## College of the Sequoias

 Welcomes you

College of the Sequoias (COS) is part of this nation's largest system of higher education. In California alone 1.6 million students enroll in community colleges every year. COS now serves more than 10,000 students.

College of the Sequoias is proud of its tradition of serving students. COS is about people helping people. Our dedicated faculty and staff are committed to ensure that each student is given the opportunity of transferring to baccalaureate institutions or leaving COS prepared for the job market. COS provides a solid foundation for further study as well as the opportunity for life-long learning.

College of the Sequoias is committed to creating an environment that offers all students the freedom and encouragement to explore new avenues and possibilities and fostering a climate marked by recognition and respect for students, faculty, and staff.

Kamiran S. Badrkhan, Ph.D.
Superintendent/President

## Proposition 187


#### Abstract

The preliminary injunction regarding Proposition 187, issued March 15, 1995, remains in effect until further court notice; students who are noncitizens or who are not officially authorized by federal law to be present in the United States will not be prevented from seeking admission, enrolling in, continuing their enrollment in, or attending any California Community College. Students will only be asked to verify their immigration status for the sole purpose of determining residence status for tuition purposes (March 24, 1995, California Community College Chancellor's Office).


## Notice

By order of the San Francisco Superior Court, community colleges and all other public postsecondary institutions have been prohibited from taking action to implement or enforce Sections 8 and 9 of Proposition 187, an initiative passed by the electorate on November 8, 1994. Pending further court order, this college will take no action to prohibit the admission, enrollment or attendance of any person who isn't a United States citizen or any person who isn't otherwise authorized by federal law to be present in the United States. Students and applicants will not be prohibited from attending or continuing their enrollment based on the provisions of Section 8 and 9 of Proposition 187. In addition, this college will take no action to determine the legal status of enrollees as such status relates to the implementation and enforcement of Proposition 187. Students and applicants will only be asked to verify their immigration status for the sole purpose of determining their residency status for tuition purposes. No information regarding any student or applicant will be transmitted to the U.S. Immigration and Naturalization Service (INS), directly or indirectly, pursuant to Sections 8 or 9 of Proposition 187.


The College of the Sequoias Community College District has made every reasonable effort to determine that information stated in this catalog is accurate. Courses and programs offered, together with other matters contained herein, are subject to change without notice by the Administration of the College of the Se quoias Community College District for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the District. The District further reserves the right to add, amend, or repeal any of their rules, regulations, policies, and procedures.

## Student Right-to-Know Disclosure

The Student Right-to-know ( SRTK) legislation (Public Law 101-542) requires an institution to produce and publicly disclose its graduate rate and transfer rate.

These two SRTK rates have been derived from the annual IPEDs/Graduation Rate Survey performed by the California Community Colleges Chancellor's Office and are available from the Dean, Student Services in Room 103A. Copies may also be requested by calling (559) 730-3879.

## Compliance Statement

College of the Sequoias does not discriminate on the basis of race, color, national origin, sex (including sexual harassment), handicap (or disability), or age 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 Age Discrimination Act of 1975 (pertaining to age), and the Americans with Disabilities Act of 1990. 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 grievance, or to request a copy of the grievance procedures covering discrimination complaints may be directed to:

Dean, Human Resources
Equal Employment Opportunity Officer and Title IX Coordinator
Donald Mast, Section 504 Coordinator
and ADA Compliance Officer
College of the Sequoias
915 South Mooney Boulevard
Visalia, California 93277
(559) 730-3700

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

College of the Sequoias recognizes its obligation to provide overall program and physical accessibility throughout the College for handicapped persons. Contact the Section 504 Coordinator/ADA Compliance Officer to obtain information as to the existence and location of services, activities, and facilities that are accessible to and usable by handicapped persons.

Inquiries regarding Federal laws and regulations concerning nondiscrimination in education or the District 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, California 94105
Students with disabilities attending College of the Sequoias are able to receive instructional materials in alternate formats to assist them in achieving academic success. Alternate formats include audio, (books on tape, CD, or MP3), Braille, electronic text, large print, or tactile graphics (raised lines representing graphics, diagrams of pictures). In addition, members of the community who may possess a disability may request COS published materials in alternate formats.

## 2004-2005 <br> Catalog and Announcement of Courses College of the Sequoias

## A Public Community College



College of the Sequoias is a member of the American Association of Community and Junior Colleges and the Community College League of California. The college is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, (10 Commercial Blvd, Novato, CA 94949, telephone (415) 506-0234, Fax (415) 506-0238), an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education. The College is an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education. It is listed in the Directory of the Western Association of Schools and Colleges and in the Accredited Institutions of Postsecondary Organizations, 1990-91, a publication of the American Council on Education.

The college is approved by the United States Immigration and Naturalization Service to accept international students and is approved for veteran training under both State and Federal laws.

## ALTERNATIVE FORMATS

In accordance with section 504 of the Rehabilitation Act and ADA requirements, this publication can be made available in alternative formats as a reasonable accommodation. To request a copy of alternative formats please contact the Disability Resource Center (559) 730-3805.

## College of the Sequoias Community College District 915 South Mooney Boulevard Visalia, California 93277 <br> (559) 730-3700

Published by the Board of Trustees

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## College of the Sequoias Foundation

College of the Sequoias and residents of the Central San Joaquin Valley are partners in progress, each relying upon the otherfor strength and support. Supported by members of our District, the Foundation greatly enhances services the college provides to students.

The COS Foundation was organized in the fall of 1985 to assist the college in the attainment of its educational, cultural and scientific goals. It raises funds for the college and also solicits donations of property and other assets. Contributions are used for such things as scholarships, equipment and other critical needs. Donations can be given in a number of ways: cash, stock, real property, deferred gifts, memorials, matching gifts and scholarships.

Gifts to the Foundation aid the college in providing quality education at an affordable cost, ensuring that College of the Sequoias will continue to graduate well-trained, competent men and women who will take their places in the business, industry and service occupations of our valley.

Persons desiring to learn how they may contribute to the COS Foundation and the work of the College of the Sequoias are invited to contact Ms. Kristin Risner, Executive Director, COS Foundation at 730-3861.


Dave Cargill
Cover and Maps

Gail Robinson
Catalog Design and Editand Miscellaneous Photographs

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## Academic Calendar

| Fall Semester, 2004 | August 16 to December 21, 2004 |
| :---: | :---: |
| August2-11 | Fall Open Web \& Telephone Registration for Eligible Students |
| August9-11 | Fall Web \& Telephone Registration for High School Accelerated Students - Juniors and Seniors Only |
| August12-15 | No Registration |
| August16 | Fall Semester Begins |
| August16-27 .................................................................................... Fall Late Web \& Telephone Registration With Instructor Add Codes |  |
|  |  |
| September6 | Labor Day Holiday (no classes) |
| October 22 | Fall Final Drop Date - Drop Classes on the Web or the Telephone Access System |
| November 11 | Veterans' Day Holiday (no classes) |
| November 23 | 2005/2006 Scholarship Application Deadline (4:45 pm) |
| November 24-26 | Thanksgiving Day Holiday (no classes) |
| November 30 | Last day to File for Associate Degree for Fall 2004 |
| December 15-21 | Fall Final Exams |
| December 21 | Fall Semester Ends |
| December21 | Last Day to Make Up Incomplete "I" Grades for Fall 2003 Semester |
| December22-January 17 | Recess Between Semesters |

Spring Semester, 2005
J anuary 18 to May 26, 2005

Admission Applications and Registration on the Web at www.cos.edu


## About our college...

## College of the Sequoias

College of the Sequoias is a two-year community college offering educational and enrichment programs for the residents of its district in Tulare and Kings Counties. The District was established in 1925 and moved to its current 62-acre site in 1940.

In addition to the primary campus, COS conducts an agriculture program on a 16 acre farm, and has also purchased an additional 495 acres for a future farm site. COS offers general education coursework in nearby communities including a college center in the city of Hanford.

## College Mission

College of the Sequoias: Is a comprehensive, student-centered community college, dedicated to enhancing our diverse educational and cultural campus environment.

College of the Sequoias: Affirms that our mission is to help students achieve their transfer and/or occupational objectives and to advance the economic growth and global competitiveness of business and industry within our region.

College of the Sequoias: Is committed to supporting students' development of basic skills and to providing self-supporting community education classes, contracteducation and training, and related studentservices.

Therefore, our mission focuses on preparing students for productive work, lifelong learning, and community involvement.

## Philosophy

College of the Sequoias believes that all individuals are innately valuable and entitled to develop their full potential; that a healthy and vigorous society benefits from an informed appreciation of the cultural, racial and socioeconomic variations among its members; that a democracy depends upon a critical, questioning and informed citizenry; and that the college programs serve the individual, the community and society.

## Enrollment

College of the Sequoias' total student population is approximately 10,000 and is comprised of the following: 40\% Caucasian, 43\% Hispanic, 6\% Asian or Pacific Islander, 3\% Black,1\% American Indian, and 7\% are unidentified. The current trends reflect increased enrollments of women, minorities, students who state that English is not their primary language, and students who planto transfer.

Students are offered a wide variety of academic and vocational programs. The college administration, faculty and staff are committed to the principle that society benefits when all of its members have an opportunity to develop to their fullest potential. All those in the college community are dedicated to reaching out to a diversified and changing population which has increased by more than 25 percent in the past decade.

## Faculty and Staff

College of the Sequoias has 153 full-time faculty, some 251 adjunct faculty, 32 administrators and 194 classified employees--all of whom are dedicated to providing the students with the very best educational environment possible. Faculty members are selected not only for their academic qualifications and experience, butfor their interest in maintaining close student-teacher relationships.

## The District

The District is governed by a five-member Board of Trustees elected through a ward system within the boundaries of Tulare and Kings Counties. In addition to Visalia, the nearby towns of Corcoran, Hanford, Tulare and Woodlake are represented by those members.

## The Community

College of the Sequoias is located in Visalia, California (in the County of Tulare), 185 miles north of Los Angeles and 225 miles south of San Francisco. In addition to easy access to the Giant Sequoias, residents of the District enjoy nearby Sequoias and Kings Canyon National Parks and two large lakes (Kaweah and Success) for boating and fishing. The Central Valley also features many fine golf courses. The Tulare County Symphony and the annual COS Musical are just two of the many performing and fine arts enjoyed, and practiced, by residents. The annual County Fair, held in the City of Tulare each fall, attracts world-renowned performers.

Since 1990, the population of Tulare and Kings Counties has increased by almost $25 \%$ and now includes approximately 379,000 residents and 133,000, respectively. Although the District enjoys a retail and professional sector, Tulare County is the second most productive agricultural area in the nation, and the annual Farm Show is the largest of its kind in the world.

# About our college... 

## College Objectives

The instructional offerings and support services are designed to meeta variety of educational needs of the community and include the following objectives:

## Responsibility to and Involvement of the Community

The District's primary responsibility is to meet the changing educational needs of its adult population. This responsibility is achieved through community participation in planning, educational offerings and community services.

## Open Access Principle

The District maintains an open access admissions policy. Enrollment is open to any person who is a high school graduate or who is 18 years of age or over and able to benefit from instruction. Enrollment is also open to high school students who qualify for enrollment.
"The policy of this District is that, unless specifically exempted by statute or regulation, every course, course section, or class, reported for state aid, wherever offered and maintained by the District, shall be fully opento enrollment and participation by any person who has been admitted to the college and who meets such prerequisites as may be established pursuant to regulations contained in Article 2.5 (commencing with Section 55200) of Subchapter 1 of Chapter 6 of Division 6 or Title 5 of the California Code of Regulations."

Regarding students who are noncitizens or who are not officially authorized by federal law to be present in the United States, but have applied for application at this college, please refer to our Position Statement on Proposition 187 on Page 2 of this catalog.

## Programs and Services

## Adult and Life-long Learning Education

To provide courses leading to upgrading of educational skills, new skill preparation, or instruction to meet the needs of adults in the District.

## Citizenship Education

To provide training and experiences which will prepare every student to function effectively as a patriotic citizen with pride in the United States of America.

## Economic Development Education

The ability to assess an organization's needs and deliver job-specific knowledge to workers defines the mission of the Economic Development Education Center at College of the Sequoias. The Office hopes to forge new relationships between the private and public sectors in the central valley and beyond, using COS faculty members' vast cumulative experience and high level of expertise.

## Employment Development

To provide training and assistance in obtaining the knowledge and skills forpursuing employmentopportunities.

## General Education

To provide courses thathelp students value cultural similarities and differences, attain a sense of self-worth and personal emotional stability, develop critical thinking, maintain physical health and fitness, gain aesthetic awareness, understand the environment and its ecology, and increase the student's abilities to cope with everyday living as an adult in a rapidly changing world.

## Remediation

To provide courses that enable students to acquire oral and written language and math skills to enhance their ability to benefit from the college's instruction programs.

## Support Services

To provide a broad base of support services to assist students in successfully attaining their academic and occupational goals. Included are comprehensive counseling and guidance services, assessment, financial aid and scholarships, job placement, veterans' assistance, tutorial programs, disabled student programs and extended opportunity programs and services.

## Transfer Curric ulum

To provide quality programs which develop the intellectual and vocational potential and other prerequisite courses so students may successfully transfer with advanced standing to four-year colleges and universities.

## Vocational andTechnical Training

To provide degree and certificate programs and special courses designed to prepare students with the skills and competencies which lead to successful competition in the job market.

# About our college... 

## College Facilities

Traditional facilities at the campus include lecture classrooms; science laboratories; computer laboratories in Art, English, Math, Business, and Nursing; a photography laboratory; a multipurpose gymnasium; a theater; an art gallery; an industrial and automotive technology complex; a library and media center; alearning resource center; Administrative and StudentServices offices; a Disabled Student complex; a student union; a college farm; abookstore; and student activities office.


Recreational facilities include a track and field complex; outdoor tennis; handball courts; pool; basketball and volleyball courts (gym); softball, baseball, and football fields; weight room which utilizes both nautilus and free weights; and an outdoor stage.

In addition, College of the Sequoias has developed facilities that supportits academic programs.

## Child Development Center

The Child Development Center serves as a training laboratory for students in the Child Development Program, students going into the child care business, as well as parents and community members. The professionally staffed Child Development Center offers an exemplary early childhood education program. The Center is a state-of-the artfacility.

## Farm

The COS Farm located at 2245 South Linwood in Visalia and provides each agriculture studentwith hands-on, learn-by-doing education in a wide range of skills. The laboratory consists of a 70-cow Registered Holstein herd which is one of the top herds in the area of milk production. A complete horticulture facility provides students with practical landscape experiences while working in the unit during class laboratories or after hours at student work sites. The farm laboratory provides students with worksites in animal science, horse production, dairy, ornamental horticulture, floriculture, turfculture, crop production, vegetable gardening and soils.

## Hanford Center

College of the Sequoias has a center at 12582 13th Road in Hanford, California. A wide variety of general education classes and some vocational classes are offered at that site during day and evening hours. Services available to students include testing, orientation, counseling, registration, tutoring, and book sales. Call (559) 585-3933 for further information.

## Off-Campus Sites

To make it easier for COS students to attend classes, the college offers regular accredited courses at nine off-campus locations within the District, including the Hanford Center.

Students may register for off-campus classes through the Web and Telephone Registration Process.

## Off-Campus Locations

## COS FARM

2245 South Linwood Visalia

CORCORAN
Corcoran High School
Whitley \& Letts Avenues
CUTLER/OROSI
Cutler-Orosi Unified High
School
418Road 128

## EXETER

Exeter High School
820 San Juan Avenue
FARMERSVILLE
Farmersville Senior Center

## HANFORD

Hanford COS Center
1258213thRoad
Rooms:1-9
LINDSAY
Lindsay High School 1701East Tulare Road

TULARE
Tulare Union High School 755East Tulare

Tulare Western High School 824 WestMaple

## WOODLAKE

Woodlake Union High
400 West Whitney

General Information


[^0]
## NUMERICAL LIST

Administration
Gymnasium
Consumer-Family Studies/
Language Arts
Industrial Education
Industrial Shop
Student Center (Under Construction)
Life Science
Old Music Building
Physical Ed Gym Annex
Social Science
Student Bookstore
Student Union
Campus Police/Transportation
Facilities
Business \& Foreign Language
Lecture Hall
Vocational Education
Maintenance
Human Resources
Theatre
Instructional Media Center
Adaptive P.E.
Fine Arts/Math
Child Development Center
Nursing Portable
Administration Storage
Student Development Center
Maint. Storage
Maint. Storage
Utility Plant
Food Court
Coffee House
CalWORKs 1
CalWORKs 2
Tech Prep
Green House
CSUF/COS Center
CSUF Admin. Office
Health Center
Portable Classrooms
Music Building
Computer Services
Learning Resource Center 5\% 8도̊ㅇ 011
013
014
015
016
017
018 옹 -
 Emergency Phone

BIdg. No. GRID


Bldg. No. GRID




$\qquad$
daptive P.E.
Administration
Admissions \& Records Art Gallery

Assessment \& Testing
ASB
Board Room
Bookstore
Box Office
Business
CSUF Admin. Offices/COS Center CalWORKs

Campus Police
areer Center
Cashier's Office
Chemistry
Child Development Center
Coffee House
Computer Services Computer Services
Consumer/Family Stu Contract Education Copy \& Mail Services Counseling Center Disability Resource Center EOP\&S

Emergency Phone Facilities and Operations Office Financial Aid Fine Arts/Math Fire Tech

Fiscal Services Food Court \& ATM Food Service
oreign Language Foundation Office Graphics

Gymnasium

General Information


"One should guard against preaching to young people success in the customary form as the main aim in life.

The most important motive for work in school and in life is pleasure in work, pleasure in its result, and the knowledge of the value of the result to the community."

Albert Einstein

## Eligibility for Admission

Any graduate of an accredited high school may be admitted to College of the Sequoias. Also, any person having successfully completed the California High School Proficiency Examination (CHSPE) or the General Educational Development Test (G.E.D.) with scores of 45 overall and with no subtest lower than 35 may be admitted.

The college may admit other persons 18 years of age or over when the evidence indicates that the individual will benefit from college level instruction. Students are encouraged to complete high school prior to enrolling in the college.

For dates relating to registration, check the calendar in the front of this catalog or inquire at the Registration Office, Room 104. Registration is through the Telephone Access System or over the Web. Information on these processes will be printed in the current Schedule of Classes and available in the Registration Office, Room 104.

See "Classification of Students,"Extended Learning/High School Accelerated Students, for concurrentenrollment of 7-12 students.

## Placement Tests

All students are required to take the COS Placement Test for math and English if they have completed or will complete six (6) or more units AND plan to pursue either a certificate, Associate degree, or transfer program. All other students who plan to enroll in an English or math course or any course with an English and/or math prerequisite, mustalso take the test. Students may be exemptfrom the Placement Testrequirements based upon criteria listed inthe Matriculation Policies section of the catalog. Tests are administered throughout the year. Information on test dates and test registration may be obtained by contacting the Assessment/Placement Test Office in Room 157 (730-3737).

## Summary of Admission Requirements

 (Full-time Students, Twelve (12) or more units and students planning to take more than six units)Full matriculation will be required of any student who intends to enroll for seven (7) or more units of credit. Full matriculation shall require that a prospective student:

1. File a completed admission application prior to the deadline as specified in the schedule of classes.
New On-line Application: Beginning with the Spring 2004 semester, COS Admissions Applications will be filed online. Detailed instructions are printed in the schedule of classes.
2. If you are under 21 years of age, request the last high school attendedto send one transcript of work completed or attempted. If you have attended college, we require only college transcripts. Transcripts are to be official copies sent directly from previous schools to the Admissions and Records Office, College of the Sequoias, 915 S. Mooney Blvd., Visalia, CA 93277.
3. If the G.E.D. Test or the California High School Proficiency Examination (CHSPE) was taken in the last two years, have the G.E.D. scores or a copy of the CHSPE Certificate sent to the Admissions and Records Office.
4. Requesteach college of attendance to send one complete transcript of work attempted, whether or not credit was earned. Transcripts are to be official copies sent directly from the previous schools to College of the Sequoias. Any high school or college transcript received by College of the Sequoias becomes the property of the College and will not be released to the student or other institutions.

## Summary of Admission Requirements

## (Part-time Students, Six (6) or Fewer Units )

1. File a completed admission application prior to the deadline asspecified in the Schedule of Classes.
New Online Application: Beginning with the Spring 2004 semester, COS Admissions Applications will be filed online. Detailed instructions are printed inthe schedule of classes.
2. File one transcript of all previous high school and/or college academic records if the student wishes to:
a. Apply for a Certificate of Achievement or an Associate Degree
b. Apply for financial assistance (EOPS, financial aid, veterans)
c. Apply for special programs, particularly in the health, arts and sciences
d. Validate that a prerequisite has been met either in high school or at anothercollege.

## Advanced Placement

College of the Sequoias recognizes high achievement by students who have successfully completed one or more Advanced Placement Examinations as authorized by the College Entrance Examination Board.

Students who have successfully completed courses in the Advanced Placement Program with a score of 3,4 , or 5 may be granted credit for purposes of general education certification, graduation, advanced placement in the college's sequence courses, and for curriculum requirements.

Students will automatically receive creditfor Advanced Placement Examinations, if scores are sent to the college. The college will confirm the credit granted. If students choose not to receive credit for AP exams, they should request to have the credit removed from their transcript by making this request in writing to the Dean of Admissions and Records. Please be aware that other institutions, particularly four-year colleges/universities, may evaluate your Advanced Placement credits differently. Check with an Academic Counselor or the institution to which you plan to transfer for an evaluation of your AP credits.

## Classification of Students

## Freshmen:

Students with fewer than 30 units of college credit. Sophomores:
Students who have completed 30 units or more of college credit.
Other:
Students who have completed more than 60 units of college credit.

## Full-time Students:

Students carrying 12 units or more.
Part-time Students:
Students carrying less than 12 units.
Returning Students:
Students who have attended COS, but have missed one or more semesters (not including the summer semester.)
Continuing Students:
Students who are currently enrolled.
New Students:
Students who have never attended COS.

## Admissions/Matriculation

## Extended Learning/HS Accelerated Students:

$7-12$ students are required to submit an admission application and high school permission form to the Admissions and Records Office for every semester of attendance. Attendance is on a space available basis only. High school accelerated students attending a class at COS are NOT considered "continuing students."

## Registration

Students may use the Telephone Access System or Web Registration to register, add and drop classes.

## Resident Regulations

Residency determination shall be made on the basis of a residence statementcompleted at the time of application.

A "resident" is a student who has physical presence in the state for more than one year immediately preceding the opening day of instruction of the semester (EC68017,680601), and has demonstrated intentto make California their permanenthome.

A student shall be required to present evidence of physical presence in California, intent to make California their home for other than a temporary purpose; and ifthe student was classified as a nonresident in the preceding term, they may be required to demonstrate financial independence (T54020/ EC68044).

Physical presence within the state solely for educational purposes does not constitute establishing California residence regardless of the length of that presence (T554026). Residents of another state are nonresidents of California (T554030). The burden is on the student to demonstrate clearly both physical presence in California and intentto establish California residence (T554026).

A student who is a member of the Armed Forces of the United States stationed in this State on active duty, except those assigned for educational purposes to State-supported institutions of higher education, shall be entitled to resident classification until he/she has resided inthe State the minimum time necessary to become a resident(EC68075). During this time, the student should demonstrate intentto make California their permanenthome.

A student who is a natural or adopted child, stepchild (under 18 years of age), or spouse who is a dependent of a member of the Armed Forces of the United States stationed in this State on active duty shall be entitled to resident classification until he/she has resided in the State the minimum time necessary to become a resident(EC68074). During this time, the student should demonstrate intentto makeCaliforniatheir permanenthome.

## Waiver of Non-Resident Fees

Assembly Bill 540 (Firebaugh) provides for the waiver of the nonresident tuition if: (1) the individual has attended a California high school for three or more years; and (2) has graduated from a California high school or attained the equivalent; and (3) has filed an affidavit with the College if he/she is an alien without lawful immigration status. Contact the Admissions and Records office with any questions.

## College Level Examination Program (CLEP)

College of the Sequoias awards credit for the five General Examination sections of the College Level Examination Program. Six units of elective credit may be awarded for each examination that a student completes with a score of 500 or higher on the written test or 50 or higher on the computerized
test. The CLEP may also be used to fulfill certain Associate Degree general education requirements as listed in this catalog. Only students who are enrolled and matriculated at College of the Sequoias may receive CLEP credit on a College of the Sequoias' transcript.

To obtain information and make arrangements to challenge one or more of the General Examinations, students may contact the Educational Testing Office at CSU, Fresno (559) 278-2457. Upon receiving the minimum score, students may petition for credit by submitting the official CLEP Test result to the COS Admissions and Records Office, Room 107.

## International Students

College of the Sequoias accepts International Students each year. In order to keep a well-balanced representation of the various nations of the world, the number of students accepted from any one country may be restricted.

Transcripts of academic records and good health verification are required to qualify for admission. To be admitted, International Students are required to achieve a score of at least 500 ( 173 for computerized test) on the written Test of English as a Foreign Language (TOEFL), which is administered in their own country or at atest center in the United States. The International Student's annual tuition fee of approximately $\$ 5,430$ (for those students enrolled in 15 units each semester) is $\$ 163.00$ per unit, the same as for other nonresident students. International and nonresident students must also pay the resident tuition of \$18 per unit which has been included in the $\$ 5,430$ annual tuition fee listed above. A \$100 Application Fee must be paid upon application to the college. Payment should be by bank draft or money order and must be received before the Form $\mathrm{I}-20$ will be issued by the college. Tuition for subsequent semesters will be paid at the time of registration.

All international students are required to purchase medical insurance, the cost of which is approximately $\$ 500$ for the school year. The funds to cover the insurance should be paid with the nonresident tuition.

Federal and State financial aid or funding for scholarships is not available to foreign students. Working during the first year is not allowed and students must have sufficient funds to defray expenses. Each application mustbe accompanied by a certified financial statement indicating sufficient monies are available to pay college costs and living expenses.

Students on an "F" or "J" type visa are required to register for a minimum of 12 units and they must maintain the same scholastic standards as other students.

The deadline for application is April 1 for the fall and October 1 for the spring semester. Requests for application forms should be sent to the International Student Advisor, (Dean, Student Services), in the Admissions and Records Office.

## Transcripts

Applicants under 21 years of age, mustfile certified transcripts of their high school record with the Admissions and Records Office at College of the Sequoias. Applicants who have attended another college or university must file transcripts from each college or university attended. College of the Sequoias grants creditfor lower division work from accredited colleges or universities.

Failure to file transcripts may delay or prevent admission or graduation. Transcripts should be sent directly from the high school or college to College of the Sequoias. All transcripts become the property of the College and will not be returned or released to the student or other institutions.

## Exception:

The high school transcript requirements may be waived for:

1. Those who have attended college.
2. Those who have attained a college degree.
3. Those who are 21 years or older.

## Fee Assistance

The California Legislature has made funds available to low-income students who are California residents and desire to attend a community college but who are prevented from doing so by the mandatory enrollment fee. The Board of Governors' Financial Assistance Program provides several ways to help lower-income students pay the enrollmentfee. Students who qualify for the Board of Governors' Fee Assistance Program are also exempted from payment of the mandatory Health Fee (AB2336/BOG 73352.1). Please contact the Financial Aid Office, Room 105, for eligibility information.

## Fees and Expenses

Fee assistance is available to eligible students. Eligibility information may be obtained from the Financial Aid Office, Room 105.

