a Second Language 67 and 68 and 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. (A, CSU, UC)

33 PERSONAL AND SOCIAL ADJUSTMENT

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC)

36 BIOLOGICAL PSYCHOLOGY

3 units, 3 lecture hours

ADVISORY: Psychology 2, Biology 1, 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; and the physiological mechanisms underlying sensation, perception, consciousness, motivation, emotion, stress, sexual behavior, learning memory, neurological disorders, psychopharmacology, and psychological disorders. (A, CSU, UC)

38 LIFESPAN DEVELOPMENT

3 units, 3 lecture hours, (See also Child Development 38)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (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 125 and 126 or English as a Second Language 67 and 68 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. (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 125 and 126 or English as a Second Language 67 and 68 recommended.

Descriptive statistics, sampling, hypothesis testing, estimation, selected non-parametric techniques, ANOVA, and regression, with applications from psychology, biology, and social sciences. (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. 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. (A, CSU, UC)

RADIOLOGIC TECHNOLOGY (RAD)

1A FUNDAMENTALS OF RADIOLOGIC TECHNOLOGY

6 units, 6 lecture hours

PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22. COREQUISITE: Radiologic Technology 1B and 1C. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Radiography and its relation to radiology and the hospital; X-ray production, darkroom chemistry, radiographic quality, medical ethics, and use of X-ray equipment. (A, CSU)

1B BASIC RADIOGRAPHIC POSITIONING LABORATORY

1 unit, 3 lab hours

PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22. COREQUISITE: Radiologic Technology 1A and 1C. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Demonstration and practice in positioning of the chest, abdomen, upper and lower extremities, and shoulder girdle. (A, CSU)

1C CLINICAL ORIENTATION LABORATORY

2 units, 6 lab hours

PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22. COREQUISITE: Radiologic Technology 1A and 1B. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Practice of the applicable rules and regulations of the clinical facility. Assist with basic radiographic procedures. (A, CSU)

302 Radiologic Technology

2A RADIATION BIOLOGY

6 units, 6 lecture hours

PREREQUISITE: Radiologic Technology 1A, 1B and 1C. 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 and 1C. COREQUISITE: Radiologic Technology 2A, 2C, and 2D.

Demonstration and practice in positioning of the pelvis and upper femora, vertebral column, bony thorax, digestive system, gallbladder, biliary ducts, urinary system and mammography. (A, CSU)

2C CLINICAL OBSERVATION LABORATORY

2 units, 6 lab hours

PREREQUISITE: Radiologic Technology 1A and 1B and 1C. 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 and 1B and 1C. 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)

3A NURSING PROCEDURES IN RADIOLOGIC TECHNOLOGY

2 units, 3 lecture hours, (12 weeks), (Summer only)

PREREQUISITE: Radiologic Technology 2A, 2B, 2C, and 2D. COREQUISITE: Radiologic Technology 3B.

Procedures and methods pertaining to X-ray, emergency patients, and surgical procedures. (A, CSU)

3B BASIC CLINICAL RADIOLOGIC TECHNOLOGY

7 units, 32 lab hours, (12 weeks), (Summer only)

PREREQUISITE: Radiologic Technology 2A, 2B, 2C, and 2D. COREQUISITE: Radiologic Technology 3A.

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 3A and 3B. COREQUISITE: Radiologic Technology 4B and 4C.

Abnormal conditions of patients that preclude routine radiography; pathological conditions that need recognition and special treatment by radiologic technologists. (A, CSU)

4B ADVANCED CLINICAL RADIOLOGIC TECHNOLOGY

11 units, 33 lab hours

PREREQUISITE: Radiologic Technology 3A and 3B. COREQUISITE: Radiologic Technology 4A and 4C.

Advanced radiographic exposure and positioning; procedures in medical-surgical conditions. (A, CSU)

4C ADVANCED RADIOGRAPHIC POSITIONING LABORATORY-CRANIUM

1 unit, 3 lab hours

PREREQUISITE: Radiologic Technology 3A and 3B. COREQUISITE: Radiologic Technology 4A and 4B.

Demonstration and practice in positioning of the skull, facial bones, paranasal sinuses and temporal bones for radiographic examination. (A, CSU)

5A SPECIAL PROCEDURES IN RADIOLOGIC TECHNOLOGY

2 units, 2 lecture hours

PREREQUISITE: Radiologic Technology 4A, 4B, and 4C. COREQUISITE: Radiologic Technology 5B and 5C.

Special procedures for diagnostic purposes and equipment maintenance. (A, CSU)

5B SPECIALIZED CLINICAL RADIOLOGIC TECHNOLOGY

11 units, 33 lab hours

PREREQUISITE: Radiologic Technology 4A, 4B, and 4C. COREQUISITE: Radiologic Technology 5A and 5C.

Special procedures for diagnostic purposes; exposure to new imaging modalities. (A, CSU)

5C FLUOROSCOPY

2 units, 2 lecture hours, 1 lab hour

PREREQUISITE: Radiologic Technology 4A, 4B, and 4C. COREQUISITE: Radiologic Technology 5A, 5B.

Fluoroscopy techniques including positioning the patient, selecting exposure factors and positioning fluoroscopy equipment. (A, CSU)

6 CONCENTRATED CLINICAL RADIOLOGIC TECHNOLOGY

6 units, 40 lab hours, (8 weeks), (Summer only)

PREREQUISITE: Radiologic Technology 5A, 5B, and 5C.

Concentrated clinical experience to develop proficiency in all aspects of diagnostic radiography. (A, CSU)

REAL ESTATE (RE)

Certain real estate courses offered by the college presently meet the course requirements imposed by the California Department of Real Estate in order to take the real estate salesperson and/or broker examination. However, these courses are not intended as licensing test preparation courses. The course requirements applicable to these examinations may be viewed at the California Department of Real Estate website www.dre.ca.gov.

40 REAL ESTATE PRINCIPLES

3 units, 3 lecture hours, (Formerly Real Estate 50)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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)

- 42 LEGAL ASPECTS OF REAL ESTATE**
 3 units, 3 lecture hours, (Formerly Real Estate 52)
 PREREQUISITE: Real Estate 40, or equivalent experience, or hold a real estate salesperson license.
 Statute and case law with emphasis on laws affecting licensees includes duties, responsibilities and regulation of licensees in the areas of agency, contracts, property financing, ownership, use and transfer of real property. (A, CSU)
- 43 REAL ESTATE APPRAISAL I**
 3 units, 3 lecture hours
 PREREQUISITE: Real Estate 40, or equivalent experience, or hold a real estate salesperson license. ADVISORY: Eligibility for Mathematics 101 recommended.
 Residential and commercial property evaluation. Preparation of appraisal reports. (A, CSU)
- 44 REAL ESTATE FINANCE**
 3 units, 3 lecture hours, (Formerly Real Estate 54)
 PREREQUISITE: Real Estate 40, or equivalent experience, or hold a real estate salesperson license. ADVISORY: Eligibility for Mathematics 101 recommended.
 Money markets, interest, and lending policies for residential, multi-family, commercial, and special purpose properties. (A, CSU)
- 45 ESCROW PRINCIPLES AND PRACTICES**
 3 units, 3 lecture hours, (Formerly Real Estate 60)
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Role and responsibility of escrow officer, including legal issues, contracts, title insurance, and forms. Institutional lenders, sales and assignments of beneficial interest, property exchange and transfers. (A, CSU)
- 46 ECONOMICS OF REAL ESTATE**
 3 units, 3 lecture hours, (Formerly Real Estate 56)
 PREREQUISITE: Real Estate 40, or equivalent experience, or hold a real estate salesperson license.
 Urban growth, redevelopment, land use planning and utilization, shopping centers, and subdivisions. (A, CSU)
- 47 REAL ESTATE APPRAISAL II**
 3 units, 3 lecture hours, (Formerly Real Estate 57)
 PREREQUISITE: Real Estate 43.
 Multi-family dwellings and evaluation of commercial and special-use property. Appraisal reports. (A, CSU)
- 48 REAL ESTATE INVESTMENT**
 3 units, 3 lecture hours, (Formerly Real Estate 58)
 PREREQUISITE: Real Estate 41 or equivalent experience. ADVISORY: Eligibility for Mathematics 101 recommended.
 Capital gains, depreciation, installment sales, tax deferred exchanges, sale, and lease-back; investment trusts in estate building. (A, CSU)
- 49 PROPERTY MANAGEMENT**
 3 units, 3 lecture hours, (Formerly Real Estate 63)
 PREREQUISITE: Real Estate 40 or equivalent experience.
 Methods and procedures; development of a plan; property and neighborhood analysis; tenant selection and maintenance procedures. (A, CSU)

RECREATION (REC)

- 19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL**
 1-8 units, (Repeats = 2)
 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, 16 units total. May be repeated for not more than 16 units total. (A, CSU)
- 20 INTRODUCTION TO RECREATION**
 3 units, 3 lecture hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Educational opportunities; federal, state, and local relationships; planning programs; finance, and leadership. (A, CSU)
- 21 RECREATION LEADERSHIP**
 3 units, 2 lecture hours, 2 lab hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Theoretical and philosophical basis for leadership. Social dynamics of participation in recreation activities. (A, CSU)
- 23 OUTDOOR RECREATION**
 3 units, 2 lecture hours, 3 lab hours
 COREQUISITE: Recreation 20.
 History, development, principles and trends of organized camping, nature and conservation, and outdoor recreation. Laboratory and field trips, including camping and hiking activities. Practical skills in firecrafts, outdoor cooking, and backpacking. Leadership training in camp counseling. Required for recreation majors. (A, CSU)
- 50 ADAPTED RECREATION AND LEISURE**
 3 units, 2 lecture hours, 2 lab hours
 ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.
 Designed for students with disabling conditions. An introduction to the regional recreational and leisure venues, and opportunities available and accessible for individuals with disabling conditions. Laboratory and field trips including, but not limited to, dining, theater, museums, sports events, concerts, and outdoor activities. (A, CSU)
-
- ## RESPIRATORY CARE PRACTITIONER (RCARE)
-
- 16 PATIENT ASSESSMENT**
 3 units, 3 lecture hours
 PREREQUISITE: Acceptance into the Respiratory Care Program; Biology 1, Chemistry 3A, and Mathematics 103. COREQUISITE: Respiratory Care 17, 18, and 20. ADVISORY: English 1A.
 Introduction to the diagnostic tools and techniques used clinically to diagnose and assess the patient with cardiopulmonary dysfunction. (A, CSU)

304 Respiratory Care Practitioner

17 FUNDAMENTALS OF PATIENT MANAGEMENT

4 units, 3 lecture hours, 3 lab hours

PREREQUISITE: Acceptance into the Respiratory Care Program; Biology 1, Chemistry 3A, and Mathematics 103. COREQUISITE: Respiratory Care 16, 18, and 20. ADVISORY: English 1A.

Problem-solving and communication skills in fundamental patient care situations utilizing respiratory care concepts and related scientific rationale; cardiopulmonary resuscitation; basic pharmacology. (A, CSU)

18 PHYSIOLOGY OF THE RESPIRATORY SYSTEM

2 units, 2 lecture hours

PREREQUISITE: Acceptance into the Respiratory Care Program; Biology 1, Chemistry 3A, and Mathematics 103. COREQUISITE: Respiratory Care 16, 17, and 20. ADVISORY: English 1A.

Introduction to the basic physiologic principles for the cardiopulmonary system with emphasis on the respiratory system. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL

1-8 units, (Repeats = 2)

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 respiratory care. Collaborative learning objectives established specific to respiratory care. 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. May be repeated for not more than 16 units total. (A, CSU)

20 INTRODUCTION TO RESPIRATORY CARE

5 units, 3 lecture hours, 6 lab hours

PREREQUISITE: Acceptance into the Respiratory Care Program; Biology 1, Chemistry 3A, and Mathematics 103. COREQUISITE: Respiratory Care 16, 17, and 18. ADVISORY: English 1A.

Selected modalities for respiratory care with the physical, mechanical, and scientific principles associated with all attendant equipment. (A, CSU)

21 APPLICATIONS AND PROCEDURES IN RESPIRATORY CARE

11 units, 8 lecture hours, 8 lab hours

PREREQUISITE: Respiratory Care 16, 17, 18 and 20. ADVISORY: English 1A.

Introduction to selected therapeutic and diagnostic modalities for respiratory care, with the physical, mechanical and scientific principles associated with all attendant equipment. Mechanical ventilation (theory and applications), sustained maximal inspiration, pulmonary function testing and chest physiotherapy. Supervised clinical performance in area hospitals. (A, CSU)

22 CLINICAL APPLICATIONS IN RESPIRATORY CARE I

9 units, 2 lecture hours, 22 lab hours

PREREQUISITE: Respiratory Care 21. ADVISORY: English 1A.

Introduction into the fully supervised clinical experience of the student respiratory care practitioner. Discerning individual patient needs, developing appropriate care plans and applying correct procedures. (A, CSU)

23 CLINICAL APPLICATIONS IN RESPIRATORY CARE II

9 units, 2 lecture hours, 22 lab hours

PREREQUISITE: Respiratory Care 22. COREQUISITE: Respiratory Care 25. ADVISORY: English 1A.

Introduction into the fully supervised clinical experience of the student respiratory care practitioner; including discerning individual patient needs, developing appropriate care plans, and applying correct procedures to patients 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)

25 RESPIRATORY DISEASE

2 units, 2 lecture hours, (Spring)

PREREQUISITE: Respiratory Care 22. COREQUISITE: Respiratory Care 23. ADVISORY: English 1A.

The pathology, etiology and management of selected respiratory diseases and/or trauma. (A, CSU)

RETAILING FASHION

SEE FASHION MERCHANDISING

RUSSIAN SEE FOREIGN LANGUAGES

SOCIAL SERVICE SEE HUMAN SERVICES (HS)

SOCIOLOGY (SOC)

1A INTRODUCTION TO SOCIOLOGY

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (TCSU SOC 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.(A, CSU-GE, UC, I)

1B CRITICAL THINKING ABOUT SOCIAL PROBLEMS

3 units, 3 lecture hours

ADVISORY: Sociology 1A or 1AH and eligibility for English 1A.

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. (A, CSU, UC)

2 AMERICAN MINORITY GROUPS

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Overview of sociological, institutional, ecological, demographic, and social-psychological aspects of ethnicity and race. Examination of non-dominant groups in the United States. (A, CSU-GE, UC, I)

5 SOCIOLOGY OF RAPE

3 units, 3 lecture hours, (See also Women's Studies 5)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 the psychology of the survivor. Includes the 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. (A, CSU)

7 DOMESTIC VIOLENCE: ABUSE WITHIN THE FAMILY

3 units, 3 lecture hours, (See also Women's Studies 7)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

A micro and macro study of the historical and contemporary problem of domestic violence. Overview of the battered spouse syndrome, characteristics of the survivor and the batterer, therapeutic approaches and development of legislation. Various forms of domestic violence such as child abuse, elder abuse, and violence in same gender relationships are also studied. (A, CSU)

10 INTRODUCTION TO AGING STUDIES

3 units, 3 lecture hours, (See also Human Services 10), (Formerly Sociology 22)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Overview of social, economic, biological and psychological functions of aging. Exploration of issues of the aged with emphasis on consumerism, housing, health, leisure time, family roles, retirement, widowhood and sexuality. (A, CSU-GE, UC, I)

14 SOCIOLOGY OF THE MEXICAN AMERICAN COMMUNITY

3 units, 3 lecture hours, (See also Chicano-Latino Studies 14)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Sociological examination of the Chicano-Latino in American society: family, religious, educational, economic, and political social institutions. Social problems, social issues, and social and cultural change. (A, CSU, UC)

31 THE CHILD IN SOCIETY: A SOCIAL PROBLEMS APPROACH

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Explores personal and social aspects contributing to the relationships and social problems facing children: socialization, the dysfunctional family, abuse, deprivation, disabilities and special needs, drugs, delinquency and sexuality. (A, CSU)

32 INTRODUCTION TO MARRIAGE AND FAMILY

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Sociological analysis of marriage and the family, including historical and contemporary changes, and the socio-cultural and economic forces shaping these changes. Topics may include but are not limited to: love, courtship, mate selection,

sexuality, family planning, pregnancy and childbirth, sexually transmitted diseases, family conflict, conflict resolution, communication skills, divorced families, step-families, aging and widowhood. (A, CSU-GE, UC)

160 BASIC SOCIOLOGY

3 units, 3 lecture hours, (Formerly Sociology 60)

PREREQUISITE: None.

Basic concepts, theoretical approaches, and methods of sociology. Analysis and explanation of social structure, culture, socialization, the self and social interaction, group dynamics, institutions, deviance, stratification, social change, social problems, and global dynamics. (A)

Note: If a student takes SOC 1A and receives a grade of "C" or better subsequent to receiving a "D" or "F" in SOC 160, then the student may apply for academic renewal of the deficient grade in SOC 160.

SPANISH SEE FOREIGN LANGUAGES

SPECIAL STUDIES

47 (COURSE TITLE TO BE SELECTED)

.5-5 units, 0-5 lecture hours, 0-15 lab hours, 9 lecture hour equivalents per 1/2 unit of credit

PREREQUISITE: To be determined.

Current topics of importance and concern in a designated subject field or on topics not covered in the regular curriculum or which need to be covered in greater depth than is possible within the regular offerings. Designed for transfer credit. Some topics may be repeatable. Units and hours to be determined. (A, CSU, UC approved as variable topics; evaluation completed by individual campuses after admission.)

177 (COURSE TITLE TO BE SELECTED)

.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)

.1-15 units, 0-15 lecture hours, 0-45 lab hours, 9 lecture hour equivalents per 1/2 unit of credit, (Formerly Special Studies 77)

PREREQUISITE: To be determined.