## ASB Representation, Photo \& ID Fee

Optional purchase of a photo and identification card entitles you to all the privileges of Associated Student Body membership, including local merchant discounts. Cost is $\$ 15.00$ per year whether you purchase your permit in the spring (January to January) or the fall (August to August).

A studentrepresentationfee of $\$ 1.00$ per semester (for students enrolled in six (6) or more units) is charged. A waiver of this fee can be obtained for religious, political, moral, or financial reasons. The Representation Fee is an includable cost in student budgets for students receiving federal and/or state financial aid benefits.

A new Student Center fee will be charged all students. The fee is $\$ 1.00$ per unit up to a maximum of $\$ 5.00$ per semester.

## Enrollment Fee

An enrollmentfee of $\$ 18.00$ per unit is charged all students. An enrollmentfee of $\$ 9.00$ is charged per $1 / 2$ unit. The nonresident fee is an additional $\$ 163.00$ per unit. Students enrolled for the Fall 2004 term should anticipate afee increase. Students will be required to pay any difference enacted for the Fall 2004 term, regardless of when State legislation is finalized, unless they apply for and receive a Board of Governors Enrollment Fee waiver based on their financial circumstances, or are otherwise exempt from enrollmentfees.

## Health Fee

A mandatory health fee is charged each semester to all COS students enrolled in classes for units or who are repeating a class under the Course Audit Option. The health fee is $\$ 13$ for Spring and Fall semesters and $\$ 10$ for the Summer Semester. Fee waivers are available for low income students and for religious reasons. The health services fee helps support campus health services, including accidentinsurance.

## Material Fees

A material fee may be levied in certain courses approved by the Board of Trustees. Fees vary and are noted in the Schedule of Classes. Material fees are refunded to students who completely withdraw from class the last day of registration BEFORE the semester begins or if the class is cancelled by the college. There are no material fee refunds once the semester begins.

## Nonresident Tuition Fees

The nonresident tuition fee for the academic year 2004-2005 is $\$ 163$ per semester unit, plus applicable enrollmentfees payable each semester upon registration. The nonresidenttuition fee for foreign students is $\$ 163$ per semester unit and when the student is both a citizen and a resident of a foreign country, a $\$ 100$ processing fee must accompany the application which is deductible from the tuition fee at the time of enrollment, plus all applicable enrollmentfees. Fees are applicable whether nonresidents enroll for creditor noncredit. Guidelines and regulations for fee refunds for the nonresident student are the same as for all other students.

## IMPORTANT NOTES:

n All fees are mandated by the State and are subject to change without prior notice.
n Any increase in fees after the student registers will be charged and billed accordingly.

## Parking Fees (Optional)

Students wishing to park on campus must pay a fee. Parking permits are purchased on a semester basis. Spring and Fall semesters are \$20.00 per semester for both full-time and part-time students. Motorcycle and Moped parking is free in designated areas. CSU Fresno students may use their Spring or Fall permit from CSU Fresno or purchase a COS permit for $\$ 20.00$.

Students are charged a $\$ 10$ fee for a summer parking permit. Fall or spring semester permits are valid for summer semester.

Students not wishing to purchase a semester parking permit may purchase one-day parking passes for $\$ 1.00$ from the dispensers located in Parking Lots 1, 3, 4, 6, 7, and at the college farm.

## IMPORTANT NOTES:

n Purchase of a parking permit does not guarantee a space will be available.
n The College District is not responsible for losses due to theftor damage.

## Student Center Fee

The students of College of the Sequoias approved a $\$ 1.00$ per unit ( $\$ 5.00$ maximum per semester) Student Center fee. By California state law, this fee may only be used to finance, construct, enlarge, remodel, refurbish and operate the COS Campus Center. The state does not pay for student center construction at any of the colleges or universities; instead, it allows students to do so. This fee will be collected each year indefinitely.

## Textbooks and Supplies

Textbooks and school supplies average approximately $\$ 250$ per semester. These costs, however, vary according to the student's major. New and used textbooks and essential supplies may be purchased at the COS Bookstore.

## Admissions/Matriculation

## Payment of Fees

Payment may be made by credit card (Visa, Master Card, American Express or Discover Card), cash, check or money order. Payment over the Telephone Access System or the Web is only by credit card; payment by credit card, check, money order, agency payment (Department of Rehab, financial aid), or by any other method may occur in person at the Cashier's Office (Room 102) or at the Hanford Center. Credit card purchases may be subject to pre-approval. The following policy applies when payment is made by personal check:

- $\quad$ Check is for the amount due only
- Mustprovide photo identification and social security number
- Imprinted checks only
- In-state checks only
- $\quad$ No personal two-party checks
- Non-sufficient funds checks are turned over to Sequoia Check Collection. The non-sufficientfunds check charge is $\$ 25.00$ plus customer bank charge which will be added to all returned checks

Books may also be purchased by Master Card or Visa. Students are encouraged to purchase books after attending the first class session.

## Refund Policy

Enrollment and health fees for students who reduce units or completely withdraw (not including short-term classes) from college prior to the end of the SECOND WEEK OF INSTRUCTION will be as follows:

## Enrollment and Health Fee Refunds

Refunds are given ONLY by student petition. Forms can be obtained at the Cashier's Office located in Room 102.

All refunds are issued by check. Students will be charged a $\$ 5$ handling fee on enrollment credits only. Students may carry a refund/credit balance and use it the following semester to avoid the $\$ 5$ handling fee.

Reimbursements petitioned for by the end of the fifth (5th) week will be mailed between the 6 th and 8 th instructional week of the semester. Refund petitions which are received by the end of the 12th week of the semester will be mailed between the 13th and 15th week of the semester.

No refunds will be given for classes dropped after the first two (2) weeks of school or short-term classes dropped after the first class day. (First two days forsummersemester.)

No refunds for material fees will be given unless the student drops class prior to first day of the semester.

Credit balances will be carried forward to the following semester.
For questions regarding collections or refunds on fees, contact 730-3956.

## Parking Fee Refunds

Parking refunds will be available to students withdrawing from school prior to the end of the second week of instruction. Students withdrawing from school after the second week will not receive refunds.

- $\quad A \$ 3$ service fee will be deducted from all permit refunds
- Parking permits must be returned to the Cashier's Office before refunds will be processed.
- A refund check will be mailed in 6-8 weeks.
- Permits must be picked up as soon as purchased as a limited number will be issued.
- Lost permits may be replaced at the same costs as the original purchase.


## Scholastic Regulations

The scholastic average is obtained by dividing the total number of grade points by the total number of units for which the student was registered. Grade points are assigned as follows:

Grade A - receives 4 points per unit;
Grade B - receives 3 points per unit;
Grade C - receives 2 points per unit;
Grade D - receives 1 point per unit;
Grade $F$ - receives 0 points per unit

## Satisfactory Scholarship

Satisfactory scholarship means at least a "C" (or 2.0) average. To achieve at least a "C" (or 2.0 ) average, students must have a minimum of twice as many grade points as they have units attempted.

## Transfer Students

Any studenttransferring from another college shall be subject immediately to these same scholastic regulations. Transfer students must supply official transcripts from all other colleges attended. It is the responsibility of all students to compute their current grade point averages for their own guidance in determining whether their scholastic records are meeting their needs. As an example of computing a grade point average, let us assume a student undertook the subjects shown below and earned grades as indicated:

| Subjects | Units <br> Attempted | Units <br> Passed | Grade | Grade <br> Points |
| :--- | :---: | :---: | :---: | :---: |
| PE | 1 | 1 | C | 2 |
| ENGL | 3 | 0 | F | 0 |
| CHEM | 5 | 5 | A | 20 |
| GEOL 1 | 4 | 4 | B | 12 |
| MATH 154 | 3 | 0 | F | 0 |
| HW 1 | 0 | 0 | W | 0 |
| Total | 16 | 10 |  | 34 |

The grade point average equals 34 divided by 16 , or 2.125 .
Explanation: Since Hygiene 1 was dropped with a "W," it does not count as units attempted. All other subjects which were carried count as units attempted, including Math 154 in which the grade was " $F$ " and English 1 in which the grade was "F."

## Admissions/Matriculation

## Scholastic Honors

Special recognition is granted to top scholars each semester. The President of the college acknowledges, on the Deans' List, those full-time students who attain a semester grade point average of 3.0 (B) or better. In addition, he also recognizes on the President's Honor List those full-time students who attain a semester grade point average of 3.5 or better. Qualification for either honor requires enrollment in a minimum of twelve units with a lettergrade.

A record of these accomplishments becomes a part of the student's permanentscholastic record.

## Matriculation Policies

Matriculation is a process that assists students in planning, choosing, and achieving educational and career goals. It begins with applying for admission and ends when the student completes the expressed goal. The purpose of matriculation is to ensure access to appropriate programs and courses offered by the College and to facilitate successful completion of student educational objectives. Through a coordinated program between instruction and support services, the College promotes and sustains efforts to help students achieve theirgoals.

Matriculation is a partnership between the student and the community college. Itcomprises mutual responsibilities and agreements for both partners. Any student who enrolls in credit classes for the purpose of realizing an educational or career goal is considered a matriculant. Matriculated students are expectedto:

1. express a broad educational intent at the time of admissions;
2. declare a specific educational objective within a reasonable period of enrollment;
3. complete the COS Placement Test or other assessments;
4. view the orientation video;
5. discusseducational/vocational choices and class selections with a counselor prior to registration;
6. diligently attend classes and complete assigned coursework; and
7. seek support services as needed and complete courses to maintain progress toward aneducational goal.

The community college agrees to provide:

1. anadmission process;
2. apre-enrollmentassessmentprocess;
3. an orientation to college programs, services, and procedures;
4. a pre-enrollment counseling and advising session;
5. an Educational Study Plan;
6. a suitable curriculum or program of courses;
7. aquality instructional experience;
8. acontinuous follow-up on student progress, with referrals to support services when needed; and
9. institutional research and evaluation to review the effectiveness of programs in assisting students to reach their goals.

All students who are deemed matriculants are required to participate in the Matriculation activities. Non-exemptstudents may request exemption status by completing a form and presenting their case to the Counseling Office. Students who are exempt based upon the following criteria are welcome to request any service or activity from the respective departments.

## Matriculation Steps

At College of the Sequoias, we believe that a process of assessment, orientation and counseling/advisement, called matriculation, will help you plan and achieve your goals in college. You may choose not to participate in parts of this process if you meet any of the exemption criteria. In addition, if a class has a prerequisite or corequisite, and you have not been through the assessment process, you may be blocked from enrollment.

## Assessment

All new students or students wishing to enroll in a course with a math or English prerequisite, unless exempted, are required to take placementtests in order to enroll in appropriate English and math classes. You may call (559) 730-3737 to make an appointment for a Placementtest.

## Orientation

All new students are expected to participate in an orientation to COS services and educational programs. Information on registration procedures, college majors and services are provided during orientations. Go to www.cos.edu to complete Web Orientation. Be sure to fill in the information and questionnaire to receive credit for orientation. You will receive. 5 unit of creditfor this process.

## Counseling/Advisement

New students are required and returning students are encouraged to see a counselor prior to registration. Counselors will recommend appropriate courses based on assessmentresults.

## Counseling Policy (Board Policy 7025) Approved 3/20/2000

1. The Governing Board of the College District at each campus within the District shall provide and publicize a counseling program, which shall include, but is not limited to, the following:
a. Academic counseling, in which the student is assisted in assessing, planning, and implementing his or her immediate and long-range academic goals.
b. Career counseling, in which the student is assisted in assessing his or her aptitudes, abilities, and interests, and is advised concerning the current and future employment trends.
c. Personal counseling, in which the student is assisted with personal, family, and/or other social concerns, when that assistance is related to the student's education.
d. Coordination with the counseling aspects of other services to students which may exist on the campus, including, but not limited to, those services provided in programs for students with special needs, skills testing programs, financial assistance programs, and job placement services.
2. Counseling services will be provided for first-time students enrolled in six or more units and students on academic or progress probation or subjectto dismissal. Students on probation and subject to dismissal may have units limited and courses or an educational plan prescribed subjectto the professional judgement of the counselor. Students subjectto academic dismissal shall be required to meet with a counselor priorto registration.
3. The College is authorized to mandate counseling or advising as a condition for enrollment for selected groups of students whose needs for such services are particularly great.

## Admissions/Matriculation

## Matriculation Exemption Criteria

All students are encouraged to take advantage of matriculation at College of the Sequoias (COS). Listed below are the criteria for an exemption:

Any student who has completed an associate degree or higher is exempt from orientation, assessment and counseling. However, all students are required to meet course prerequisites, which may require placementtesting.

## Additional exemption criteria are as follows:

Assessment Exemption: (Note-students receiving Veterans educational benefits musttake the appropriate placementestbefore enrolling in remedial (300-level) Math or English courses).

Math Test: You are exempt from the Math Test if:

1. you are not enrolling in a math class or a class that lists a math prerequisites and/or advisory and you are not working toward a certificate, degree or transfer program; or
2. you enroll in a Pre-Algebra Math 360 or Math 365 ; or
3. you presenta valid college transcript demonstrating successful completion (grade " C " or higher) of math courses equivalent to courses offered at COS; or
4. you present a valid score report reflecting a score of 3,4 or 5 on the AP Calculus AB or the AP Calculus BC test.

English Test: You are exempt from the English Test if:

1. you are not enrolling in an English class or a class that lists an English prerequisite and/or advisory and not working towards a certificate, degree or transfer program; or
2. you presenta valid college transcript demonstrating successful completion (grade " C " or higher) of English courses equivalent to courses offered at COS; or
3. you present a valid score report reflecting a score of 3,4 , or 5 on the AP Language and Composition or the AP Literature and Compositiontest.

## Orientation Exemption:

Youare exempt from the orientation requirement if:

1. you have previously participated in a COS orientation; or
2. you are transferring to COS from another college; or
3. you are enrolling in 6 units or less and have no plan to obtain a degree, certificate or participate in atransfer program.

Counseling Exemption: (Note-Students receiving Title IV Financial Aid and/or Veterans' educational benefits are not exempt from counseling requirement).
You are exempt from the counseling requirementif:

1. you are transferring to COS from another college; or
2. you are enrolling in 6 units or less and have no plan to obtain a degree, certificate or participate in atransfer program.

## Exemption Procedures

Any student who is considered nonexempt from the Matriculation services by District criteria (mentioned above), yet wishes to be considered for exemption for one or more of the activities, shall be directed to the Admissions and Records Office, Room 107, or theCounseling Office, Room 103.

## Formal Procedure:

1. The student can acquire the Matriculation Exemption Form from Counseling
2. The student mustreturn the form to the Counseling Office.
3. The staff will review forms within 24 hours of submission.
4. The student may file an Appeal/Grievance Form requesting a hearing from the Matriculation Appeal/Grievance Committee within 10 working days of submission if the student is dissatisfied with the exemption status.

## Appeal/Grievance Procedures

An appeal/grievance may be filed with the Office of Matriculation, under the following situations:

1. if a student feels entitled to any matriculation service or program to which he/she has been denied access; and/or
2. if astudentfeels that any matriculation procedure is being applied in adiscriminatory manner.

## Formal Procedure:

1. The student must complete the form and submititto the Dean, Admissions and Records.
2. Within 10 working days, the Matriculation Office will review the case with the student.
3. If the student is still dissatisfied with the resolution, the student can request a hearing from the Matriculation Appeal/Grievance Committee within 10 additional working days to review the Appeal/Grievance.

"More than ever before in the history of the United States,
education is the fault line, the Great Continental Divide, between those who will prosper and those who will not in the new economy."

President Clinton, 1996
(Spoken at the 1996 Princeton graduation)

"The credit belongs to the man who is actually in the arena, who strives valiantly;
who knows the great enthusiasms,
the great devotions, and spends himself in a worthy cause;
who at the best, knows the triumph of high achievement; and who, at worst, if he fails, fails at daring greatly, so that his place shall never be with those cold and timid souls, who know neither victory nor defeat."

Theodore Roosevelt

## Course Audit Option

The Governing Board of College of the Sequoias has authorized the auditing of specific courses at the college. There will be a $\$ 15.00$ fee charged for each unit. It is the preference of the College that students take courses for credit and use this option ONLY when necessary (i.e., they have completed all possible eepetitions that the course can legally offer). Students must also pay all health, materials and parking fees. Students enrolling for credit will have priority in all credit classes. Consent of the instructor is necessary. For further information concerning the auditing of classes, contact the front desk in the Administration Office at (559) 730-3712.

No person may attend or participate in a class without being properly enrolled due to insurance stipulations.

## California Articulation Number (CAN)

Applicable CAN numbers are printed at the end of courses listed in the "Course Descriptions" portion of this catalog. Check for the specific course/s in which you have interest in the "Course Descriptions" to see if they are designated as "CAN" referenced. For further information refer to the Index of this catalog under the listing of "CAN."

## Class Cancellations

Courses listed in the Schedule of Classes are subject to cancellation based on low enrollment or loss of instructor. If a class is cancelled, fees will automatically be refunded and every effort will be made to reschedule students to meet their needs. Early registration and attendance offirst class meetings will help ensure continuance of scheduled classes.

## Class Wait Lists

Wait lists are no longer used at College of the Sequoias. Some instructors establish and maintain their own wait list.

## Cooperative Education Program

The Cooperative Education Program offers students an opportunity to use their work experience to earn college credit. Any student who is employed (paid or volunteer) and can meet the criteria to qualify may participate. The employer must be willing to assist the student in setting measurable learning objectives, which will be accomplished during the grading period and evaluated as to degree of accomplishment.

Each semester one to four units can be earned depending on the type of employment and the hours worked. Students interested in registering for Work Experience should plan on attending a registration meeting to be held on campus prior to each semester. Registration forms and course codes will be available from the Program Coordinator during this meeting.

Additional information may be obtained in the Cooperative Education Office which is located in Room 106, or by calling the Program Coordinator at 7303742.

## Course Repetition Policy

Only courses which fall into the following categories may be repeated. Enrollment in two sections of the same course during the same semester is not permitted.

1. Courses designated "a-b," "a-c," and "a-d" may be repeated for credit; however, they may not be taken concurrently. Courses may be repeated according to the following schedule:

$$
\begin{array}{ll}
\text { "a-b" } & \text { may be taken } 2 \text { times for credit } \\
\text { "a-c" } & \text { may be taken } 3 \text { times for credit } \\
\text { "a-d" } & \text { may be taken } 4 \text { times for credit }
\end{array}
$$

Courses that are repeatable are approved for inclusion in this category on the following basis:

1. Skills or proficiencies are enhanced by supervised repetition and practice or;
2. Active participation experience is a basic means by which learning occurs.

College of the Sequoias monitors studentenrollment in repeatable courses. Students enrolled in courses the permitted number of times will receive credit. Any student enrolled for more than the maximum number of times will be dropped. Students are urged to keep track of the number of times they repeat such courses, because no prior warning can be provided by the College that the repetition limit has been reached. See "Course Audit Option" regarding course attendance in repeatable courses once the repetition limit has been reached.

## A student may petition to repeat a course:

1. If a grade of "Credit" or "CR" was received and prior permission of the Dean, Admissions and Records, has been granted.
2. If a final course grade of " D, " " "F," or " $N C$ " was received.
3. If the course has been repeated a second time with a substandard grade received, and prior permission from the Dean, Admissions and Records, has been granted.
4. When repeating a course with an initial grade of "C" or better, the student MUST obtain a petition and have written approval from the Dean, Admissions and Records, PRIOR to repeating a course to have the mostrecentgrade recorded. The secondgrade awarded for repeated courses in which a "C" or better was received initially, shall not be counted in calculating a student's grade point average. However, both grades earned will appear on the official transcript.

Conditions under which a grade of " C " or better may be petitioned are:

- If the grade was affected by interruptions such as verifiable accident, illness, or other circumstances beyond the control of thestudent;
- Ifasignificant lapse of time has occurred since the course was taken (usually at least one calendar year).
- Ifthe content of the course has been significantly modified/ updated.


## Credit by Examination

## Conditions and Requirements for Credit by Examination

1. Students must be currently registered and in good standing at COS. The student may not be currently enrolled in the course he/ she is petitioning for Credit by Examination. Good standing is defined as not on probationary status.
2. Students must file a petition for approval to challenge a course by examination with the Admissions and Records Office. Petitions are available in the Admissions and Records Office, Room 107.
3. Students must furnish strong proof to the satisfaction of the instructor/department, division chairperson and the Vice President of Academic Services that previous background experience or training would ensure a reasonable measure of success in the challenge.
4. If the petition is approved, the examination or series of tests shall be administered by the appropriate instructor as designated by the division chairperson. The course, with units and letter grade assigned, shall be entered on the student's record and will be reflected in the student's cumulative grade point average.
5. The student's academic record shall be clearly annotated to reflect that credit was earned by examination. A maximum of 12 units may be earned through credit by examination. (This limitation is waived in the case of registered nursing students.) Units for which credit is given pursuant to the provisions of this section shall not be counted in determining the 15 semester hours of creditin residence required for an associate degree.
6. Any course listed or qualified to be listed in the college catalog is available for challenge within the limits of condition "3" above.
7. Once the student receives approval for credit by examination, the examination must be completed within the same semester unless extenuating circumstances are shown to justify an extension of time. In the event the examination is not completed within the semester approval was obtained, a NC (no credit) grade will be assigned. If a NC grade is assigned, the student will not be allowed to challenge the same course again.
8. A nonrefundable material fee and a processing fee of $\$ 15$ will be assessed for each credit by examination petition in addition to the appropriate enrollment, and/or nonresidentfees charged for each semester unitto be challenged.
9. The deadline to complete the petition process is as follows:

| Fall Semester 2004 | November 5 |
| :--- | :--- |
| Spring Semester 2005 | April 8 |
| Summer Semester 2005 | End of 2nd Week |

Credit by Exam will NOT be allowed after these dates.

## Dropping a Class

Withdrawals prior to the end of the second week of the semester are not recorded on the student's transcript and the student may petition for a refund. However, students may officially drop a class or withdraw from college through the 10th week of the semester with a "W" recorded on the transcript and no refund. It is the student's responsibility to drop a class in which he/she nolonger wishes to be enrolled. Nonattendance does not release the student from this responsibility. The last day to drop a Fall 2004 class is October 22 and the last day to drop a Spring 2005 class is April 1. Students will process all drops and withdrawals by Web or the Telephone Access System.

## Drop Fee

No drop fees are being charged by the college at this time.

## Extenuating Circumstances

Title 5, Section 55758 , defines extenuating circumstances as those which apply to the college drop-date procedures as follows: verified cases of accidents, illness, death in the immediate family, jury duty, job displacement, orders for active military or firefighting duty, and/or other circumstances which are justifiable in the judgement of the Dean, Admissions and Records.

## Grading Procedures

All college work is measured in terms of both quantity and quality. The measure of quantity is the unit, and the measure of quality is the grade point.

Grades may be accessed by calling the Telephone Access System at 737-6101 or over the Web (www.cos.edu) during dates listed in the Schedule of Classes under "Grades". In addition, a hard copy of grades may be obtained at no cost from the Web (any Web accessible computer or Room 156, the StudentWeb Resource Lab). Semester grade reports are no longer mailed to students.

For purposes of grading and transfer to other collegiate institutions, itis necessary for the student to obtain a "C" average.
"A," "B," "C," and "D" are passing grades, corresponding to excellent, good, satisfactory, and passing. "F" is failure. A grade of " l " (incomplete) will be given in cases of extenuating circumstances. The student is entitled to all grade points upon satisfactory completion of assignments within one year.

It is understood that instructors' grades when handed in are final and not subject to change by reason of revision of judgment on the part of the instructor.

## "Credit/No Credit" Grading

Effective the Spring semester, 1996, all students enrolled in the 300 series (Course Number) of classes are graded on an "A," "B," "C," and "No credit" basis.
"Credit" grading (. 5 units) is given to IS 220, Orientation for College Success. The Learning Skills discipline is awarded "Credit" and "No Credit" grading.

## Incomplete Grades

Incomplete grades (I) may, at the instructor's option, be given for incomplete academic work due to extenuating circumstances. The condition for removal of the (I) shall be stated by the instructor in a written record. This record shall contain the conditions for removal of the $(I)$ and the grade assigned in lieu of its removal if the required work is not completed. A copy must be given to the student with the original record on file in the Admissions and Records Office until the (I) is made up or the time limit has passed. A final grade shall be assigned when the work stipulated has been completed and evaluated, or when the time limit for completing the work has passed. The (I) may be made up no later than one year following the end of the term in which it was assigned. The (I) symbol shall not be used in calculating units attempted nor for grade points.

## Independent Study

The purpose of an independent study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement existing courses. The independent study requires a minimum of 54 hours of academic work per unit.

## Before a student may enroll.......

The student must have completed ALL beginning level courses offered at the college in the subject. Only in very unusual cases may students be enrolled in independent study without completing the beginning level courses.

4 students must have written approval from:

- the instructor;
- the division chairperson;
- Vice President, Academic Services.

Credit for Independent Study is accepted at the CSUs. Independent Study courses are accepted for the granting of transfer credit at a UC campus contingent upon an evaluation of the course outline by a UC campus (maximum creditallowed is $3-1 / 3$ semester units perterm).

## Independent Study Application Procedure

1. A student who has completed all beginning level courses and wishes to pursue a subject of interest may obtain an independent study application form in the Admissions and Records Office, Room 107.

A student must be currently registered at COS in one or more units before applying for independent study credit.
2. The student seeking independent study should outline his/her proposal and discuss it with an appropriate instructor. With the instructor's approval, the student should then complete the independent study application form. Once the form is completed, the student should return itto the supervising instructor. This approval process should be completed before the third week of the semester.
3. The form should then be passed from instructor to division chairperson to the Vice President, Academic Services, before the end of the 3rd week of the semester.
4. If approved, the form is sent from the Office of Academic Services to the Admissions and Records Office and the course is entered on the student's schedule of classes. Registration is complete at this point. A copy of the approved form is then sent to the student by mail along with information regarding appropriate fees.
5. Ifdisapproved, the reason for the disapproval is written (stated) on the form and returned to the instructor and/or division chairperson who approved the independentstudy. The instructor then notifies the student as to the reason for the denial.
6. Roll sheets will be distributed to the appropriate instructors by the Admissions and Records Office.
7. At the end of the semester, grade reports are due in the Admissions and Records Office at the same time as those for regularly scheduled classes.
8. Ifthe independent study projectmust continue beyond the semester's end, a grade of "l" (incomplete) will be assigned to the student. An incomplete must be made up according to the stated procedure in the college catalog.
9. A complete roster of all independent study students will be kept by semester for a given year and filed in the Admissions and Records Office.

## Maximum Unit Limit

The normal load for a college schedule comprises 15-16 units of work.
Students may enroll in a maximum of 19 units each semester. Students on Academic or Progress Probation are limited to 13 units. Students wanting an exception to this rule must obtain a unit overload form approved by a counselor prior to registration.

Once the Counselor has entered the overload into the system, the student can register for units above the maximum by telephone or the Web.

Courses offered as associate degree applicable will use the Carnegie Unit equivalent: 18 hours of lecture equal one lecture unit credit; 36 hours laboratory equal one laboratory unit credit.

In determining the total number of units offered through the course for laboratory class, the following combinations may be used:

- one hour lecture, two hours homework equal one unit of credit;
- one hour of lecture, one hour of laboratory, and one hour of homework equal one unit of credit;
- one hour of lecture, two hours of laboratory equal one unit of credit;
- three hours of laboratory equal one unit of credit;
- two hours oflaboratory, one hour of homework equals one unit of credit.


## Military Service Credit

Four semester units of elective credit will be given toward graduation to any actively enrolled student submitting aDD214 that shows completion of basic training in the Armed Services of the United States and any discharge other than dishonorable. Creditis allowed in accordance with recommendations by the American Council on Education (ACE). The number of units awarded are those recommended by the Council in the Guide to the Evaluation of Educational Experience in the Armed Services.

In addition, up to eleven semester units of elective credit may be granted in accordance with the recommendation by the American Council on Education in the Guide to the Evaluation of Educational Experience in the Armed Services to actively enrolled students submitting a military transcript for lower division associate/baccalaureate level courses taken at schools in the Armed Services of the United States.

Both the DD214 and military transcript should be submitted to the College of the Sequoias, Office of Admissions and Records. Following evaluation, a maximum of fifteen semester units in electives may be earned through military service.

## Peace Corp Credit

Credit will be granted for service in the Peace Corps only if the work is earned on an official college transcript. No credit can be granted for field work.

## Prerequisites and Corequisites

Title 5 Matriculation Regulations(Sections 55002,55200 , and 55201) state that students are entitled to enroll in any course for which they can meet necessary and valid pre- and co-requisites.

A "prerequisite" means a condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program. Prerequisites shall be based on successful completion of an appropriate course (e.g., Math 230 with a "C" or better prior to attempting Math 45 or 21) or the college's assessment process using multiple measures.

A "corequisite" is a condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course (e.g. , Math 75 in conjunction with Engineering 1).

An "advisory on recommended preparation" means a condition of enrollment that a studentis advised, but not required, to meet before or in conjunction with enrollment in a course or educational program (e.g., GD 160 with a "C" or better prior to attempting GD 161).

A "limitation on enrollment" is similar to a prerequisite because both are conditions of enrollment that a student is required to meet for enrollment in a course or educational program. Alimitation on enrollment differs from a prerequisite because it is not based on the successful completion of a course or the college's assessment process using multiple measures (e.g., public performance courses requiring an audition).

Section 55201 permits the establishment of pre-and co-requisites ifthe particular pre-and co-requisites:
a. were established prior to July 6,1990 , and are part of a sequence of degree-applicable courses within a given discipline; or
b. were established between July 6, 1990, and November 4, 1993, in accordance with regulations in effect during this period of time; or
c. are required by statute or regulation; or
d. are part of a closely-related lecture-laboratory course pairing within a discipline; or
e. are required by four-year institutions.

According to Section 55201 any pre- or co-requisite may be challenged by a student on one or more of the grounds listed in the regulations. Section58106 describes similar grounds upon which a student may challenge alimitation on enrollment. These regulations are available in the offices of Student Services, Academic Services, and Matriculation upon request. The student shall bear the burden of showing that grounds existfor the challenge. Challenges shall be handled in a timely manner according to the Appeal and Grievance Procedures through Matriculation. The Appeal/Grievance form and procedures document can be obtained from the offices of Student Services and Matriculation. If the challenge is upheld, the student must be permitted to enroll in the course in question.

## Probation and Dismissal

## Academic Probation

A student who has attempted at least 12 cumulative semester units as shown by the official academic record at College of the Sequoias shall be placed on academic probation ifthe student has earned a grade point average below 2.0 in all units which were graded on the basis of the grading scale (T5 55754).

## Unit Limitation

A student on academic and progress probation is limited to 13 units or to a maximum load recommended by the student's counselor.

## Academic Probation Removal

Astudent on academic probation for a grade point deficiency shall be removed from probation automatically when the accumulated GPA is 2.0 or higher.

$$
\begin{array}{ll}
\text { Computation: } & \text { Grade point Average equals } \\
& \text { Total Grade Points Earned divided by } \\
& \text { Total Units attempted with Letter } \\
& \text { Grade. }
\end{array}
$$

## Academic Dismissal Procedures

Astudent on academic probation shall be subject to dismissal if the student earned a cumulative grade point average of less than 2.0 in all units attempted in each of the three consecutive semesters which were graded on the basis of the grading scale. Dismissals occur only after the Spring semester. In addition, no student will be granted creditin excess of 30 units for precollegiate basic skills courses, except in the case of a student who has applied for and received a waiver from the Dean, Admissions and Records.

The term "consecutive semesters of enrollment" is defined on the basis of studentenrollment. For example, astudent enrolled in two fall semesters and not enrolled for the spring semester between would have two consecutive semesters of enrollment. Summer session is considered a semester of enrollmentfor dismissal purposes.

Students on academic probation will not be dismissed after their third semester of below satisfactory work (below 2.0 semester cumulate GPA) if during that third semester and every subsequent semester they maintain a 2.0 semester GPA until their cumulative GPA is above the probationary level.

Academically disqualified students will be so informed by letter and notice of their status will be entered on their permanent record. A studentwho has been dismissed shall not be eligible for reinstatement or readmission until one semester has elapsed after the dismissal (not including summer semester). A petition for readmission is required prior to enrollment and is available from the Admissions and Records Office, Room 107. Approval for readmission will specify conditions and requirements to be met.

Any student readmitted after disqualification remains on probation until probation removal requirements have been fulfilled. Students dismissed for the second time are not eligible to petition for readmission until another semester of nonattendance has elapsed (notincluding summer session).

## Academic Renewal

A student may petition the Academic Review Board to have "F" grades disregarded from inclusion in the totals and grade points as listed on the permanent record. Prior to petitioning for the renewal of an "F" grade, conditions (1) and (2) below must be met.
(1) Fifteen or more semester units of lower division college work with a 2.0 ("C") or better grade point average at College of the Sequoias or another accredited institution of higher learning mustbe completed following the semester in which the "F" grades were earned.
(2) At least three years must have elapsed since the "F" grades were received. Instructors who originally assigned the grades must give written approval for their forgiveness. In cases where the faculty members cannot be located, the final decision or forgiveness of " F " grades will reside with the Dean, Admissions and Records.

## Progress Probation

A student who has enrolled in a total of at least 12 cumulative semester units as shown by the official academic record at College of the Sequoias shall be placed on progress probation when the percentage of all units in which a student has enrolled and for which entries of "W," "I," and "NC" are recorded reaches or exceeds 50 percent.

After the second progress probation, students who satisfactorily complete 50 percent or more of units registered each semester will continue on progress probation rather than be dismissed (even ifinsufficient units have been completed to remove them from probation.) If students complete 49 percent or fewer of units enrolled in any semester after the second progress probation, they will be subject to progress dismissal.

## Progress Probation Removal

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

Computation: Progress Percentage equals
Total Units with "W," "I", and "NC" divided by Total Units Enrolled.

## Progress Dismissal Procedures

A student who has been placed on progress probation shall be subject to dismissal ifthe percentage of units in which the student has been enrolled with entries of "W," "l," and "NC" are recorded in at least three consecutive semesters reaches or exceeds 50 percent.

Disqualified students will be so informed by letter and notice of their status may be entered on their permanent record.

A student who has been dismissed shall not be eligible for reinstatement or readmission until one semester has elapsed after the dismissal (not including summer semester). A petition for readmission is required prior to enrollment and is available from the Admissions and Records Office, Room 107. Approval for readmission will specify conditions and requirements to be met.

Any studentreadmitted after disqualification remains on probation until probation removal requirements have been fulfilled. Students dismissed for the second time are not eligible to petition for readmission until another semester of nonattendance has elapsed (notincluding summer semester).

## Student Progress

If satisfactory progress through College of the Sequoias' specialized support service programs (i.e., the Learning Assistance Center, etc.) is not made during two semesters, life-goal setting and career counseling will occur with the individual student involved. The Academic Review Board and selected faculty members will determine, for referral purposes, the most appropriate educational or community-based agency to better serve the student's need.

## Report Delayed (RD)

The "RD" symbol may be assigned by the Dean, Admissions and Records, only. It is to be used when there is a delay in reporting the grade of the 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.

## Transfer Deficiencies

In the case of an applicant not eligible for clear admission to a college or university at the time of entrance to the community college, deficiencies in both subject and grade requirements for such admission should be removed in the community college.

Repetition of a college course for the purpose of removing a grade deficiency is permissible. Contact the Admissions and Records Office for details.

## Withdrawal from College

Withdrawals will be processed through the Telephone Access System or over the Web. Students withdrawing after the final drop date must bring documentation of approved extenuating circumstances to the Registration Office, Room 104, or the Dean, Admissions and Records.

Please refer to the section above regarding Dropping a Class for grading policies, fees and effect on the student's record relative to withdrawals.

## Distance Learning

If you find it difficult to get to the COS campus for a weekly schedule of classes, our Distance Learning program may be just what you need!

COS distance learning classes allow you to complete most of the coursework outside the classroom, on your own time. Classes are offered in two formats:

$$
\begin{aligned}
& =\quad \text { On-line classes, requiring you to have access to a } \\
& \text { computer with an email account and/or the Internet. } \\
& =\quad \begin{array}{c}
\text { Television classes, broadcast on Channel 18, } \\
\text { Choice TV, and Media One. }
\end{array}
\end{aligned}
$$

COS distance learning courses transfer to four year colleges and universities exactly like traditional classes held on campus. The coursework is equally rigorous. It is important to remember that success in distance learning classes will mean hard work on your part, plus good time management skills.

For more information, Check our web page at:
http://www.cos.edu

# College of the Sequoias Academic Senate Statement of Professional Ethics 

## Section I.

Community college facultymembers, guided by a deep conviction of the worth and dignity of the advancement of knowledge, recognize the special responsibilities placed upon them. Their primary responsibility to their subjects is to seek and to state the truth as they see it. To this endfaculty members devote their energies to developing and improving their scholarly competence. They accept the obligation to exercise critical self-discipline and judgmentin using, extending, and transmitting knowledge. They practice intellectual honesty. Although faculty members may follow subsidiary interests, these interests must never seriously hamper or compromise their freedom of inquiry.

## Section II.

Asteachers, facultymembers encourage the free pursuit oflearning in their students. They hold before them the bestscholarly standards of their discipline. Faculty members demonstrate respect for the student as an individual, and adhere to their proper role as intellectual guides and counselors. Faculty members make every reasonable effort to foster honest academic conduct and to assure thatevaluation of students reflects their true merit. They respect the confidential nature of the relationship between facultymember and student. They avoid any exploitation of studentsfor private advantage and acknowledge significant assistance from them. They protect the academic freedom of students.

## Section III.

As colleagues, facultymembers have obligations that derive from common membership in the community of scholars. Faculty members do not discriminate against or harass colleagues. They respect and defend the free inquiry of associates. In the exchange of criticism and ideas, facultymembers show due respectfor the opinions of others. Faculty members acknowledge their academic debts and strive to be objective in their professional judgment of colleagues. Faculty members accept their share offaculty responsibilities for the governance of their institution.

## Section IV.

Asmembers of an academic institution, facultymembers seek above all to be effective teachers and scholars. Althoughfaculty members observe the stated regulations of theirinstitutions, provided the regulations do not contravene academic freedom, they maintain their right to criticize and seek revision. Faculty members give due regard to their paramount responsibilities within their institution in determining the amount and character of work done outside it. When considering the interruption or termination of their service, faculty members recognize the effect of their decisions upon the program of the institution and give due notice of their intentions.

## Section V.

As members of their community, faculty members have the rights and obligations of all citizens. Faculty members measure the urgency of these obligations in the light of their responsibilities to their subject areas, to their students, to their profession, and to their institutions. When they speak or act as private persons, they avoid creating the impression that they speak or actfor their college. As citizens engaged in a profession that depends uponfreedomfor its health and integrity, faculty members have a particular obligation to promote conditions of free inquiry and to further public understanding of academic freedom.

"The quality of a person's life is
in direct proportion to their
commitment to excellence,
regardless of their chosen field of endeavor."

Vincent T. Lombardi

## Student Bill of Rights

Preamble: College of the Sequoias' students, as members of the academic community, have the same rights and freedoms that all citizens have as students, and as students they are accountable to federal and state laws and statutes. In addition, students are also accountable tothe College of the Sequoias Board policies and individual college campus rules and regulations.

Student's Rights: Inthe context of these concepts, students' rights consist of the following:

1. In preparing student publications, the editorial staff and faculty advisors shall be free from censorship and advance copy approval. These publications shall do the following:
a. Adhere to cannons of responsible journalism, such as avoidance of libel, indecency, undocumented allegations, attacks on personal integrity, and the techniques of harassment and innuendo;
b. State on the editorial page that the opinions expressed are not necessarily those of the college or the student body;
c. Follow districtpolicies, individual publications policies (The Campus and other publications of information) and the free flow of ideas as a public forum.
2. Students shall have the right to take stands on issues, the right to examine and discuss questions of interest to them, and the right to support causes by orderly means which are in harmony with the regular functioning of the institution.
3. Students shall have the right to hear speakers on any subject, and on-campus recognized student organizations shall have the right to present speakers on any subject. In addition, students shall have the right of free assembly on campus subject to regulations that concern the regular functioning of the institution, to ensure that there is orderly scheduling of facilities and adequate preparation for the event. The recognized organizations, together with the Student Activities Office, shall be responsible for following the policies for scheduling and use of facilities for campus activities.
4. Students shall have the right to form an organization around any particular interest; this right will include the freedom to organize and join studentorganizations subjectto published associated student and district regulations.
5. Students shall have the right to be informed on all campus matters that can be shown to be directly relevant to them by having a voice in decision-making that affects their academic future with the exception of staff appointment, termination, and tenure. In case of conflict in determining what campus matters are relevant to students, the determination will be made by the Committee on Student Conduct and Grievance.
6. Students shall have the right to have their academic records treated in a confidential and responsible manner with due regard to the personal nature of the information these records contain. Students' records will be released only on the written consent of the student, according to the law.
7. Students shall have the right of protection against prejudiced or capricious academic evaluation. At the same time, however, students are responsible for maintaining standards of academic performance established for each course in which they are enrolled.
8. Students shall have the right to receive the quality education as outlined in this catalog and in the California Education Code, Title 5 Regulations, and the Code of Ethics of the teaching profession.
9. Students shall have the right to file a grievance under the procedures of the district student grievance policy which provides a prompt and equitable method of resolution.

## Student Grievance Procedure

College of the Sequoias has adopted a student grievance procedure under which students who feel that their rights have been abridged may appeal their cases to a committee composed of representatives from the administration, faculty, and student body. A full description of the procedures is available upon request from StudentServices.

Anyone desiring additional information or wishing to file a complaint in regard to the above statement should contact the Dean of Student Services.

## Student Record Privacy Rights and Access to Students' Official Records

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are:
(1) The rightto inspect and review the student's education records within 45 days of the day the college receives a request for access.

Students should submit to the Dean, Admissions \& Records or other appropriate official, written requests thatidentify the record(s) they wish to inspect. The college official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the college official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
(2) The rightto requestthe amendment of the student's education records that the student believes are inaccurate or misleading.

Students may ask the college to amend a record that they believe is inaccurate or misleading. They should write the college official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.

If the college decides not to amend the record as requested by the student, the college will notify the student of the decision and advise the student of his or her right to appeal the decision.
(3) The right to consent to disclosures of personally identifiable information contained inthe student's education records, exceptto the extent that FERPA authorizes disclosure without consent.

One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, or supportstaff position (including law enforcementunit personnel and health staff); a person or company with whom the college has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Records may also be released without the student's written consent for the following reasons: (a) pursuant to a court order or I awfully issued subpoena; (b) a federal court order concerning ani nvestigation or prosecution of terrorism; (c) to authorized representativesof state or federal agencies where that information is necessary to audit or evaluate state or federally supported programs; (d) other public or private schools where the student seeks to enroll; (e) to agencies or organizations in connection with a student's application for, or receipt of, financial aid; (f) to organizations conducting studies for accrediting organizations or educational agencies; ( g ) in connection with an emergency ifthe knowledge of that information is necessary to protect the health or
safety of a student or other persons; and (h) to federal military for the purposes of recruitment.
(4) The right to file a complaint with the U.S. Department of Education concerning alleged failures by College of the Sequoias to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

FAMILY POLICY COMPLIANCE OFFICE<br>U.S. Department of Education<br>400 Maryland Avenue, SW<br>Washington, DC 20202-4805

Certain kinds of information may be made available without a release. Such information is known as a "directory information" and consists of the following items: Student's name, address, telephone number, date and place of birth, major, photographs, weight and height of athletes, most recent previous school attended, activities, dates of attendance, degrees and awards received and institutions attended. Any student wishing to deny the release of his/her directory information may do so by indicating under the Family Education and Privacy Act Section on the COS application.

## Sexual Harassment

## Policy

It is the policy of the College of the Sequoias District to provide an educational, employment and business environmentfree of unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct or communications constituting sexual harassment, as defined and otherwise prohibited by the State and Federal law.

Engaging in sexual harassment (as defined below), shall be a violation of this policy for those authorized to either recommend or take personnel or academic actions affecting employees or students, or those otherwise authorized to transact business or perform other acts of services on behalf of the College of the Sequoias

## Educational Environment

Withinthe educational environment, sexual harassment is prohibited between employees and students, and between students and students.

## Work Environment

Within the work environment, sexual harassment is prohibited between supervisors and employees, between employees and between nonemployees and employees.

## Definition of Sexual Harassment

## General Definitions

Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature that:
n are made either explicitly or implicitly a term or condition of an individual's educational status or employment;
n are used as a basis for educational or employment decisions affecting such individual; or
n have the purpose or the effect of unreasonably interfering with an individual's educational or work performance or which create an intimidating, hostile or offensive educational or work environment.

## Students Rights and Responsibilities

## Specific Examples

For the purpose of further clarification, sexual harassmentincludes, but is not limited to:
n Making unsolicited written, verbal, physical and/or visual contacts with sexual overtones. (Examples of sexual harassment which appear in a written form include, but are not limited to: suggestive or obscene letters, notes, invitations. Examples of verbal sexual harassment include, but are not limited to: derogatory comments, slurs, jokes, epithets. Examples of physical harassment include, but are not limited to: assault, touching, impeding or blocking movement. Examples of visual sexual harassment include, but are not limited to: leering, gestures, display of sexually aggressive objects or pictures, cartoons or posters.)
n Continuing to express sexual interest after being informed that the interest is unwelcome.
n Making reprisals, threats of reprisal, or implied threats of reprisal following a rebuff of harassing behavior. The following are examples of this type of sexual harassment within the work place: implying or actually withholding supportfor an appointment, promotion or change of assignment; suggesting a poor performance report will be prepared; or suggesting probation will be filed. Examples of this type of sexual harassment, withinthe educational environment include: implying or actually withholding grades earned or deserved; suggesting a poor performance evaluation will be prepared; or suggesting a scholarship recommendation or college application will be denied.
n Engaging in explicit or implicit coercive sexual behavior within the work environment which is used to control, influence or affect the employee's career, salary and/or work environment.
n Engaging in explicit or implicit coercive sexual behavior within the educational environment which is used to control, influence or affect the educational opportunities, grades, and/or learning environment of astudent.
n Offering favors or educational or employment benefits, such as grades or promotions, favorable performance evaluations, favorable assignments, favorable duties or shifts, recommendations, reclassifications, etc., in exchange for sexual favors.

## DisciplinaryAction

The College of the Sequoias Community College District forbids any form of sexual harassment, including the acts of non-employees. Prompt disciplinary action will be taken against any student, employee (supervisory or otherwise), engaging in sexual harassment.

## Reporting Charges

The procedures for reporting charges of sexual harassment and for pursuing available remedies are available from the College of the Sequoias Title IX Officer, the District Affirmative Action Officer, Human Resource Services and the Student Services Office.

## Sexual Harassment Complaint Procedure

Any student, employee or applicant for employmentwho believes he/she has been sexually harassed may file a complaint with the College of the Sequoias, Title IX Coordinator. In order for a complaint to be processed, the complaint must be filed within one year of the sexual harassment or within one year of learning of the sexual harassment ( $\$ 59328)^{*}$.

The College is committed to ensuring that students, employees and applicants for employment are not adversely affected for having brought forward a sexual harassment complaint. All participants in these procedures shall be protected from retaliatory acts by the College, its employees and students. If retaliation or reprisal does occur, disciplinary action will be imposed.

Nothing in this procedure shall affect the right of the complainant to pursue the matter with any State or Federal enforcement agency. Sexual harassment complaints may be filed concurrently with an external agency to meetState and Federal agency deadlines without jeopardizing an individual's rights to pursue a complaintunder this procedure.

## Purpose of Complaint Procedure

This complaint procedure implements the civil rights protections against sexual harassment. Its purpose is to ensure that no person shall be subjected to sexual harassment under any program, activity or service offered by this College.

This procedure applies to the processing of sexual harassment complaints by any student, employee or applicant for employment who believes that she/ he is a victim of sexual harassment.

## Informal Complaint Procedure

The purpose of this informal resolution process is to allow an individual who believes she/he has been sexually harassed to resolve the issue through a mediation process rather than the more formal process provided by the College. Ifit is determined that sexual harassment has taken place, resolution may require nothing more than an apology from the respondent and an assurance that the offending behavior will cease. The steps of the informal procedure follow:
A. If the complainant believes that discussions of alleged sexual harassment with the respondent or her/his supervisor would be unproductive or inappropriate, the complainant may consult with the Title IXCoordinator.
B. The Title IX Coordinator will counsel the complainant regarding the sexual harassment policy and complaint procedure.
C. The complainant's allegation of sexual harassment shall be kept confidential by the Title IX Coordinator and used only to provide a factual basis for resolving the complaint. The Title IX Coordinator will explain to the complainant the nature and extent of the confidentiality provided by this process.
D. The informal complaint procedure is initiated only when the complainant puts the allegation in writing and in any format comfortable for the complainant. The written statement should contain as much detail as possible including dates, time, description of incident(s), parties involved, any witnesses, etc. However, no official action on this specific allegation of sexual harassment will be taken ifthe complainant decides notto putthe complaint into writing.
E. Within 10 days of receipt of the informal complaint, the Title IX Coordinator shall contact the respondentin an attempt to resolve the matter informally. The respondent will be asked to provide a written response to the allegations.
F. Within 10 days of discussing the matter with the respondent, the Title IX Coordinator will review the statements of both the complainant and the respondent and meet individually with each party in an attemptto resolve the matter.
G. Steps A through F of this informal procedure shall be completed within 30 days.
H. The completion of the informal procedure is a prerequisite to initiatinga formal complaint under the College's sexual harassment complaintprocedure(§59328(b))*.

## Possible Outc omes of the Informal Complaint Procedure

A. If the matter is resolved, the Title IX Coordinator will put the resolution in writing and meet with both parties who will review and signthe agreement.
B. If the parties agree that there has been no sexual harassment and are satisfied with the resolution, the documents connected with the allegation shall be destroyed by the Title IX Coordinator and the complaint will be considered resolved.
C. If the parties agree that sexual harassment has occurred, but are satisfied with the resolution, then the documentation connected with the allegations and resolution will be placed in a sealed envelope and remain in the possession of the Title IX Coordinator. At this point, the complaint will be considered resolved.
D. If the complainant is dissatisfied with the resolution of the complaint, she/he should file a formal complaintimmediately.
E. If, after negotiations between the parties, it becomes clear to the Title IXCoordinator that an informal resolution cannotbe reached, she/he will convey the determination to both parties. The Title IX Coordinator will also inform the complainant of the right to file a formal sexual harassment complaint under this procedure or to file a sexual harassment complaint with any appropriate State or Federal enforcement agency (i.e., Office of Civil Rights, Equal Opportunity Commission, Department of Fair Employmentand Housing).

## Formal Procedure

## Administrative Determination

1. The complainant shall initiate the formal complaint procedure by filing a complaint in writing on the College's sexual harassment form.
2. Within 90 days of receiving the complaint ( $\$ 59336)^{*}$, the Title IX Coordinator shall provide the complainant with:
a. A copy of the report of the College's investigation of the sexual harassment complaint.
b. The written decision that sexual harassment did or didnotoccur.
c. A copy of the proposed resolution of the complaint.
d. Adescription of the action taken by the College administration to prevent similar sexual harassment in the future.
e. Notice of the complainant's right to appeal the administrative decision to the Governing Board of the College.
f. Notice that both parties have a right to be accompanied by a representative at each step in this procedure.

## Appeal to the Governing Board (§59338)*

1. If the complainant is not satisfied with the administrative decision, she/he has 15 days in which to file a written appeal with the College's Governing board.
2. Only the complainant has a right to appeal the administrative decision (§59338)*. However, a respondent who is an employee may have an opportunity to challenge any disciplinary action resulting from these proceedings.
3. Within 45 days of receiving the appeal, the Governing Board shall issue a final decision, or the administrative determination will be considered the final decision. However, a further appeal may be made to the Chancellor of the California Community Colleges (§59338)*.

## Further Appeal Options

A. If the complainant is not satisfied with the decision of the Governing Board she/he has 30 days in which to file a written appeal with the Chancellor of the California Community Colleges (59338)*.
B. Once again, the College shall inform the complainant of the right to file a sexual harassment complaint with any appropriate State or Federal enforcement agency (i.e., Office of Civil Rights, Equal Employment Opportunity Commission, Department of Fair Employment and Housing).
*All references are to the California Code of Regulations, Title 5, Div. 6, Chapter 10, sub chapter 5, Article 3 unless otherwise noted. Title IX requires the Title IX Coordinator to investigate complaints of alleged sex discrimination, which includes sexual harassment.

## Students Rights and Responsibilities

## Code of Student Conduct

Students are subject to charges of misconduct for any of the following acts on the college campus, an extension of the campus, or at a college-sponsored activity:

1. Cheating or plagiarism in connection with the academic program.
2. Forgery, alteration or misuse of college documents or knowingly furnishing false information to the college.
3. Misrepresentation of oneself or an organization as an agent of the college.
4. Obstruction or disruption of the college's educational, administrative or other college process.
5. Physical abuse or the threat of abuse to any member of the college process.
6. Theft of or damage to college property or property owned by a member of the college community.
7. Unauthorized entry into, unauthorized use or misuse of college property.
8. Possession of or being under the influence of alcohol or unlawful narcotics.
9. Possession or use of explosives or weapons.
10. Indecent or obscene behavior.
11. Abusive behavior or hazing.
12. Gambling.
13. Any other cause identified as good cause by the Education Code or other laws governing a community college.

Students charged with misconduct may be subject to the following penalties:

1. Reprimand: Written warning that continued misconductwill result in more serious disciplinary action.
2. Temporary Exclusion: Removal from class or college activity for the duration of its scheduled period and the next class/activity period.
3. Suspension: Exclusion from classes, activities, and/or student privileges for a specified number of days, up to a maximum of five days.
4. Expulsion: Termination of student status at this college.

Certain members of the campus community are authorized to impose the above penalties as follows:

1. Any instructor may temporarily exclude the offending student from his class for the remainder of the class session and the next class day.
2. Any administrator may temporarily exclude the student from any college sponsored activity for the remainder of the activity time.
3. The Dean of Student Services and the Vice President of Student Services may impose a reprimand or temporary exclusion, or may recommend suspension or expulsion.
4. The President of the College may impose suspension or recommend expulsion.
5. The Board of Trustees may impose expulsion.

## Attendance

Regular class attendance not only is essential to the maintenance of satisfactory grades, but also is the means by which the college obtains financial support. So, your absences hurt you as a student and mean a loss of revenue tothe college.

STUDENTS MAY BE WITHDRAWN FROM ALL CLASSES IN WHICH THEY WERE ABSENT ON THE FIRST MEETING OF THE SEMESTER.