Current topics of importance and concern in a designated subject field or on topics not covered in the regular curriculum or which need to be covered in greater depth than is possible with regular offerings. Designed for nondegree, nontransfer credit. Units and hours to be determined.

377 (COURSE TITLE TO BE SELECTED)

1-40 lecture hours, 1-40 lab hours, (Pass/No Pass), (Open Entry, Open Exit), (Formerly Special Studies 77)

PREREQUISITE: To be determined.

Current topics of importance and concern in a designated subject field or on topics not covered in the regular curriculum or which need to be covered in greater depth than is possible with the regular offerings. Designed for noncredit. 0 unit, lecture hours and lab hours to be determined.

SPEECH (SPEECH) SEE COMMUNICATIONS

SUPERVISED TUTORING (ST)

FORMERLY BASIC STUDIES AND INDIVIDUALIZED LEARNING

300 SUPERVISED TUTORING

Lab hours arranged, (Repeats = 3), (Formerly Supervised Tutoring 100)

PREREQUISITE: None.

Provides tutoring assistance to increase the probability of a student's successful completion of his or her educational objectives. Hours will vary depending upon individual student need.

SURGICAL TECHNOLOGY (SURGT)

101 INTRODUCTION TO SURGICAL TECHNOLOGY

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Introduction of surgical team concepts with emphasis on the role of the surgical technologist. An overview of the history of surgery, health care facilities and systems, and the surgical environment. Ethical and legal responsibilities and interpersonal relationships. Principles of aseptic technique, sterilization, and basic instrumentation. (A)

102 SURGICAL TECHNIQUES

3 units, 3 lecture hours

PREREQUISITE: Surgical Technology 101. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Discussion and application of the principles of aseptic technique, procedures relating to patient care, and demonstration of the use and care of supplies and equipment in the operating room. (A)

103 SURGICAL PROCEDURES

3 units, 9 lab hours, (Repeats = 2)

PREREQUISITE: Surgical Technology 102. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The role of the surgical technologist in surgical procedures. Principles of anesthesiology and surgical pharmacology. (A)

104 CLINICAL PRACTICUM

6 units, 18 lab hours, (Repeats = 2)

PREREQUISITE: Surgical Technology 103. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The first of two clinical components of the surgical technology training. Assignment to a hospital surgery department and participation as an independent member of the surgical team to master first scrub role in a surgical team. (A)

105 ADVANCED CLINICAL PRACTICUM

6 units, 18 lab hours, (Repeats = 2)

PREREQUISITE: Surgical Technology 104. ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

The second clinical component of the surgical technology training. Participation as an independent member of a surgical team to master the first scrub role. Performance of advanced skills and mastering anticipation of surgical needs. (A)

SWAHILI SEE FOREIGN LANGUAGES

TEACHER AIDE SEE EDUCATIONAL AIDE

THEATRE ARTS (TA)

12 FUNDAMENTALS OF INTERPRETATION

3 units, 3 lecture hours, (See also Communication 12)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An introduction to orally interpreting works of literary art in their intellectual, emotional, and aesthetic entirety. Class readings include poetry, prose, and drama. (A, CSU-GE, UC)

15C CREATIVE WRITING: PLAYWRITING

3 units, 3 lecture hours, (Repeats = 1), (See also English 15C)

PREREQUISITE: English 1A or the equivalent.

Writing plays for critical review. (A, CSU, UC)

23 TECHNICAL THEATRE PRACTICUM

3 units, 1 lecture hour, 6 lab hours

ADVISORY: Eligibility for English 125 and 126 recommended.

Provides an opportunity for students to work on and develop a theatrical production. Hands-on opportunities in scenic construction, costume construction, lighting and sound installation. Students will serve on the crew for a production. Some night and weekend hours may be required. (A, CSU)

25 STAGECRAFT

3 units, 3 lecture hours, (Formerly Theatre Arts 34A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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. (A, CSU, UC)

27A INTRODUCTION TO SCENIC DESIGN

3 units, 3 lecture hours, 1 lab hour

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Study and execution of lighting for the theatre. Equipment control; lighting plots; color theory; photo-metrics and cueing are emphasized. (A, CSU, UC)

27B INTRODUCTION TO LIGHTING DESIGN

3 units, 3 lecture hours, 1 lab hour

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 recommended.

Study and execution of lighting for the theatre. Equipment control; lighting plots; color theory; photo-metrics and cueing are emphasized. (A, CSU, UC)

28 INTRODUCTION TO STAGE MAKEUP

3 units, 2 lecture hours, 3 lab hours, (Formerly Theatre Arts 37)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and recommended.

Introduction to methods of designing and applying makeup for theatrical use. Instruction and practice in a lecture/laboratory setting. (A, CSU, UC)

29A ADVANCED TECHNICAL THEATRE PRACTICUM I

1 unit, 3 lab hours

PREREQUISITE: Theatre Arts 23.

Topics in more advanced technical theatre, and stage crew leadership. Students may specialize in one or more of the following areas (with instructor approval): Scenery, Properties, Costumes, Make Up, Lighting, Sound, Special Effects. Arranged hours, as the part of Fresno City College stage production may be required. (A, CSU)

30 THEATRE APPRECIATION

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An introduction to the Theatre with emphasis on the theatre as an exciting artistic and social experience. Designed for the general student. (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 125 and 126 or English as a Second Language 67 and 68 recommended.

Survey of the Theatre history and dramatic literature of Western culture from Ancient Greeks through Restoration Theatre. (A, CSU-GE, UC, I)

32 THEATRE HISTORY AND DRAMATIC LITERATURE II

3 units, 3 lecture hours, (Formerly Theatre Arts 32B)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Survey of the theatre history and dramatic literature of Western culture from 18th century to the present. (A, CSU-GE, UC, I)

35 COSTUME CRAFTS

3 units, 3 lecture hours, (Formerly Theatre Arts 35A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU, UC)

40 PERFORMANCE PRACTICUM

3 units, 2 lecture hours, 12 lab hours, (9 weeks), (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU)

41 BEGINNING ACTING

3 units, 3 lecture hours, (Formerly Theatre Arts 31A)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

An introduction to the fundamentals of acting through exercises, scene performance, and play analysis. Not open to students enrolled in Theatre Arts 42. (A, CSU-GE, UC)

42 BEGINNING ACTING FOR THEATRE MAJORS

3 units, 2 lecture hours, 4 lab hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Designed for theatre arts majors stresses acting technique, character building, scene and monologue performance, and scene analysis from selected plays from Modern Realism. Not open to students currently enrolled in Theatre Arts 41. (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 125 and 126 or English as a Second Language 67 and 68 recommended.

Improvisation, body movement, character development; class exercises to develop voice for the stage, classical and contemporary, monologues and scene study with class performance. (A, CSU, UC)

44 ACTORS WORKSHOP

3 units, 2 lecture hours, 3 lab hours, (Repeats = 1), (Formerly Theatre Arts 38A and 38B and 38)

PREREQUISITE: Theatre Arts 41 or 42 or equivalent. ADVISORY: Theatre Arts 43 recommended. Eligibility for English 125 or 126 or English as a Second Language 67 and 68 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)

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 audition for the instructor to be cast as a scene partner for a festival participant.

Preparation of theatre students for attendance at the Kennedy Center American College Theater Festival. Participation in master classes and participation/attendance at adjudication events. (A, CSU)

46 VOICE FOR THE ACTOR

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 and expressiveness. (A, CSU, UC)

48 TEASERS

1 unit, .25 lecture hour, 2 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 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)

348 SENIOR PLAY PRODUCTION

1 lecture hour, 9 lab hours, (16 weeks), (Unlimited Repeats), (Formerly Theatre Arts 80)

Organize, write, cast, rehearse, and perform a major seniors' variety show for public performance.

VOCATIONAL ENGLISH AS A SECOND LANGUAGE (VESL)

266R APPLIED INTERMEDIATE READING FOR COLLEGE AND CAREERS

4 units, 8 lecture hours, (9 weeks), (Pass/No Pass)

PREREQUISITE: English as a Second Language 264R or designated score on the placement test. Use of language other than English as primary language.

Intermediate reading, vocabulary, critical thinking and study skills applied to tasks for a variety of career fields. Reading strategies reinforced through use of workplace materials and other texts. Acquisition and effective use of workplace vocabulary. Course content includes: teamwork, problem solving, critical thinking, organizational and research skills, self-editing and the use of technological resources.

266W APPLIED INTERMEDIATE WRITING FOR COLLEGE AND CAREERS

4 units, 8 lecture hours, (9 weeks), (Pass/No Pass)

PREREQUISITE: English as a Second Language 264W or designated score on the placement test. Use of language other than English as primary language.

Intermediate writing, grammar, critical thinking and study skills applied to tasks for various career fields. Focus on a broad range of professional communication genres. Acquisition and application of appropriate syntactic and semantic elements. Course content includes: problem solving, teamwork, critical thinking, organizational and research skills, self-editing and use of technological resources.

269R APPLIED ADVANCED READING FOR COLLEGE AND CAREERS

4 units, 8 lecture hours, (9 weeks)

PREREQUISITE: English as a Second Language 265R, or designated score on the placement test, or completion of Vocational English as a Second Language 266R. Use of language other than English as primary language.

Advanced reading, vocabulary, critical thinking and study skills applied to tasks for a variety of career fields. Reading strategies reinforced through the use of workplace materials and other texts. Acquisition and effective use of workplace vocabulary. Course content includes: teamwork, problem solving, critical thinking, organizational and research skills, self-editing, and the use of technological resources.

269W APPLIED ADVANCED WRITING FOR COLLEGE AND CAREERS

4 units, 8 lecture hours, (9 weeks)

PREREQUISITE: English as a Second Language 265W, or designated score on the placement test, or completion of Vocational English as a Second Language 266W. Use of language other than English as primary language.

Advanced writing, grammar, critical thinking and study skills applied to tasks for various career fields. Emphasis on a broad range of professional communication genres. Acquisition and application of syntactic, lexical and grammatical rules. Course content includes: problem solving, teamwork, critical thinking, organizational and research skills, self-editing and the use of technological resources.

WATER TREATMENT AND DISTRIBUTION (WTD)

101 BASIC WATER TREATMENT

3 units, 3 lecture hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 and Mathematics 101 recommended or permission of the instructor.

Provides water treatment operators with the knowledge and skills required to effectively operate and maintain water treatment facilities; prepares students to take the California Public Health Department (CPHD) test for "Water Treatment Operator Grade T2" (or Grade 2). (A)

102 ADVANCED WATER TREATMENT

3 units, 3 lecture hours, (Repeats = 3)

COREQUISITE: Water Treatment and Distribution 101 or equivalent.

Concepts of various scientific disciplines to the science of water treatment, and preparation for taking the California Department of Public Health (CDPH) test for "Water Treatment Operator Grade T3" (or higher). (A)

106 BASIC WASTEWATER TREATMENT

3 units, 3 lecture hours, (Repeats = 3)

PREREQUISITE: None.

Knowledge and skills required to effectively operate and maintain wastewater treatment facilities; prepares students to take the State Water Resources Control Board (SWRCB) Grade II Certificate Exam. (A)

107 ADVANCED WASTEWATER TREATMENT

3 units, 3 lecture hours, (Repeats = 3)

PREREQUISITE: Water Treatment and Distribution 106 or equivalent.

Knowledge and skills required to effectively operate and maintain wastewater treatment facilities; prepares students to take the State Water Resources Control Board (SWRCB) Grade III Certificate Exam. (A)

112 BASIC WASTE DISTRIBUTION

3 units, 3 lecture hours, (Repeats = 3)

PREREQUISITE: None.

Explores the field of water distribution, including the configuration, operation and maintenance of a water distribution system, and the Expected Range of Knowledge (ERK) required for California Department of Public Health (CDPH) water distribution exam at D1 & D2 levels. Successful completion fulfills the requirements for specialized training covering fundamentals of water supply principles required to apply for CDPH D2 examination. (A)

113 ADVANCED WASTE DISTRIBUTION

3 units, 3 lecture hours, (Repeats = 3)

PREREQUISITE: Water Treatment and Distribution 112 or equivalent.

Intermediate level; preparing for apprentice or journey person positions in the field of water distribution; the Expected Range of Knowledge (ERK) required to pass California Department of Public Health (CDPH) water distribution examination at D3 level. Successful completion fulfills the requirements for specialized training covering the fundamentals of water supply principles required to apply for CDPH D3 examination. (A)

114 WATER MATHEMATICS

3 units, 3 lecture hours

PREREQUISITE: None.

Recommended for current enrollees in water technology course(s); Covers math required to solve problems commonly encountered in water technology, including Water Treatment, Water Distribution, and Wastewater. The Water Treatment Operator and Water Distribution Operator Certification Tests are weighted heavily with water math. (A)

WELDING TECHNOLOGY (WELD)

1 EXPLORING WELDING/METALS

3 units, 2 lecture hours, 3 lab hours, (Formerly Industrial Education 5)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 or Applied Technology 130 recommended.

An introduction to oxyacetylene and shielded metal arc welding in the flat and horizontal positions, along with other methods of joining steel together. An emphasis

on safety and developing good manipulative skill. Includes information on cutting, brazing, and an introduction to the MIG process. (A, CSU)

2A INTRODUCTION TO WELDING TECHNOLOGY

6 units, 4 lecture hours, 6 lab hours, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 or Applied Technology 130 recommended.

Oxyacetylene welding and cutting, shielded metal arc, gas metal arc (MIG), and gas tungsten arc (TIG) welding. An emphasis on good manipulative welding skills for joining 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, (Repeats = 3)

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 14 and Welding 2B.

ADVISORY: Drafting 12, and eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 or Applied Technology 130 recommended.

Design and fabrication of metal projects by welding. Manufacturing processes, production techniques, and material cost estimation. (A, CSU)

3B ADVANCED WELDING DESIGN AND FABRICATION

5 units, 3 lecture hours, 7 lab hours, (Repeats = 3)

PREREQUISITE: Welding 3A.

A continuation of Welding 3A in the design, construction, and finishing of welded projects. (A, CSU)

4A HEAVY PLATE, STRUCTURAL STEEL AND WELDING CERTIFICATION

5 units, 3 lecture hours, 7 lab hours, (Repeats = 3)

ADVISORY: Welding 2B or equivalent, Drafting 12, and eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 or Applied Technology 130 recommended.

An emphasis on obtaining certification in vertical and overhead welding positions (3G and 4G) in structural welding with shielded metal arc welding (SMAW) flux cored arc welding (FCAW) gas metal arc welding (GMAW) processes leading to the American Welding Society (AWS) Structural Welding Code Certification test. (A, CSU)

4B PIPE, TUBE WELDING AND CERTIFICATION

5 units, 3 lecture hours, 7 lab hours, (Repeats = 3)

ADVISORY: Welding 2B or equivalent, Drafting 12, and eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 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, (Repeats = 3)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68, and Mathematics 101 or Applied Technology 130 recommended.

Basic fundamentals of blueprint reading and welding symbol interpretation as required by the welding trade. (A, CSU)

WIND TURBINE TECHNOLOGY (WTT)

1 INTRODUCTION TO SAFETY IN THE UTILITY WIND TURBINE INDUSTRY

2.5 units, 2 lecture hours, 1.5 lab hours, (Repeats = 3)

PREREQUISITE: None.

An introduction to the Wind Generation Industry, the history, advantages and disadvantages of wind generation, and industry market trends. Safety practices used in the Wind Generation Industry. (A, CSU)

2 WIND GENERATION AND ELECTRICAL CIRCUITS

2.5 units, 2 lecture hours, 1.5 lab hours, (Repeats = 3)

PREREQUISITE: None.

The electrical measurement tools used in the wind generation industry. The tool types, application and test procedures, including tool safety. (A, CSU)

3 WIND TURBINE SYSTEM MAINTENANCE AND REPAIR

2.5 units, 2 lecture hours, 1.5 lab hours, (Repeats = 3)

PREREQUISITE: None.

Introduction to wind turbine technology systems, both mechanical and electrical. The operation and maintenance of wind turbine systems. (A, CSU)

WOMEN'S STUDIES (WSTS)

5 SOCIOLOGY OF RAPE

3 units, 3 lecture hours, (See also Sociology 5)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 the psychology of the survivor. Includes the various forms of sexual assaults, 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. (A, CSU)

7 DOMESTIC VIOLENCE: ABUSE WITHIN THE FAMILY

3 units, 3 lecture hours, (See also Sociology 7)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

A micro and macro study of the historical and contemporary problem of domestic violence. Overview of the battered spouse syndrome, characteristics of the survivor and the batterer, therapeutic approaches, and development of legislation. Various forms of domestic violence such as child abuse, elder abuse, and violence in same gender relationships are also studied. (A, CSU)

10 CHANGING ROLES OF WOMEN

3 units, 3 lecture hours

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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. (A, CSU-GE, UC, I)

310 Women's Studies

24 LA CHICANA AND LATINA

3 units, 3 lecture hours, (See also Chicano-Latino Studies 24)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Asociological analysis of the Mexican American female in contemporary society. Special emphasis placed on her role in the family, church, education, economics, and politics. (A, CSU, UC)

25 ASSERTIVENESS TRAINING

2 units, 2 lecture hours, (See also Human Services 25)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Becoming more effective and creative in expressing oneself in a courteous and dignified manner. Discovering the communication options available in various life situations. (A, CSU)

30 ASIAN-AMERICAN WOMEN

3 units, 3 lecture hours, (See also Asian-American Studies 30)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Historical experiences of early and later Asian immigrant women. Emphasis is on Asian American women today. Topics include growing up Asian American, relationship with parents, marriage, identity, raising children, doll image, voice, and American feminism. (A, CSU, UC)

36 WOMEN IN LITERATURE

3 units, 3 lecture hours, (See also English 36)

PREREQUISITE: English 1A or equivalent. English 1B is not a prerequisite for this course.