If unusual circumstances prevent the student from attending, the student should notify the Dean of Student Services/Admissions and Records. However, the decision to retain a student in the class is the decision of the faculty member. However, it is the student's responsibility to drop a class in which helshe no longer wishes to be enrolled. NONATTENDANCE DOES NOT RELEASE THE STUDENT FROM THIS RESPONSIBILITY.

> No PERSON MAY ATTEND OR PARTICIPATE IN CLASS WITHOUT BEING PROPERLY ENROLLED DUE TO INSURANCE STIPULATIONS. STUDENTS PROPERLY ENROLLED SHOULD NOT BE ACCOMPANIED IN THE CLASSROOM BY CHILDREN, NOR SHOULD CHILDREN BE LEFT UNATTENDED ON THE CAMPUS WHILE PARENTS ATTEND CLASS.

Each instructor has his/her own attendance policy which he/she will announce early in the semester.

Students should be aware that some courses and activities include trips and that they are responsible, first, for informing their instructors when they will be absent because of these trips and, second, for completing the work missed. If the instructor is late for class, students are obligated to wait for 10 minutes from the time the class is officially to begin before leaving.

If a student has PRIOR knowledge of a scheduled absence, they should obtain permission from the instructor prior to the absence. If advance notice is not possible, students should follow the instructor's instructions for reporting an absence.

## Dropping a Class

It is the student's responsibility to drop a class in which he/ she no longer wishes to be enrolled.

Nonattendance does notrelease the studentfrom this responsibility.

Classes may be dropped through the Telephone Access System or online throughWebRegistration.

## Eating

Eating is allowed in the Student Union (Carl's Junior, Tacos); the food courts and areas outside of buildings, BUT IS NOT permitted in classrooms or conference rooms.

## Liquor and Drugs

Students and guests of students, regardless of age, may not use or be in possession or under the influence of alcohol or unauthorized drugs on either the main campus, college farm, Hanford Center, or at COS sponsored events. Violation of this regulation may result in citation and/or suspension or expulsion from college ( 25608 Business and Professional Code).

## Smoking

The College of the Sequoias Board of Trustees has adopted a policy which does not allow the sale of cigarettes or any other tobacco products on the college campus and prohibits smoking in any of the college buildings. COS ordinance\#204, per 76033e Educational Code. State law prohibits smoking within 20 feet of any door or window of a college facility.

## Pets

Pets are not permitted on campus without approval.

## Messages

The college cannot relay any personal communication for such things as medical appointments, car breakdowns, lost keys, employer contacts, transportation problems, jury duty, etc. Only in the case of a legitimate emergency will messages be taken and delivered to students.

## Posting of Materials

Clearance must be obtained from the Student Activities' Office for posting or distribution of any materials on campus. If there is any question of appropriateness, materials may be referred to the Executive Vice President, StudentServices for clearance.

Materials may be posted only on bulletin boards that say "Approved for Posting" across the top. General Advertisements (for sale, roommates or transportation needed, etc.) may be placed on cards available in Student Activities.

## Student Field Trips

## Student Transportation

Throughout the school year various classes will meet at off-campus locations. The college will not provide transportation to these sites and all transportation arrangements are the responsibility of each of the students enrolled in the class. Although district personnel may assist in coordinating this transportation and/or may recommend travel time, routes, caravans, etc., these recommendations are not mandatory. The districtis not responsible nor does the district assume liability for any injuries or losses resulting from non-district sponsored transportation. If you ride with another student, that student is not an agent of, or driving on behalf of, the district.

## Voluntary Field Trips

Throughout the school year, the district may sponsor voluntary field trips and excursions in which you may want to participate. Be advised as stated in the California Code of Regulations, Sub Chapter 5, Section 55450, ifyou participate in a voluntary field trip or excursion, you are deemed to have held harmless the District, its officers, agents and employees from all liability or claims which may arise out of or in connection with your participation in this activity.

"Most people are mirrors, reflecting the moods and emotions of the times;
few are windows,
bringing light to bear on the dark corners where troubles fester.
The whole purpose of education is
to turn mirrors into windows."

Sydney J. Harris

"Life's most persistent
and urgent question is:
What are you doing for others?"
Martin Luther King, Jr.

## Associated Student Body

The Associated Students of College of the Sequoias is the official student body organization. Upon payment of the student activity fee at registration, students become official members of the Associated Student Body and are represented by the Student Executive Board. Upon payment of the activity fee, students are issued a student body card which entitles them to participate in activities of the organization as long as they remain in good standing. Most activities which concern the student-body as a whole are sponsored by the Associated Students.

The business of the Associated Students is carried out by the Student Executive Board. Members comprising the Student Executive Board are: Associated Student-Body President, Vice-President, Commissioners of Activities, Clubs, Records, Finance, Publicity, Student Body Ambassador, and Student Board of Trustees member.

All clubs on campus are officially chartered by the Associated Student Executive Board.

## Audio Visual

## Hours:

|  |  |
| :--- | :--- |
| Monday through Thursday | 7:30 a.m. to 7 p.m. |
| Friday | 7:30 a.m. to 4:30 p.m. |
| Saturday | 12 noon to 4 p.m. |

Audio Visual services are available in the Media Center located on the ground floor of the Instructional Media Center wing just west of the Library. In the AV Student Media Lab, students can view and listen to video tapes, videodiscs, compact discs, slide/tape programs, filmstrips and audio tapes.

As assigned by instructors, the following services are also available: video and audio tape editing, video and audio tape duplication, preview rooms, equipment check out, (camcorders, overhead projectors, slide projectors and cassette recorders, and overhead transparencies).

## Bookstore

The COS Bookstore welcomes you to the College of the Sequoias. Conveniently located on campus, the bookstore carries textbooks and supplies as well as clothing, gifts, and other merchandise.

Buy your textbooks online! http://bookstore.cos.edu
The COS Bookstore encourages you to visit the store before the semester begins to avoid the long lines during the first week of class. It would be helpful to bring a copy of your class schedule with you while shopping for yourtextbooks. Textbooks are arranged by department, course, instructor, and section number. Textbooks are priced on the shelftags below the books.

## Discounts

It pays to purchase an ASB card! You will receive a coupon for new books at the COS Bookstore as well as additional discounts on all clothing and gift merchandise throughout the semester when you present your card.

Personal checks, Visa, Master Card, and Discover are accepted for payment provided a drivers license and student ID number are presented. All returned checks are turned over to Sequoias Check Collection and assessed a $\$ 30.00$ service fee.

## Refunds and Exchanges

## Terms

Refunds will be given through late registration; refunds or exchanges for books purchased for short-term classes must be returned on or before the first day of class; a COS Bookstore receipt must be presented for any refund or exchange; new books must be in perfect condition to return; a refund will not be issued if books are written in, unwrapped, soiled or stickers are removed.

## Buy Back Policy

You can sell your books back year around at the COS Bookstore. Wholesale prices may be offered during the semester. At the end of the semester, your books may be worth up to $50 \%$ of the new price IF they are being used again on campus AND the bookstore needs additional quantities. If the bookstore does not need your book, a wholesale price MAY be offered. Dates and times will be posted at the bookstore and around campus. As a special THANK YOU to our customers, the COS Bookstore will offer you additional cash back on the books needed on campus when you present your COS Bookstore receipt, BUT a receipt is not required. The bookstore cannot guarantee the buy back of any book at any time.

The staff at the COS Bookstore is here to serve you. If you have any questions or requests, please feel free to contact the Bookstore by phone at 730-3751 or by email.

Becky Covington, Bookstore Manager
beckyc@cos.edu
Dorianna Mendietta, Bookstore Operations Coordinator
doriannam@cos.edu
Marcy Parks, Textbook Buyer
marcyp@cos.eud
Josie Cote, Special Accounts, Programs \& Scholarships
josiec@cos.edu
Alice Hernandez, Merchandise Buyer
aliceh@cos.edu
Jim Anderson, Shipping \& Receiving
jima@cos.edu

## Campus Parking

Parking facilities on campus are extremely limited. Students are encouraged to participate in car pools or ride public transportation rather than drive their own vehicles because of the added safety, financial savings, and parking congestion.

Those who do bring vehicles on the main campus or college farm are required to purchase a permit and to obey ALL PARKING regulations. Citations may be issued by the Campus Police to anyone who is in violation of the college parking policy or California Vehicle Code. A brochure containing the parking policies are available at the Campus Police Office.

Students wishing to park on campus must pay a fee for a semester parking permit. The cost is $\$ 20$ for full-time and part-time students. Permits must be paid for at the Cashier's Office. Business hours are 7:45 a.m. to 4:30 p.m., Monday through Friday.

Students not wishing to purchase semester parking permitmay purchase one-day parking passes for $\$ 1.00$ from the dispensers located in Parking Lots 1, 3, 4, 6, 7 and at the College Farm.

## Student Services

Parking refunds will be available to students withdrawing from school prior to the end of the second week of instruction. Students withdrawing from school after the second week will not receive refunds.

## Refund Procedure:

I Apply for parking refunds at the Campus Police Office in Lot1.
I A\$3 service fee will be deducted from all full-time and part-time permitrefunds.
I Parking permits must be returned to the Campus Police Office before refunds will be processed.
I A refund check will be mailed in 6-8 weeks.
I Permits must be picked up as soon as purchased as a limited number will be issued.

Purchase of a parking permit does not guarantee a space will be available. The College District is not responsible for losses due to theft or damage. All parking lot users are urged to lock their vehicles and not leave valuables within view.

## Career Center

A complete career counseling program is offered to students, as well as other interested parties. The main emphasis of this program is to assist individuals in finding careers, occupations, and college majors that will contribute to a meaningful life experience. The Center offers career testing, computerized career search programs, and bibliographical resources.

The Center also provides students with assistance in finding employment to help pay the costs of their education. A job board provides a listing of local on/off campus positions. Students may use the Center's computerized self-referral system for direct connection with employers. The Center hosts workshops in career and job related topics such as interview techniques, resume preparation and labor marketinformation. The Career Center is located in the Student Services Center, Room 106.

## Child Care

The Child Development Center serves as a training laboratory for students in the Child Development Program, students going into the child care business, as well as parents and community members. The professionally staffed child development center offers an exemplary early childhood education program. The facility is located at 1945 West Meadow Lane, Visalia.

At this center, child care is provided for students, staff, and the public.
Call the Training Center ifyou have any questions about qualifications and referral to other child care services--730-3918.

## Clubs and Organizations

Students are encouraged to become active in one or more of the various clubs at COS to enrich and round-out their college experience. A list of clubs, their advisors and meeting times is listed on various bulletin boards on campus. Further information is available in the Student Activities Office located in Room 112.

Any group which wants to be organized at COS must be chartered through the Associated Student Body. Forms are obtained in the Student Activities Office, Room 112.

An "Activity Hour" is scheduled on Tuesdays and Thursdays at 12 noon for activities. It is set up so groups can plan meetings, social activities, and assemblies when most students are free to attend. An effort is made to schedule a minimum number of classes during these hours.

## Counseling Services

Counselors at College of the Sequoias provide complete educational and career guidance services. They meet with students on an individual or small group basis for a range of purposes: interpreting the assessment scores, recommending further assessment/testing, determining specific courses for immediate and future registration, developing a Student Educational Plan, identifying a person's concerns for referrals and services, and supporting the progress and successful achievement of the student's goal through follow-up services. Personal and social concerns are also addressed as they relate to college success. Students are encouraged to take advantage of these services offered at no cost.

The purpose of counseling is to help students succeed in their studies through self-evaluation, decision-making, careful planning, and commitment. Because accurate information is essential, our counselors are dedicated to insuring that students receive current and correct information. This information is usually documented in a Student Educational Plan which reflects the current goal of a student. Students wishing to change their goal should see a counselor to revise their Student Educational Plan.

Counselors are available during the day either by appointment or on a walk-in basis. Evening counseling is available by appointment only. It is advised that students make appointments well in advance of registration because of the high demand for counseling. Walk-in students should be aware that they may have to wait to see an available counselor.

College of the Sequoias' students wishing to make an appointment on the main campus may call or stop by the Counseling Office located in the Student Services Center. The telephone number is (559) 730-3741, or 7303715. To schedule a counseling appointment on the Hanford campus, students may call (559) 585-3933.

## COS Campus Police Department

The COS Campus Police Departmentfunctions for the protection of school facilities, students and staff. It also sells daily parking permits for students wishing to park on campus who don't buy a semester permit during registration.

Other services provided by the Campus Police Departmentinclude:

1. Autolockoutassistance
2. Traffic accidentreportsfor insurance purposes
3. Escort service from building to parking areas
4. Patrol of buildings and parking areas to aid in crime prevention
5. Campus lost and found
6. Investigations of theft and other crimes
7. Security functions at COS-sponsored special events
8. Emergency medical aid services

Students should remember to always lock their cars and lockers and not leave valuables unsecured in hallways or dressing rooms. Do your part to prevent crime on campus by reporting all suspicious activity to the Campus Police Department.

The Campus Police Department is located in Parking Lot 1 off Meadow Lane. Call our business office at 730-3726 and for emergencies ONLY call 730-3999.

## Deaf and Hard of Hearing Services

COS employs a lead interpreter to coordinate academic support services for the deaf and hard of hearing population.

Services depend on individual need and may include any of the following: educational assessment; individual educational planning; in-class interpreters (oral, manual and total communication interpreters); specialized tutoring; vocational, academic and personal counseling; notetakers; specialized telephone equipment(TTY); and a personal FM system.

For additional information, contact the Disability Resource Center Office, 915 S. Mooney Boulevard, Visalia, CA, 93277, or telephone (559) 730-3805, (TTY730-3913).

## Disability Resource Center

Services are provided to enhance accessibility to and success in all classes and activities offered at College of the Sequoias.

Services are individualized, with personal, physical, academic, and vocational needs considered. Services may include, but are not limited to: academic, personal and vocational counseling; specially designated parking; mobility assistance; interpreting for the deaf; notetakers; resources for the visually impaired; specialized equipment; testaccommodations; and adapted physical education. Further information may be obtained by contacting the (DRC) Disability Resource Center, 915 S. Mooney Boulevard, Visalia, CA, 93277, or telephone (559) 730-3805. (TTY 730-3913).

## Extended Opportunity Programs and Services (EOPS)

Extended Opportunity Programs and Services (EOPS) is a state funded program that provides targeted recruitmentto those students identified as being financially or educationally disadvantaged. Academic and personal counseling is emphasized and progress is monitored. Tutorial and supportive social services are available for student success. Students who feel uncomfortable starting college or are having problems trying to make it through college, should visit the EOPS Office, Room 108. For further information and assistance students can call 730-3818 or visit the website: http://www.cos.edu.

C A R E<br>(Cooperative Agencies Resources for Education)

CARE is the combined effort of Health and Human Services and Extended Opportunity Programs and Services of the College of the Sequoias.

CARE will assist single parents receiving TANF (Temporary Assistance to Needy Families) to:
u Increase theireducational skills
u Enhance theiremployability
u Becomemore confidentand self-sufficient
u Move from TANF to independence
Students eligible for student financial aid may receive an augmented grant for child care expenses. For more information about CARE, inquire in the EOPS Office, Room 108, or call 730-3818.

## Financial Aid Programs

College of the Sequoias recognizes that many students need financial assistance to pursue their educational goals and strives to provide this assistance to as many students as possible. The College offers a coordinated program of scholarships and grants, loans and employment opportunities to assiststudents in meeting their college expenses.

Financial aid awards are made on the basis of demonstrated financial need. For the purpose of establishing financial need, students should submitthe Free Application for Federal Student Aid (FAFSA). Application materials and detailed instruction booklets will be available at California high school counseling offices and/or College of the Sequoias Financial Aid Office after January 1 of each year. For further information, please contact College of the Sequoias Student Financial Services Office in Room 105 or call 730-3747.

Limited Financial Aid Services are offered at the Hanford Center.

## Food Services

College of the Sequoias offers its students three food service areas.
A snack bar (food court) with an outside seating area is located at the south end of the Business building. The snack bar offers a variety of snacks, which include candies, ice-creams, crackers, cookies; a variety of drinks, light lunches and sandwiches. The snack bar is open 7 a.m. to 9 p.m. Monday through Thursday, and Fridays, 7 a.m. to 2 p.m.

There is an outside seating area west of Room 104 (registration area) where there is a snack bar (coffee shop) which also serves sandwiches and a variety of drinks. The coffee shop is open from 7 a.m. to 5 p.m., Monday through Thursday, and Fridays, 7 a.m. to 2 p.m.

Carl's Jr. and Tacos are located in the old Student Union. They are open Monday through Thursday 7:30 a.m. to 7:00 p.m. and Fridays 7:30 a.m. to 1:00 p.m. Both breakfast and lunch are served. Breakfast orders end at 10 a.m.

## Housing Services

The Student Activities Office provides a Housing Bulletin Board to assiststudents in locating apartments, rooms, and houses in the local area. Anyone interested in posting a listing should stop by the Student Activities Office Room 112 or call 730-3736. The Housing Bulletin Board is located in the breezeway. There are no dormitories on campus.

## Insurance Coverage for Students

All students are covered by an accident insurance policy that provides coverage for accidents occurring during school-sponsored, supervised curricular and co-curricular activities. The policy coordinates with students' personal insurance so duplicate benefits are not paid. "STUDENTS INVOLVED IN AN ACCIDENT MUST FILL OUT AN ACCIDENT FORM AND CLAIM IN THE ATHLETIC OFFICE."

Students may also buy voluntary health insurance through COS during registration. Coverage may be extended to include spouse and children. Although the plan is a voluntary one, the college recommends that every student be covered by this policy or an equivalent one. Extreme financial hardship can result when a major illness or accident occurs and there is no insurance protection. More information is available in the Athletic Office and Health Center.

## Learning Resource Center

Learning Resource Center and Media Lab Hours
Monday through Thursday $\quad$ 7:30 am-8:00 p.m.
Friday $\quad$ 7:30 am - 4:00 p.m.
Saturday $\quad 12: 00 \mathrm{pm}-4: 00 \mathrm{p} . \mathrm{m}$.
The Learning Resource Center is closed during holidays, Sundays, and school breaks. Summer school hours will vary and will be posted at the entrance.

In the fall of 2004 College of the Sequoias will open its new Learning Resource Center. It is a state-of-the-art facility equipped to meet the needs of students and faculty in the Information Age. Its 53,000 square feet of floor space has everything that a traditional library has and much more.

On the first floor there are over 100 computers for student use, some in the Learning Commons and others in the Tutorial Center. In the Learning Commons students can write papers, access hundreds of periodicals through the Learning Resource Center's online database subscriptions, surfthe Internet, print documents and assignments, and access the Blackboard course management system. In the Tutorial Center students can receive assistance from a trained student tutor or use computer based tutoring programs. Online catalogs provide access to the book collection.

Staff members are available at strategic locations to assist students in navigating this hi-tech world. Reference librarians are available for research assistance, and the circulation staff assists with the check-out and check-in of books and other resources. The Learning Commons staff assists students using the computers. Also located on the first floor are current periodicals, the reference and legal collections, and listening and viewing stations for audiovisual materials and microforms. And when students are done researching and doing their school work, there is a lounge area where they can go to just relax and read a good book.

The second floor holds most of the book collection, as well as bound volumes of back issues of periodicals. There are also tables, study carrels, and group study rooms where students can find a quiet place to work or read. There are two classrooms, one a distance learning classroom and the other a computer orientation lab. Both of these rooms have the latest computer and audiovisual equipment. A meeting room and staff work area round out the second floor.

At College of the Sequoias' new Learning Resource Center students will find a welcome atmosphere for learning. They will find the ideal combination of up to date instructional technology, print and online resources, and personal service to help them achieve their educational goals.

Limited library services are also available at the Hanford Center. Students can access the COS computer catalog and use it to request delivery of up to four books per week to the Hanford Center. A reference librarian visits the Center at least weekly on a scheduled basis to assist students.

## Learning Commons

The Learning Commons is located in the Learning Resource Center.

Learning Commons Hours*
Monday through Thursday
Friday
Saturday
8:00 am - 8:00 p.m.
8:00 am - 4:00 p.m.
12:00 pm - 4:00 p.m.

The Learning Commons* is closed during holiday weekends and school breaks. Summer school hours will be posted at the entrance.

The Learning Commons, with 72 computers networked with a wide variety of library resources and course tutorials, plus word processing, graphic, and spread sheet applications and Internet access, is open to all COS students, faculty and staff, once they've registered for a free account. Librarians and Learning Commons staff are on hand if students need help in
registration. Guidelines for appropriate Learning Commons computer use are posted in the Learning Commons. Learning Commons computers are for instructional use only-- games are not permitted.

Many of the Learning Commons computers plus two workstations provided by CSU Fresno access the book collection at Fresno State's Madden Library and a number of very useful periodical index/full text sources.

## LISTO Program

LISTO is a program designed to increase the retention and success of low-income students entering College of the Sequoias. Participants in the program enroll in a group of courses with their fellow LISTO students. These Learning Communities allow the incoming freshman or returning student the opportunity to create a support network of classmates and also to receive the attention and support needed for academic success.

## Mini-Corps

COS houses a Mini-Corps Program for students with a migrant-farm working background, and who plan to go into bilingual education. Those students serve as role models and tutors for migrant children in our local schools.

Participants must have at least a 2.0 G.P.A., a financial need, a flexible schedule and be a full-time student with access to a vehicle. Students will be paid a monthly salary of approximately $\$ 270.00$ for an average work week of 10 1/2 hours.

Mini-Corps Training (EDUC 101AD Cross Cultural Education) acquaints students with cross-cultural experiences with migrant children. The class will also provide students with the following necessary instructional tools that will support and assist migrant children in achieving success in school:

- LanguageDevelopmentStrategies
- Standards and Early Literacy Strategies
- Interactive Journals
- Guided Reading Strategies
- TargetTeaching
- Lesson Planning Using Standards
- Leadership: Initiatives, Team/TrustBuilding, Risk Taking
- DevelopmentofPersonal Portfolios Students interested in the program should contact the Mini-Corps Office in Room 108C or call 730-3958.


## Orientation Services

Orientation is a required activity for all newly matriculated students at College of the Sequoias. A comprehensive orientation program includes general information and runs approximately one hour for which each student will earn a half unit of credit and be charged for a half unit, \$9.00. Non-resident students must pay the half unit fee of $\$ 9.00$ plus the $\$ 81.50$ nonresident fee. The new student orientation may be viewed on-line atwww.cos.edu. The questionnaire and information which appear at the end of the orientation must be completed and submitted electronically to receive credit for the orientation. Following application, assessment, and orientation, a student may contact the counseling office to arrange a meeting with a Counselor for the development of a Student Education Plan. A student is then ready to register for classes either on-line at www.cos.edu or by telephone at (559) 737-6101. Telephones and computers are available for use with the COS matriculation process in Room 156 (730-3987). A matriculation exemption is granted ifthe student has previously participated in a COS orientation, or is transferring to COS from another college; or is enrolling in six units or less and has no plans to obtain a degree, certificate, or participate in a transfer program.

## Student Services

## Puente Project

## What is the Puente Project?

The mission of the Puente Project is to increase the number of educationally underserved students who enroll in four-year colleges and universities, earn degrees and return to their communities as leaders and mentors to succeeding generations. Puente students sign up for a transfer program that will help them to develop necessary skills to accomplish their goals.

## There are four main components to the program:

English instruction: Puente students will be enrolled in two consecutive accelerated writing courses-English 251 for the fall semester and English 1 in the spring. Both courses focus on Latino authors, culture, and issues.
Counseling: Puente students work closely with their Puente counselor until they graduate. The counselor tracks their progress and helps students to make the right choices through their college experience. In addition to the English courses, students will enroll concurrently in Human Development 120AB, a study skills course.
Mentoring: Each Puente student will be paired with a mentor from the professional community. Students will be required to meet with mentors on a regular basis for sharing of experiences, job shadowing, and networking. Activities: Puente students are required to attend a statewide conference and to take field trips to a variety of UC campuses, attend lectures, plan social events, and become involved in the Puente Club events. Students considering applying to enter the program should work no more than 20 hours per week, so that they will be able to take advantage of all the project has to offer. Students will be asked to be available on some Thursday evenings for program activities.

For more information contact: Teresa Guadiana, Counselor (559) 730-3957; teresag@cos.edu or Joni Jordan, English Instructor (559) 730-3957; jj@jonijordan.com.

## Scholarship Program

College of the Sequoias offers numerous Scholarship Awards each year to eligible student applicants. Awards sponsored by the College, COS Foundation and many community donors, range from $\$ 150$ to $\$ 6,000$ and are offered to incoming freshman, continuing sophomores, and graduating/ transferringstudents.

Eligibility information, applications, and a Scholarship Directory may be obtained from the Scholarship Office located in the Administration Office. Contactthe Scholarship Office for applicationdeadlines.

## Student Activities

COS recognizes its responsibility for students' emotional and social growth. The college, therefore, offers a variety of co-curricular programs, including student government, athletics, music groups, clubs, assembly programs, community service projects and social activities. Further information on any activities can be obtained through the Student Activities Office, Room 112.

## Student Employment

College of the Sequoias offers on and off-campus studentemployment. Numerous off-campus jobs in local businesses are listed in the Career Center, along with on-campus, temporary, part-time studentworker positions. Student help is funded by various departments and programs, including Federal Work Study and CalWORKSs Work Study. For more information, contact Work Study Specialist, Dianna Fauvor at 730-3856, located in the Career Center, Room 106.

## Student Health Center

Services offered have evolved based on student need. Current services include blood pressure screening, T.B. skin testing, vision and hearing screening, immunizations, health counseling, pregnancytesting, psychological counseling, and nursing assessments. The Health Center staff will assist with counseling referrals for drug and alcohol abuse, mental health, eating disorders, pregnancy, family planning and illness. A rest area and some over-the-counter medications are available for students.

Health education information and materials are available in the Health Center on topics such as physical fitness, wellness, sexually transmitted diseases, AIDS, diet and nutrition. Contact the Health Center for more information.

A $\$ 13$ health fee is charged to all COS students enrolled in units for Fall and Spring semester classes and an $\$ 10$ health fee is charged for Summer Sessions. If you have any questions, contact the Health Services Coordinator at 730-3880 or 730-3881.

## Transfer Center

The Center offers many services to help students prepare for transfer to a four-year institution. Examples of services include: regularly scheduled visits by representatives from four-year colleges and universities; workshops; assistance with completing applications; and catalogs and a reference library. The Center is located in the Student Services Center, Room 106. You can contact the Center by calling (559) 730-3730.

## Tutorial Center

The Tutorial Center provides individual or small-group tutoring free of charge to any student who wants to improve his/her class performance. Tutors are available for most classes. The Center strives to teach students to be independent learners by training them in study skills such as how to take notes, improve memory and take tests.

The Tutorial Center is located in the northeast corner of the Library Building and is open from 7:30 a.m. to 8:00 p.m., Monday through Thursday and from 7:30 a.m. to 4:30 p.m., Friday.

## Veteran's Educational Benefits

College of the Sequoias is approved for training of veteran students under the provisions of State and Federal law. Dependent's Educational Assistance is also available to children and dependents of service-connected disabled or service-related deceased veterans. Students planning to attend the college and request certification for Veteran Benefits should contact the Veteran's Office at (559) 730-3854 or visit Room 4 to receive information regarding required forms and procedures.

## Work Experience

The Work Experience Program offers students the opportunity to earn elective credit (1-4 units) related to work they are doing within the community. This program is open to all majors with acceptable employment (paid or volunteer). Students interested in participating may contact Lisa Greer in the Career/Transfer Center or call 730-3742.

## Work Study Program

The Work Study programs at College of the Sequoias offer government subsidized employment in the form of part-time, temporary work for students who need additional income to help pay for their educational costs. COS provides three separate Work Study programs: CalWORKS, State and Federal Work Study. The programs encourage recipients to participate in community service activities. For more information, please contact the Work Study Specialist, Dianna Fauvor, at 730-3856, located in the Career Center, Room 106.


Child Development Center
"Wisdom is the reward you get
for a lifetime of listening
when you'd have preferred to talk.""
Doug Larson


College of the Sequoias Theater
"Life is what happens to us
while we're making other plans."

John Lennon

## Agriculture

Frank Tebeau, Chairperson

Tulare County is the leading Agriculture producing county in the nation and agriculture is the largest industry in California. COS is located in the center of this county and there are numerous educational and career opportunities for those students attending COS.

A student can complete a certificate, degree or become general education certified to transfer to a four-year university. The COS Agriculture Departmentoffers numerous evening and short-term classes for the upgrading of skills for individuals who are already employed in the agriculture industry.

The future is exciting for the division with the proposed relocation of the COS Agriculture Department Laboratory from it's current facility to a new facility. The proposed laboratory will consist of 200 acres of diversified crops, livestock and equine facilities. The COS Dairy program will be part of the California Dairy Technology Center which will operate a 1,000 cow commercial dairy, research herd and COS students will work with U C Davis Vetstudents. The California Dairy Products Training Institute (CDPTI) operates a dairy processing facility.

The Agriculture Department has recently updated its computer laboratory to one of the newest and most complete on the College of the Sequoias campus. The department maintains the most modern welding andfabrication shop in the entire community college system.

A supervised work experience program is an important part of instruction, which links the college with industry and provides valuable experience for our graduates.

Extracurricular activities are a vital part of the COS Agriculture Department. Several clubs such as the Ag Business, Dairy, Horse and Ag Council offer students leadership skills. COS serves as the headquarters for the CaliforniaCommunity Colleges Agriculture/National Resources Organization of Student Leaders. This organization offers leadership training for students and a statewide competition in a variety of skill based training.

Faculty in the Agriculture Department are experts in their disciplines and are dedicated to teaching. There are several adjunct faculty from the agriculture industry who teach in a variety of areas which enhance the educational opportunities for students. Faculty and staff are eager to help students learn and are available as agricultural counselors and advisors.

## Business

Kevin Picciuto, Chairperson
The mission of the Business Division is to educate and train students for employment in the business world, while also meeting the lifelong learning and retraining needs of our local community. The courses, certificates and majors offered by the division are designed to support the dual transfer and vocational missions of the College.

A broad range of transfer-level courses are available for students seeking to pursue a four-year degree. Associate of Science degrees are offered in seven different business areas. Fourteen vocational certificates, requiring from one to four semesters, are available to assist students who are interested in updating business skills or who will directly enter the job market.

With the explosive growth in technology-based job skills requested by employers, the Division provides hands-on experience in:

```
            Access
                        Excel
                Word
                    COBOL
            Visual BASIC
            Windows/DOS
            World Wide Web
                Keyboarding Software
                ProSeries Tax Preparation Software
            Lexis Legal Research
                FrontPage
                    PageMaker
                    PowerPoint
            QuickBooks
```

To meet the needs for computer experience, the Business Division offers both beginning and advanced coursework. The classes are schedule during the day, evening and weekend time periods. Facilities include four state-of-the-art computer classroom/labs and a dedicated computer lab which is staffed with instructional assistants.

Students may select a concentrated field of study leading to a certificate in:

| Accounting | Law Office Clerk/Receptionist |
| :--- | :--- |
| Administrate Assistant | Legal Secretary |
| Business, General | Marketing |
| Computer Applications | Paralegal |
| Computer/Information Systems | Real Estate |
| Computer Web Technician | Word Processing |

Computerized Office Procedures Certificates range from 14-36 units. Additionally, students who successfully complete Individual Income Tax ACCT 282 qualify to be certified by the California Tax Education Council as tax preparers.

## Paralegal Program

The objective of the Paralegal Program is to train students to work in a legal office environment. The Paralegal major and certificate are approved by the American Bar association. A paralegal is a person qualified by education, training or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible.

A paralegal is not an attorney and, therefore, cannot give legal advice or represent another in court, except undervery limited circumstances provided by law. This is not a four-year transfer program or a prelaw program. Students admitted into the program musthave ahigh school diploma or have passed an equivalency examination. Because of the standards set by the American Bar Association, the Paralegal major places additional general education requirements for graduation. Consultthe Paralegal General Education Pattern listed on the major and certificate page of paralegal in this catalog. The program Includes work experience and assistance with job placement.

## Consumer Family Studies <br> Deborah Campbell, Chairperson

## Focus of Consumer/Family Studies

The focus of Consumer/Family Studies is to improve the quality of life for individuals and families. Our classes do this by helping students fulfill transfer and AA/AS degree general education requirements, achieve vocational goals, enrich life styles, expand horizons, develop imaginative outlets for creative talents and leisure time, explore alternate methods of using resources and update everyday skills and knowledge.

## Areas of Study

The following are the general areas of study taught in the Consumer/ Family Studies Division:

Child Development is designed to help students develop an understanding of the development of children and relationships with them. The child development program provides classes for persons wanting to work in private child care programs and preschools; classes to earn a Child Development Permit for employment in state or federally funded programs; classes for infant/toddler care; classes in administration for director qualifications; classes for a Special Education option; classes for an AA/AS degree in Child Development; and/or classes for a transfer option. Child Development 39 and 42 are Area D transfer general education classes; and CFS 80 is a CSU AreaE transfer general education class. Two vocational certificates are available in the child development program.

Fashion is designed to help students become familiar with individualizing current fashion and personal image trends to their vocational and personal needs. The fashion program provides classes for persons interested in fashion merchandising, fashion design, clothing construction, colorlimage or modeling and includes classes for an AA/AS degree and/or a transfer option. Two kinds of vocational certificates for employment are available within the fashion program.

Food Service provides classes to help students obtain or upgrade employment in the food service industry. Two vocational certificates are available in the Food Service Program.

Nutrition/Foods is designed to help students select, purchase and/or prepare nutritious foods to fit specific life styles, budgets and abilities. NUTR 18 counts as an Area E general education transfer class and an Area B (science) general education class for an AA/AS degree. NUTR 20 is transfer general education Area D, a CSU transfer Area D3, and UC transfer 4G.

The Fine Arts division includes the following Departments: Art, Dance, Drama, Music, Photography and Speech.

The Fine Arts division provides a full and diverse curriculum in the arts and humanities as well as giving students an awareness of creative processes and strategies for adapting to the changing culture, ideas and technologies of the 21st century. The division is dedicated to providing an avenue for people to express themselves in a variety of media and enriching the lives of those who want to participate in artistic endeavors.

As a vital part of a well-rounded education, the division offers a wide breadth and depth of courses that will satisfy and challenge the potential of each student. Each department offers courses that will fulfill AA/AS degree and transfer requirements. The Fine Arts Division has courses to meet any students' needs.

The following Associate of Arts Degrees and Certificates are offered: Art, Commercial Art, Dance, Drama-Acting, Drama-Technical, Music-Vocal, Music-Instrumental, Music-Keyboard, Music-Theory/Composition, Sequoias Theatre Conservatory-Acting, Sequoias Theatre Conservatory-Technical, SpeechCommunication.

The Division actively sponsors a plethora of Arts shows, Band, Choir, Piano/Organ, Orchestra, Dance and Jazz Concerts, Plays and Musical Theater productions each year, and we are proud of our fine facilities and state-of-the -artlabs and recording studio.

Industry and Technology<br>John Winterton, Chairperson

The COS Industry and Technology Division is dedicated to serving the needs of all students interested in furthering their Industrial education at the college level. Our seven departments provide educational opportunities for students seeking job skills needed for employment, transferable credits for students who plan on transferring to a university and opportunities for persons wishing to upgrade their job skills in order to advance in their current jobs.

The Industry and Technology Division offers Associate of Science Degrees and Certificates in: Automotive Technology, Architecture, Construction Technology, Drafting, Electronics, Electrical Wiring, Graphic Design, Heating Ventilation and Air Conditioning, Industrial Maintenance, Plumbing, Technical Illustration and Welding.

The Industry and Technology Division stresses quality teaching/learning through formal classroom lecture/discussion methods as well as plenty of hands on "learn-by-doing" in our well equipped laboratory facilities.

# Language Arts and Communications 

Louise Culver, Chairperson

The Language Arts Division encompasses several departments: English, English as a Second Language, Foreign Languages, Sign Language Studies, Linguistics and Journalism. Some courses offered in the division meet the Area C requirements for the AA/AS degree and for transfer to the CSU system; many also fulfill the Area 3 requirements to the UC system. Spanish, French, or ASL fulfill foreign language requirements of the UC system as well.

Most students at COS take composition courses to fulfill either transfer or graduation requirements or to enhance their writing skills. Faculty in the English Departmenthelp students improve reading, writing and thinking abilities, all of which are necessary components in any major field of study. The composition courses vary in entry skill level from very basic writing, where students learn to develop and sharpen their writing, to the critical thinking courses, in which students tackle issues and elements of logic. In addition to the composition courses, the department offers a wealth of courses in literature from survey courses, such as Introduction to Literature, to ethnic courses, such as Chicano Literature or Native American Literature, to period literature, such as Shakespeare or American Literature. The departmenthas been foremost in the development of teaching in cyberspace! Several courses are offered online, allowing students to meet minimally on campus and to do the majority of the coursework from their own homes. For students who need greater access to computers than the Learning Center can give them, the Language Arts Computer Lab provides an opportunity for students to write papers, conduct research and complete Web-based assignments. Many instructors use the lab as a classroom for part of their courses. The English Departmentalso houses the Puente Project, a transfer program for students interested in studying Latino culture and issues and in transferring to the University of California. An English major prepares a student for a number of professional opportunities--law, teaching, publishing, broadcasting, journalism, and many more. Increasingly, employers demand strong reading and writing skills of their employees, in addition to the ability to work with a variety of people successfully. The courses of study within the English Department emphasize growth and communication and the ability to live life more deeply.

Coursework in English as a Second Language is intended for students whose first language is one other than English. The program differs from that offered through the adult school in its rigor and focus. Courses make collegelevel demands on students, requiring intense study in and outside of class, and they focus on academic reading, writing, speaking and listening skills, rather than the life-skills focus of the adultschool program. Beginning courses are designed for students with minimal skills in one or more of the reading, writing, speaking and listening areas; advanced courses are equivalent to the developmental composition courses in the English department butstress improvement of the skills with an emphasis on the special needs of the nonnative speaker. The program seeks to support and encourage students as they take coursework elsewhere in the college curriculum, and thus many students take courses simultaneously in ESL and in other disciplines.

The Foreign Language departmentoffers transfer courses in French, Portuguese, and Spanish. The Foreign Language Department believes that it is in the interest of all students to become bilingual or fluent in many languages in order to compete in today's global community. Therefore, the instructors in the department provide a sequenced program of courses that support the goal of fluency in speaking, reading, writing and comprehension. Besides offering French 1-4 and Spanish 1-4, the department also features a vital Spanish for Spanish Speakers Program (Spanish 22-24) and a survey of literature (Spanish 12). The Spanish program and instructors have been particularly active, sponsoring the campus MECHA club and offering students opportunity for study abroad.

# Nursing and Allied Health Jan Woodall, Chairperson 

## General Information:

The College of the Sequoias Division of Nursing and Allied Health offers a variety of courses and programs for students interested in the health care field. Included among these are an Emergency Medical Technician course; a Nursing Assistant course; a Phlebotomy Program; a Pharmacy Technician Program and an Associate Degree Registered Nurse Program as well as a variety of courses designed to meet the health education needs of the community. Educational programs are planned to help the student maximize his or her potential and to enhance career mobility.

The nursing curriculum integrates scientific knowledge of professional nursing and general education courses to fulfill requirements of the College of the Sequoias and the State of California Board of Registered Nursing. Nursing and general education classes are taken on the college campus and nursing laboratory classes are offered in selected hospitals and community health care agencies. The faculty is directly responsible for teaching nursing classes and supervising clinical experience.

The purpose of the Nursing and Allied Division is to provide a sound program for the education of students in the nursing and health care areas and to provide beginning practitioners to safely and effectively meet community health care needs. The Division welcomes applications from qualified men and women of all ages, races and ethnic origin groups. Students who are interested in health care education are encouraged to visit the division office for additional information. Regular monthly information meetings are scheduled by the Nursing Division for all students interested in nursing education. Dates and times are available in the division office, the counseling office and on the division website.

Three options are available to Licensed Vocational Nurses wishing to become Registered Nurses, including the 30 unit option as prescribed by the California Board of Registered Nursing. Detailed information is available in the division office.

## Registered Nursing

College of the Sequoias Registered Nurse Program is a two year program leading to an Associate in Science degree. This program is approved by the California Board of Registered Nursing and successful completion of the nursing requirements qualifies the graduate to apply to take the National Licensing Examination for Registered Nurses.

## Admission Requirements

In order to be considered for admission to the Registered Nursing Program each applicant mustmeet the College of the Sequoias requirements for admission, be in good standing, and satisfy the following specific requirements for admission to the Registered Nursing Program.

1. Graduation from an accredited high school, or equivalency (GED).
2. Maintenance of a 2.5 or higher G.P.A. overall and on all required prenursing courses.
3. Completion of Nutrition 18 (Nutrition), Biology 30 (Human Anatomy), Biology 31 (Human Physiology), Biology 40 (General Microbiology), Chemistry 20 (General Chemistry), or Chemistry 30
(General and Biological Chemistry);English1
(College Reading and Composition), Psychology 1 (General Psychology), Speech 1 (Fundamentals of Public Speaking) or Speech 4 (Interpersonal Communications), or Speech 8 (Group Communication) and either Sociology 1 (Introduction to Sociology), Anthropology 10 (Cultural Anthropology), or Nursing 106 (Cultural Diversity in Health and Illness) at College of the Sequoias, or equivalent classes at other accredited colleges.
4. Satisfactory completion of required college application and Registered Nursing Program application and informationforms, and submission of high school and college transcripts for all schools attended previously.
5. Because there are many more applicants than seats in Nursing 161, a selection process based on prerequisite GPA is used to determine the most qualified candidates. A point system is used based upon student achievements including grade point average, and work experience. Information regarding this point system is available in the Nursing Division Office or from Counselors.
6. Students must provide their own transportation to clinical agencies and must have a valid California driver license, access to transportation, and insurance as required by California law.

## Transfer and Challenge

The Division of Nursing and Allied Health may grant credit for previous nursing education. Information and advising abouttransfer and challenge policies is available in the division office.

## Scholastic Requirements

To remain in the nursing program, students must maintain a grade of " $C$ " or better, in all nursing and other required classes. Policies regarding admission, transfer and challenge, retention, grading and graduation are available in the division office.

Safe nursing practice is necessary for retention of students in the nursing program. If, at any time, a student's conduct and/or patient care displays a potential harm to the well-being of patients, or if, at any time the physical or emotional health of a student appears such that he or she cannot withstand the program in nursing, based on the professional judgment of the faculty, the student may be asked to terminate from the nursing program. The amount of time that can be lost in any nursing course, for any reason, is stated in the Nursing Student Handbook.

## Application Procedure

A class is admitted to the RN program each semester. The final date for filing applications is January 15 for the August class and July 15 for the January class. The deadline for receipt of required supporting documents is January 30 and July 30 respectively.

Nursing and Health Science
Jan Woodall, Chairperson

The final filing date for advanced placement students, such as LVN/LPN, for Summer/Fall admission is April 15 with receipt of supporting documentation deadline of April 30. Advanced placement student final filing date for Spring admission is November 15 with receipt of supporting documentation deadline of November 30.

Applicants are encouraged to file their applications as early as possible and not wait until the deadline. Application packets are available in the division office.

Physical Education<br>Tracy Myers, Chairperson

Physical Education uses physical activity to produce holistic improvements in a person's physical, mental and emotional qualities. Ittreats each person as a unit--a whole being--rather than as having separate physical and mental qualities that bear no relation to and have no effect on each other.

Here at College of the Sequoias, physical education covers a broad field of interests. Courses are offered in the areas of Sport Activities, Dance, Fitness, Health and Wellness, Sports Medicine and Athletic Training, and Adapted Physical Education. We are also proud of our outstanding Intercollegiate Athletic program which offers collegiate competition to student/athletes.

The facilities include a newly equipped gymnasium, weight room, dance studio and aerobic room with mirrors, special handicapped facilities, a football field and a regulation track. Baseball and softball fields are on campus as well as a swimming and diving pool. There are also tennis, handball and volleyball courts. Most recently the department has added a new sports medicine and training center which includes afitness lab for athletes.

Through the courses offered inthe Physical Education and Athletic Department, we are preparing students to meet the needs of the times.

Science<br>Dan Shelly, Chairperson

The Division of Science at College of the Sequoias consists of the Departments of Biology, Chemistry, and Physics. Major programs are offered in each of these disciplines. Each of these areas offer a transfer program to either state colleges or universities. Other courses taught in this division are Geology, Physical Anthropology, Physical Geography and Meteorology.

The Biology Department offers a wide variety of courses for non-majors and majors alike. The department also offers the courses needed for students entering the health-related fields, such as nursing, dental hygiene, physical therapy and sports medicine.

The Science Division also offers two Natural Science courses (NSCI 131 and NSCI 132). These courses are specifically designed for Liberal Studies students who intend to transfer to CSU Fresno. They cover topics in chemistry and physics, and in biology and geology, respectively.

The Chemistry Department offers courses for chemistry majors and for the health-related fields. This is one of the very few community college chemistry departments that offers the second year of chemistry for majors, specifically Organic Chemistry.

The Physics Department offers two series of physics courses. A threesemester calculus-based physics series is offered for those students entering the engineering fields, physics and some biology programs. A two-semester trigonometry-based physics series is designed for those students entering biological science fields.

Social Sciences<br>Ron McGriff, Chairperson

The goal of the Social Sciences Division 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, individual and collective past and present, distant and local. Their intent constitutes a search for greater social justice, personal freedom and mutual understanding. Tothis end, the Social Sciences Division feels it is imperative to champion the idea and ideals of diversity through our Ethnic Studies (and other classes, listed below) "inclusion' is paramount. It is part of our mission to continue to be sensitive to the ever-changing demographics of the community we serve. We continue to promote access to transfer and skills for the world of work.

The division offers courses in administration of justice, anthropology, economics, education, geography, history, human services, philosophy, political science, public administration, social science, and sociology. These courses will satisfy transfer, associate degree and general education requirements.

The division also offers career training in the following areas: Human Services and Administration of Justice. Programs in these two areas lead to a certificate or to an AA or AS degree.

## Student Services <br> TeresaGuadiana, Chairperson

## Mission Statement

The mission of Student Services is to empower students to achieve personal, academic and vocational success through self-evaluation, skillful decision-making, careful planning and commitment.

## Student Services

## Teresa Guadiana, Chairperson

## Counseling

Counselors at College of the Sequoias provide complete educational and career guidance services. They meet with students on an individual basis for a range of purposes: interpreting the assessmentscores, recommending further assessment/testing, determining specific courses for immediate and future registration and developing a Student Educational Plan, which reflects the current goal of the student and identifies needs for referrals and services. Students wishing to change their goal should see a counselor to revise their StudentEducational Plan. Personal and social concerns are also addressed as they relate to college success. Students are encouraged to take advantage of these services offered at no cost.

The purpose of Interdisciplinary Studies 220 (college orientation) is to prepare students for a successful entrance into college life. With the introduction of the supportive services at the college through orientation, students become informed of the resources available to them. Students also become aware of their rights and responsibilities.

The Human Development courses provide an opportunity for students to develop career decision making and college success skills.

## Disability Resource Center

The Disability Resource Center (DRC) works individually with students who have physical, communication, and learning disabilities, acquired brain injuries and psychological disabilities to enhance their access and success in classes and activities at COS.

Services include academic, personal and vocational counselling, specially designated parking, mobility assistance, note takers, extratime and other testing accommodations, and specialized equipment. The DRC offers courses through a learning skills lab, a high the center and an adaptive P.E. Program.

Other services include in-class sign language interpreters specialized tutoring and telephone equipment(TTY) for deaf and hearing impaired students.

Students with disabilities attending College of the Sequoias are able to receive instructional materials in alternate formats to assist them in achieving academic success. Alternate formats include audio, (books on tape, CD, or MP3), Braille, electronic text, large print, or tactile graphics (raised lines representing graphics, diagrams of pictures). In addition, members of the community who have disabilities may request COS publications in alternate formats.

Through the provision of these services, the DRC attempts to maximize the student's potential and to facilitate success in college.

## Extended Opportunity Programs \& Services (EOPS)

Extended Opportunity Programs and Services (EOPS) is a state-funded program that providestarget recruitmentto thosestudents identified as being financially and educationally disadvantaged, Academic and personal counseling is emphasized and progress is monitored. Tutoring, supportive social services and studentadvisors are available to enhance student success.

Students who are single heads of household, receiving TANF benefits, with children under 14 years of age may be eligible for additional funding under the CARE Program.

## Puente Project

The Puente Projectcounselor provides services to educationally underserved students in order to increase their opportunity to transfer to a university and become future leaders in their communities. The Puente counselor teaches courses, counsels students, and works with mentors in the community.

"I will prepare and some day my chance will come."

Abraham Lincoln

"If you don't know where you're going,
any road will take you there."
Uknown Author


General education breadth requirements emphasize democratic concepts based on the value and dignity of each individual, thus helping students prepare to undertake the responsibilities of citizenship and to participate knowledgeably in the varied experiences of life.

We believe in the vital importance of major requirements to educate students in the area of specialization and in breadth requirements to help them develop the capacity for independent judgment.

We also believe that the general education breadth requirements are of vital importance in the personal, social, and vocational/professional life of each student.

O In personal development, breadth requirements help students develop self-awareness, thus increasing understanding of personal potentialities and limitations.
O In social relationships and in the life of society, breadth requirements help the students communicate more effectively, promote better understanding of the communications of others and help develop awareness of societal relationships.
In professional development, the breadth requirements help the student become a more effective person in the workplace through more effective communication with fellow workers and through a better understanding of the relationship between the job at hand and the larger world into which it fits.

General education breadth requirements will help the student by:
Z exposing them to the major disciplines of accumulated knowledge,
Z stimulating curiosity about their surroundings,
z evaluating alternatives so that personal values can be formed,
z developing effective communication skills,
z gaining a sense of self-worth,
Z learning to make rational decisions based on the utilization of problem-solving techniques,
z questioning simple solutions of complex problems; ; fappropriate, seeking alternatives.

## The Difference Between the AA \& AS Degrees

Students at College of the Sequoias who complete the appropriate requirements may earn either an Associate of Arts or an Associate of Science degree. Both degrees representsignificant levels of achievement and may be used by students who plan to start their career immediately after graduating or, with proper planning and course selection, by those who plan to transfer to a four year university.

Associate of Arts (AA) degree is granted to students majoring in the arts, humanities, social sciences, and similar areas.

Associate of Science (AS) degree is granted to students majoring in agriculture, engineering, technology, the sciences, and related programs.

## Requirements for Graduation

The Associate of Arts or Associate of Science degree will be awarded to all students upon the satisfactory completion of the following requirements:

ㄱ A minimum of 60 units of college courses numbered from 1 to 299 , at least 15 of which must be taken in residence at the College of the Sequoias, with a "C" (2.0) average.
$\square$ Completion of all courses required for the desired major (see major and certificate section of this catalog for specifics).
$\square$ Eighteen units of general education including at least three (3) units from each of the areas: A through E. However, completion of the CSU or IGETC general education requirements or general education requirements at any accredited university will fulfill the COS general education, subject, and competency requirements.
$\square$ Subjectrequirements:
a. Satisfactory completion of two units of Dance, Intercollegiate Athletics or Physical Education general activities courses. Students 21 years of age and over at the time of graduation are exempt from this requirement. A medical exemption is also available.
b. Three units of Health and Wellness. This requirement is satisfied by completion of HW 1, 7, or 104.
Degrees in Registered Nursing are exempt from this requirement; Veterans are also exempt with approved DD214 or DD295.
c. American Institutions:
$=\quad$ Completion of a one-year high school Civics, U.S. History and/or Government course with a minimum grade of "C" or better in both semesters or
$=\quad$ Completion of HIST 17, 18, GOVT 5, or SSCI 276, or an equivalent course at an accredited college.
$\square$ Competency Certification:
State law requires that the candidate for the Associate of Arts or Associate of Science degree be certified as competent in the areas of writing, reading, and computation. College of the Sequoias students may establish competency in each area by one of the following:
a. Writing:
$=$ ENGL 1, 251, or BUS 184 at COS or an equivalent course at an accredited college with a grade of "C" or better.
$=$ CLEP English Composition or English Composition with Essay Examination (Score of 500 or higher on the written test and 50 or higher on the computerized test).
b. Reading:
$=$ Score of 25 or higher on the APS Paper \& Pencil Reading Placement Test
$=$ Score of 85 or higher on the CPT Computerized Reading Placement Test
$=$ ENGL 1, 265AB at COS or an equivalent course at an accredited college with a grade of "C" or better.
$=$ CLEP English Composition or English Composition with Essay Examination (Score of 500 or higher on the written test and 50 or higher on the computerized test).

## Graduation and Transfer

c. Mathematics:
$=$ High school algebra 1 and geometry (one each) with a grade of "C" or better, or a more advanced math course with a grade of " C " or better.
$=$ MATH 230 or 235 , or a more advanced math course at COS, or an equivalent course at an accredited college with a grade of "C" or better.
$=$ Pass Math competency exam with a successful score (at least 70 percent)
$=$ CLEP College Mathematics Examination (Score of 500 or higher on the written test and 50 or higher on the computerized test).

## Area A1 Written Communication

A minimum of three (3) units chosen from the following:
ENGL 1
ENGL 251
BUS 184
CLEP English Composition or English Composition with
Essay Examination. (Score of 500 or higher on the written test or 50 or higher on the computerized test).

NOTE: Grade of "C" or higher is required in Area A1.

## Area A2

Oral Communication and Analytical Thinking

A minimum of three (3) units chosen from the following:
AJ *25
AG 201
AGMT 102
BUS 20, *25,119, 295
COMP 5, 6, 7
ENGL 2
ITEC 201
JOUR **7
GOVT **7, *25
PHIL 20, 25, 28
SPCH 1, 4, 5, 7, 8, 112
Any Math course numbered 1-299
CLEP College Mathematics Examination (Score of 500 or higher on the written test or 50 or higher on the computerized test).

* AJ 25 is the same as BUS 25 and GOVT 25, and can be counted in one AREA ONLY (A2 or D)
** JOUR 7 is the same as GOVT 7, and can be counted in one AREA ONLY (A2 or D)


## Area B <br> Natural Science

A minimum of three (3) units chosen from the following:
AG 3
OH 101
NSCI 131,132
NUTR*18
ASTR 10; GEOG 1, 1L, CHEM $1,2,20,21,20,253$; GEOL $1,4,12$;
MET 1; PSCI 12,20; PHYS 5,6,7,20,21;
BIO1,2,20,21,22,25,30,31,40,60, AND ANTH 11

CLEP Natural Science Examination (Score of 500 or higher on the writtentest or 50 or higher on the computerized test).