Survey of literature by and about women in fiction, drama, poetry, biography, and essay. Covers multicultural and international literature from classical to contemporary periods, in addition to feminist and gender theory. (A, CSU-GE, UC, I)

41 THE AFRICAN-AMERICAN WOMAN

3 units, 3 lecture hours, (See also African-American Studies 41)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

Examination of the roles and status of African-American women within the larger U.S. social structure. Diversified roles of women in Africa from antiquity through the period of slavery and colonization, including contemporary issues among African-American women and the impact African-American women have had on the U.S. and the world. (A, CSU, UC)

43 WOMEN'S NUTRITION

2 units, 2 lecture hours, (See also Food and Nutrition 43)

ADVISORY: Eligibility for English 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 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 125 and 126 or English as a Second Language 67 and 68 recommended.

Interdisciplinary perspective of Lesbian and Gay studies through various disciplines. Issues covered include 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

1-3 units, (Repeats = 2)

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 3 units per semester, 6 units total. May be repeated for not more than 6 units total. (A, CSU)

ZOOLOGY SEE BIOLOGY

COLLEGE PERSONNEL

State Center Community College District

Board of Trustees

Isabel Barreras
Richard M. Caglia
H. Ronald Feaver
Ron Nishinaka
Patrick E. Patterson
Dorothy Smith
William J. Smith

Administration

Dr. Deborah G. Blue
Chancellor

Robert E. Fox
*Acting Associate Vice Chancellor,
Workforce Development and Educational
Services*

Ed Eng
*Vice Chancellor, Finance
and Administration*

Diane Clerou
*Interim Associate Vice Chancellor,
Human Resources*

Doris Griffin
*Interim Vice President, Admissions and
Records*

Fresno City College

Administration

Anthony D. Cantú
President

Kelly M. Fowler
Interim Vice President of Instruction

Dr. Christopher M. Villa
Vice President of Student Services

Cheryl Sullivan
Vice President Administrative Services

Instructional Deans

Dr. Jothany Blackwood
*Dean of Instruction,
Fine, Performing, and Communication
Arts Division*

Christopher Whiteside
*Dean of Instruction, Applied Technology
Division*

Dr. Natalie Culver-Dockins
*Dean of Instruction, Career and
Technology Center and Workforce
Development*

Dr. Carolyn C. Drake
*Dean of Instruction, Health Sciences
Division*

Dr. Jennifer L. Johnson
Dean of Instruction, Humanities Division

Dr. Margaret E. Mericle
*Dean of Instruction, Social Sciences
Division*

Dr. Ashok Naimpally
*Dean of Instruction, Mathematics,
Science and Engineering Division*

Vacant
*Dean of Instruction,
Library and Student Learning Support
Services*

Dr. Timothy J. Woods
Dean of Instruction, Business Division

Student Services Deans

Dr. Lee Farley
Dean of Students, EOPS

Dr. Mark Sanchez
*Dean of Student Services, Counseling and
Guidance*

Faculty and Administration

- Aguilar, Luis E. (1985)**
Automotive Collision Repair (CTC)
California Community College Credential
- Allen, Nathan (2011)**
Mathematics
A.A., Reedley College
B.A., M.A., California State University, Fresno
- Almand, Nancy (2009)**
Librarian
B.Ed., University of Hawaii
M.A., University of Illinois at Springfield
M.L.S., Indiana University
- 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
- Andrade, Tiffany (1997)**
Mathematics
B.A., M.A., California State University, Fresno
- Anglen, Brandy L. (2005)**
Geology
B.S., M.S., Southern Illinois University
Ph.D., Indiana University, Bloomington
- Arakelian, Charlotte A. (1983)**
Counselor, CalWORKs
B.S., M.A., California State University, Fresno
- Avery, Douglas D. (2002)**
Mathematics
B.A., California State University, Fresno
M.A., Fresno Pacific University
- Badertscher, Lynn (1994)**
Communication
B.A., M.A., California State University, Fresno
- Baker, Brian (2012)**
Computer Information Technology
B.A., M.S., California State University, Fresno
- Balogh, David (2001)**
Physics
B.S., M.S., Brigham Young University
- Barnard, Douglas (2009)**
Air Conditioning
A.S., Cerro Coso Community College
B.S., Ferris State University
- Bates, Robyn L. (1990)**
Art
B.F.A., University of Southern California
M.A., California State University, Northridge
M.F.A., California State University, Los Angeles
- Begley, Polly (2000)**
Speech
B.A., M.A., San Diego State
- Bell, Autumn (2008)**
Business & Technology
B.A., Penn State
M.A., University of New Mexico
- Benefiel, Diane M. (2004)**
Nursing
B.S., Point Loma College, San Diego
M.S., California State University, Dominguez Hills
Ed.D., California State University, Fresno
- Bertolani Jr., William J. (1987)**
Criminology
B.A., Fresno State College
M.A., California State University, Sacramento
- Bezerra-Nader, Rosemarie (1990)**
Developmental Mathematics
B.A., California State University, Fresno
M.A., Fresno Pacific College
- Bigham, Craig (1999)**
Mathematics
B.S., M.S., California State University, Fresno
- Blackerby-Slater, Laurel (2001)**
Mathematics
B.S., University of California, Davis
M.A., Fresno Pacific University
- Blackwood, Jothany (2006)**
Dean of Instruction, Fine, Performing and Communication Arts Division
B.A., M.A., Tennessee State University
Ed.D., California State University, Fresno
- Blodgett, Ryan (2008)**
Counselor, Disabled Students Programs & Services
B.A., M.A., California State University, Fresno
- Bluth, Gary (1991)**
Physical Education
B.A., M.A., San Francisco State
- Bolen, Gennean (2001)**
English
B.A., Oral Roberts University
M.A., California State University, Fresno
Ed.D., Alliant International University
- Bolt, Sandra B. (1999)**
Business & Technology
A.A., Fresno City College
B.S., California State University, Fresno
M.B.A., National University
- Boltz, Christopher R. (2005)**
Theatre Arts Scenic/Light Design
B.F.A., M.F.A., University of Southern California, School of Theatre
- Boyd, Robert (1996)**
Philosophy
B.A., Trinity College
M.A., Texas Christian University
Ph.D., University of Wales, Lampeter
- Brandl, Jeremy (2011)**
Mathematics
B.A., M.A., California State University, Fresno
- Brennan, Jennifer A. (2004)**
Nurse
A.S., Fresno City College
B.S.N., California State University, Dominguez Hills
M.S.N., Walden University
- Brewer, Melinda (2001)**
Child Development
B.S., M.S., California State University, Fresno
- Brotsis, William (2007)**
Fire Technology
A.A., Fresno City College
B.A., Fresno Pacific College
- Bugay, Elnora (1995)**
Nursing
G.N., University of the Philippines
B.S.N., Long Island University
M.S.N., California State University, Fresno
- Caetano, Heidi (2008)**
Dental Hygiene
A.S., Fresno City College
B.S., California Polytechnic University, San Luis Obispo
M.A.Ed., Fresno Pacific University
- Calhoun, Brian (1988)**
Education
B.A., University of California, Davis
M.A., Syracuse University
Ph.D., University of Wisconsin, Madison
- Camacho, Brett P. (2005)**
Welding Technology
B.S., M.S., California Polytechnic University, San Luis Obispo
- Camacho, Tammy (2011)**
Applied Technology
B.S., M.S., California Polytechnic, San Luis Obispo
- Campbell, Lynn (2001)**
English
B.A., Southeastern College
M.S.Ed., State University of New York, Geneseo

- Canales, Leticia S. (1996)
Counselor
A.A., Kings River Community College
B.A., M.A., California State University, Fresno
- Cantú, Anthony D. (1987)
President
B.A., California State University, Long Beach
M.A., California State University, Long Beach (French)
M.A., California State University, Fresno (Linguistics/ESL)
- Carrigan, Janel (2012)
Business Administration
B.A., Pepperdine University
M.B.A., National University
- Carroll, Jean (2001)
ESL
B.A., California State University, Fresno
M.A., University of South Florida
- Caviglia, Tony (1999)
Physical Education
A.A., Chabot College
B.A., California Polytechnic, San Luis Obispo
M.A., University of Southern California
- Cerda, Ricarda (2000)
Food & Nutrition
B.A., M.S., California State University, Fresno
- Cerkueira, Ronald C. (1996)
Computer Aided Drafting and Design
B.A., M.A., California State University, Fresno
- Chacon, Kenneth R. (2005)
Developmental English
B.A., University of California, Davis
M.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
- Cheney, Judith A. (1999)
Dental Hygiene
A.A., Monterey Peninsula College
A.S., Fresno City College
B.A., California State University, Fresno
- Cho, John (2001)
Asian-American Studies
B.A., M.A., California State University, Fresno
- Christl, Janine (2007)
Theatre Arts Director
B.A., University of California, Santa Cruz
M.F.A., California State University, Fullerton
- Contreras, Luis (1999)
English
B.A., M.S.W., M.A., California State University, Fresno
- Cooper, Kevin (2009)
Music
B.M., Ithaca College
M.M., D.M.A., University of Southern California
- Coronel, Maria (2007)
Spanish
A.A., Imperial Valley College
B.A., M.A., California State University, San Diego
- Covington, Jeanette A. (1982)
Learning Disabilities, English
A.A., Fresno City College
B.A., M.A., California State University, Fresno
- Craig-Marius, Renee (1999)
Counselor
B.A., M.S., California State University, Fresno
- Crawford, Kathleen (1999)
History
B.A., California State University, Fresno
M.A., University of California, Los Angeles
- Culver-Dockins, Natalie (2008)
Dean of Workforce Development
B.S., California State University, Stanislaus
M.A., San Jose State University
- Curtis, Carol (1994)
Mathematics
B.A., M.A., Ed.D., California State University, Fresno
- Dana, Julie (1999)
Music
B.A., San Diego State University
M.Mus.Ed., University of Northern Colorado
- Dana, Michael E. (1990)
Music
B.A., M.A., California State University, Fresno
- Dancy, Karen (2008)
Business & Technology
B.S., California Polytechnic University, Pomona
M.B.A., DeVry University
- Daniels, Stevie (1997)
ESL
A.A., College of the Sequoias
B.S., M.S., California State University, Fresno
- 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
- Day, Elizabeth (2007)
Nursing
M.S.N., B.S.N., Virginia Commonwealth University
- DeAnda, Carolyn (2010)
Photography
- De Freitas, Diane (2008)
Economics
A.A., American River
B.S., M.A., California State University, Hayward
- DeKruif, Linda (1998)
Women's Studies, Psychology
B.A., M.A., California State University, Fresno
- Demannett, Paula (2000)
Librarian
B.A., University of California, Riverside
M.L.S., Brigham Young University
M.A., Fresno Pacific University
M.S., California State University, Fullerton
- Denis-Arru e, Nuria M. (2005)
Biology/Microbiology
B.A., M.A., California State University, Fresno
- Denver, Monta (1986)
Dental Hygiene
A.A., Montgomery County Community College
A.S., Fresno City College
B.S., M.S., California State University, Fresno
- DeSantiago-Gomez, Laura (1999)
Counselor
B.A., M.A., California State University, Fresno
- DeVoe-Peterson, Robert (2001)
Computer Information Technology
B.S., M.B.A., California State University, Fresno
- Dorn, Lawrence S. (1989)
Mathematics, Developmental Math
B.A., California State University, Fresno
M.B.A., California State University, Fresno
- Doud, Laurel M. (2005)
Librarian
B.A., Stanford University
M.L.S., San Jose State University
- Douty, Douglas A. (1984)
Electronic Technology
B.A., M.S., California State University, Fresno
- Dowis, Hawkins (2007)
Biology
B.A., Pepperdine University
M.S., California State University, Fullerton
- Drake, Carolyn C. (1978)
Dean of Instruction, Health Sciences Division
B.S.N., M.S.N., California State University, Fresno
Ed.D., University of Southern California

314 College Personnel

- Dunklin, Marianne (2001)
Business Administration/Marketing
B.S., M.B.A., Creighton University
Ph.D., University of Kansas
- Dustin, Ron (1996)
Accounting
A.A., Fresno City College
B.S., M.B.A., California State University, Fresno
- Edison, James S. (1997)
Police Academy Coordinator
A.A., Shasta College
- Edwards, Sarah (1998)
Health Information Technology
A.A., Reedley College
B.A., California State University, Fresno
B.S., Loma Linda University
M.A., Fresno Pacific University
- Elizondo, Tony (1993)
Automotive Mechanics (CTC)
A.A., San Joaquin Delta College
B.A., M.A., California State University, Fresno
- Emerling III, Fred M. (1984)
Counselor
A.A., Glendale Community College
B.A., University of Alabama
M.Ed., Ph.D., University of Arizona
- Emerzian, Janice M. (1975)
District Director, Disabled Students Programs & Services
B.A., M.A., California State University, Fresno
Ed.D., University of Laverne
- Engstrom, Dale (2001)
Music
B.A., M.A., California State University, Fresno
- Erven, Milton "Chuck" (1999)
Theatre Arts
B.S., Eastern New Mexico
M.A., University of Maryland
- Ewing, James (1990)
English
B.A., Howard Payne College
M.A., Rice University
Ph.D., Texas A & M University
- Ezaki, Gretchen (2010)
Nursing
B.S., Pacific Lutheran University
M.S., California State University, Fresno
- Farley, Lee (1981)
Dean of Students, EOPS
B.A., M.A., California State University, Bakersfield
Ed.D., University of Southern California
- Ferrer, Sharon (1995)
Spanish
B.A., M.A., California State University, Fresno
- Fitzer, John (2001)
Linguistics/ESL
B.A., California State University, Fresno
M.Ed., M.B.A., Ph.D., State University of New York, Buffalo
- Fletcher, Eric (1999)
Communication, Forensics
B.A., M.A., California State University, Fresno
- Florence, Christine A. (2009)
Nursing
A.D.N., DeAnza College
B.S.N., M.S.N./Ed., University of Phoenix
- Forestiere, Marc C. (1996)
Computer Information Technology
B.S., California State University, Sacramento
M.A., Fresno Pacific College
- Fowler, Kelly M.
Interim Vice President of Instruction
B.S., M.S., Appalachian State University
- Francis, Charles (1997)
Director, Training Institute
B.A., M.S., California State University, Fresno
- Frese, Joan (1995)
Computer Information Technology
B.S., University of Wisconsin
M.A., Chapman University
Ph.D., Southeastern University
- Friesen, Tiffany (2001)
Mathematics
B.A., M.A., Fresno Pacific University
- Fuller, Pauline M. (1977)
Counselor
A.A., Fresno City College
B.A., M.A.Ed., California State University, Fresno
- Garcia Lupian, Sonia (2008)
Counselor
B.A., M.S.W., California State University, Fresno
- Garoupa, Clifford (1997)
Sociology
A.A., Fresno City College
M.S., Ohio State University
J.D., San Joaquin College of Law
- Gaxiola, Thomas J. (2001)
Counselor
B.S., M.A., California State University, Fresno
- Gennity, Joseph M. (1996)
Biology
B.A., New York University
Ph.D., Texas A & M
- Germond, Oliver (2001)
Physical Education
B.S., California State University, Northridge
M.S., National University
- Gilbert, Michael (2004)
Biology
B.Sc., University of Central England
Ph.D., Leeds, School of Physiotherapy, UK
- Gilmore, Paul C. (2004)
History
B.A., Furman University
M.A., University of Wisconsin, Milwaukee
M.S., Georgia Institute of Technology
- Glenn, Marilyn R. (2002)
Counselor
B.A., M.S., California State University, Fresno
- Goehring, Stephen (2007)
Auto Collision Repair Technology
- Gonzalez, Eileen (2000)
Nursing
B.S.N., M.S.N., California State University, Fresno
- Good, David (1990)
English
B.A., M.A., California State University, Fresno
- Gose, Kristine (2001)
Child Development
B.A., M.A., California State University, Fresno
- Granata, Charity (1985)
Communication
B.A., M.A., California State University, Fresno
- Grover, Stephen C. (1984)
Mathematics
B.S., University of Wisconsin, Madison
M.S., Central Missouri State University
- Gruet, Karin (2005)
Chemistry
DEUG Chemistry/Geology, University Paul Sabatier, France
M.S., Ph.D., Yale University
- Guglielmino, Rosemarie Spight (1989)
English
A.A., West Hills Community College
B.A., California State University, Humboldt
M.A., California State University, Fresno
- Gutierrez-Osborne, Virginia (2005)
Biology
B.A., M.A., California State University, Los Angeles
M.A., California State University, Fresno
- Gutierrez-Sauceda, Nancy M. (2005)
Sociology
B.A., California State University, Fresno
M.A., University of Wisconsin
- Halls, Thom (2001)
Photography
B.A., California Polytechnical State University, San Luis Obispo
- Hao, Jian-Min (2006)
Dance
B.F.A., Central Beijing Dance Academy
M.F.A., University of California, Los Angeles
- Harriet, Sydney H. (1970)
English, Speech
B.A., Michigan State University
M.A., San Francisco State College
Ph.D., University of Oregon
M.S.W., California State University, Fresno
Psy.D., University of Denver

- 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)
Business & Technology
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, Sean (2010)
Director of Student Activities
B.A., M.A., California State University, Fresno
- Henry, Amanda (2006)
Chemistry
B.S., Central Washington University
M.S., Western Washington University
- Herren, Brett (2007)
Mathematics
B.S., M.S., California Polytechnic, San Luis Obispo
- Herrick, Lee (1997)
Developmental English
B.A., M.A., California State University, Stanislaus
- 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
- Hickman, Katherine (2001)
Criminology
B.S., M.S., California State University, Fresno
Ed.D., University of San Francisco
- Hiebert, Margaret P. (2005)
Developmental English
A.A., Reedley College
B.A., M.A., California State University, Fresno
Ph.D., State University of New York
- Hill, Bruce (2007)
Criminology
B.A., Occidental College
J.D., University of California, Los Angeles
- Himes, Daniel J. (1987)
Instructor/Coordinator, Cisco Academy and Apprentice Programs
A.A., Modesto Jr. College
B.S., California State University, Fresno
- Hodges, Cynthia (1990)
American Sign Language
B.S., Gallaudet College
M.S., University of Arizona
- Holford, Susan (2001)
Human Services, Sociology
B.S.W., San Jose State
M.S.W., California State University, Sacramento
- Holland, Nancy (2001)
Business Administration/Marketing
A.S., College of the Sequoias
B.A., California State University, Fresno
M.S., Chapman University
- Honda, Lorence (1997)
Music
B.A., California State University, Fresno
M.M., University of Southern California
- Hood, Brett (2006)
Nursing
B.S., California State University, Fresno
M.B.A., National University
- Hopper, Clarence (1999)
Mathematics
B.S., M.S., California State University, Fresno
- 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)
ESL
A.A., Cape Cod Community College
B.A., University of Massachusetts, Boston
M.A., Monterey Institute of International Studies
- Hunter, Timothy D. (2004)
Automotive Mechanics (CTC)
A.S., Reedley College
B.S., M.S., California State University, Fresno
- Jamison, Gregory (1997)
Mathematics
B.A., M.A., California State University, Fresno
- Jauregui, Enrique (2000)
Student Services Office
B.A., M.A., California State University, Fresno
- Johal, Sarbjit (1999)
Political Science
B.A., University of Reading (UK)
M.A., University of British Columbia
Ph.D., University of California, Santa Barbara
- Johansson, Carl A. (1999)
Biology
A.A., Fresno City College
B.S., California State University, Fresno
M.S., Brigham Young University
- Johnson, Frederick (2008)
Police Academy Instructor/Coordinator
A.S., Fresno City College
B.S., National University
- Johnson, Jennifer L. (2011)
Dean of Instruction, Humanities Division
B.A., University of Southern California
M.A., California State University, Northridge
Ph.D., University of Southern California
- Joseph, James (1999)
Political Science
B.A., M.A., California State University, Fresno
Ph.D., University of California, Riverside
- Kadingo, Carol J. (1984)
Physical Education
B.S., Lock Haven University
M.S., Pennsylvania State University
- Kamimoto, Martin S. (1996)
Automotive Technology
A.S., Fresno City College
B.S., M.S., California State University, Fresno
- Kato-Gee, Jacquelyn (2001)
Nursing
A.S., El Camino College
B.S.N., California State University, Fresno
M.S.N., California State University, Dominguez Hills
- Kawagoe, Kirk (1997)
Chemistry
B.A., University of California, Santa Cruz
Ph.D., University of North Carolina, Chapel Hill
- Keller, Charles F. (1977)
Adaptive Physical Education
B.S., University of Santa Clara
M.A., San Jose State University
- Kelley, Monique (2001)
Accounting
B.A., Morris Brown College
M.P.A., Georgia State University
- Keysaw, Paul (2006)
Physical Education
B.A., M.A., California State University, Bakersfield
- Khan, Kherstin (2011)
Communication
B.A., M.S., California State University, Fresno
- Kim, Daniel E. (1989)
Coordinator, Institutional Research
B.A., Seoul National University
M.Ed., University of Idaho
Ph.D., Washington State University
- Kirby, James (2008)
Human Services
A.A., Ventura College
B.A., M.S.W., California State University, Fresno

316 College Personnel

- Kirk, Karla (2011)
African-American Studies
B.A., M.A., Fresno Pacific University
- Kizziar, Robert (1999)
Art, Ceramics
B.A., M.A., California State University, Fresno
- Koshear, Jeannine (2005)
Geography
B.A., University of California, Santa Cruz
M.A., Ph.D., University of California, Berkeley
- Krauter, Larry (2008)
Photography
B.S., California State University, Fresno
- Kulbeth, Jean (1997)
Dental Hygiene
A.A., San Jose City College
A.S., Fresno City College
B.S., M.S., California State University, Fresno
- Lewis, Kristin (1995)
English
B.A., Colorado State University
M.Ed., Voldosta State College
- Linder, Colby (2001)
Biology
B.A., M.A., California State University, Fresno
- Lindstrom, Richard J. (1994)
Director, Police Academy
B.S., M.S., California State University, Fresno
- Loftis, Darlene (1991)
High Tech Center
B.A., California State University, Fresno
M.A., Fresno Pacific College
- Logan, L. Zay (2004)
Developmental English
A.A., Fresno City College
B.A., M.F.A., California State University, Fresno
- Lopez, Bradley M. (1975)
Health Science
A.S., Loma Linda University
B.A., M.S., California State University, Fresno
Ed.D., University of California, Davis
- Lopez, Donald F. (1995)
Director of Technology
B.S., M.B.A., California State University, Fresno
- Lopez, Rachel G. (1990)
English
B.A., M.A., California State University, Fresno
- Lourido-Habib, Claudia (2002)
Architecture/CADD
B.A., California State University, Fresno
M.S., National University
Ed.D., California State University, Fresno
- Lozano, Alicia (2008)
Nursing
L.V.N., Clovis Adult School
A.D.N., Fresno City College
B.S.N., M.S.N., California State University, Fresno
- Luna, Cynthia (2001)
Communication
A.A., Moorpark College
B.A., M.A., California State University, Fresno
- Machado, Gayle (1996)
Mathematics
B.A., California State University, Northridge
M.S., California State University, Los Angeles
- Madec, Edward (2006)
Physical Education
B.A., Sonoma State University
M.A., California State University, Chico
- Magnia, Martha (2008)
Child Development
B.S., M.A., California State University, Fresno
- Makofske, James P. (1989)
Accounting, Computer Information Technology
B.A., B.S., University of Central Florida
M.B.A., Chapman College
- Marius, Deborah (2007)
Child Development
A.A., Fresno City College
B.A., National University
M.A., California State University, Fresno
- Maroot, Nereyda (1999)
Spanish
B.A., M.A., California State University, Fresno
- Martin, Sheila (1990)
Business & Technology
A.A., Saddleback College
B.A., M.S., National University, Irvine
- Martinez, Renato (1999)
Spanish
M.A., Ph.D., University of California, San Diego
- Martinez, Robert II (2000)
Electrical Systems Technology
B.S., California State University, Fresno
- Martinez, Todd (1999)
Psychology
B.A., M.A., California State University, Fresno
Ph.D., University of Connecticut
- McCafferty, Karen (1998)
English
B.A., California State University, Fresno
M.A., California State University, Fresno
- McCullough, Mark D. (1999)
Computer Aided Design/Computer Aided Manufacturing CAD/CAM
A.A., Hartnell College
B.A., California State University, Long Beach
- McCorkle, Kent (2011)
Chemistry
B.S., Rose-Hulman Institute of Technology
Ph.D., Auburn University
- McCully, Brian J. (1989)
Paralegal
A.A., Fresno City College
B.A., California State University, Fresno
J.D., Hastings College of Law
- McLeod, Todd (2001)
Computer Information Technology
B.A., University of California, Santa Cruz
M.B.A., California State University, Fresno
- McManus, Shirley (1992)
Biology
B.S., M.A., California State University, Fresno
- Mendez, Linda (1999)
Counselor
B.A., M.A., California State University, Fresno
- Mericle, Margaret E. (1999)
Dean of Instruction, Social Sciences Division
A.B., Ohio University
M.A., Ph.D., State University of New York at Stony Brook
- Meserve, Peter (2001)
Geography
B.A., University of Kansas
M.A., Ph.D., University of Washington
- Miller, Bruce A. (1996)
Electrical Systems Technology
A.A.S., Ferris State College, Michigan
B.S., California State University, Fresno
- Miller, Mary Beth (2001)
Child Development
B.S., 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
- Moncibais, Gordon (2011)
Fire Technology
A.S., Solano College

- Mooneyham, David E. (2003)
Maintenance Mechanic (CTC)
B.S., M.S., California State University, Fresno
- Moore, Marilyn (1984)
Child Development
B.A., M.A., Stanford University
- Moses, John (1999)
English
A.B., Albright College
M.A., Kutztown State College
Ph.D., Miami University
- Munoz, Shana (2001)
English
A.A., Santa Rosa Jr. College
B.A., M.A., California State University, Fresno
- Naipally, Ashok (2007)
Dean of Instruction, Mathematics, Science and Engineering Division
M.S., Ph.D., Syracuse University
- Natal, Lori (2008)
Counselor
A.A., Fresno City College
B.A., M.S., California State University, Fresno
- Navarro, Bernard M. (2005)
American Indian Studies/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
- Nitzsche, Eric J. (1996)
Construction
B.A., California State University, Fresno
- Oaks, Scott (2007)
Radiologic Technology
A.S., Fresno City College
B.S., California State University, Fresno
M.S., National University
- Ochs, Raquel (2005)
Child Development
B.S., California State University, Fresno
M.A., Pacific Oaks College
- Ockey, Debbie (1995)
Linguistics/ESL
B.A., M.A., California State University, Fresno
- Ohanian, Gregory (1999)
Physics, Engineering
B.A., University of Southern California
B.S., California State University, Fresno
M.S., University of Southern California
- Olowude, Brian (2005)
Psychological Services Center Coordinator
A.A., Monterey Peninsula College
B.A., California State University, Sacramento
M.P.A., Syracuse University
Ph.D., California School of Professional Psychology, Fresno
- Olsen, Rodney G. (2002)
Biology
B.S., M.S., California State University, Fresno
- Ostrander, Theodore E. (1989)
Mathematics, Developmental Math
B.A., California State University, Fresno
M.A., Fresno Pacific College
- Owens, Daniel L. (1999)
Computer Information Technology
B.S., California State University, Fresno
M.B.A., National University
- Pacheco, Joanne (2001)
Dental Hygiene
A.S., Fresno City College
B.A., Fresno Pacific University
M.A., Alliant International University
- Palmer, Richard (1990)
Biology
B.S., Oregon State University
M.S., California State University, Fresno
- Pankratz, Aaron (2008)
Economics
B.A., M.P.P., Pepperdine University
- Patton, Michelle (2008)
English
A.A., Fresno City College
B.A., M.F.A., California State University, Fresno
- Pinkard, Joyce (1997)
Spanish
B.A., M.A., Mississippi State University
- Polanowski, Craig P. (1991)
Graphic Communications
A.A.S., Brookdale Community College, N.J.
B.S., Trenton State College, New Jersey
M.Ed., University of Massachusetts
- Pollard, Mark (2012)
Respiratory Care
A.A., Bakersfield College
B.S., California State University, Fullerton
- Poole, Thomas Craig (1999)
Geology
B.S., M.S., California State University, Fresno
- Porteous, Scott (2001)
Biology
B.A., M.A., California State University, Fresno
- Preston-Smith, Julie (2002)
Counselor
B.A., University of California, Irvine
M.S., California State University, Long Beach
- Quercia, Olga (1996)
Music
B.A., California State University, Fresno
M.M., Eastman School of Music
- Racki, David (1985)
Librarian
B.A., Southern Connecticut State University
M.L.S., Western Michigan University
- Radnejad, Forouzandeh (2005)
Counselor
B.A., Esfahan University, Iran
M.S., California State University, Fresno
- Ramirez, Graciela (1996)
Counselor
B.A., M.A., California State University, Fresno
- Ramos, Loretta (1994)
Communication
B.A., University of Southern California
M.A., California State University, Fresno
J.D., San Joaquin College of Law
- Razee, Alan (2008)
Communication
B.A., California Polytechnic University, San Luis Obispo
M.A., Ph.D., University of Washington
- Reitz-Robinson, Stephanie (2008)
Director of Nursing
A.S., Fresno City College
B.S., California State University, Dominguez Hills
M.H.A., Chapman University
- Reyes, Jesus (2011)
Physical Education
A.A., Mt. San Antonio College
B.A., San Diego State University
M.A., St. Mary's College
- Riley, David (2001)
Electrical Systems Technology
B.S., M.S., California State University, Fresno
- Roberts, Michael D. (1992)
English
A.A., San Joaquin Delta Junior College
B.A., University of California, Davis
M.A., M.F.A., California State University, Fresno
M.A., Fresno Pacific College
- Rooks, Clay (1999)
English
B.S., Iowa State University
M.A., California State University, Fresno
- Rosendale, Stephen (2008)
Automotive Technology
A.S., Fresno City College
- Rutishauser, Brian (1999)
History
B.A., University of Dayton
M.A., Ph.D., Ohio State University

318 College Personnel

- Ryan, Judy L. (1988)
English
B.A., California State University, Sacramento
M.A., California State University, Fresno
- Samra, Sandi (2004)
Counselor
B.A., California State University, Fresno
M.S., National University
- Sanchez, Mark (2010)
Dean of Student Services, Counseling and Guidance
B.A., Point Loma Nazarene University
M.A., Ed.D., California State University, Fresno
- Sanchez, Raymond M. (2005)
Tutorial Center Coordinator
A.A., Fresno City College
B.A., M.A., California State University, Fresno
- Santos, Geraldine (1999)
Counselor
B.A., M.A., California State University, Fresno
- Santos, Jeannie (2009)
Reading
B.A., M.A., California State University, Fresno
- Santos, Richard (1994)
Linguistics/ESL
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
- Scheid, Anne F. (1991)
Art
B.A., Edgecliff College
M.F.A., University of Cincinnati
- 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
- Schulte, Tracy (2007)
Physical Education
B.A., M.A., Fresno Pacific University
- Scott, Daniel J. (2005)
Communication/Assistant Forensics Coach
A.A., Fresno City College.
B.A., California Polytechnic University, San Luis Obispo
M.A., California State University, Fresno
- Scott, Ronald A. (1990)
Physical Education
B.S., California State University, San Jose
M.A., California State University, Fresno
- Semien, Kenneth (2005)
Counselor
B.S., McNeese State University, Louisiana
M.S., National University, Fresno
- Shapazian, Debra P. (1990)
Theatre Arts
B.A., M.A., California State University, Fresno
- Shelley, Deborah (2008)
Biology
B.A., California State University, Chico
Ph.D., Purdue University
- Shirey, Melinda (2006)
Business & Technology
B.A., M.A., Fresno Pacific University
- Shultz, Joseph (1996)
Radiologic Technology
B.S., California State University, Fresno
M.Ed., National University
- Simba, Ceroasetta (1997)
English
B.A., University of Southern Colorado
M.A., California State University, Fresno
- Siroky, Allen (1999)
History
B.A., Rocky Mountain College
M.A., Trinity College
Ph.D., City University of New York
- Slaton, Rebecca L. (1991)
Psychology
B.A., California State University, Fresno
M.S., Ph.D., University of California, Santa Cruz
- Smith, Bonnie (1996)
Computer Information Technology
B.S., San Francisco State University
M.S.A., California State University, Fresno
- Smith, Lorraine M. (2005)
Business & Technology
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., Ph.D., Stanford University
- Soto, Ernestina (2010)
Nursing
B.S.N., M.S.N., California State University, Fresno
- Sousa, Daniel J. (1992)
Electrical Systems Technology
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
- Stanton, Ray (1990)
Mathematics
B.S., University of the Pacific
M.A., Fresno Pacific College
Ed.D., University of Southern California
- Stephenson, Wendell (1999)
Philosophy
B.A., Westmont College
M.A., Ph.D., University of California, Santa Barbara
- Stewart, Richard (2001)
Biology
A.A., College of the Sequoias
B.A., M.A., California State University, Fresno
- Stricker, Terrellyn Rhymes (1984)
Accounting, Decision Science
B.S., M.B.A., California State University, Fresno
- Sullivan, Cheryl (2012)
Vice President Administrative Services
A.S., Fresno City College
B.S., M.S., California State University, Fresno
- Syvertsen, William A. (1990)
Business Administration/Marketing
A.S., Loma Linda University
B.A., California State University, Fresno
M.S., University of San Francisco
- 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
- Temple, Donald L. (1990)
Decision Science, Computer Information Technology
A.A., San Joaquin Delta College
B.A., M.B.A., California State University, Fresno