* NUTR 18 can be counted in one AREA ONLY (B or E)


## Area C Humanities

A minimum of 3 units chosen from the following:
AJ 123
ASL (1-299)
ANTH *4, *5,
ARCH 10, 20, 21, 70, 71, 120, 121AC
ART (1-299)
BUS*185
CFS **6, **7
ENGL 4, 10, 15-46, 253
FOREIGN LANGUAGES (1-299)
ITEC*185
INTD121,124
LING 10
MUS (1-299)
OH 111
PHIL (1-299)
PORT 1, 2
SPAN 12
DRAM (1-299)
CLEP Humanities Examination (Score of 500 or higher on the written test or 50 or higher on the computerized test).

* ANTH 4, 5 are the same as ART 4, 5; BUS 185 same as ITEC 185
** CFS 6 and 7 are the same as ART 6 and 7.


## Area D <br> Social/Behavioral Science

A minimum of three (3) units chosen from the following:
AGMT 1
AJ 11, *25, 114
ANTH 10
BUS *25, 188
CHLD**39, 42, 158, 160
CFS \#\#136
ECON 1, 2
ETHN 1, 2, 3, 4, 5
FASH 179
GEOG 2, 3
GOVT 5, \#7, *25
HIST 4, 5, 17, 18, 23, 24
JOUR \#7, 120
NUTR ***20
PSY 5, **39
SSCI 276,\#\#136, 10
SOC 2
SPCH 9
CLEP Social Sciences/History Examination (Score of 500 or higher on the written test or 50 or higher on the computerized test).

* AJ 25 is the same as BUS 25 and GOVT 25, and can be counted in one AREA ONLY (D or A2).
** CHLD 39 is the same as PSY 39 .
*** NUTR 20 can be counted in one AREA ONLY (D or E).
\# JOUR 7 is the same as GOVT 7, and can be counted in one AREA ONLY (D or A2).
\#\# CFS 136 is the same as SSCI 136 and can be counted in one AREA ONLY (D or E).


## Area E <br> Exploration

A minimum of three (3) units chosen from the following:
COMP 1-299
CFS 80, *26,\#\#136, 186
ENGL 14AB
HW 1, 7, **60, 104, 119
LIBR102
NURS 106
NUTR \#18, ***20
PARA 101, 102
PSY 1, 10, 133
SSCI\#\#136
SOC 1, *26
SMED **60
PE (1-299)
Any GE class listed in Area A1, A2, B, C, or D outside the major (e.g., a business major could not take an additional business class in Areas A2.)

* SSCI 26 is the same as CFS 26.
** HW 60 is the same as SMED 60.
*** NUTR 20 can be counted in one AREA ONLY (E or D)
\# NUTR 18 can be counted in one AREA ONLY (E or B)
\#\# CFS 136 is the same as SSCI 136, and can be counted in one AREA ONLY (D or E)


## Degree Guidelines

## Graduation Application

An Application to Graduate must be filed by each student who wishes to receive an Associate Degree. Students must have a graduation checklist completed by a counselor prior to submitting their application. Applications are available in the Admissions and Counseling Offices.

The completed application must be returned to the Admissions Office prior to the deadlines published in the college calendar which can be found in the Schedule of Classes, College Catalog, and Student Bulletin.

Starting with the 1991-92 catalog year, courses numbered 300 and above will not be associate degree applicable regardless of your establishing catalog rights prior to the 1991-92 catalog year.

## Second Degree

1. A minimum of 12 semester units at COS subsequent to completion of the first AA or AS Degree with attendance during the last semester prior to graduation, or a total of forty-five (45) units in residence if not in attendance during the last semester prior to graduation. Units earned through Credit by Examination may not be counted as units in residence.
2. Courses specifically required in the major field of the second degree.
3. Students who have not maintained continuous enrollment (see Catalog Rights listed below on this page) are required to meet all additional state and local requirements including general education, competencies, etc., as specified by the catalog in effect at the time of pursuing the second degree.
4. Only one diploma will be provided by COS at no cost to the student. A student may purchase additional (2nd or more, if earned) diplomas at a cost to be determined by COS.
5. Notations of all degrees earned and majors completed will appear onyourtranscripts.
6. A receipt from the cashier for an additional diploma must accompany the application for a degree.

## Catalog Rights

Students may graduate under the degree requirements in effect:

4 At the time of first enrollment as long as continuous enrollment is maintained, or;

4 Under the requirements in effect from the time continuous enrollment is established and maintained, or;

4 Under the requirements in effect at the time of graduation.

Continuous enrollment is defined as enrollment in at least one semester during a calendar year on a continuing basis without a break of more than one semester excluding summer session. Any academic record symbol (A-F, CR, NC, I, IP, RD, W) shall constitute enrollment.

## Private and Independent

Transfer Planning

Planning to Transfer?


> Yourofficial sourcefor Californiaarticulation andstudenttransfer information.

Students planning to transfer have a wide variety of options. The California State University with 23 campuses; the University of California with 9 campuses; and over 60 private, independent colleges in California provide a wide range of academic programs, physical and academic environments, and social climates. College of the Sequoias offers the equivalent of the firsttwo years of these four year college and university programs. Students wishing to pursue any of these educational alternatives should meet with a counselor as early as possible to discuss their educational study plan. Careful planning will help you avoid mistakes which could prolong your academic pursuits.

Successful transfer planning requires the following steps:

$$
\begin{array}{ll}
\mathrm{n} & \text { Selecting a career goal } \\
\mathrm{n} & \text { Selecting an appropriate major to meet your career goal } \\
\mathrm{n} & \text { Selecting an appropriate college or university } \\
\mathrm{n} & \text { Planning and completing an appropriate transfer program } \\
\mathrm{n} & \text { Completing the application process }
\end{array}
$$

All colleges and universities have specific admissions requirements and may have special course and unit requirements, as well as minimum grade averages that must be met prior to transfer. Once students identify their major and the college or university to which they wish to transfer, they should consult the respective catalog of the college or university for specific requirements. Catalogs for the California State University campuses, the University of California campuses, and selected private, independent colleges are available for use in the Transfer/ Career Center. Students are encouraged to purchase their own catalog by writing directly to the college or university.

Four year colleges and universities require students to complete specific general education requirements as well as major requirements for the baccalaureate degree. Students should work toward completing both general education and lower division major requirements prior to transfer. The Counseling Office maintains articulation agreements with course equivalencies and curriculum major sheets for selected majors and colleges. COS counselors will assistwith interpreting the curriculum major sheets, articulation agreements and catalog statements and requirements.

In accordance with Executive Order No. 167 from the Chancellor's Office of the California State Universities and Colleges, College of the Sequoias has developed a list of courses which are baccalaureate level. Courses that are numbered 1-199 are accepted by the California State Universities and most private, independent colleges. Courses numbered 1-99 are accepted by the University of California; however, students should consult the "University of California Transfer Course List" in this catalog for specific limitations. COS courses transfer to four-year colleges and universities in terms of specific or elective credit depending upon the school and major selected.

ALL STUDENTS must assume the responsibility for complying with regulations and instructions set forth in catalogs for selecting the courses which will permit them to meet their educational objectives, and for satisfying prerequisites for any programs or courses which they plan totake. College requirements and articulation agreements are continually changing; the following pages represent our best attemptto provide current and pertinent information for transfer students.

# THE <br> CALIFORNIA STATE UNIVERSITY 

Initial Application Filing Period

All applicants are encouraged to file within the initial application filing period. Applications to impacted majors must be filed within the first month of the filing period. Each campus accepts applications until capacities are reached. If applying after the initial filing period, consult the COS Transfer Center for current information. Applications for admissions are available in the Transfer Center.

| Summer Semester or Quarter: | February 1-28 |
| :--- | :--- |
| Winter Quarter: | June1-30 |
| Spring Semester or Quarter: | August1-31 |
| Fall Semester or Quarter: | October 1-30 |

## Eligibility for Transfer

## Lower Division Transfer Requirements

If you have completed fewer than 56 transferable semester ( 84 quarter) units, you will qualify for admission if you have a grade point average of 2.0 (C) or better in all transferable units attempted, are in good standing at the last college or university attended, and meetthe admission requirements for firsttime freshmen, i.e., you have completed with a grade of "C" or better each of the courses in the comprehensive pattern of college preparatory subject requirements and have a qualifiable eligibility index. If you do not complete all the subject requirements in high school, appropriate college courses may be used to make up the missing subjects. Nonresidents mustmeet the eligibility index for nonresidents.

## Upper Division Transfer Requirements

Ifyou have completed at least 56 transferable semester (84 quarter) units, have a grade point average of 2.0 (C) or better in all transferable units attempted (nonresidents must have a grade point average of 2.4 ), and are in good standing at the last college or university attended, you may become eligible one of two ways:

1. You have completed at least 30 semester ( 45 quarter) units of college courses with a grade of " C " or better in each course to be selected from courses in English, arts and humanities, social science, science and mathematics at a level at least equivalent to courses thatmeetgeneral education requirements.

The 30 semester ( 45 quarter) units must include all of the general education requirements in communication in the Englishlanguage (at least 9 semesters or 12 quarter units to include written communication, oral communication, and critical thinking) and mathematics (at least 3 semester or 4 quarter units) or, if completing the Intersegmental General Education Transfer Curriculum, English communication (at least9 semester or 12 quarter units in English composition, oral communication, and critical thinking) and the requirement in mathematics (at least 3 semester or 4 quarter units); most CSU campuses require completion of these four courses by Spring for Fall transfer, and by Summer for Spring transfer.
2. You have completed all subject requirements required for firsttime freshmen. Ifyou did not complete all the subject requirements in high school, appropriate college courses may be used to make up the missing subjects.

For upper division transfers seeking admission to the fall term 2000 or later, the second option will not be available to establish eligibility for admission. All applicants with 56 or more transferable semester (84) quarter units will be required to have completed at least 30 semester units of courses atalevel equivalent to courses that meet general education requirements. The 30 semester units must include all of the general education requirements in communication in English language (3 courses) and at least the three semester units (typically 1 course) required in mathematics.

Applicants who graduated from high school in 1987 or earlier who have not completed the subject requirements in (1) and (2) above should contact the Admissions Office at the campus to which they plan to submit an application for admission to inquire aboutalternative admission programs.

## General Education Requirements

All campuses of the CSU system require a minimum of 48 units of general education. Thirty-nine of these units may be taken at community colleges. Beginning with Fall 1991, students may fulfill the lower division general education requirements prior to transfer by completing one of the following three options.

1. The California State University General Education Certification which will fulfill the lower division breadth/general education requirements for all CSU campuses.
2. The Intersegmental General Education Transfer Curriculum which will fulfill the lower division breadth/general education requirements for all CSU and most UC campuses.
3. The specific lower division breadth/general education requirements of the campus to which they intend to transfer.

The California State University General Education Certification and Intersegmental General Education Transfer Curriculum patterns are listed below. Students should consult a COS Counselor to determine which option is best suited for their educational objective.

## General Education Certification for Transfer to CSU

Students may complete the following pattern of courses within the stated rule to be eligible to receive General Education Certification prior to transfer. This certification requires all CSU campuses to apply all 39 units toward the 48 units minimum general education requirement.

## THE CALIFORNIA STATE UNIVERSITY

Area A
Oral and Written Communication and Critical Thinking (9 units minimum)

Choose one course from each section.
A1 Oral Communication
A2 WrittenCommunication
A3 Critical Thinking

SPCH 1, 4, 7, 8, \#\#112
ENGL1
ENGL 2, PHIL 25, 20, 28; BUS \#25*, SPCH 5

All courses in "Area A" must be completed with a grade of "C" or better.

* Courses with asterisks can be counted in ONE AREA ONLY.
\# BUS 25 same as AJ 25 and GOVT 25
\#\# SPCH 112 same as BUS 112


## Area B

Natural Sciences and Mathematics
(9 units minimum)
Choose one course from each group. One laboratory science is required. (Labs underlined).

Group 1 (B1)
Physical Science
ASTR 10; GEOG 1, 1L; CHEM 1, 2,20,21,30;
GEOL 1, 4,12, MET 1; PSCI 20;
PHYS 5, 6, 7, 20, 21
Group 2 (B2) Life Science
BIOL 1, 2, 20, 21, 22, 25, 30, 31, 40, 60, and ANTH 11
Group 3 (B4)
Mathematics
MATH $10,11,21,45,61,62,70,75,76,77$, 80, 81, 154; BUS 20, 119

All courses in "Group 3" must be completed with a grade of "C" or better.

## Area C <br> Arts, Literature, Philosophy and Foreign Language <br> (9 units minimum)

The nine units must include at least one course from Groups 1 and 2.

Group 1 (C1)

```
Arts (Art, Dance, Music, Theatre)
ART 1, 2, 3, #4, #5, #6, #7, 8
CINA 31, 32, DRAM1, 2, 3, 6*, 8, 9, }6
MUS 1, 4, 5, 6, 7, 10, 11, 13
Group 2 (C2) Humanities (Philosophy, Foreign Language)
AJ123
ASL 1, 2, 3,4
BUS# 185
ETHN 1**2*,3*,4*
FREN 1, 2, 3, 4,
LING 10
PHIL 1, 5, 12, 13, }1
PORT2
SPAN 1, 2, 3, 4, 22, 23, }2
ENGL 4, 10, 15, 16, 17, 18, 19, 25, 30, 31, 44, 45, 46
SPAN 12, DRAM 6*
```

\# ART 4, 5 same as ANTH 4, 5; ART 6, 7, same as CFS 6, 7; BUS 185 same as ITEC 185.
*Courses with asterisks can be counted in ONE AREA ONLY.

# THE <br> CALIFORNIA <br> STATE UNIVERSITY 

## General Education Certification for Transfer to CSU

Students may complete the following pattern of courses within the stated rules to be eligible to receive General Education Certification prior to transfer. This certification requires all CSU campuses to apply all 39 units toward the 48 units minimum general education requirement.

## Area D <br> Historical, Political, and

Econommic Institutions
(9 units minimum)

The nine units must include at least one course from from Groups 1 and 2.

GROUP 1 (D8)
AMERICAN INSTITUTIONS
GOVT 5
GROUP 2 (D6)
AMERICAN INSTITUTIONS
HIST 17, 18
GROUP 3
(D1): ANTH 10
(D2): ECON 1,2, AGMT 1
(D3): ETHN $1^{\star}, 2^{\star}, 3^{\star}, 4^{\star}, 5$
(D4): SSCI 10
(D5): GEOG 2,3
(D6): HIST 4, 5, 23, 24
(D7): PSY 5, SPCH 9, NUTR 20*
(D8): GOVT \#7, BUS \#25*
(D9): CHLD \#39, 42, PSY\#39
(DO): AJ 11, 114, SOC 2
\# CHLD 39 same as PSY 39; GOVT 7 same as JOUR 7; BUS 25 same as AJ 25 and GOVT 25.

* Courses with asterisks can be counted in ONE AREA ONLY.


## Understanding and

Self-Development
(3 units minimum)

PSY 1, 10, 133; SOC 1, \#26; NUTR 18, 20*; CFS 80, \#26, \#136,186; ENGL 14AB; HW 1, 7, 104; NURS 106, SSCI \#136.
\# SOC 26 is the same as CFS 26;
CFS 136 is the same as SSCI 136 .

* Courses with astericks can be counted in ONE AREA ONLY.


## American Institutions Requirement

All CSU graduates must complete coursework in U.S. History, Constitution, and American Ideals as required by Section 40404 of Title 5 of the Administrative Code. This requirement may be fulfilled at COS for 22 of the 23 CSU campuses by completing GOVT 5 and either HIST 17,18 as part of the General Education Certification. Some CSU campuses will not allow these courses to meet both the general education requirement and the American Institutions requirement. See a COS counselor for details.

Students may complete the following pattern of courses within the stated rules to be eligible to receive the Intersegmental General Education Transfer Curriculum (IGETC) Certification. This certification requires all CSU and most UC campuses to consider all lower division breadth/general education requirements fulfilled. All courses must be completed with a grade of " C " or better.

## INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM FOR TRANSFER TO CSU AND UC

## Area 1

English Communication
(CSU-Select one course from each group -9 units minimum)
(UC-Select one course from Group A and one course from Group B-6 units minimum)

Group A English Composition
1 course, 3 semester units
ENGL 1
Group B Critical Thinking-English Composition
1 course, 3 semester units
ENGL 2, PHIL 25
Group C Oral Communication (CSU Requirement Only)
1 course, 3 semester units
SPCH 1, 8
Area 2
Mathematical Concepts and
Quantitative Reasoning
(1 course, minimum, 3 semester units)

MATH 21*, 61*, 62*, 70*, 75*, 76*, 77, 80, 81


## Area 4

Social and Behavioral Sciences (Minimum of 9 semester units)

Select at least three courses from at least two disciplines.
AGMT 1; ANTH 10
CFS 26\#,80
CHLD 39\#, 42
ECON 1, 2;
ETHN $1^{* *}, 2^{* *}, 3^{* *}, 4^{* *}, 5$
GEOG 2, 3
GEOL 4
GOVT 5+*, 7\#, SOC 1, 2, 26\#
HIST 24
JOUR 7\#
NUTR 20
PSY 1, 5, 10, 34, 39\#
SSCI 10
SPCH 9
\# GOVT 7 is the same as JOUR 7
\# PSY 39 is the same as CHLD 39
\# CFS 26 is the same as SOC 26
** Courses may be counted in ONE AREA ONLY

## Area 5

Physical \& Biological Sciences
(Minimum 2 courses, 7-9 semester units)
Select at least one course each from Groups A and B. At least one course must include a laboratory. (Labs are underlined)

Group A PhysicalSciences
CHEM 1*, 2*, 5, 12*, 13*, 20*, 21*, 30*,
PHYS 5*, 6*, 7*, 20*, 21*
ASTR 10; GEOG1, 1L; GEOL 1,12
MET 1; PSCl 12*, 20*
Group B Biological Sciences
BIOL 1, 2, 20*, 21*, 22*, 30, 31, 40, 60;
ANTH11

# INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM FOR TRANSFER TO CSU AND UC 

## Language Other <br> Than English <br> (UC Requirement only)

This requirement may be fulfilled by the completion of two years of a foreign language in high school with a grade of " C " or better, or a score of 3 or higher on an AP Exam in a language other than English; or a score of 500 or higher on a College Board Achievement test in a language other than English; or a score of 5 or higher on an International Baccalaureate Higher Level Exam in a language other than English; or a satisfactory completion, with "C" grades or better, of two years of formal schooling at the sixth grade level or higher in an institution where the language of instruction is not English. If you are not able to demonstrate proficiency as indicated above, you can fulfill this requirement by completing one of the following courses:

ASL 1,2,3,4
FREN 2,3,4
PORT 2
SPAN 2,3,4,22,23,24

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

This is not part of the IGETC; however, this requirement may be completed prior to transfer. Select one course each from Groups 1 and 2.

GROUP 1
GOVT 5+*
GROUP 2
HIST 17+, 18+*

* Indicates that number of transfer units may be limited by UC.

Please consult the "University of California Transfer Course List," located in this catalog for transfer unit limitations.
$+\quad$ Ifcourse is used to meetthe CSU Graduation Requirement in U.S. History, Constitution, and American Ideas it can NOT also be used tomeet/GETC Requirements.

All California State University bound transfer students mustfulfill degree requirements from one catalog, not the most favorable requirements from two or more catalogs. As long as a student maintains continuous attendance*, he or she may elect, for purposes of fulfilling graduation requirements, one of the following:

1. The catalog in effect at the time a student begins attending a California community college such as College of the Sequoias.
2. The catalog in effect at the time a student begins attending the transfer campus.
3. The catalog in effect at the time a student graduates from the transfer campus.

All students planning to transfer to the University of California or a private university must fulfill degree requirements from one catalog, not the most favorable requirements from two or more catalogs. These transfer students typically use the catalog in effect at the time they begin continuous attendance.*

* Continuous attendance is defined as being officially enrolled in at least one semester or two quarters during a calendar year regardless of the number of units completed. Also, a student is considered to have been in attendance even if he or she registered and totally withdrew from school during that semester/quarter as long as the official transcript so indicates.


## Priority Application Filing Period

All applicants are encouraged to file within the priority application filing period. If applying after the priority filing period, consult the COS Transfer Center for current information. Applications for admissions are available in the Counseling Office and the Career/Transfer Center.

## UNIVERSITY <br> OF CALIFORNIA

UC Berkeley<br>FallSemester: November1-30<br>(Applications accepted for Fall only)

## Eligibility for Transfer

1. If you were eligible for admission to the University when you graduated from high school--meaning you satisfied the subject, scholarship, and examination requirements, or were identified by the University during the senior year in high school as being eligible under the Eligibility in the Local Context (ELC) Program, you are eligible to transfer if you have a "C" (2.0) average in your transferable college coursework.
2. If you met the scholarship requirement, but did not satisfy the subject requirement, you must take transferable college courses in the subjects you are missing to be eligible to transfer. You will need to earn a grade of "C" or better in each of these required courses and an overall "C" (2.0) average in all transferable college coursework.
3. If you were not eligible for admission to the University when you graduated from high school because you did not meetthe Scholarship Requirement, you must:
a. Complete 90 quarter units or 60 semester units of transferable college credit with a grade point average of at least 2.4 ; (no more than 14 semester/21 quarter units may be taken (pass/not pass), and;
b. Complete the following course pattern, earning a grade of "C" or better in each course:
n two transferable college courses (3 semester or 4-5 quarter units each) in English composition, and;
n one transferable college course (3 semester or 4-5 quarter units) in mathematical concepts and quantitative reasoning, and;
n four transferable college courses (3 semester or 4-5 quarter units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, the physical and biological sciences.
(Students who satisfy the Intersegmental General Education Transfer Curriculum prior to transferring to UC will satisfy Option 3b above of the transfer admission requirements. For more information about the IGETC, refer to the Index of this catalog.

## Nonresidents

The minimum admission requirements for nonresidenttransfer applicants are the same as those for residents, except that nonresidents must have a grade point average of 2.8 or higher in all transferable college coursework.

## NOTE

If the number of applicants exceeds the spaces available for a particular campus or major, as is often the case, the campus uses criteria that exceeds the minimum requirements to select students. Therefore, meeting the minimum requirements is not enough to gain admission to many UC campuses and programs.

# UNIVERSITY OF CALIFORNIA <br> Clearing High School Subjects with College Courses* 

| UC Subject Requirement "A" through "F" | High School Requirement | How to clear "A-F" deficiency or ommission (All courses must be completed with a grade of " C " or better.) |
| :---: | :---: | :---: |
| (a) History/Social Science | Two Years | For a deficiency in U.S. History/Civics/American Government, a transferable college course of two or more semester units in U.S. History, civics, or American government. For a deficiency in world history/cultures/geography, a transferable college course of two or more semester units in world history, cultures, and geography. |
| (b) English | Four Years | For each year of deficiency, one transferable course of four quarter (three-semester) units in English composition, literature (American or English), speech, foreign literature in translation, public speaking, or oral interpretation of literature. Literature and speech courses must include substantial composition. |
| (c) Mathematics | Three Years | To clear the entire deficiency, complete one of the following: a transferable mathematics course that employs the topics of intermediate algebra or; a transferable statistics course offered by either the mathematics or statistics department that has intermediate algebra as a prerequisite. |
| (d) Laboratory Science | Two Years | For each year of deficiency, a transferable course in a natural (physical or biological) science with at least 30 hours of laboratory (not "demonstration"). |
| (e) Language Other than English | Two Years | To clear entire deficiency, any transferable course or courses held by the college or university to be equivalent to two years of high school language (excluding conversation). |
| (f) Visual and Performing Arts | One Year | Any transferable (3) semester (4) quarter unit course that clearly falls within one of four Visual/Performing Arts disciplines: dance, drama/ theater, music or visual art. |
| (g) College Preparatory Electives | Two Years | For each year of deficiency: one transferable course beyond those listed above as clearing any of the "a-e" requirements: or a transferable course having as prerequisite the equivalent of two high school years in a second language; or transferable course equivalent to those that clear the "c", "d", or "e" requirement; or a transferable course of three or more semester (4 or more quarter) units in history, social science, or visual and performing arts. |

[^1]
## General Education Requirements

Each school and college at every UC campus has its own breadth/ general education requirements. Beginning with Fall 1991, students may fulfill the lower division breadth/general education requirements at any UC campus by completing one of the following two options:

## UNIVERSITY <br> OF CALIFORNIA

1. The Intersegmental General Education Transfer Curriculum which will fulfill the lower division breadth/general education requirements for most UC and all CSU campuses.
2. The specific lower division breadth/general education requirements of the campus they intend to transfer to.

Refer to the Index of this catalog to find the Intersegmental General Education Transfer Curriculum. Students should consult a COS Counselor to determine which option is best suited for their educational objective.

## University of California Transfer Course List

College of the Sequoias courses that are acceptable by the University of California including all unit limitations are as follows:

## Accounting

1, 2
Administration of Justice
11, 13, 14*, 25*
*14 and 25 combined: maximum creditallowed: one course NOTE: AJ 25 same as GOVT 25 and BUS 25

## Agriculture

1, 3, 4
Agriculture Management 1

American Sign Language
1, 2, 3, 4
Animal Science
1, 2AB, 22
Anthropology
4, 5,10, 11
NOTE: ANTH 4, 5 same as ART 4, 5.

## Architecture

$10,11,20,21,70,71$
Art
1, 2, 3, 4, 5, 6, 7, 8, 9, 10AD, 11AD,12AD, 13AD, 15, 16AC, 17AD, 18AD,23AD*,25AD\#
*Maximum credit, 6 units
\#Maximum credit, 6 units
NOTE: ART 4 and 5 same as ANTH 4, and 5 ; ART 6 \& 7 , same as CFS $6 \& 7$.

## Astronomy

10

## Biology

$1,2,20+, 21,22,25,30,31,40,60 *$
+No credit for BIOL 20 if taken after
BIOL1
*No credit for BIOL 60 if taken after BIOL 1 or 2

## Business

$18,20^{*}, 25,82$
*BUS 20 and MATH 21 combined; maximum creditallowed, one course NOTE: BUS 25 same as AJ 25 and GOVT 25.

Chemistry
$1^{\star}, 2^{\star}, 12,13,20^{\star}, 21^{\star}, 30^{*}$
*1,2,20,21, and 30 combined: maximum credit: 2 courses.

Child Development 39,42

NOTE: CHLD 39 same as PSY 39
Consumer/Family Studies
6, 7, 26, 80
NOTE: CFS 6 \& 7 same as ART 6 \& 7;
CFS 26 same as SOC 26

## Transfer Course List

## Cinema Arts

31, 32

## Computer

5, 6, 7, 8, 9
Dance
6AD, 8AD, 10AD, 12AD, 13AB, 16AB, 41AD
NOTE: DANC 41AD same as MUS 97AD and DRAM 20AD.

## Drama

1, 2, 3, 4, 5, 6, 8, 9,11AD, 12AB, 13AB, 14AB, 15AB, 16AB, 17AB, 18AB, 19AD, 20AD, 21AD, 22AD,30AB,40AB, 60

## Economics

1,2

## Engineering

1, 2, 3, 4, 7

## English

1, 2, 4, 10, 14AB, 15, 16, 17,
$18,19,25,30,31,44,45,46$
Ethnic Studies
1, 2, 3, 4, 5

## Fashion

12AB, $17 \mathrm{AB}, 76$

## French

1, 2, 3, 4
Geography
1,1L, 2, 3
Geology
1, 4,12
Government
5, 7, 25+
+25 and AJ 14 combined; maximum
credit, one course
NOTE: GOVT 7 same as
JOUR 7; GOVT 25 same as AJ 25 and BUS 25 .

## History

$4,5,17,18,23,24,31$

## Health and Wellness

1*, 3, 7*, 60*
*1, 7 , and 60 : maximum credit allowed, one course
NOTE: HW 60 same as SMED 60

## Independent Study

(See COS Counselor)

## Intercollegiate Athletics

1ADthrough 31AD
*See PE (*) for limitation
Journalism
1, 7, 20

## Linguistics

10

## Mathematics

$10^{* *}, 11^{* *}, 15,16,18,21^{*}, 45,61+, 62+, 70 \#$, $75+, 76+, 77,80,81$
*21 and BUS 20 combined: maximum creditallowed, one course
+61/62, 75/76 combined: maximum credit allowed, one series
**10 and 11 combined: maximum credit allowed, one course
\#70 maximum credit allowed, 4 units

## Meteorology

1

## Music

1++, 4++, 5++ 6, 7, 10, 11, 13, 20, 21, 22AD, 23AD, 30AD, 31AD, 32AD, 34AD, 36AD, 40AD, 41AD,50AD, 53AD, 54AD, 55AB, 56AB, 57AD, 60AD, 61AD, 62AD, 63AD, 65AD, 66AD, 72AD, 73AD, 74AD, 75AD, 76 AD + , 90AD, 91AD, 92AD, 93AD,94AD, 97AD
+Limit with (*) P.E. courses: maximum credit allowed, 4 units
$++1,4, \& 5$ combined; no credit for 1 if taken after 4 or 5
NOTE: MUS 75AD same as PE 41AD.

## Nutrition

18,20

## Ornamental Horticulture

2*, 3*, 7
*2 and 3 combined; maximum credit
allowed, one course

## Philosophy

$1,5,12,13,14,20,25,28$

## Photography

1, 2AD

## Physical Education

1AD through 16AD*, 17+, 18AD through
26AD* $27,28,30 A B$ through $35 A^{*}, 36$,
$37+, 52 A D$ through 68AD*,70AD through
76AD*
*any or all of these courses combined with MUS 75AD or 76AD; maximum credit allowed, 4 units
+Any or all of these courses combined:maximum creditallowed, 8 units

## Physical Science

20*
No credit for 20 if taken after
a college course in Astronomy,
Chemistry, Geology or Physics.

## Physics

$5^{*}, 6^{*}, 7^{*}, 20^{*}, 21^{*}$
*20, 21 combined with 5,6 , and 7 :
maximum credit: one series

## Plant Science

1,12

## Portuguese

1,2

## Psychology

1, 5, 10, 34, 39
Note: PSY 39 same as CHLD 39

## Sociology

1, 2,26*
*Note: SOC 26 same as CFS 26

## Social Science

10

# UNIVERSITY 

## Private Independent Colleges

College of the Sequoias is accredited by the Western Association of Schools and Colleges. Therefore, COS courses numbered 1-199 will usually be accepted as transfer credit at universities and colleges throughout the country. Students who plan to transfer to a private or out-of-state college should consult the specific catalog with the assistance of a COS counselor to determine lower division requirements necessary for transfer.

## California <br> $A^{\text {rticulation }}$ <br> umber System

The California Articulation Number (CAN) System identifies some of the transferable, lower division preparatory courses commonly required by four year colleges and universities. Lists of courses for campuses participating in the CAN system are available in the Counseling Office and the Transfer Center. The system assures students that CAN courses on one participating campus will be accepted "in lieu of" the comparable CAN course on another participating campus. Example: CAN CHEM 2 at College of the Sequoias will be accepted for CAN CHEM 2 at any other participating campus. California Articulation Numbers are listed below, and parenthetically after each course description in this catalog.

| CAN AG 4 | AGTC 101 | Basic Farm Mechanics | CAN AJ 4 | AJ 14 | Introductionto Criminal Lawl |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CAN AG 6 | ASCI 1 | Introductionto Animal Science | CAN AJ 6 | AJ112 | Criminal Evidence |
| CAN AG 8 | PLSI 1 | Introductionto CropScience | CAN AJ 8 | AJ118 | Criminal Investigations |
| CAN AG 12 | ASCI 103 | Animal Nutrition | CAN ANTH 2 | ANTH 11 | Physical Anthropology |
| CAN AG 14 | AG 4 | Soils | CAN ANTH 4 | ANTH 10 | Cultural Anthropology |
| CAN AG 16 | AGTC 103 | Farm Power | CAN ART 2 | ART 2 | Art History |
| CAN AG 20 | ASCI 111 | BeefProductionandManagement | CAN ART 4 | ART 3 | Art History |
| CAN AG 22 | ASCI 112 | Sheep Production \& Management | CAN ART 6 | ART 17AD | BasicCeramics |
| CAN AG 24 | ASCI 110 | Swine Production\&Management | CAN ART 8 | ART8 | DrawingFundamentals |
| CAN AG 26 | ASCI 22 | Horse Husbandry | CAN ART 10 | ART 13AD | StudioPainting |
| CAN AG 28 | DSCI101 | Elements ofDairying | CAN ART 12 | ART 11AD | Sculpture |
| CAN AJ 2 | AJ 11 | Introductionto Criminal Justice | CAN ART 14 | ART6 | Colorand Design |

# umber System 

| CAN ART 16 | ART7 | Advanced Color and Design | CAN FCS 8 | NUTR 101 | Foods |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CAN ART 18 | PHOT 1 | Beginning Photography | CAN FCS 10 | FASH 160AB | ClothingConstruction |
| CAN ART 20 | ART 15 | Printmaking + Advanced Printmaking | CAN FCS 14 | PSY 39 | Child Development |
| CAN BIOL 4 | BIOL1 | Principles of Biology |  |  |  |
| CANBIOL 6 | BIOL2 | General Biology | CAN HIST 2 | HIST 4 | The History of Western Civilization to 1648 |
| CANBIOL 10 | BIOL30 | Human Anatomy |  |  |  |
| CANBIOL 12 | BIOL31 | HumanPhysiology | CAN HIST 4 | HIST 5 | The History of Western Civilization since 1648 |
| CANBIOL 14 | BIOL40 | General Microbiology |  |  |  |
| CAN BUS 2 | ACCT 1 | Principles of Accounting | CAN HIST 8 | HIST 17 | The People of the United States |
| CAN BUS 4 | ACCT 2 | Principles of Accounting | CAN HIST 10 | HIST 18 | The People of the United States |
| CAN BUS 6 | COMP 5 | ComputerConcepts |  |  |  |
| CAN BUS 12 | BUS 18 | Business Law | CAN JOUR 4 | JOUR 1 | Beginning Newswriting |
|  |  |  |  | JOUR 7 or |  |
| CAN CHEM 2 | CHEM 1 | General Chemistry |  | GOVT 7 | MassCommunications; Introduction |
| CAN CHEM 4 | CHEM 2 | General Chemistry |  |  |  |
| CAN CHEM 6 | CHEM 20 | General Chemistry |  |  |  |
| CAN CHEM 8 | CHEM 21 | General Organic and Biological Chemistry | CAN MATH 2 | MATH 45 | Modern Applications of Mathematics |
| CAN CSCI 4 | MATH 15 | ComputerSciencel | CAN MATH 4 | MATH 10 | Structure and Concepts1 |
| CAN CSCI 8 | COMP 7 | Cobol Programming | CAN MATH 8 | MATH 154 | Trigonometry |
|  |  |  | CAN MATH 16 | MATH 70 | Precalculus |
| CAN DRAM 8 | DRAM 2 | Fundamentals of Acting I | CAN MATH 18 | MATH 75 | Calculus with Analytic Geometry |
| CAN DRAM 12 | DRAM 13 AB | BeginningStagecraft | CAN MATH 20 | MATH 76 | Calculus with Analytic Geometry |
| CAN DRAM 14 | DRAM 17AB | Makeup | CAN MATH 22 | MATH 77 | Calculus with Analytic Geometry |
| CAN DRAM 18 | DRAM 1 | Introductiontothe Theatre | CAN MATH 24 | MATH 81 | Differential Equations |
|  |  |  | CAN MATH 26 | MATH 80 | LinearAlgebra |
| CAN ECON 2 | ECON 1 | Principles of Economics I | CAN MATH 30 | MATH 61 | Survey of Calculus 1 |
| CAN ECON 4 | ECON 2 | Principles of Economics II | CAN MATH 32 | MATH 62 | Survey of Calculus 2 |
| CAN ENGL 2 | ENGL 1 | CollegeReading and Composition | CAN MUS SEQ A | MUS 4+5 | Comprehensive Musicianship1\&2 |
| CAN ENGL 4 | ENGL 4 | CollegeCompositionandLiterature |  |  |  |
| CAN ENGL 6 | ENGL 14AB | CreativeWriting | CAN PHIL 2 | PHIL1 | Introductionto Philosophy |
| CAN ENGL 8 | ENGL 15 | Survey of British Literature 1 | CAN PHIL 4 | PHIL5 | Ethics |
| CAN ENGL 10 | ENGL 16 | Survey of British Literature 2 | CAN PHIL 6 | PHIL20 | IntroductoryLogic |
| CAN ENGL 14 | ENGL 30 | U.S. Literature 1 | CAN PHYS 2 | PHYS 20 | General Physics |
| CAN ENGL 16 | ENGL 31 | U.S. Literature 2 | CAN PHYS 4 | PHYS 21 | General Physics |
| CAN ENGR 2 | ENGR 1 | Graphics | CAN PHYS 8 | PHYS 5 | Physics for Scientists and |
| CAN ENGR 4 | ENGR 3 | MaterialsScience |  |  | Engineers |
| CAN ENGR 6 | ENGR 4 | Alternating Current Circuits | CAN PHYS |  |  |
| CAN ENGR 8 | ENGR 2 | Statics | SEQ B | PHYS 5+6+7 | Physics for Scientists and Engineers General Psychology |
| CAN ENGR 10 | ENGR 7 | Surveying |  |  |  |
|  |  |  | CAN PSY 2 | PSY 1 |  |
| CAN FREN 2 | FREN 1 | Elementary French1 |  |  |  |
| CAN FREN 4 | FREN 2 | Elementary French2 | CAN SOC 2 | SOC 1 | Introductionto Sociology |
| CAN FREN 8 | FREN 3 | IntermediateFrench | CAN SOC 4 | SOC 2 | The Sociology of Social Problems |
| CAN FREN 10 | FREN 4 | AdvancedFrench | CAN SPAN 2 | SPAN 1 | ElementarySpanish1 |
|  |  |  | CAN SPAN 4 | SPAN 2 | Elementary Spanish2 |
| CAN GEOG 2 | GEOG 1 | Physical Geography | CAN SPAN 8 | SPAN 3 | IntermediateSpanish |
| CAN GEOG 4 | GEOG 3 | Cultural Geography | CAN SPAN 10 | SPAN 4 | AdvancedSpanish |
| CAN GEOL 2 | GEOL 1 | Physical Geology | CAN SPCH 4 | SPCH 1 | Fundamentals ofPublic Speaking |
| CAN GOVT 2 | GOVT 5 | Federal, State and Local | CAN SPCH 6 | SPCH 5 | Argumentationand Debate |
|  |  | Government | CAN SPCH 8 | SPCH 4 | Interpersonal Communications |
| CAN FCS 2 | NUTR 18 | Nutrition | CAN SPCH 10 | SPCH 8 | GroupCommunications |
| CAN FCS 12 | CFS 26 or |  | CAN STAT 2 | MATH 21 | Introductionto Statistics |
|  | SOC 26 | Marriage and Family Life |  |  |  |


"It's what you learn after you know it all that counts."
John Wooden

## Degrees

Students at College of the Sequoias who complete the appropriate requirements may earn either an Associate of Arts or an Associate of Science degree. Both degrees represent significant levels of achievement and may be used by students who plan to start their career immediately after graduating or, with proper planning and course selection, by those who plan to transfer to a four year university.

Associate of Arts (AA) degree is granted to students majoring in the arts, humanities, social sciences, and similar areas.

Associate of Science (AS) degree is granted to students majoring in agriculture, engineering, technology, the sciences, and related programs.

All majors are organized alphabetically on the following pages for your convenience. Specific majors can be found listed alphatetically in the index of this catalog.

## Vocational Certificate Program

College of the Sequoias Vocational Certificates are awarded to students who have satisfactorily completed ahighlevel oftechnical training and meetor exceed the skills and knowledge required for employment in business or industry.

Certificates are not equal to an AS or AA degree and can usually be completed in a much shorter period of time. Certificates verify to employers that the recipient has achieved a high level of technical competency. Certificate units can also be applied toward an associate degree concurrently or at a later date.

## Certificate Policy

The College of the Sequoias will issue certificates to those students who satisfactorily complete the requirements stated in the collwege catalog with a "C" or better grade in each required class.

Students can petition for a waiver and/or the certificate requirements with training and/or professional experience from another institution or agency. Students must complete at least $50 \%$ of the units required for the certificate in classes offered through COS. The petition should be initiated through the division chair or departmentfaculty in which the certificate training is available. Verification of any substitution for a required class must be attached to the certificate application.

All certificates issued by the College of the Sequoais District must be approved by the Dean of Academic Services - Vocational.

## How to Apply for a Certificate

Certificate applications are available from the Dean of Academic ServicesVocational, or the Division Chair of the division in which the coursework is provided.

The students must complete the application and attach all necessary documentation and return the application to the faculty and division chair for signatures. When signed, the application should be forwarded to the Dean of Academic Services-Vocational for approval.

## Types of Certificates

## Achievement Certificates

I Type A ---------- Requires from 18-29 units
I Type B ---------- Requires from 30 to 60 units
These certificates are awarded to students who have achieved the highest level of tehcnical competency in their field and have satisfactorily completed a rigorous sequence of courses. The requirements for these certificates are based upon close articulation with business and industry.

## Skill Certificates (17 or fewer units)

Skill certificates also prepare students for employment, but have fewer unit requirements than the Career Certificates. They are highly specialized and are available in a wide variety of career and technical areas. These certificates are frequently used to upgrade or update an individuals skills for promotion or increased salary.

## Major and Certificate Listings

## Division Listing

Beginning on the adjacent page, we have listed all majors and certificates available in each division of study at College of the Sequoias.

## Aphabetical Listing

Following the "division' listing of all certificates and majors, each major and certificate is listed alphabetically.


## Alphabetical Listing of All Certificates and Majors



## Alphabetical Listing of All Certificates and Majors



## Alphabetical Listing of All Certificates and Majors



Major and Certificate Requirements
Alphabetical Listing of All Certificates and Majors
by Division

| Name of Major/Certificate | Page | Certificate Units | Units in Major | Associate Degree AA/AS |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Agriculture |  |  |  |  |
| Agricultural Business Management | 81 | 30 | 30 | AS |
| Agricultural Enterprise-Alfalfa | 82 | 7 | ... | .... |
| Agricultural Enterprise-Corn | 83 | 7 | .... | .... |
| Agricultural Enterprise-Cotton | 84 | 9 | .... | .... |
| Agricultural Enterprise-Wheat | 85 | 7 | .... | .... |
| Agricultural PestManagement | 86 | 30 | .... | .... |
| Agricultural PowerEquipment Technology | 87 | 17 | .... | .... |
| Agricultural Science Education | 88 | 30 | 30 | AS |
| Agricultural Technology | 89 | 30 | 30 | AS |
| Animal Science | 91 | 30 | 30 | AS |
| California Dairy Products Training Institute (Concepts) | 100 | 15 | .... | .... |
| Dairy Science | 116 | 30 | 30 | AS |
| Equine Science | 127 | 30 | .... | .... |
| Floral Technology | 134 | 30 | .... | .... |
| Landscape Design | 148 | 30 | .... | .... |
| LandscapeManagement | 149 | 30 | 30 | AS |
| Nursery Management | 163 | 30 | 30 | AS |
| Ornamental Horticultural | 165 | 30 | 30 | AS |
| Plant Science and Industry | 174 | 30 | 30 | AS |
| Veterinary Technician | 185 | 17 | .... | .... |
| Business |  |  |  |  |
| Accounting | 77 | 32-34 | 32-34 | AS |
| Administrative Assistant | 80 | 30 | 30 | AS |
| Business (General) | 98 | 30 | 30 | AS |
| Business Management | 99 | .... | 30 | AS |
| Computer Applications | 108 | 30 |  |  |
| Computer/Information Systems | 109 | 30 | 30 | AS |
| ComputerWebTechnician | 110 | 14 | .... | .... |
| Computerized Office Procedures | 111 | 30.5-32 | 30.5-32 | AS |
| InterpreterCertificate(Spanish) | 145 | 20 | $\ldots$ | .... |
| Law Office Clerk/Receptionist | 151 | 14 | .... | .... |
| Legal Secretary | 152 | 17 | .... | .... |
| Marketing Management | 155 | 31 | 30 | AS |
| Paralegal | 167 | 60 | 30 | AS |
| Real Estate | 177 | 33 | .... | .... |
| Word Processing | 188 | 30 | .... | .... |
| CFS |  |  |  |  |
| Child Development | 102 | 24 | 24 | AS |
| Child Development, Early Childhood Education, Option II | 103 | 26 | 1 | AS |
| Consumer/Family Studies | 114 | .... | 21 | AS |
| Educational Paraprofession | 121 | 47 | .... | .... |
| Family Childcare Mentor Training | 128 | 2 | $\ldots$ | .... |
| FashionDesign | 129 | 20 | 20 | AS |
| FashionMerchandising | 130 | 19 | 19 | AS |
| Food Service 1: Basic Certificate | 135 | 13 | .... | .... |
| Food Service 2: Dietetic Service Supervisor | 136 | 22 | $\ldots$ | $\ldots$ |

# Alphabetical Listing of All Certificates and Majors by Division 



Major and Certificate Requirements
Alphabetical Listing of All Certificates and Majors by Division


## Accounting

A.S. Degree: Certificate courses with a minimum "C" grade plus General Education and graduation requirements for atotal of 60 units. (See page 54.)<br>Certificate: 32-34 units in courses listed below with a minimum of a "C" grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

The Accounting Program is designed to prepare students to enter the work force to do bookkeeping/accounting. Without accounting, sound economic decisions could not be made, business planning and decision making would be difficult and companies could not operate. Accountants gather, record, report and interpret financial information. Career opportunities are available in government, business and industry, nonprofit organizations, and private accounting firms.
Course Numbers Core Courses Units
ACCT $1 \quad$ Principles of Accounting (4) and
ACCT $2 \quad$ Principles of Accounting (4) or ACCT 101 Essentials of Accounting (5) and
ACCT 202 General Vocational Accounting (5) ..... 8-10
ACCT 210/COMP 210 Computer Accounting ..... 3
ACCT 282 Individual Income Tax ..... 5
BUS 82 Introduction to Business ..... 3
BUS 185/ITEC 185 Ethics in Business and Industry ..... 3
BUS 295 Business Mathematics (3)
Quantitative Methods (3) Business Statistics ..... 3
or BUS 119
COMP 5, Computer Concepts (4)Introduction to Personal Computers4
COMP 138 Spreadsheet Design for Business (3)or COMP 223AD Beginning Excel (1.5) andCOMP 224AD Advanced Excel (1.5)3
Minimum Core Course Units: ..... 32-34
Course Number Support Courses ..... Units
Select additional units from this list for further study.
ACCT 292 Fundamentals of Governmental Accounting ..... 3
ACCT 295 California School Accounting ..... 3
BUS 112/SPCH 112 Public Speaking for Business ..... 4
BUS 174 Marketing Principles ..... 3
BUS 184 BusinessCommunications ..... 3
BUS 268 Electronic Calculating ..... 2
BUS 97 Personal Finance ..... 3
Minimum Support Course Units: ..... 0
Total Minimum Units Required: ..... 32-34

## Major and Certificate Requirements

## © Associate Degree

## Administration of J ustice: Corrections Emphasis

A.S. Degree: 27 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: $\quad$ Certificate is not available.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.


#### Abstract

A.S. DEGREE

The Administration of Justice program offers courses integrating theoretical and applied materials. Students may specialize in either Corrections or Law Enforcement. The curriculum is designed to prepare students for beginning paraprofessional or professional employment in criminal justice.

The Administration of Justice major offers career opportunities in many diversified local, state, federal, and private criminal justice agencies. On a local level, employment opportunities for students with a Corrections emphasis include county probation departments, halfway houses, group homes, crisis centers, juvenile halls, and victim services agencies. At the State level, employment opportunities exist with the Department of Corrections and California Youth Authority. The Federal level offers employment with federal probation and juvenile institutions.


$\qquad$
AJ 11 Introduction to Criminal Justice ...................................................................................... 3
AJ 111 Writing for Criminal Justice ........................................................................................... 3
AJ 114 Juvenile Delinquency .................................................................................................... 3
AJ 115 Criminal Law 2 .............................................................................................................. 3
AJ 116 Probation and Parole .................................................................................................... 3
AJ 117 Correction/Counseling ...................................................................................................... 3
AJ 121 Introduction to Corrections ............................................................................................. 3

Total Minimum Units Required: ................................................................................. 21

## Course Numbers Support Courses <br> Units

Select 6 additional units from this list for further study.
AJ 13 Community Relations ..... 3
AJ 14 Introduction to Criminal Law 1 ..... 3
AJ25/BUS 25/GOVT 25 Constitutional Law ..... 3
AJ 113 Juvenile Laws and Procedures ..... 3
AJ 115 Criminal Law 2 ..... 3
AJ120 Womenin Criminal Justice ..... 3
AJ 123 Criminal Justice Ethics ..... 3
AJ 160/PARA $160 \quad$ Criminal Law Terms in Spanish ..... 1
AJ 193-196 Work Experience ..... 1-4
Minimum Support Course Units ..... 6
Total Minimum Units Required ..... 27

## Administration of J ustice: Enforcement Emphasis

A.S. Degree: 27 units with a minimum "C" grade plus General Education and graduation requirements for atotal of 60 units. (See page 54.)<br>Certificate: Certificate is not available.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## A.S. DEGREE

The Administration of Justice program offers courses integrating theoretical and applied materials. Students may specialize in either Corrections or Law Enforcement. The curriculum is designed to prepare students for beginning paraprofessional or professional employment in Criminal Justice.

The Administration of Justice major offers career opportunities in many diversified local, state, federal, and private criminal justice agencies.
For Administration of Justice students with a Law Enforcement emphasis, career opportunities on the local level include work in municipal police departments, county sheriffs offices, and welfare fraud. At the State level, career opportunities include state police, highway patrol, Alcohol Department, Motor Vehicles Department, Department of Justice, Fish and Game, and Forestry. Federal opportunities include the border patrol, FBI, and Secret Service.
Course Numbers Core Courses Units
AJ 11 Introduction to Criminal Justice ..... 3
AJ 13 Community Relations ..... 3
AJ 14 Criminal Law 1 .....  3
AJ25/BUS 25/GOVT 25 Constitutional Law ..... 3
AJ 111 Writing for Criminal Justice .....  3
AJ 112 Legal Aspects of Evidence .....  3
AJ 115 Criminal Law 2 ..... 3
Total Minimum Units Required: ..... 21
Course Numbers Support Courses ..... Units
Select 6 additional units from this list for further study.
AJ 110 Police Patrol Procedures .....  3
AJ 113 Juvenile Laws and Procedures .....  3
AJ 114 Juvenile Delinquency .....  3
AJ 118 Criminal Investigation .....  3
AJ $119 \quad$ Criminal Identification .....  3
AJ 120 WomeninCriminal Justice ..... 3
AJ 122 Criminal Justice Procedures ..... 3
AJ 123 Criminal Justice Ethics ..... 3
AJ 160/PARA 160 Criminal Law Terms in Spanish ..... 1
AJ 193-196 Work Experience ..... 1-4
Minimum Support Course Units ..... 6
Total Minimum Units Required ..... 27

Ø Associate Degree

## Administrative Assistant


#### Abstract

A.S. Degree: Certificate plus General Education and graduation requirements for a total of 60 units. (See page 54.)

Certificate: $\quad$ The 30 -unit program below with a minimum of a "C" grade in all required courses. Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.


## ACHIEVEMENT CERTIFICATE

The Administrative AssistantProgram incorporates the clerical skills of filing and typing with the managerial skills of communication, time management, and administrative decision making. The strength of any well-run office is directly relatedto its office managers, administrative assistants, and secretaries. The administrative assistantof tomorrow mustbe prepared to meet the technological needs of business, using the computer to process information. The administrative assistantposition often acts as a springboard for advancementwithinthe company. Relatedfields include legal secretary, medical secretary, and office manager.
Course Numbers Core Courses Units
ACCT 1 Principles of Accounting (4)or ACCT 101 Essentials of Accounting (5)4-5
BUS 82 Introductionto Business ..... 3
BUS 271 College Keyboarding, Level 2 ..... 3
BUS 184 Business Communications ..... 3
BUS 188 Human Relations in Business ..... 3
BUS 268 Electronic Calculating ..... 2
BUS 293 Business English ..... 4
BUS 295 Business Mathematics (3)
or BUS 119 Quantitative Methods (3)BusinessStatistics3
COMP 5 Computer Concepts(4)Introductionto Personal Computers4
Minimum Core Course Units: ..... 29-30
Course Numbers Support Courses ..... Units
Select additional units from this list to complete the total units required.
BUS 18 BusinessLaw ..... 4
BUS 112/SPCH 112 Public Speaking for Business ..... 4
BUS 170 Introductionto Sales ..... 3
BUS 174 Marketing Principles ..... 3
BUS 185 Ethics in Business and Industry ..... 3
COMP 136 Word Processing ..... 3
COMP 220 Essential ComputerConcepts .....  2
COMP 221AD Beginning Word ..... 1.5
COMP 222AD Advanced Word ..... 1.5
COMP 227 Presentation Software for Business ..... 1.5
COMP 229 Web Page Design \& Development ..... 3
Minimum Support Course Units: ..... 0-1
Total Minimum Units Required: ..... 30

# Agricultural Business Management 

Associate Degree
Certificate

A.S. Degree: Certificate courses with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: $\quad 30$ units in courses listed below with a minimum of a "C" grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

The Agriculture Business Management Program is designed to prepare students who seek a certificate or degree in the Agriculture Business Management field. The course work provides the fundamentals for entry-level job skills in Agriculture Management as well as providing degree applicable units for the Associate of Science Agricultural major degree. Some of the courses also meet transfer requirements. The COS Agriculture Business Management Certificate/Degree major provides a strong curriculum foundation for Agricultural Business students.

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| AGMT 1 | Agriculture Economics |  |
| AGMT 102 | Agriculture Sales and Marketing |  |
| AGMT 103 | Introduction to Agricultural Management |  |
| AGMT 104 | Agriculture Accounting | 3 |
| AGMT 108AB | Introductionto Agriculture Computer Applications (1stsemester) .. | 3 |
| WEXP193 | Agricultural Occupational Cooperative Education/Internship .. | 3 |
|  | Minimum Core Course Units: ........................................... |  |
| Course Numbers | Support Courses | Units |
| Select 12 additional units from this list to complete the total units required. |  |  |
| AG 4 | Soils | 3 |
| AG 201 | Agricultural Mathematics | 3 |
| AG 200AD | Agriculture Leadership ....... | 1 |
| AGMT 108AB | Introduction to Agriculture Computer Applications (2nd semester). | 3 |
| AGMT 271 | Orientation to Agricultural Business Industry | 3 |
| DSCI 103 | Commercial Dairy Herd Management . | 3 |
| PLSI 1 | Introductionto Plant Science . | 3 |
| WEXP 194 | Agricultural Occupational Cooperative Education/Internship | 1-4 |
| AG --- | Other Approved Agriculture Classes With Approval of Department. | 1-4 |
|  | Minimum Support Course Units: ...................................... | . 12 |
|  | Total Minimum Units Required: ......................................... | . 30 |

# Major and Certificate Requirements <br> q Associate Degree <br> Agricultural Enterprise Alfalfa 

A.S. Degree: $\quad$ Degree not available.