- Tessler, Brian (1999)
Physical Education
B.A., California State University, Fresno
M.S., National University
- Thiessen, Jolene (2001)
Business & Technology
B.A., Tabor College
M.B.A., National University
- Thomas, Pamella (1984)
English
B.S., M.A., California State University, Fresno
- Thurston, Gerald (2003)
Communication
B.A., M.A., California State University, Fresno
- Tippins, Kira (2011)
Director of Financial Aid
A.A., West Hills College
B.A., California State University, Chico
M.A., California State University, Phoenix
- Trezza, Mark J. (2004)
Political Science
B.A., University of California, Davis
M.A., California State University, Sacramento
- Tuttrup, Richard J. (2000)
Business and Technology
B.A., California State University, Long Beach
M.B.A., California State University, Fresno
- Ugwu-Oju, Dympna (1994)
Journalism
B.A., Briarcliff College
M.S., Syracuse University
Ph.D., California State University, Fresno and University of California, Davis
- Valentino, Mary Ann (2004)
Psychology
B.A., San Diego State University
Ph.D., California School of Professional Psychology
- Van Vleet, Patricia N. (1991)
Linguistics/ESL
B.A., M.A., California State University, Fresno
- 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
- Velasquez, Sarah (2007)
Political Science
B.A., California State University, Long Beach
M.A., California State University, Fullerton
- Vellandi, Christian J. (2005)
Chemistry
A.S., Columbia College
B.S., M.S., California State University, Fresno
- Vidinoff, John M. (2003)
Mathematics
B.A., California State University, Fresno
M.A., Fresno Pacific University
- Villa, Christopher M. (2009)
Vice President of Student Services
B.A., University of California, Irvine
M.P.A., University of Southern California
Ed.D., University of Utah
- Villalba, Tabitha (2009)
Writing and Reading Center Coordinator
B.A., M.F.A., California State University, Fresno
- Vinicor, Melinda (2009)
Sociology
B.A., Pepperdine University
M.A., San Jose State University
- Voorhees, Amie (2004)
Biology
B.A., M.A., California State University, Fresno
- Waller, Tammie (2005)
Computer Information Technology
A.S., West Hills College
B.S., California State University, Fresno
M.S., National University
- Walzberg, Laura Ann (1985)
Nursing
B.S.N., M.S.N., California State University, Fresno
- Watson, Matthew (2011)
Chicano-Latino Studies
B.A., California State University, Fresno
J.D., University of California, Berkeley School of Law
- Watts, Anne (2008)
Director of CalWORKS
B.A., M.B.A., Eastern Washington University
- Wen-Howe, Julie (1990)
Developmental Mathematics
B.Ed., National Taiwan Normal University
M.A., California State University, Fresno
M.A., Fresno Pacific College
- Wengerd, Bethany (2008)
Anthropology
B.A., California State University, Fresno
M.A., California State University, Fullerton
- West, Laura (1999)
Art
B.F.A., Southern Illinois University
M.F.A., Idaho State University
- Whiteside, Christopher (2012)
Dean of Instruction, Applied Technology Division
B.S., M.S., National University
- Williams, Forrest (2007)
Psychology
B.A., M.A., California State University, Chico
- Williams, Rhonda (1999)
Physical Education
B.A., Fresno Pacific
M.A., California State University, Fresno
- Woods, Timothy (2010)
Dean of Instruction, Business Division
B.A., University of California, Riverside
M.A., California State University, Fresno
Ph.D., Walden University
- Yang, Mai (2007)
Librarian
B.A., California State University, Fresno
M.A., University of Illinois, Urbana
- Yang, Victor Bee (1999)
Counselor
B.S., University of Nebraska at Omaha
M.S., National University
- Yarbrough, Thomas (1997)
Engineering
B.A., California State University, Fresno
M.A., Consortium of California State Colleges and Universities
- Yates, Seth (2010)
Chemistry
B.A., Fresno Pacific University
M.S., California State University, Fresno
- Yates, Susan E. (1984)
Athletic Director, Physical Education
B.A., California State University, Fresno
M.A., University of San Francisco
- Ybarra, Kerry (2007)
Philosophy/Humanities
B.A., California State University, Fresno
M.A., California State University, San Francisco
- Zamora, Kenneth C. (1992)
Architecture
A.A., College of the Sequoias
B. Arch., B.S., California Polytechnic University, San Luis Obispo
- Zhai, Lijuan (2010)
Director of Institutional Research, Assessment and Planning
B.S., Shandong Agriculture University
M.S., Ph.D., Ohio State University

Classified Professionals

Anne Adams <i>Office Assistant III</i>	Judith Bennett <i>College Relations Specialist</i>	Ellen Chernehoff <i>Instructional Aide – Child Development Lab</i>
Patricia Aeikens <i>Accounting Technician I</i>	Kimera Betz <i>Office Assistant II</i>	Nathan Clark <i>Micro-Computer Specialist</i>
Norma Aguilar <i>Financial Aid Assistant II</i>	Delores Biddy <i>Office Assistant III</i>	Nileen Clark <i>Administrative Aide</i>
Shanna Ahrens <i>Accountant/Auditor</i>	Kathleen Bonilla <i>Public Information Officer</i>	Terri Clement <i>Instructional Aide – Child Development Lab</i>
Joseph Akina <i>Office Assistant III</i>	Michael Bourbonnais <i>Micro-Computer Specialist</i>	Karin Collins <i>Job Developer</i>
Stephanie Alaniz <i>Department Secretary</i>	Margaret Bourrel <i>Nursing Skills Resource Assistant</i>	Reshonda Collins <i>Instructional Technician</i>
Jose Alcorta <i>Custodian</i>	William Bowlin <i>Micro-Computer Resource Technician</i>	Sheila Collins <i>Early Childhood Education Specialist</i>
Carmen Alessandro <i>Student Services Specialist</i>	Rebecca Boyd <i>Program Developer Assistant</i>	David Cook <i>Printing Trades Technician</i>
Mary Alfieris <i>Student Personnel Services Specialist</i>	Anthony Bravo <i>Bookstore Sales Clerk II</i>	Mike Coppedge <i>Accounting Technician II</i>
Frank Anaya, III <i>Instructional Technician – Auto Body and Fender</i>	Juan Bravo <i>Custodial Manager</i>	Alicia Cowan <i>Office Assistant III</i>
Thomas Andrews <i>General Utility Worker</i>	Kathy Braze <i>Department Secretary</i>	David Cowan <i>Duplicating Operator</i>
Ivy Arana <i>Bookstore Shipping/Receiving Specialist</i>	Cristina Bremer <i>College Director of Marketing and Communications</i>	Penny Cristan <i>Interim Accounting Supervisor</i>
Eloisa Arizaga <i>Eligibility/Assessment Assistant</i>	Richard Briones <i>Custodian</i>	Kendra Cronk <i>Sign Language Interpreter IV</i>
Monica Armenta <i>Administrative Aide</i>	Rose Brownell <i>Educational Advisor</i>	Jered Crump <i>Custodian</i>
Jamien Armstrong <i>Library/Learning Resources Assistant II</i>	Eleanor Bruce <i>Accounting Clerk III</i>	Heather Cruz <i>Sign Language Interpreter III</i>
Elvie Atkinson <i>Instructional Aide – Child Development Lab</i>	Melanie Bryant <i>Office Assistant II</i>	Paula Cuesy <i>Program Developer Assistant</i>
Edward Baiz <i>General Utility Worker</i>	John Castro <i>Physical Education Attendant</i>	Sylvia Cuevas <i>Financial Aid Assistant I</i>
Carrie Baize <i>Office Assistant III</i>	Victoria Castro <i>Instructional Technician – Biology</i>	Christine Culbertson <i>Early Childhood Education Specialist</i>
Howard Barile <i>Accounting Technician I</i>	Frances Catlapp <i>Department Secretary</i>	Christopher Cupp <i>Bookstore Sales Clerk III</i>
Kelly Barkley <i>Office Assistant III</i>	Robert Cawley <i>Library/Learning Resources Assistant III</i>	Steve DaSilva <i>Instructional Technician – Greenhouse</i>
Jeffrey Barrett <i>Theatre Manager</i>	Christina Cazares <i>Financial Aid Assistant I</i>	Elizabeth Davidian <i>Accounting Technician I</i>
	Anthony Celaya, Jr. <i>Micro-Computer Resource Technician</i>	Charlezsette Day <i>Job Developer</i>

Theresa Delaney
Library Technical Services Assistant

Julian Delgado
Micro-Computer Specialist

Mary Delgado
Library/Learning Resources Assistant III

Sandra Denington
Sign Language Interpreter III

Cindy DeSutter
Instructional Aide

Juliana Devine
Sign Language Interpreter III

Larry Dickson
General Utility Worker

Joseph Diebert
Occupational Health and Safety Officer

Anthony Diegidio, Jr.
Instructional Technician - Biology

Valerie Di Pinto
Office Assistant III

Sherri Dodd
Accounting Clerk III

Mary Doyle
Copy Center Specialist

Mirna Duarte
Office Assistant III

Cynthia Dunn
Job Placement Coordinator

Katherine Echols
Student Services Specialist

Rebecca Edens-Paul
Sign Language Interpreter III

Patricia Ediger
Department Secretary

Stanley Ediger
Educational Advisor

Theresa Ervin
Accounting Technician I

Kathleen Ervine
Early Childhood Education Specialist

Ruthina Estrada
Administrative Aide

Marjorie Facio
Financial Aid Assistant II

Leslie Farrell
Office Assistant II

Mary Ferdinand-Smith
Sign Language Interpreter III

Daniel Fierro
Custodian

Frances Figueroa
Custodian

Judi Fischer
Bookstore Sales Clerk II

Kimberly Fischer
Office Assistant III

Veronica Flanders
Department Secretary

Abrian Florez
Lead Custodian

Jennifer Franklin
Library/Learning Resources Assistant II

Lisa Fries
Accounting Clerk II

Tammy Gallagher
Instructional Aide – Child Development Lab

Terri Gallegos
Bookstore Sales Clerk III

Sandra Garachana
Administrative Aide

Ernesto Garcia
Department Secretary

Jacque Gaston
Micro-Computer Specialist

Scott Gerety
Student Services Specialist

Patricia Gonzalez
Administrative Secretary

Christine Gough
Sign Language Interpreter/Coordinator

Sabrina Gray
Office Assistant II

Alvin Greathouse
Custodian

Homer Greene, Jr.
Educational Advisor

Ricco Guajardo
Electronics/Microcomputer Technician

Sue Hammond
College Trainer

Maria Handy
Library Services Assistant

Loretta Haney
Department Secretary

Linda Harris
Textbook Purchasing Clerk

Richard Harrison
Print Media Communications Manager

Reynami Hawkins
Admissions and Records Manager

Wilhemina Henderson
Office Assistant II

Debra Hendricks
Administrative Aide

Daniel Her
Human Resources Technician

Suzanna Her
Financial Aid Assistant I

Tamara Herman
Department Secretary

Abel Hernandez
Custodian

Maria Hernandez
Instructional Technician – Automotive

Monica Hernandez
Custodian and Physical Education Attendant

Randal Hernandez
Instructional Aide

Barbara Hinkle
Office Assistant III

Michael Hopkins
Job Developer

Matthew Horton
Piano Accompanist

Josefa Huckeba
Department Secretary

Trina Hughes
Administrative Secretary

Thien Huynh
Instructional Aide – Child Development Lab

Linda Jackson
Library/Learning Resources Assistant III

Dale Jimenez
Accounting Clerk II

Cathie Johnson
Financial Aid Assistant I

322 College Personnel

Donnie Johnson
Athletic Equipment Manager

Mikki Johnson
Financial Aid Assistant II

Susan Johnson
Administrative Secretary

Mona Kohl
Administrative Aide

Cathleen Kozielski
Accounting Technician II

Renee Kubo
Library/Learning Resources Assistant III

Mary Jo Lane
Accounting Clerk III

Jenny Langworthy
Sign Language Interpreter II

Charles La Voie
Micro-Computer Resource Technician

Sherry Lawson
Department Secretary

Joseph Lescoulie
Instructional Technician – Microcomputer Lab

Otha Lewis
Programmer Analyst

Frances Lippmann
Admissions and Records Manager

Susan Lopes
Office Assistant III

Stephanie Lopez Pedrosa
Office Assistant III

Erasmus Lopez
Custodian

Rosa Lopez
Office Assistant III

Benjamin Lozano
Graphic Artist

John Luna
Custodian

Maile Lutz
College Center Assistant

Linda Lyness
Administrative Secretary

Mayra Machain
Accounting Technician I

Tamara Maddox
Accounting Technician II

Sunnie Mahavong
Student Services Specialist

Lynn Mallory
Administrative Assistant

Josephine Mancillas-Llanos
Department Secretary

Pearl Mangum
Administrative Aide

Janine Marklund
Educational Advisor

Christopher Martin
Micro-Computer Specialist

Sean Martin
Audio-Visual Maintenance Specialist

Alejandra Martinez
Office Assistant III

Dawn Martinez
Instructional Technician-Costume Maker

Patricia Martinez
Office Assistant II

Mary Mathos
Financial Aid Assistant I

Mary Mattern
Early Childhood Education Specialist

Keelin McCabe
Administrative Assistant

Debra McCollum
Phone Communications Operator II

Shannon McKibben
Administrative Assistant

Mark McNiff
Educational Advisor

Linda Mendoza
Office Assistant III

Ulises Meza
Instructional Technician-Art

Tamra Miller
Administrative Secretary

Jennifer Monroe
Theatre Box Office Cashier

Jeannie Morgan
Accounting Technician I

Susan Mosqueda
Office Assistant III

Mary Beth Mosette
Program Development Assistant

Jose Munoz
Custodian

Razonda Munyaradzi
Faculty Sign Language Interpreter

Leticia Murrietta
Administrative Aide

Leslie Musacchio-Mabray
Accounting Clerk III

John Nelson
College Trainer

Mark Nichols
Micro-Computer Specialist

Debra Nieto
Administrative Aide

Susan Nitzel
Department Secretary

Timothy Nkansah-Mahaney
Instructional Technician – Chemistry

Kelli O'Rourke
Curriculum Analyst

Gayle Oki
Office Assistant III

Francisco Olvera
Custodian

Emelita Pacada
Office Assistant II

Alemario Padua
Accounting Technician II

Cynthia Peek
Tutorial Assistant

Yadira Peralta
Financial Aid Assistant I

Denee Perea
Office Assistant III

Darlen Perez
Sign Language Interpreter III

Renee Petch
Administrative Secretary

Lisa Pinley
Office Assistant III

Henry Polanco, Jr.
Custodian

Ronald Potter, Jr.
General Utility Worker

Stephanie Powers-Puahi
Office Assistant III

Tanya Pryor
Accounting Technician I

Carlos Puente, Jr.
Lead Custodian

Kim Quesada
Secretary to the President

Erlinda Ragasa
Accounting Technician I

Judith Ramirez
Educational Advisor

Eric Rata
Office Assistant III

Charles Record
Custodian

Edwin Reed
Custodian

Kaye Reynolds
Office Assistant III

Michael Richards
Lead Custodian

Kaitlin Rickerd
Sign Language Interpreter IV

Rebecca Riddle
Financial Aid Assistant I

Rhea Riegel
Institutional Research Coordinator

Melody Riversmith
Business Facilities Assistant

Andrew Rocha
Audio-Visual Technician

Phyllis Rogers
Office Assistant II

Ryan Rooks
Micro-Computer Specialist

Roy Rosa
Financial Aid Assistant I

Jim Rothford
Athletic Equipment Manager

Michele Ruby
Assessment Coordinator

Linda Sanchez
Accounting Clerk II

Silvia Sanchez
Office Assistant III

Delfina Sandoval
Office Assistant II

Suzanne Sankey
Automotive Parts Technician

Janet Santillan
Bookstore Purchasing Clerk

Susan Schmidt
Administrative Secretary

Roland Schreiner
Systems Technical Resource Analyst

Carolina Shimer
Office Assistant II

Helen Shubin
Custodian

Jessica Silva
Financial Aid Assistant I

Sonny Silva
Financial Aid Assistant I

Phila So
Office Assistant II

Zaneta Solis
Mobility Driver

Alonzo Solorzano, Jr.
Mobility Driver

Eddie Standifer II
Custodian

Deborah Stovall
Bookstore Sales Clerk III

Cynthia Tafoya-Gipson
Office Assistant II

Gina Tarvin
Accounting Technician II

Bobbie Tello-Perez
Office Assistant II

Irene Thirlwall
Department Secretary

Pamela Tibbet
Educational Advisor

Andrea Torrez
Department Secretary

Ruben Valdez
General Utility Worker

Robert Van Dyken
Custodian

Choua Vang
Office Assistant II

Nhia Vang
Office Assistant II

Joe Vasquez
Custodian

Joel Villar
Instructional Technician – Automotive

Albert Villegas-Villagomez
Custodian

Lisa Vincent
College Relations Specialist

Pa Vue
Upward Bound Assistant

Daniel Waltrip
Custodian

Robert Weil
Sales/Marketing Coordinator

Kellee Wesley
Department Secretary

Oscar Whittle
Custodian

Maria Wiget
Office Assistant II

Aaron Wilks
Micro-Computer Resource Technician

Artie Williams
Custodian

Steven Williams
Custodian

Phyllis Willis
Administrative Secretary

Jonathan Wilson
*Distance Ed/Information
Technology Support Technician*

Nancy Withrow
Office Assistant III

Daniel Wong
Instructional Technician – Reprographics

Janice Wong
College Center Assistant

Mary Beth Wynn
Assistant Bookstore Manager

Houa Yang
Educational Advisor

Pao Yang
Phone Communications Operator II

Harold Zahlis, Jr.
Network Coordinator

Ramon Zapata
*Instructional Technician – Body and
Fender*

Emeritus Faculty

- Albright, Linda S.**
1981-2009
Nurse
- Alvarez, Manuel E.**
1971-1992
Electronics
- Amaro, Arthur N.**
1973-2011
Chicano-Latino Studies, Sociology
- Andersen, L. LeGrand**
1974-1999
Vocal Music
- Andreen, Kristi**
2000-2011
Respiratory Therapy
- Andrews, Robert N.**
1971-1996
Automotive Technology, Industrial Education
- Angarano, Angelo P.**
1968-1984
Philosophy, English
- Arredondo, Alfred V.**
1975-2008
Counselor
- Arroyo, Robert F.**
1969-1999
Associate Dean of Students, Director, EOP&S
- Arth, Raymond G.**
1977-2010
Photography
- Atkinson, Dennis. C.**
1990-2008
Automotive Technology
- Azamber, Eugene C.**
1966-2001
Business Administration, Management
- Baber, Roberta**
1986-2011
Computer Information Technology
- Balakian, Elizabeth**
1962-1995
English
- Bartels, Fred W.**
1965-1999
Physical Education
- Beck, Allen**
1974-2008
Anthropology
- Bell, Calvin**
1968-1984
Counselor
- Bell, Edward**
1979-1986
Auto Mechanics
- Bengel, Earl**
1968-1997
Engineering
- Bill, Gerald M.**
1970-2008
Sociology
- Bingham, Isabell H.**
1970-1982
Home Economics
- Blackburn, Norma D.**
1961-1979
Legal Secretaryship
- Boucher, Richard**
1964-1996
Electronic Technology
- Bourdet, Malcolm L.**
1957-1990
Physical Education
- Brooks, Walter**
1970-2008
Counselor
- Brown, Martin D.**
1974-1990
Associate Dean of Instruction,
Health Arts and Sciences
- Brown, Richard S.**
1964-1986
Geology
- Brunetti, Pat A.**
1982-2004
Nurse
- Bruns, Paul M.**
1958-1990
Chemistry
- Byrd, Ronald F.**
1968-2001
Librarian
- Byrns, Dennis C.**
1995-2011
Fire Technology
- Carlisle, Elizabeth**
2005-2007
Speech
- Castagna, Paula**
1992-2011
Mathematics
- Castine, John**
1955-1984
English
- Chow, Richard**
1968-1991
Reprographics, Industrial Education
- Christian, Peter C.**
1958-1981
English
- Christl, Richard I.**
1970-2011
Dean of Instruction, Applied Technology Division
- Cleland, Richard L.**
1959-1996
College Business Manager
- Cleveland, Sandra**
1976-2007
Nursing
- Colby, Camilla**
1969-2007
Spanish
- Cole, Wayne**
1990-2011
English
- Cornwell, Gerald D.**
1961-1990
Business
- Crider, Andrew B.**
1998-2012
Director of Career & Technology Center
- Culp, Robbey C.**
1995-2010
Chemistry
- Cummings, John H.**
1996-2011
Vice President, Admissions and Records
- Curry, Ruth**
1981-1998
Philosophy, English, Humanities
- Davy, Thelma L.**
1965-1973
English
- Deeter, Gary,**
1981-2008
Music
- DeKoning, Richard M.**
1958-1982
Drafting, Mathematics,
Architecture, Industrial Education
- 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
- Doyland, Russell A.**
1961-1983
Accounting
- Draper, C. Dean**
1960-1987
Art
- Drummond, Harold G.**
1970-1984
Accounting
- Duncan, Janet**
1990-2006
Business & Technology
- Dzerigian, Steven V.**
1987-2008
Photography
- Eckenrod, Gervase A.**
1955-1984
Associate Dean of Instruction, Business Division
- Eckenrod, Sherian H.**
1979-2003
Associate Dean of Instruction, Business Division
- Edman, Leland M.**
1975-1991
Administration of Justice
- Eischen, Clifford**
1964-1998
Business Administration, Management
- Elgin, Judy A.**
1987-2010
Business and Technology
- Elgorriaga, Carmen**
1970-1994
English, Spanish
- Elliott, Jacqueline**
1995-2006
Art
- Engel, Kathleen**
1980-2008
Nursing
- Estrada, Gonzolo**
1965-1984
English
- Estrada, Joan E.**
1964-1989
Accounting
- Farrington, Gerald**
1970-2003
History, Political Science
- Ferguson, Phillip**
1972-1982
Mathematics
- Fischer, Laurene J.**
1965-1995
Business Administration,
Computer Information Technology
- Fox, Robert E.**
1980-2009
Vice President of Students
- Franz, James J.**
2000-2008
Economics
- Fries, Bobby**
1965-1991
Health Education, Track
- Gaither, Loren F.**
1964-1996
Mathematics
- Gant, Ralph**
1985-2010
Communication
- Gaona, Venancio Garcia**
1969-1999
Spanish
- Gartman, Grace**
1989-2005
Tutorial Resources
- Gaudin, Roderick F.**
1966-2005
Sociology
- Gibbs, Richard R.**
1966-1994
Economics, Psychology
- Gonzales, Paul**
1989-2007
Radiologic Technology
- Graham, Ronald J.**
1987-2005
Criminology
- Green, M. Fred**
1962-1984
Engineering
- Grover, Stanford C.**
1966-1977
Counselor
- Gunn, Donald L.**
1971-1992
Theatre Arts, Speech
- Hald, Kenneth**
1949-1972
Biological Sciences
- Hallstone, Kenneth**
1968-2002
Psychology
- Handley, Richard**
1955-1980
Associate Dean of Instruction,
Occupational Education
- Hanson, Richard A.**
1965-2003
Psychology
- Hanson, William F.**
1946-1978
Director,
Vocational Training Center
- Harmon, Beverlee Jill**
1990-2012
Counselor
- Haroutunian, Vahack**
1971-1996
Mathematics
- Hayden, Layne E.**
1999-2007
Automotive Collision Repair
- Hendrickson, David H.**
1958-1984
Geography, History
- Hendry, Harold T.**
1966-1984
Business Administration
- Hibler, Edward B.**
1961-1978
Psychology
- Hildreth, Sonya**
2007-2010
Dean of Student Services, Counseling
and Guidance
- Hill, Jack**
1956-1980
Marketing, Advertising
- Hiroyasu, Shaw**
1975-1996
Automotive Mechanics, Industrial Education
- Hoff, Nancy**
1981-2007
Nursing
- Holstein, George C.**
1955-1966
Dean of Admissions & Records
- Hostetler, Robin L.**
1979-2011
Geography
- Jansen, Janice R.**
1975-2004
Physical Education, Dance
- Jeanis, Dorothy I.**
1969-1995
Business Administration, Management

326 College Personnel

- Jimenez, Joaquin**
1988-2004
District Associate Dean of Financial Aid
- Johnston, H. Bruce**
1966-1996
Biology
- Keen, Derl W.**
1975-2001
Child Development
- Kennedy, Harry L.**
1984-2005
Journalism, English
- Kimura, Robert H.**
1963-1984
Chemistry
- King, Charles G.**
1958-1990
Electronic Technology, Industrial Education
- Khoury, Alexis**
1990-2008
English
- Kirkhart, Jerry L.**
1989-2005
Biology
- Klein, Kenneth A.**
1968-1999
Architectural Drafting
- Kriesel, L. Anne**
1974-1990
Counseling (Enabler)
- Krueger, Rodney L.**
1965-1991
Art
- Kuiper, H. Peter**
1968-1993
Speech, English, Philosophy
- 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
- 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
- Liscano, Tanya**
1974-2001
Librarian
- Locker, Theodore A.**
1965-1990
English
- Lopez, Matthew**
1971-1991
Welding
- Luck, Emory F.**
1984-2004
Physical Education
- Luckenbach, Roger**
1998-2012
Biology
- Lund, Edward L.**
1988-2008
Counselor, Disabled Students Programs & Services
- Marks, William A.**
1959-1992
Industrial Education, Air Conditioning
- Marshall, Thomas A.**
1962-1987
Psychology
- Martin, Lawrence**
1957-1981
Accounting, Native American Studies
- Martin, Merle**
1950-1980
Dean of Students
- Maruko, Eiji**
1976-1997
Music
- Mascarenas, Timothy E.**
1971-2004
Automotive Technology
- Mateo-Laeno, Mary Ann**
1990-2007
Child Development
- Mattox, Jack V.**
1966-2001
Health Science
- McCarthy, John R.**
1951-1977
Health Education
- McClain, Mary Jane**
1999-2011
Medical Assisting Surgical Technology
- McCormack, Ethel**
1930-1961
Secretarial Science, Dean, Business Division
- McCully, Clyde C.**
1967-1986
President
- McHenry, James A.**
1965-2001
Biology
- Merlier, Christiane M.**
1984-2008
ESL, French
- Meyer, Kent R.**
1962-1987
Accounting
- Miller, Mary E.**
1960-1984
Secretarial Science
- Moller, Richard T.**
1968-1990
Mathematics
- Moore, Bessie M.**
1971-1984
Vocational Nursing
- Moore, Joseph Jr.**
1966-1999
History, Political Science
- Moorehouse, Richard L.**
1974-1993
Director, Dental Hygiene Program
- Moran, Charles L.**
1959-1989
Botany, Biology
- Morgan, Carl H.**
1955-1973
Physics, Mathematics
- Muldoon, Marcia**
1995-2006
English
- Munshower, Donald**
1984-2003
Counselor
- Murphy, Connie J.**
1984-2007
Business & Technology

- Musick, William D.
1965-1999
Physical Education
- Neal, Stanley B.
1990-2005
Welding, Metal Fabrication
- Neal, William A.
1961-1990
Mathematics
- Nelson, Carl C.
1966-1994
Biology
- Neuman, Darlene H.
1962-2000
Business & Technology
- Newcomb, Joan T.
1971-2001
Sociology, Child Development
- Nielsen, Robert
1961-2001
Music
- Nishimoto, Henry
1980-2007
Economics
- Ogden, Gordon L.
1975-1994
Director, Health Sciences
- Okkerse, Victor J.
1959-1984
Secretarial Science
- Olson, Kenneth E.
1990-2012
Electronic Technology, Automated Technologies
- Osborne, Leon
1959-1995
Art
- Owens, Kenneth B.
1963-1999
Art
- Parks, John L.
1996-2009
Air Conditioning
- Pauls, Albert N.
1963-1990
Secretarial Science
- Paulson, Richard S.
1955-1984
Speech
- Paz, Isias E.
1971-1996
Spanish, German
- Peart, Gilbert M.
1958-1977
Marketing
- Perkins, Alvan E.
1964-1990
Counselor
- Piper, James K.
1965-1999
English, Film
- Pool, June E.V.
1956-1984
Vocational Nursing
- Porter, Ralph W.
1971-2003
Biology
- Putnam, Marlene S.
1984-2001
Business & Technology
- Quinn, Charles T.
1970-2003
Theatre Arts, Speech
- Quintana, Frank M.
1970-2006
Associate Dean of Instruction, Fine,
Performing, and Communication Arts Division
- Rail, Lester DeWayne
1971-2000
Director, Arts, Honors & Student Success
- Ramay, Morris W.
1972-2000
Respiratory Care
- Ramon, Frank
1972-2010
Director, Financial Aid
- Rash, Lucille
1970-2003
Business & Technology
- Rawate, Prabhu
1990-2005
Chemistry
- Reid, Birt
1973-2007
Counselor
- Reynolds, Jr., William A.
1957-1978
French
- Reznik, Zwi
1990-2010
Mathematics
- Richardson, Robert L.
1968-2005
Counselor
- Ritter, James J.
1984-2002
Maintenance Mechanic (CTC)
- Rios, Cruz F.
1976-1986
Automotive Mechanics
- Roach, Darlene
1985-2012
Counselor
- Rohrer, Martha J.
1976-1981
Home Economics
- Rose, Bronwen Wendy
1984-2003
Native American Studies
- Ross, James Edward
1971-2002
Mathematics
- Rowe, Andrew F.
1962-1990
Mathematics
- Ruston, James R.
1967-1995
English, Speech
- 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
- Sandau, Richard R.
1959-1983
English
- Sausen, Barbara
1981-2008
Mathematics
- Scambray, Terry A.
1967-2001
English
- Schneider, Dennis
1981-2011
Business Administration/Marketing
- Scott, Rueben A.
1971-2005
English, Philosophy

328 College Personnel

- Scott, William F.
1967-1984
Geography
- Seaberg, William
1980-1998
Associate Dean of
Instruction, Learning Resources
- Seely, Irene O.
1989-2009
Biology
- Shepard, James H.
1987-2005
Art
- Shine, G. Dennis Jr.
1968-1993
Economics, Business Administration
- Shirley, W. Delton
1968-2001
Biology
- Slaughter, Clare L.
1955-1984
Physical Education
- Smith, Bernice V.
1972-1978
Librarian
- Smith, Dorothy E.
1965-1978
Nursing
- Smith, Shannon
1958-1980
Flight Science, Industrial Education
- Solwazi, Kehinde
1970-2011
African-American Studies
- Sorensen, Royal
1976-1978
Microbiology
- Sosa, Luis R.
1977-1993
Sociology, Human Services
- Spencer, Lowell
1948-1978
Music
- Spolsdoff, John
2000-2008
Director, Student Success & Honors
- Stanley, Vance
1972-1999
Physical Education
- Stark, Charles M.
1966-1990
Physical Education
- Statham, Yolanda A.
1964-1984
English
- Stilwell, Shirley B.
1962-1984
Physical Education
- Stokle, J. Gerald
1967-1999
Associate Dean of Instruction,
Social Science Division
- Stone, Carol J.
1990-2010
Home Economics
- Stubblefield, Gertrude
1930-1960
Secretarial Science
- Susnick, Ruthford
1999-2010
Automotive Mechanics CTC
- Takeuchi, Leo S.
1959-1992
Associate Dean of Instruction,
Technical & Industrial Division
- Taylor, Mary A.
1975-2011
Nursing
- Teague, Jonas A.
1973-1993
Automotive Mechanics (VTC)
- Templer, William F.
1975-1999
Physical Geography, Earth Science
- Terry, Blair
1974-2001
Accounting
- Tognazzini, Eugene A.
1984-2011
Mathematics
- Toomasian, John
1961-1995
History
- Tucker, James
2006-2011
Dean of Instruction,
Library and Student Learning Support Services
- Valencia, Richard
1976-2007
Sociology
- Van Gerpen, Maurice
1959-1999
Political Science
- 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
- Walsh, James H.
1971-2009
Sociology
- Wash, Dennis C.
1974-1996
Air Conditioning, Industrial Education
- Waters, Rosemary
1972-2009
Biology
- Watson, Donald G.
1968-2005
Counselor
- 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
- Winter, Robert F.
1951-1990
Botany, Biology
- 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
- Young, Nain T.
1962-1984
Registered Nursing
- Zepeda-Esparza, Josephine
1969-1995
English, Spanish

Emeritus Classified Professionals

Aguilar, Yolanda 2001-2011 Student Services Specialist	Flores, Delfina 1977-2007 Student Services Specialist	Miller, Donna 1985-2003 Business Facilities Assistant
Anderson, Robin 1979-2011 Department Secretary	Fouquette, Brenda 1988-2012 Library/Learning Resources Assistant II	Miller, Toni O. 1973-2004 Educational Advisor
Andrews-Boock, Sharon 1988-2008 Administration Aide	Gerety, Cheryl 1990-2012 Office Assistant III	Moorer, Lewis 1983-2008 Lead Custodian
Archuleta, Irene 1990-2004 Administrative Aide	Greenwood, Phyllis 1990-2010 Department Secretary	Myers, Doris 1988-2009 Office Assistant III
Barber, Joan 1974-2007 Office Assistant III	Guillen, Guillen 2006-2011 Custodian	Pelham-Wiley, Emma 1987-2003 Nursing Skills Resource Assistant
Barlow, John 1991-2011 Custodian	Hagler, Linda 1992-2008 School Relations Specialist	Peterson, Sandra 2007-2012 Department Secretary
Barnett, Karin 2003-2011 Textbook Purchasing Clerk	Harris, Elizabeth 1980-2005 Administrative Assistant	Pisching, George 1990-2008 Graphic Artist
Battcher, Shirley 1999-2011 Office Assistant II	Jimenez, Jess 1997-2004 Athletic Equipment Manager	Points, Susan 1987-2011 Duplicating Operations Technician
Belk, James 1982-2004 Library/Learning Resources Assistant III	Kelley, LaVonne 1974-2005 Office Assistant III	Rackin, Marilyn 1975-2007 Secretary to the President
Bischel, Steve 1973-2007 Custodian	Kilgore, Richard 1992-2011 Instructional Technician – Art	Reid, Ora 1985-2010 Custodian
Bogdanoff, Gerald 1980-2004 Electronics/Microcomputer Technician	Komaki, Hiro 1975-2005 Graphic Artist	Rice, Mary 1998-2012 Student Services Specialist
Brooks, Edward 1977-2010 Custodian	Kroeker, Jay 1970-2004 Audio Visual Maintenance Specialist	Rivera, Donna 1973-2009 Assistant Bookstore Manager
Caldwell, Carmen 1979-2008 Department Secretary	Larsen, Dale 2002-2007 Financial Aid Assistant	Roe, Franklin 1998-2010 Job Development
Carr, William 1999-2010 Financial Aid Assistant II	Linn, Carolyn 1991-2004 Administrative Aide	Slevkoff, Hazel 1970-2006 Curriculum Assistant
Christiansen, Argilia 1977-2003 Textbook Purchasing Clerk	Livengood, Robert 1982-2005 Instructional Technician-Auto	Sullivan, Francis 1975-2003 Theatre Manager
Cox, James 1992-2010 Athletic Equipment Manager	McSwain-Tennent, Holly 1997-2005 Administrative Aide	Staebler, Kathleen 1995-2009 Administration Secretary
Faith, Linda 2001-2010 Department Secretary	Mena, Salvador 1973-2007 Educational Advisor	Taylor, Gail 1997-2011 Administrative Aide

330 College Personnel

Tortensen, Jeffrey
1992-2007
Department Secretary

Supersad, Pearl
1972-2011
Department Secretary

Uribes, Regina
2011
College Relations Specialist

Vargas, Sandra
1973-2011
Campus Business Assistant

Vennard, Michael
1992-2005
Instructional Technical-Reprographics

Wilk, Woody
1985-2009
News Writer/ Sports

Willingham, Tandy
1982-2004
Library/Learning Resources Assistant III

Willis, Carole
1999-2004
Office Assistant I

Whisenhunt, Lydia
1969-2010
Secretary to the President

In Memoriam

James Gillespie
Instructional Technician, Biology

Michael E. Haney
Automotive Technology

John R. Peterson
Engineering, Physics

Verna Sharpton
Office Assistant II

LeRoy E. Stoner
Air Conditioning, Apprenticeship
Training Coordinator

INDEX

A

AA and AS Degree General Education Courses.....	32
AA and AS Degree Requirements.....	33
AA-T and AS-T Requirements.....	32
AB-540, Exception from Nonresident Tuition.....	14
About Ourselves.....	69
Academic Calendar.....	10
Academic Dishonesty.....	53
Academic Freedom.....	53
Academic Limitations, Veterans.....	76
Academic Probation,	
Placement on.....	28
Removal from.....	28
Academic/Progress Dismissal.....	29
Academic/Progress Dismissal, Readmission Following.....	29
Academic Regulations.....	20
Academic Renewal.....	27
Academic Renewal Petition/Repeated Courses.....	27
Academic Renewal, Other Colleges.....	27
Academy Programs, Admission to.....	85
Accounting Courses.....	196
Accounting Program.....	97
Accreditation.....	Inside Front Cover
Adaptive Ornamental Horticulture Skills Program.....	98
Adaptive Physical Education (APE) Courses.....	296
Address Changes.....	57
Administration, Fresno City College.....	311
Administration, State Center Community College District.....	311
Administration of Justice — Police Academy Courses.....	197
Administration of Justice Programs.....	99
Administrative Policies.....	51
Admission and Registration.....	12
Admission of Students.....	12
Admission of Students, General.....	12
Admission of Students, International.....	12
Admission of Students, Provisional.....	12
Admission of Students, Readmission.....	12
Adult Correctional Officer Core Program.....	99
Advanced Placement Program (AP).....	23
Advertising, Marketing Program.....	165
Advisories.....	190
Aerospace Studies Courses.....	200
African-American Studies Courses.....	200
African-American Studies Program.....	100
Air Conditioning Courses.....	201
Air Conditioning Programs.....	100
Air Conditioning Technology Overview Program.....	101
Air Force and Army (U.S.) ROTC Studies.....	75
Alcoholism and Drug Abuse Counseling,	
Human Services Program.....	151
Alleviation by Repetition for a Better Grade.....	27
Alleviation of Substandard Grades.....	27
Alleviation of Substandard Grades without Repetition.....	27
Allied Health.....	71
Alpha Gamma Sigma.....	30
American Indian Studies Courses.....	203
American Indian Studies Program.....	103
American Sign Language Courses.....	260
American Studies Course.....	203
Anthropology Courses.....	203
Anthropology Program.....	103
Anthropology-Archaeology Archaeological	
Technician Program.....	104
Application for Admission.....	13
Application for Associate Degree or	
Certificate of Achievement.....	35
Applied Technology Courses.....	204
Applied Technology Division.....	84
Admission to the Academy Programs.....	85
Apprenticeship Programs/Courses.....	85
Associate in Science Degree.....	84
Certificate of Achievement.....	84
Certificates.....	85
Work Experience Education.....	85
Apprenticeship Training Courses.....	205
Apprenticeship Training Programs.....	104
Automotive and Heavy Duty Electrical.....	104
Automotive Mechanics.....	105
Body and Fender.....	105
Diesel and Heavy-Duty Mechanics.....	106
Machine Shop.....	106
Parts Clerk.....	106
Roofing.....	107

Stationary Engineers	107	Baseball, Competitive	297
Welding	108	Basic Fire Academy	143
Architecture Courses	205	Basic Police Academy, Administration of Justice	99
Architecture Program	108	Basic Supervisor Program	99
Areas of Study by Division	79	Basketball, Competitive	297
Arithmetic for the Learning Disabled.....	281	Bilingual/Crosscultural Program	113
Armenian Courses.....	261	Biology Courses.....	215
Army and Air Force (U.S.) ROTC Studies.....	75	Biology Program.....	92
Art Courses	206	Bookstore.....	58
Art Programs.....	109	Broker/Sales Option, Real Estate Program	177
Art Space Gallery.....	89	Building Safety and Code Administration Courses.....	216
Articulated, Common, and In-Lieu Courses, SCCCD Intra-District.....	193	Building Safety and Code Administration Programs.....	113
Articulation	36	Business Administration Courses	217
Articulation System Stimulating Inter-Institutional Student Transfer (ASSIST)	37	Business Administration Program	114
Articulation with High Schools (2+2)	23	Business Administration Management Program.....	115
Asian-American Studies Courses	209	Business Division	87
Assessment.....	15	Employment Available.....	87
Assignment of Registration Dates.....	16	Associate in Arts Degree	88
Associate Degree and Certificate Programs.....	97	Associate in Science Degree	88
Associate in Arts Degree	33	Certificate of Achievement.....	88
Associate in Arts for Transfer, Communication.....	126	Certificates.....	88
Associate in Arts for Transfer, Psychology.....	176	Co-Curricular Activities	88
Associate in Arts for Transfer, Sociology.....	181	Nontransfer Students	89
Associate in Arts for Transfer, Theatre Arts	185	Business Finance and Accounting Program.....	116
Associate in Science Degree	33	Business Finance and Investment Program	116
Associate in Science for Transfer, Early Childhood Education.....	123	Business & Technology Courses	220
Associated Student Body Fee.....	18	Business & Technology Programs.....	118
Associated Student Government Representation Fee.....	18	Business Office Assistant Program	120
Associated Students	68		
Astronomy Course.....	210	C	
Athletics.....	69	Cafeteria, Food Services	65
Attendance.....	20	Calendars Fall 2012	10
Attendance and Progress Policies, Veterans and Dependents	76	Spring, Summer, Fall 2013.....	10
Authority and Disciplinary Actions.....	53	Spring, Summer 2014	11
Automation Control Technician, Electrical Systems Technology Program.....	139	California State University, Lower Division Transfer Students	39
Automotive Collision Repair, CTC.....	210	California State University Transfer Certification, General Education	39
Automotive Collision Repair Technology Courses	210	California State University Transfer Course List	41
Automotive Collision Repair Technology Program	110	California State University Transfer Requirements	38
Automotive Mechanics, CTC.....	214	California State University, Upper Division Transfer Students	39
Automotive Technology Courses	210	CalWORKs	59
Automotive Technology Programs.....	110	Campus Security Act	9
General Motors ASEP Courses	214	Career & Technology Center.....	86
General Motors ASEP Program	112	Career & Technology Center Courses/Programs.....	86
Awards, Honors.....	29	Career Center	59
B		Catalog Rights	31
Baccalaureate Degree Transfer Courses	41	Certificate of Achievement.....	31
Badminton, Competitive	297	Certificate/Degree Requirements	31
		Certificates.....	31

Certifications of Enrollment.....	26	Computer Lab (LRC).....	65
Certification of General Education (CSU-GE).....	39	Computer/Network Equipment Use Policy	52
Change of Address/Telephone Number.....	57	Computer Science Courses	235
Chassis Technician, Automotive Technology.....	112	Computer Science Program	93
Cheating.....	53	Computerized Accounting Program	98
Chemistry Courses	224	Concurrent College Enrollment.....	15
Chemistry Program	92	Conduct Standards, SCCCD Policy Statement	51
Chicano-Latino Studies Courses	225	Conduct Standards, Student.....	51
Chicano-Latino Studies Program	121	Construction Courses.....	236
Child Development Associate Credential.....	125	Construction Program.....	131
Child Development Associate Teacher Program.....	123	Construction Option, Industrial Technology Program	154
Child Development Center.....	59	Contents, Table of	3
Child Development Courses.....	226	Control Systems, Electrical Systems Technology Program.....	140
Child Development Programs	122	Cooperative Work Experience Education.....	24, 77
Child Development, Qualifications to Teach	125	Core Values, Fresno City College.....	7
Child Nutrition Program.....	147	Corequisites.....	190
Chinese Courses.....	261	Correctional Science Option, Criminology Program.....	132
Circumstances for Appeal or Exemption of Academic or Progress Dismissal.....	29	Counseling Courses	237
Cisco CCNA Preparation, Electrical Systems Technology Program	139	Counseling Department	59
Cisco CCNP Preparation, Electrical Systems Technology Program	139	Counseling for Probationary Students.....	28
Class Schedule Change.....	17	Course and Unit Credit, Earning.....	23
Classified Professionals.....	320	Course Classification	191
Clerical Training Program	121	Course Credit Limitation	190
Clubs	68	Course Descriptions	190
Clubs, Organization of New.....	69	Course Numbering System	191
College Arithmetic	281	Course Repeatability (Course Descriptions)	190
College English for International Students	74	Credit by Examination	24
College-Level Examination Program (CLEP)	23	Credit by Examination Fee.....	19
College Personnel	311	Credit for Military Service.....	25
College Relations	59	Criminology Courses	238
College Statement.....	2	Criminology Option, Criminology Program.....	133
Commercial Air Conditioning, Heating, and Duct Systems Program	102	Criminology Program	132
Commercial Music Program.....	169	Cross Country, Competitive.....	297
Commercial Photography Program	174	Cultural Studies Courses	240
Common, Articulated, and In-Lieu Courses, SCCCD Intra-District.....	193	Culinary Arts, Advanced Program	136
Communication Courses.....	229	Culinary Arts, Basic Program.....	136
Communication Program, for Transfer	126	Culinary Arts, Intermediate Program	136
Communications Technology, Electrical Systems Technology Program.....	139	D	
Community College-High School Enrichment Program.....	17	Dance	70, 89
Computer Aided Drafting and Design Courses.....	230	Dance Courses.....	240
Computer Aided Drafting and Design Program.....	126	Dance Program.....	136
Computer Aided Manufacturing Courses.....	231	Data Entry Operator Program.....	128
Computer Aided Manufacturing Program.....	126	Dean's List.....	29
Computer Applications Software Program.....	120	Debate (Forensics).....	70
Computer Information Systems Program	127	Decision Science Courses.....	242
Computer Information Technology Courses	231	Degree/Certificate Requirements	31
Computer Information Technology Programs.....	127	Degrees, Multiple	32
		Dental Hygiene Courses.....	242

Dental Hygiene Program.....	137
Description of Courses.....	190
Design/Technical Theatre Studies.....	186
Developmental Education Program.....	73
Developmental Services Courses.....	244
Dietary Aide Program.....	146
Dietetic Service Supervisor Program.....	146
Difference Between AA and AS Degrees.....	33
Digital Air Conditioning Controls Program.....	102
Digital Video Option, Graphic Communications.....	148
Digital Photography Program.....	174
Disabled Students Programs and Services (DSP&S).....	60
Disciplinary Actions and Authority.....	53
Disciplinary Procedures, Academic Dishonesty.....	53
Dismissal, Academic/Progress.....	29
District Courses and Programs.....	95
District, The.....	9
District Police.....	61
Divisions.....	84
Applied Technology.....	84
Business.....	87
Fine, Performing, and Communication Arts.....	89
Health Sciences.....	90
Humanities.....	91
Mathematics, Science, and Engineering.....	92
Social Sciences.....	94
Drafting Courses.....	246
Drama.....	70
Dropping a Class.....	25
Dropping/Withdrawal Due to Extenuating Circumstances.....	26
DSP&S.....	60
Drug Abuse Policy.....	53

E

Early Intervention Assistant, Child Development Program.....	124
Economics Courses.....	246
Education Courses.....	246
Educational Aide Courses.....	247
Educational Aide (Special Education) Program.....	184
Educational Benefits for Veterans and Dependents.....	76
Electrical Line Utility/Worker, Electrical Systems Technology.....	140
Electrical Systems Technology Courses.....	247
Electrical Systems Technology Program.....	138
Elementary School Teaching Credential.....	125
Emeritus Classified Professionals.....	329
Emeritus Faculty.....	324
Emission Technician, Automotive Technology.....	112
Employment Resource Center.....	61

Engineering Courses.....	250
Engineering Program.....	142
English-as-a-Second-Language Courses.....	253
English-as-a-Second-Language (ESL) Program.....	74
English Courses.....	250
English Placement (Assessment).....	16
English Program.....	142
Enrollment Certifications.....	26
Enrollment Fee.....	17
Enrollment Fee, Refund.....	19
Entrepreneurial Ventures Program.....	114
Escrow Option, Real Estate Program.....	178
Ethics Statement, Fresno City College.....	7
Extended Learning Writing Center – Reading, Writing and Math Lab.....	61
Extended Opportunity Program and Services (EOPS).....	61
Extenuating Circumstances, Withdrawal.....	26

F

Faculty & Administration.....	312
Emeritus Faculty.....	324
In Memoriam.....	330
Fall Semesters.....	10
Family Child Care Licensing Requirements.....	125
Family Child Care Program.....	124
Family Education Rights and Privacy Act.....	57
Fashion and Textiles Studies Courses.....	254
Fashion Merchandising Courses.....	255
Fees.....	
Associated Student Body Fee.....	18
Associated Student Body Fee, Refund.....	19
Associated Student Government Representation Fee.....	18
Credit by Examination Fee.....	19
Enrollment Fee.....	17
Enrollment Fee, Refund or Reversal.....	19
Health Fee.....	18
Health Fee, Refund.....	19
Instructional Materials Fee.....	18
Nonresident and International Tuition.....	17
Parking Fee.....	18
Parking Fee, Refund.....	19
Transcript Fee.....	18
Film Courses.....	255
Final Examinations.....	23
Final Grade Report.....	26
Financial Aid.....	62
Financial Aid, Return of Aid Based Upon Total Withdrawal.....	62
Financial Aid and Scholarships.....	62
Financial Aid Coursework Repeatability.....	62
Financial Aid Satisfactory Progress.....	62

Fine Art Photography Program 175

Fine, Performing, and Communication Arts Division.....89

 Associate in Arts Degree89

 Associate in Science Degree89

 Certificate of Achievement89

 Communication Arts89

 Fine and Performing Arts89

Fire Academy.....85

Fire Technology Courses.....256

Fire Technology Programs143

Food and Nutrition Courses258

Food and Nutrition Program145

Food Service Management Courses.....259

Food Service Management Program.....146

Food Services.....65

Football, Competitive.....298

Foreign Languages Courses.....260

Forensic Evidence Program Option,
 Criminology Program134

Forensics (Debate).....70

Foster Care Program.....124

Free Expression.....51

French Courses.....262

Fresno City College Map Inside Back Cover

Fresno City College Programs Not Offered at Reedley College.....95

Fresno City College Training Institute74

Full Charge Bookkeeper Program.....98

Full-time Enrollment20

G

GED Scores12

General Activities Courses, Physical Education295

General Admission of Students.....12

General Education for AA and AS Degree.....32

General Education Requirements for CSU Transfer Certification.....39

Geography Courses265

Geology Courses.....265

German Courses262

Golf, Competitive298

Grade Point Average (GPA)22

Grade Reports.....26

Grade Review, Student22

Grading System.....21

Graduation Requirements.....31

Graphic Communications Courses266

Graphic Communications Program147

Graphic Design Option, Graphic Communications Program.....148

Grievance Policy for Students.....55

Guitar Courses285

Guitar Music Program.....168

H

Health Care Career Programs.....90

Health Fee18

Health Fee, Refund19

Health Information Technology Courses.....269

Health Information Technology Program148

Health Science Courses.....270

Health Sciences Division90

 Health Care Career Programs.....90

Health Services.....65

High Honors.....29

High School Articulation (2+2)23

High School-Community College Enrichment Program.....17

Highest Honors.....29

History Courses.....270

History of Fresno City College.....9

Hmong Courses.....262

Holds on Records and Registration.....15

Home Economics, Consumer Education Program150

Honor Societies30

Honors and Awards29

Honors Courses271

Honors Program150

Honors Program Admission74

Housing Information65

Housing Management Option, Real Estate Program178

Human Relations and Communications Program117

Human Resource Management and Human Relations Program117

Human Resource Management Assistant Program.....115

Human Services Courses274

Human Services Programs151

Humanities Courses275

Humanities Division91

 Associate in Arts Degrees91

 Certificate of Achievement91

 Composition.....91

 Foreign Languages91

 Letters91

 Linguistics/ESL.....91

 Preparatory English.....91

Humanities Program.....153

I

IDILE Program66

Illness21

In Progress (IP)22

Incomplete (I)21

Individual Study Course276

Industrial Arts and Technology Program154

Industrial Controls, Electrical Systems Technology Program.....	140
Industrial Refrigeration - CARO/EPA - Section 608 Certification, Air Conditioning.....	102
Industrial Technology Programs	154
Industrial Training, CTC.....	86
Information Security I, Computer Information Technology.....	128
Information Security II, Computer Information Technology.....	128
In-State Residency.....	13
Institutional Student Learning Outcomes, Fresno City College.....	8
Instructional Materials Fee	18
Instrumental Music Program	168
<i>IntenseCity</i>	69
Intercollegiate Activity Courses	297
Interdisciplinary Studies Course	276
Interior Design Course.....	276
International Admission.....	12
Intersegmental General Education Transfer Curriculum (IGETC).....	45
Intra-District (SCCCD) Articulated Courses, Common Courses and In-Lieu Courses	193
Intra-District Transfer.....	15
Introduction.....	7

J

Japanese Courses.....	263
Journalism Courses.....	276
Journalism Program.....	155
Juvenile Correctional Officer Core Program	99

K

Key to Graduation or Transfer Status Designations.....	190
--	-----

L

Laboratory Assistant Course.....	277
Latin American Studies Courses.....	277
Law Enforcement Option, Criminology Program	135
Learning Assistance Courses.....	277
Learning Resources Center (LRC)	65
Legal Office Professional, Business & Technology Program.....	119
Liberal Arts with Areas of Emphasis	155
Liberal Arts, Emphasis in American Sign Language.....	156
Liberal Arts, Emphasis in Anthropology/Criminology.....	156
Liberal Arts, Emphasis in Anthropology/Economic/Geography	157
Liberal Arts, Emphasis in Asian Language	157
Liberal Arts, Emphasis in Cultural Studies.....	158
Liberal Arts, Emphasis in Foreign Languages	158
Liberal Arts, Emphasis in History/Political Science.....	159
Liberal Arts, Emphasis in Interdisciplinary Science.....	159
Liberal Arts, Emphasis in Philosophy/Humanities.....	160
Liberal Arts, Emphasis in Romance Languages	160
Liberal Arts, Emphasis in Social Sciences.....	161

Liberal Arts, Emphasis in Spanish	161
Liberal Studies (Credential) Program	162
Library.....	65
Library Skills Courses	277
Library Technology Courses	278
Library Technology Program	163
Life Science Program.....	164
Linguistics Courses	278
Logistics and Distribution Program.....	115
Lost and Found.....	66
Lower Division Transfer Pattern.....	37

M

Mail Services, Telephone	67
Maintenance Mechanic, CTC.....	87
Makeup Work.....	21
Management and Supervision Program.....	117
Manufacturing Mechanic Courses.....	278
Manufacturing Mechanic, CTC.....	87
Manufacturing Option, Industrial Technology Program.....	154
Manufacturing Technician Program.....	164
Map, Fresno City College	Inside Back Cover
Marketing Courses	279
Marketing Program	165
Marketing, Fashion Merchandising Program	165
Marketing, Retail Management Program.....	166
Math Placement (Assessment)	16
Mathematics Courses.....	279
Mathematics Program.....	167
Mathematics, Science, and Engineering Division	92
Biology	92
Chemistry.....	92
Computer Science.....	93
Engineering	93
Geology.....	93
Life Science	93
Mathematics	93
Physical Science.....	93
Physics.....	93
Matriculation.....	14
Matriculation Checklist.....	14
Matriculation Exemptions	15
Maximum Course Load.....	20
MCSE Core Program, Computer Information Technology	128
MCSE Networking, Computer Information Technology Program.....	129
Mechanical and Electrical Systems, Air Conditioning Program.....	102
Medical Assistant-Clinician Program	167
Medical Assisting Courses.....	281
Medical Billing Assistant Program.....	121

Medical Coding Program	149
Medical Office Professional, Business & Technology Program	120
Metal Fabrication Option, Welding Technology Program	186
Microcomputer Software Specialist, Computer Information Technology Program	129
Microsoft Access, Computer Information Technology Program	129
Microsoft Excel, Computer Information Technology Program	130
Microsoft Office, Computer Information Technology Program	130
Microsoft Word, Business & Technology Program	121
Military Service, Credit for	25
Military Science Courses	282
Military Withdrawal (MW)	22
Mission of Fresno City College	7
Multimedia Option, Graphic Communication	148
Multiple Degrees	32
Museum of Anthropology	70
Music	70
Music Activities	70
Music, Applied Courses	284
Music Courses	283
Music, History and Appreciation Courses	284
Music, Intermediate/Advanced Ensembles and Individual Lessons Courses	285
Music, Large Performing Organization Courses	287
Music Programs	168
Music Theory Courses	283
N	
Natural Science Course	289
Network/Computer Equipment Use Policy	52
Network/Computer Technician, Computer Information Technology Program	130
Network Security, Electrical Systems Technology Program	140
Networking/Computer Technician, Electrical Systems Technology Program	141
Newspaper, College	69
Nondiscriminatory Policy and Obligations, Statement of	55
Nonresident and International Tuition, Regular and Summer Sessions	17
Nursing, Registered Courses	289
Nursing, Registered Program	171
O	
Office Professional I, Business & Technology Program	118
Office Professional II, Business & Technology Program	118
Organization of New Clubs	69
Other Policies	57
Out-of-State Residency	13
Out-of-State Students	13

P	
Paralegal Courses	291
Paralegal Program	172
Parking Fee	18
Parking Fee, Refund	19
Parking Regulations	55
Parking, Student	55
Pass/No Pass (P/NP)	22
Pep Squad	298
Personal Finance and Investments Program	117
Personal Sales, Marketing Program	166
Peters, Leon S., Honors Program	29
Phi Theta Kappa	30
Philosophy Courses	293
Philosophy Program	173
Photography Courses	294
Photography Programs	173
Photojournalism Program	175
Physical Education Courses	295
Physical Education, General Activity Courses	295
Physical Education, Intercollegiate Activity Courses	297
Physical Education, Preprofessional Courses	297
Physical Science Courses	299
Physical Science Program	93
Physics Courses	299
Piano Courses	285
Piano Music Program	169
Pipe and Structural Steel Certification Option, Welding Technology Program	187
Placement, Advanced (AP)	23
Placement Testing (Assessment)	16
Plagiarism	53
Police Academy	75, 85
Police, District	61
Political Science Courses	299
Portuguese Courses	263
Powertrain Technician, Automotive Technology	112
Pre-Academy Training Option, Criminology Program	136
Prehospital Paramedic Care	145
Preparation in Microsoft Office, Computer Information Technology Program	130
Preparation to Enter Four-Year Colleges or Universities	36
Preprofessional Courses, Physical Education	297
Prerequisites	190
Privacy Act	57
Probation, Academic	28
Probation and Dismissal	28
Probation Core Course Program	100
Probation, Counseling	28

Probation, Progress	28	Repetition of Courses Successfully Completed.....	28
Probation, Removal From.....	28	Report Delayed (RD)	22
Professional Photography Program.....	173	Requalification – Basic Course Program	100
Programs, Associate Degree and Certificates	97	Requirements for AA and AS Degrees	33
Progress/Academic Dismissal.....	28	Residency	13
Progress/Academic Dismissal, Circumstances for Appeal or Exception of	29	Respiratory Care Practitioner Courses	303
Progress/Academic Dismissal, Readmission Following	29	Respiratory Care Practitioner Program	179
Progress and Attendance Policies, Veterans	76	Retailing, Marketing Program	166
Progress Probation,		Rights and Privacy Act Information	57
Placement on.....	28	Rights and Responsibilities, Enrollment	54
Removal from.....	28	ROTC Studies, U.S. Air Force and U.S. Army.....	75
Provisional Admission of Students.....	12	Russian Courses.....	263
Provisional Student Status	12		
Psychology Courses.....	300	S	
Psychology Program.....	175	Satisfactory Progress.....	28
Psychological Services.....	66	Satisfactory Scholarship	26
Public Information.....	66	Schedule Change, Class.....	17
Public Safety Dispatcher Program	100	Schedule of Classes.....	190
Publications.....	69	Scholarships.....	62
Puente Project.....	66	School To Work, Clerical Program.....	180
		School To Work, Workability Program	181
		Services to Students with Disabilities	60
		Sexual Harassment Policy	57
R		Sign Language Interpreting Preparation Program.....	181
Radiologic Technology Courses	301	Small Business Management Program	117
Radiologic Technology Program	176	Smoking in Campus Buildings	52
<i>Rampage</i>	69	Soccer, Competitive.....	298
<i>Ram's Tale</i>	69	Social Activities, Clubs	69
Readmission	12	Social Science Division.....	94
Readmission Following Academic/Progress Dismissal	29	Career Training.....	94
Real Estate Courses.....	302	Social Work Option, Human Services Program.....	152
Real Estate Program.....	177	Sociology Courses	304
Records, Holds.....	15	Softball, Competitive	298
Recreation Courses	303	Spanish Courses.....	263
Recreation Leadership Program	178	Spanish Program.....	182
Reedley College.....	96	Special Areas of Study.....	71
Refund of Associated Student Body Membership.....	19	Allied Health.....	71
Refund or Reversal of Enrollment Fees and Tuition	19	Career & Technology Center.....	71
Refund of Health Fee.....	19	Developmental Education Program.....	73
Refund of Parking Fee.....	19	English as a Second Language (ESL) Program	74
Refund Policy, Bookstore.....	58	Fire Academy.....	74
Refund to Students	19	Fresno City College Training Institute	74
Registered Nursing Courses.....	289	Honors Program	74
Registered Nursing Program.....	171	Police Academy	75
Registration.....	15	ROTC Studies–U.S. Army and U.S. Air Force	75
Registration Holds	15	Veterans Services	76
Removal from Class by Instructor.....	55	Weekend College.....	77
Renewal Petition.....	27	Work Experience (Cooperative) Education.....	77
Repeatability of Courses	190		
Repeated Courses/Academic Renewal Petition.....	27		

Special Studies Courses	305	Transfer Center.....	60
Spring Semesters.....	10, 11	TRIO Programs.....	67
State Center Community College District	311	Tutorial Services.....	65
Statement of Nondiscriminatory Policy and Obligations.....	55	Upward Bound Program	67
Student Activities.....	68	USEAA Academic Program	67
Student Assembly	51	Writing and Reading Center – LI-134	66
Student Body Fee.....	18	Student Understanding College, Careers, Employment, Support and Success	182
Student Conduct Standards.....	51	Studio Art Program.....	110
Student Conduct Standards, SCCCD Policy Statement.....	51	Summary of Admission Requirements	13
Student Enrollment Responsibilities.....	54	Summer Semesters	10, 11
Student Grade Review.....	22	Summer Units Allowed.....	20
Student Grievance Policy.....	55	Supervised Tutoring Course.....	306
Student Organizations.....	68	Surgical Technology Courses	306
Student Protests and Demonstration	52	Surgical Technology Program	182
Student Publications	69	Swahili Courses.....	265
Student Right-To-Know Act.....	9	System Support Specialist, Computer Information Technology Program.....	131
Student Support Services	58		
Bookstore.....	58	T	
CalWORKs	59	Table of Contents	3
Career Center	59	Teacher Aide.....	183
Child Development Center.....	59	Teacher Aide (General) Program.....	183
College Relations	59	Teacher Education.....	184
Computer Lab	65	Telephone and Mail Services	67
Counseling Department.....	59	Telephone Number Changes	57
Disabled Students Programs and Services (DSP&S)	60	Tennis, Competitive	298
District Police.....	61	Theatre Arts.....	185
Employment Resource Center.....	61	Theatre Arts Courses	306
Extended Learning Center – Reading, Writing and Math Lab.....	61	Theatre Arts Program	185
Extended Opportunity Program and Services (EOPS)	61	Track and Field, Competitive.....	298
Financial Aid.....	62	Training Institute.....	74
Financial Aid, Return of Aid Based Upon Total Withdrawal	62	Transfer Admission of Students.....	12
Financial Aid and Scholarships.....	62	Transfer-Baccalaureate Degree Level Courses.....	41
Financial Aid Coursework Repeatability.....	62	Transfer Information.....	36
Financial Aid Satisfactory Progress	62	Transcript Fee.....	18
Food Services.....	65	Transcript Requests.....	18
Health Services.....	65	Transfer Center.....	60
Housing Information.....	65	Transfer Course List, CSU	41
IDILE Program	66	Transfer Course List, UC	43
Learning Resources Center (LRC).....	65	Transfer Requirements	36
Library.....	65	Transfer Requirements to California State University (CSU)	38
Lost and Found.....	66	Transfer Requirements to University of California (UC).....	43
Psychological Services	66	Travel-Study Credit	25
Public Information.....	66	TRIO Programs.....	67
Puente Project.....	66	Tutorial Services.....	65
Student Support Services Program (SSSP)	67		
SYMBAA	67		
Telephone and Mail Services	67		

U

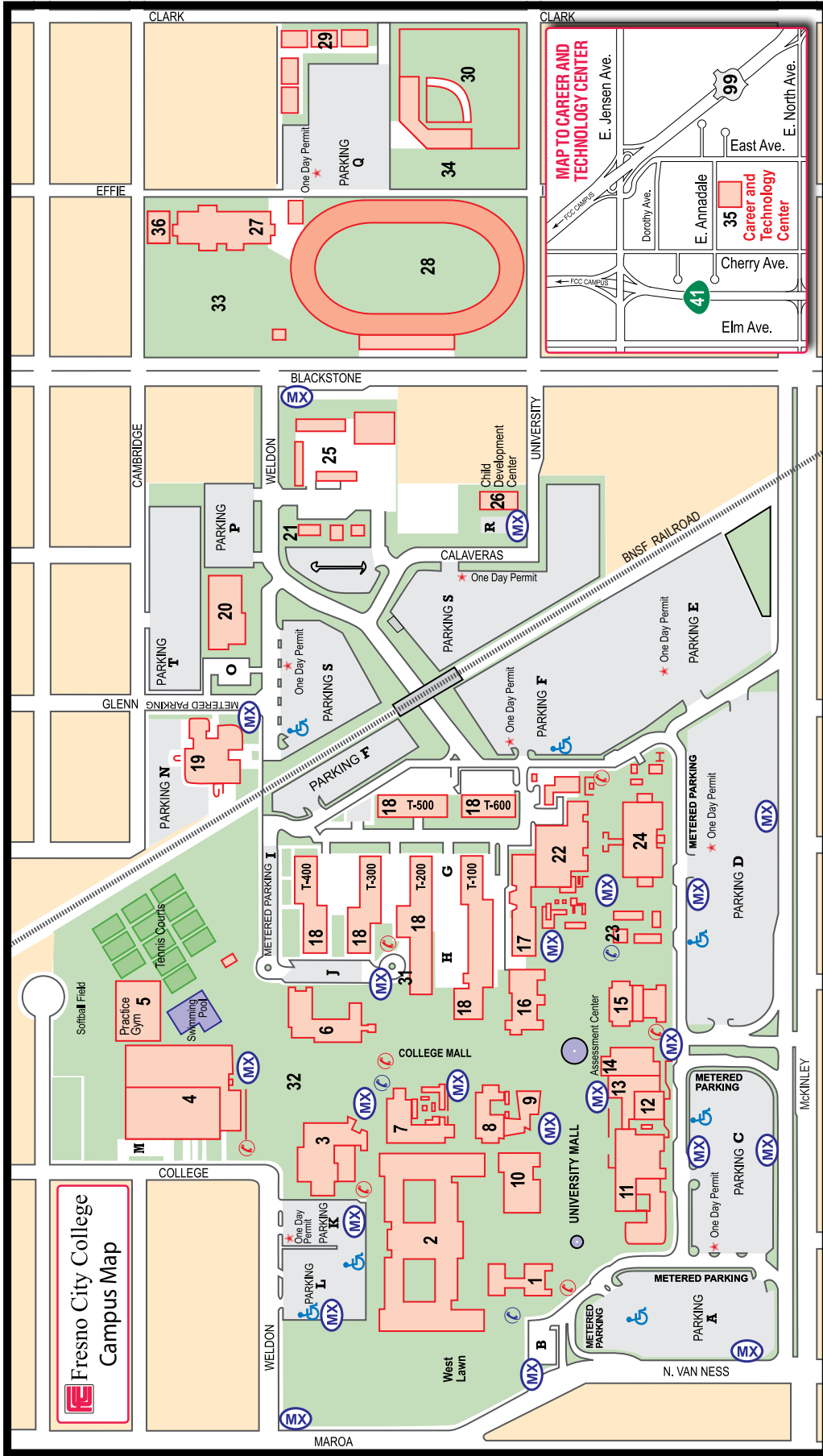
Units of Academic Credit	20
University of California Transfer Requirements	43
University of California Transfer Course List	43
Upward Bound Program	67
USEEA Academic Program	67

V

Veterans, Academic Limitations	76
Veterans, Progress and Attendance Policies	76
Veterans and Dependents, Educational Benefits for	76
Veterans Services	76
Vision Statement, Fresno City College.....	7
Vocal Music Program.....	168
Vocational English as a Second Language Courses.....	308
Voice Courses.....	285
Volleyball, Competitive	298

W

Water Polo, Competitive	299
Water Treatment and Distribution Course	308
Web Design, Graphic Communication Program.....	148
Web Developer, Computer Information Technology Program	131
Web Page Development, Computer Information Technology Program	131
Weekend College	77
Welding Design & Fabrication Program.....	188
Welding Multi-Process Program	188
Welding Technology Courses.....	308
Welding Technology Programs	186
Wind Turbine Technician Program	189
Wind Turbine Technology Courses.....	309
Wireless Networks, Electrical Systems Technology Program	142
Withdrawal (W)	22
Withdrawal from Classes	25
Withdrawal from College.....	26
Withdrawal/Dropping Due to Extenuating Circumstances.....	26
Women's Studies Courses	309
Women's Studies Program	189
Work Experience	24, 77
Work Experience, General Course	310
Wrestling, Competitive.....	299



Campus Buildings:

1. Administration Building (A)	29. Police Academy (PA)
2. Old Administration Building	30. Euless Ball Park (EU)
3. Cafeteria/Student Lounge (C)	31. CaiWORKS (T-200)
4. Gymnasium (G)	32. Veterans Peace Memorial
5. Practice Gym (PG)	33. Soccer Field (SF)
6. Student Center/Bookstore (SC)	34. Football Practice Field
7. Business Education (BE)	35. Career Technology Center (CTC)
8. Social Sciences (SO)	36. Physical Performance Center (PPC)
9. Forum Hall (FH)	

Campus Buildings:

10. Student Services (ST)	20. State Center Community College District Office (DO)
11. Library (LI)	21. District Police Office (PD)
12. Tutorial Center (LI)	22. Theatre Arts (TA)
13. Learning Resources Center (LI)	23. Humanities Offices (HU)
14. Assessment Center (AC)	24. Math/Science (S)
15. Language Arts (LA)	25. Campus Service Center
16. Art/Home Economics (AH)	26. Child Development Center (CDC)
17. Speech/Music (MS)	27. Fieldhouse (F)
18. Applied Technology (T)	28. Ratcliffe Stadium (RS)
19. Health Sciences (HS)	

Campus Buildings:

19. Parking N	29. Parking Q
20. Parking O	30. Parking R
21. Parking P	31. Parking S
22. Parking T	32. Parking U
23. Metered Parking I	33. Metered Parking J
24. Metered Parking K	34. Metered Parking L
25. Metered Parking M	35. Metered Parking N
26. Metered Parking O	36. Metered Parking P
27. Metered Parking Q	37. Metered Parking R
28. Metered Parking S	38. Metered Parking T
29. Metered Parking U	39. Metered Parking V
30. Metered Parking W	40. Metered Parking X
31. Metered Parking Y	41. Metered Parking Z

Campus Locator Legend, Parking Lots: A thru T

Public Lots in gray tint
One-day Parking Permit Dispenser
Handicapped Parking
Mobility Service Tram Stops
Pay Telephones
Emergency Telephones