Certificate: 7 units in courses listed below with a minimum of a "C" grade in all courses.
Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## SKILL CERTIFICATE

This certificate provides an opportunity to apply classroom instruction to the laboratory by producing an agriculture crop. Students completing this certificate will share in the profit from the sale of the crop.

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| AG 117 | Agriculture Enterprise | 3 |
| AG 110AB | Ag Enterprise Lab |  |
|  | Alfalfa (2 semesters: $2+2$ ) . | 4 |

# Agricultural Enterprise Corn 

Associate Degree
Certificate
A.S. Degree: Degree not available.

Certificate: $\quad 7$ units in courses listed below with a minimum of a "C" grade in all courses.
Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## SKILL CERTIFICATE

This certificate provides an opportunity to apply classroom instruction to the laboratory by producing an agriculture crop. Students completing this certificate will share in the profit from the sale of the crop.

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| AG 117 | Agriculture Enterprise | 3 |
| AG 110AB | Ag Enterprise Lab |  |
|  | Corn (2 semesters: $2+2$ ) |  |
|  | Minimum Core Course U | .... 7 |

## Major and Certificate Requirements

q Associate Degree

## Agricultural Enterprise Cotton

A.S. Degree: Degree not available.<br>Certificate: $\quad 9$ units in courses listed below with a minimum of a "C" grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## SKILL CERTIFICATE

Thiscertificate provides an opportunity to apply classroominstructiontothe laboratory by producing an agriculture crop. Students completingthis certificate will share in the profit from the sale of the crop.

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| AG 117 | Agriculture Enterprise |  |
| AG 109AC | Ag Enterprise Lab |  |
|  | Cotton (2 semesters: $2+2$ ) | 6 |
|  | Minimum Core Course Un | .. 9 |

## Agricultural Enterprise Wheat

Associate Degree
Certificate

A.S. Degree: Degree not available.<br>Certificate: $\quad 7$ units in courses listed below with a minimum of a "C" grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## SKILL CERTIFICATE

This certificate provides an opportunity to apply classroom instruction to the laboratory by producing an agriculture crop. Students completing this certificate will share in the profit from the sale of the crop.
Course Numbers Core Courses ..... Units
AG 117 Agriculture Enterprise .....  3
AG 109AC Ag Enterprise Lab
Wheat (2 semesters: $2+2$ ) .....  4
Minimum Core Course Units: .....  7

## Major and Certificate Requirements

q Associate Degree

## Agricultural Pest Management

| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | 30 units in courses listed below with a minimum of a "C" grade in all courses. |

## ACHIEVEMENT CERTIFICATE

Amajor/certificate in Agricultural PestManagementoffers students an opportunity to develop valuable job entry skills in plant protection. Insect pests and plantdiseases along withenvironmental and economic concerns are the primary focus ofthis program. Students interested incareerssuch as crop consultant or farm manager are encouraged to enroll in this area of study. Many of the courses transfer to four-year colleges and universities.
Course Numbers Core Courses Units

AG 3 EconomicEntomology ..................................................................................................... 3
AG 4 Soils ............................................................................................................................... 3
AG 105 Fertilizers ......................................................................................................................... 3
AG 125 Principles ofPesticideUse............................................................................................... 3
PLSI IntroductiontoPlantScience ............................................................................................ 3
PLSI 105 Weeds andWeed Control ................................................................................................ 3
PLSI 110 IntegraedPestManagement ............................................................................................ 3
WEXP 193 Agricultural Occupational CooperativeEducation/Internship(1stsemester) ......................... 3
Minimum Core Course Units: .................................................................................... 24

Course Numbers Support Courses Units
Select 6 additional units from this list to complete the total units required.
AG 200AD Agriculture Leadership.................................................................................................... 1
AG 201 AgriculturalMathematics ................................................................................................... 3
AGMT 102 Agricultural Sales and Marketing ...................................................................................... 3
AGMT 108AB Introductionto Agriculture Computer Applications (2nd semester) ....................................... 3
AGTC 108 Irrigation ......................................................................................................................... 3
PLSI 12 Fruit and Nut Tree Production......................................................................................... 3
PLSI 102 Row Crops ..................................................................................................................... 3
PLSI 111 CitrusProduction ........................................................................................................... 3
PLSI 113 Grape and Vine Production............................................................................................. 3
AG ---
Other Approved Agriculture Classes
With Approval of Department ........................................................................................... 1-4
Minimum Support Course Units: ................................................................................ 6
Total Minimum Units Required: .................................................................................. 30

# Agricultural Power Equipment Technology 

Degree: Degree not available<br>Certificate: 17 unit program below with a minimum of a "C" grade in all courses.

## SKILL CERTIFICATE

The Agricultural Power Equipment Technology Program prepares the studentto enter thehighly technical field of Power Equipment Technology. Studies include operation, service, repair and maintenance of modern agricultural equipment. Practical hands-onlessons aswell as moderntheory are stressed. Careers include shop technician, service manager, equipment operator, equipment sales, and field service technician. Many of the courses are transferable to universities for degrees in related agricultural mechanics fields.
Course Numbers Core Courses Units
AGTC 213AC Hydraulics Principles and Applications ..... 3
AGTC 214 Outdoor Power Equipment ..... 3
AGTC 215AD Outdoor Power EquipmentApplication ..... 2
AGTC 216AC Applied Hydraulics ..... 2
WEXP 193 Agricultural Occupational Cooperative Education/Internship (1-4) ..... 2
Minimum Core Course Units: ..... 12
Course Numbers Support Courses Units
Select 5 additional units from this list to complete the total units required.
AGMT 108AB Introductionto Agricultural Computer Applications ..... 3
AGTC 106AD Agriculture Welding ..... 3
AUTO 109 Air Conditioning and Accessories ..... 3
WELD161 Oxy-AcetyleneWelding ..... 4
Minimum Support Course Units: ..... 5
Total Minimum Units Required: ..... 17

## Major and Certificate Requirements

## ब Associate Degree <br> © Certificate

## Agricultural Science/Education

| A.S. Degree: | Certificate courses with a minimum "C" grade plus General Education and graduation requirements for atotal of 60 units. <br> (See page 54.) |
| :--- | :--- |
| Certificate: | 30 units in courses listed below with a minimum of a "C" grade in all courses. |
| Transfer Students: | Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. |

## ACHIEVEMENT CERTIFICATE

The major/certificate in Agricultural Sciences and Education is designed for a student who seeks employment as a general agriculturist or teacher in the agricultural education field. The generalized curriculum gives students a broad base in agricultural education that includes agriculture management, animal agriculture, agriculture technology, ornamental horticulture, and plant science.
Course Numbers Core Courses Units
AG 107 Agricultural Education Orientation ..... 3
AGMT 1 Agricultural Economics ..... 3
AGMT 108AB Introductionto Agriculture Computer Applications(1stsemester) ..... 3
AGTC 101 Basic Farm Mechanics ..... 3
ASCI 1 Introduction to Animal Science ..... 3
ASCI 123 Horse Production ..... 3
DSCI 101 Elements of Dairying ..... 3
OH 101 Basic Ornamental Horticulture ..... 3
WEXP193 Agricultural Occupational Cooperative Education/Internship ..... 3
Minimum Core Course Units: ..... 27
Course Numbers Support Courses ..... Units
Select 3 additional units from this list to complete the total units required.
AG 4 Soils ..... 3
AG 117 Agriculture Enterprise Project ..... 3
AG 200AD Agriculture Leadership ..... 1
AG 201 Agricultural Mathematics ..... 3
AGMT 108AB Introduction to Agriculture Computer Applications (2nd semester) ..... 3
AGMT 271 Orientation to Agricultural Business Industry ..... 3
PLSI 1 Introductionto PlantScience ..... 3
WEXP 194 Agricultural Occupational CooperativeEducation/Internship (1-4) [2nd semester] ..... 1-4
AG --- Other Approved Agriculture Classes
With Approval of Department ..... 1-4
Minimum Support Course Units: ..... 3
Total Minimum Units Required: ..... 30

## Agricultural Technology

Associate Degree
Certificate

A.S. Degree: Certificate courses with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: $\quad 30$ units in courses listed below with a minimum of a " $C$ " grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

Agriculture is highly mechanized, and production agriculture cannot exist without technology and machinery. Agricultural Technology students develop skills and knowledge using tools and equipment on the modern COS farm. Farm buildings are constructed and repaired using both wood and metal fabrication techniques. Students also have the opportunity to study irrigation principles, land surveying, and laser leveling. Farming industries are in need of agricultural technology students. Jobs are available on farms, sales and service of farm equipment, equipment manufacturing, ag mechanics, and welding. All major universities offering agriculture programs offer advanced courses in all fields of Agricultural Technology.

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| AGMT 1 | AgricultureEconomics |  |
| AGMT 102 | Agriculture Sales and Marketing | 3 |
| AGMT 108AB | Introductionto AgricultureComputerApplications . | 3 |
| AGTC 101 | Basic Farm Mechanics | 3 |
| AGTC 103 | Farm Power | 3 |
| AGTC 106AD | AgricultureWelding (1stand 2nd semesters) | 3 |
| AGTC 209AD | Small Engines and Equipment | 2 |
| AGTC 210AD | Agriculture Project Construction | 3 |
| WELD 162 | Shielded Metal Arc Welding .. | 4 |
| WEXP193 | Agricultural Occupational Cooperative Education/Internship (1st semester) $\qquad$ | 2 |
|  | Minimum Core Course Units: ................................... |  |

Course Numbers Support Courses Units
Select 7 additional units from this list to complete the total units required.
AG 200AD Agriculture Leadership ................................................................................................... 1
AG 201 Agricultural Mathematics ............................................................................................... 3
AGMT 102 Agriculture Sales and Marketing ..................................................................................... 3
AGTC 108 Irrigation ........................................................................................................................ 3
AGTC 271 Agricultural Mechanics, Skills and Practices ...................................................................... 3
DSCI 200 Applied Mechanics in Dairy Science ................................................................................. 2
WELD173 StainlessSteelWelding/Repair ........................................................................................ 2
AG ---
Other Approved Agriculture Classes
With Approval of Department (1-3) .................................................................................. 3
Minimum Support Course Units: ............................................................................... 7
Total Minimum Units Required: .................................................................................. 30

## Major and Certificate Requirements

## ब Associate Degree <br> q Certificate

## American Sign Language

$\begin{array}{ll}\text { A.A. Degree: } & \begin{array}{l}18 \text { units with a minimum "C" grade plus General Education and graduation requirements for a total of } 60 \text { units. } \\ \text { (See page 54.) }\end{array} \\ \text { Certificate : } & \text { Certificate not available. } \\ \text { Transfer Students: } & \text { Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. }\end{array}$

## A.A. DEGREE

The major in American Sign language offers students the opportunity to learn a new language in an entirely different mode of communication. ASL is the primary language of Deaf people in the United States. Other languages use voice, hearing and writing, but ASL will develop your ability to communicate effectively in the visual mode. Moreover, you will be exposed to the richness of the unique culture of Deaf people. When you learn a second language, you also gain a greater insight into your own language and culture. You will discover possible new career opportunities, enrich your travel experiences and enhance your own visual communication techniques.

Core requirements are designed to provide basic knowledge and understanding of the language and culture of Deaf people, including their history and social mores. These courses provide a solid basic foundation for entry into any career in a Deaf-related field. COS students have gone on to careers as interpreters, basic ASL instructors, counselors, audiologists, speech pathologists, community service personnel and other related careers.
Course Numbers Core Courses Units
ASL2 Beginning American Sign Language 2 ..... 3
ASL 3 Intermediate American Sign Language ..... 3
ASL 4 Advanced American Sign Language ..... 3
Minimum Core Course Units: ..... 9
Course Numbers Support Courses ..... Units
Select 9 units from this list to complete the total units required.
ASL 110AD Sign Language Interpreting ..... 4
ASL 1 Beginning American Sign Language 1 ..... 4
DRAM 2 Fundamentals of Acting 1 ..... 3
ENGL 17 Native American Literature ..... 3
FREN 1,2, or 3 Elementary French 1 \& 2, Intermediate French ( 4 units each) ..... 4
HIST 23 Mexican-American ..... 3
PORT 1 Elementary Portuguese ..... 4
SOC 1 Introduction to Sociology ..... 3
SOC 2 Social Problems ..... 3
SPAN 1 Elementary Spanish 1 ..... 4
SPAN 2 Elementary Spanish2 ..... 4
SPAN 3 Intermediate Spanish ..... 4
SPCH 9 Intercultural Communication ..... 3
Minimum Support Course Units: ..... 9
Total Minimum Units Required: ..... 18

## Animal Science

Associate Degree
Certificate

A.S. Degree: Certificate courses with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: $\quad 30$ units in courses listed below with a minimum of a "C" grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

The Animal Science Program is designed for students whose major interest is in working with red meat farm food animals. Students work on the college's farm, combining practical experience with technical knowledge in the beef cattle, sheep, and swine units. Most Animal Science majors return to livestock operations or seek employment as vocational agriculture teachers, animal nutritionists, animal health technicians, meat inspectors or plant managers, and in sales and services.
Course Numbers Core Courses Units
AGMT 108AB Introduction to Agriculture Computer Applications ..... 3
ASCl 1 Introductionto Animal Science ..... 3
ASCl 103 Animal Nutrition ..... 3
ASCI 110 Swine Production and Management ..... 3
ASCI 111 Beef Production and Management ..... 3
ASCI 112 Sheep Production and Management ..... 3
WEXP 193 Agricultural Occupational Cooperative Education/Internship ..... 3
Minimum Core Course Units: ..... 21
Course Numbers Support Courses ..... Units
Select 6 additional units from this list to complete the total units required.
AG 200AD Agriculture Leadership ..... 1
AG 201 Agricultural Mathematics ..... 3
AGMT 1 Agriculture Economics ..... 3
ASCI 104 Animal Diseases and Sanitation ..... 3
ASCI 105AD Preparing Livestock for Shows and Sales ..... 2
ASCI 107 Introductionto MeatScience ..... 3
ASCI 123 Horse Production ..... 3
ASCI 124AD Colt Breaking ..... 2
VT 109 Introduction to Veterinary Technology ..... 3
ASCl 271 Advanced Llama Training .....  1
PLSI 1 IntroductiontoPlantScience ..... 3
AG --- Other Approved Agriculture Classes
With Approval of Department(1-4) ..... 3
Minimum Support Course Units: ..... 9
Total Minimum Units Required: ..... 30

## Major and Certificate Requirements

ब Associate Degree
ब Certificate

## Architecture

A.S. Degree: Architecture courses (50 units) with a minimum "C" grade plus General Education and graduation requirements for a total of 65 units. (See page 54.)<br>Certificate: $\quad 38$ units in courses listed below with a minimum of a "C" grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

The certificate in Architecture provides the knowledge, and skills necessary for successful employmentas adraftsperson/CADtechnician in architectural or engineering firms, or in related construction fields. Architecture integrates social, cultural, technological, and aesthetic issues. Introductory courses in the field as appropriate for the general education of students of any major.

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| First Semester: |  |  |
| ARCH 10 | Architectural Design1 | 4 |
| ARCH 20* | Introduction to Graphics \& Perspective | 3 |
| ARCH 112 | ArchitectDigital Design1 | 4 |
| ARCH 160* | Materials of Construction | 3 |
| DRFT 114 | Introductionto AutoCAD . |  |
| Second Semester: |  |  |
| ARCH 11 | Architectural Design2 | 4 |
| ARCH 21* | Basic Graphics | 3 |
| ARCH 113 | ArchitectDigital Design2 . | 4 |
| ARCH 161AD | Computer Assisted Architectural Detailing(1stsemester) . | 3 |
| ARCH 162 | Conceptual Shtructural Analysis ................................. | 3 |
| ARCH 163 | ConstructionDocuments | 3 |
|  | Minimum Certificate Core Course Units: | 38 |

## ASSOCIATE DEGREE

The degree in Architecture provides the basis for further study and employment in all aspects of environmental design, and enables students to transfer with credit in their major to university programs of architecture, interior design, planning, landscape architecture, product design, and civil engineering. It also provides the skills necessary for immediate employment in a technical capacity in architecture and allied professions.

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| First Semester: |  |  |
| ARCH 10 | Architecture Design 1 | 4 |
| ARCH 20* | Introduction to Graphics and Perspective . | 3 |
| ARCH 70 | Architecture History 1. | 3 |
| ARCH 160 | Materials of Construction | 3 |
| Second Semester: |  |  |
| ARCH 11 | Architecture Design2 | 4 |
| ARCH 21* | BasicGraphics | 3 |
| ARCH 71 | Architecture History2 | 3 |
| ARCH 120 | Freehand Drawing ... | 3 |
| Third Semester: |  |  |
| ARCH 112 | ArchitectDigital Design1 | 4 |
| DRFT 114 | Introductionto AutoCAD | 4 |
| Fourth Semester: |  |  |
| ARCH 113 | ArchitectDigital Design2 | 4 |
| ARCH 161AD | Computer Assisted Architectural Detailing (1stsemester) | 3 |
| ARCH 163 | ConstructionDocuments | 3 |
| ARCH 221AC* | Perspective Alternatives(1stsemester) .. | 3 |
|  | Total Minimum Units Required for AS: .......... | . 50 |

*Note: This certificate/major is going through curriculum changes. Please contact the Vocational Education Office before enrolling in classes for this certificate/major. Vocational Education Office: (559) 730-3710.


A.A. Degree: Corecourses(12units) plus supportcourses below (12 units) with a minimum grade of "C" in all courses (24units), plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: Certificatenotavailable.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## A.A. DEGREE

The Art program is designed to prepare students to enter the fields of studio art, graphic communication, or art history and to provide transfer Art majors the opportunity to achieve an AA degree in the student's area of specialization. While a baccalaureate degree is the minimal recommended preparation for those considering professional careers related to these fields, the completion of the suggested program will demonstrate commitment to the field. In addition, it will provide comprehensive preparation for upper division work and/or attainment of a degree supportive of attempts to gain entry-level employment in graphic design or as a free-lance artist.
Course Numbers Core Courses Units
ART 1 Art Appreciation ..... 3
ART 6/CFS $6 \quad$ Color and Design ..... 3
ART 8 Drawing Fundamentals ..... 3
ART 11AD Sculpture ..... 3
Minimum Core Course Units: ..... 12
Course Numbers Support Courses ..... Units
Select 12 additional units from this list to complete the total units required.
Student desiring to specialize in 2-D, 3-D, or Digital Arts should emphasize elective courses within these fields.
ART $2 \quad$ ArtHistory/Ancient-Gothic (3)
or ART 3 ArtHistory/Gothic-Modern ..... 3
ART 4/ANTH $4 \quad$ PrecolumbianArtofMesoamerica(3)
or ART 5 Precolumbian Culture/Central and South America ..... 3
ART 7 Advanced Color and Design ..... 3
ART 9 Drawing Fundamentals ..... 3
ART 10AD Figure Drawing ..... 3
ART 11AD Sculpture ..... 3
ART 12AD Watercolor Painting ..... 3
ART 13AD Studio Painting ..... 3
ART 15 Beginning Printmaking .....  3
ART 16AC AdvancedPrintmaking ..... 3
ART 17AD Handbuilding Ceramics ..... 3
ART 18AD Wheel Thrown Ceramics ..... 3
ART 23AD Macintosh Basics for Artists and Beginners ..... 3
ART 25AD Digital Imaging for Artists ..... 3
ART 101AD Arts and Crafts ..... 3
ART105ADNELD105AD Basic MetalcraftWelding \&Forging ..... 3
ART 111AB Exhibition Design, Gallery ..... 2
ART 119AD Stained Glass Design ..... 3
ART 121AC Serigraphy/ScreenPrinting ..... 3
ART 126AD Digital Painting ..... 3
ART 127 IntroductiontoPrintmaking ..... 3
ART 128AD Lithography ..... 3
ART 212AD Photo Realism ..... 3
Minimum Support Course Units: ..... 12
Total Minimum Units Required: ..... 24

## Major and Certificate Requirements

## © Associate Degree <br> q Certificate

## Athletic Trainer/Sports Medicine

| A.S. Degree: | 36 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. <br> (See page 54.) |
| :--- | :--- |
| Certificate: | Certificate is not available. |
| Transfer Students: |  |

## A.S. DEGREE

This program is designed to prepare the student to administer appropriate procedures in the prevention, care and rehabilitation of athletic injuries. Students who successfully complete the program may transfer to a four-year institution to continue their education in fulfillment of the requirements of the National Athletic Trainers Association.
Course Numbers Core Courses Units
BIOL 30 Human Anatomy .....  .4
BIOL 31 Human Physiology ..... 4
CHEM 20 General Chemistry ..... 4
HW 3 Standard First Aid ..... 3
NUTR 18 Nutrition ..... 3
SMED 40 Introductionto Sports Injuries ..... 3
SMED 60 Concepts in Health \& Fitness ..... 3
SMED 150AD Practicum in Sports Medicine (2 units per semester for 4 semesters) ..... 8
Minimum Core Course Units: ..... 32
Course Numbers Support Courses ..... UnitsSelect 4 additional units from this list to complete the total units required.
ANTH 10 Cultural Anthropology ..... 3
CHEM 21 Organic/Biological Chemistry ..... 4
HW 1 Personal \& Community Health ..... 3
HW 104 Drugs \& Society ..... 3
PSY 1 General Psychology .....  3
SMED 180AD Applications of Rehabilitation ..... 2-8
SMED 280AD Policies and Procedures of Sports Medicine ..... 2-8
Minimum Support Course Units: ..... 4
Total Minimum Units Required: ..... 36

A.S. Degree: Degree not available.<br>Certificate: $\quad 5.5$ units in the course listed below with a minimum of a "C" grade.

IMPORTANT NOTE: Prerequisites to this Certificate are the Basic Automotive Technology Certificate, or a minimum 15 semester units from the AUTO 101,102, 108 and 113 classes in general engine performance. Additional support courses may be taken to develop the required skills and knowledge needed to complete this certificate.

## SKILL CERTIFICATE

This program offers pre-employment vocational training for the student desiring full-time work as a Smog Check Technician.
Course Numbers Core Courses Units
AUTO 263AD Clean Air Car Course ..... 3
AUTO 264AD Advanced Clean Air Car Course ..... 2.5
Minimum Core Course Units: ..... 5.5
Course Numbers Support Courses ..... Units
Select additional units from this list for further study.
AUTO 122 Advanced Engine Performance Diagnosis ..... 3
AUTO 201AD ASE Certification Preparation ..... 1.5
AUTO 202 Automotive Fuel Injection ..... 3
AUTO 253 Bar Alternative Training ..... 2
AUTO 262AD Bar Update Training ..... 5
Minimum Support Course Units ..... 0
Total Minimum Units Required ..... 5.5

## Automotive Technology

A.S. Degree: $\quad 33$ units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: $\quad 33$ units in courses listed below with a minimum of a "C" grade in all classes.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

This program offers pre-employment vocational training for the student desiring full-time work in automotive service and repair. All classes are designed to meet national certification standards for ASE testing. Instructors fully qualified both by shop experience as master technicians and by training as instructors conduct all technical classes in lecture, demonstration and laboratory sections. An advisory committee, composed of employers and working technicians, assists the college in maintaining a program geared to current needs of the trade.

The Basic Automotive Technology Certificate Program is designed to be completed in one year. Since the courses offer skill-paths from the most basic automotive fundamentals and principles to advanced automotive theory and design, students should take the classes in a progressive order to properly complete the program. The Associate of Science degree in Automotive Technology is atwo-year course of study including lecture, demonstration and laboratory instruction, all emphasizing fundamental mechanical principles and applications.
ALL BEGINNING students must take AUTO 100 and 101. AUTO 100 and 101 may be taken with AUTO 102, 104, 105, 106, and 109. AUTO 107 cannot be taken until 106 is completed. AUTO 108 and 113 cannot be taken until 100, 101, and 102 are completed. AUTO 108 and 113 should be taken concurrently. A student may also complete a certificate in three (3) semesters by following a prescribed course of study.
Course Numbers Core Courses Units

## First Semester:

AUTO 100 Safety, Bench-Work and Service Procedures ....................................................................... 2
AUTO 101 Automotive Electrical/Electronic Systems ..... 4
AUTO 102 Automotive Fuel and Cooling Systems ..... 3
AUTO 104 Automotive Power Train ..... 3
AUTO 105 Automotive Brakes and Braking Systems ..... 3
Second Semester:
AUTO 106 Automatic Transmissions ..... 4
AUTO 108 Automotive Engine Tune-Up ..... 5
AUTO 109 Air Conditioning and Accessories ..... 3
AUTO 113 Computerized Engine Control ..... 3
AUTO 115 Automotive Steering, Alignment and Suspension ..... 3
Minimum Core Course Units: ..... 33
Course Numbers Support Courses ..... Units
Select additional units from this list for further study.
AUTO 122 Advanced Engine Performance Diagnosis ..... 3
AUTO 190AD Automotive Supervised Practice ..... 1-3
AUTO 201AD ASE Certification Preparation Course ..... 1.5
AUTO 202 Automotive Electronic Fuel Injection ..... 3
AUTO 203 Automotive Engines ..... 4
AUTO 253AD BAR Alternative Training ..... 2
AUTO 262AD BAR Update Training .....  5
AUTO 263AD Clean Air Car Course ..... 3
AUTO 264AD Advanced Clean Air Car Course ..... 2.5
AUTO 265 Electrical and Alternative Fuel Vehicles ..... 1.5
WELD 161 Oxyacetylene Welding ..... 4
Minimum Support Course Units: ..... 0
Total Minimum Units Required: ..... 33

A.S. Degree: 25 units with a minimum " $C$ " grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: Certificate not available.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## A.S. DEGREE

The Biology major provides the student with some of the background necessary to pursue upper division study in a wide variety of biological fields, including premedicine, predentistry, prepharmacy, physiology, science teaching, research, marine biology, biotechnology and field ecology. The lower division Biology major requirements at most four-year institutions include a year each of organic chemistry, calculus and physics. Though these courses are not required for the COS Biology major, the student is strongly advised to complete most of these courses prior to transferring. A fully prepared biology major may complete the required biology courses and the support courses (organic chemistry, calculus and physics) in two years. However, moststudents choose to spread the course work over a longer period. There are few jobs available, other than as a laboratory assistant, for students who have completed only the courses required for the A.S. Degree level Biology major. Nearly all jobs in the biological science field require at least a B.A. or B.S. degree and often require a graduate degree.
Course Numbers Core Courses Units
BIOL 1\& 2 Principles of Biology ..... 10
Minimum Core Course Units: ..... 10
Course Numbers Support Courses ..... Units
Select 15 additional units (one course minimum from each group) to complete the total units required
Group 1:
MATH 21 Introduction to Statistics .....  .4
MATH 70 Precalculus ..... 5
MATH 75 CalculusWithAnalytic Geometry1 ..... 5
Group 2:
BIOL 40 General Microbiology ..... 4
CHEM 1 General Chemistry ..... 5
CHEM 2 General Chemistry ..... 5
CHEM 12 Organic Chemistry ..... 5
CHEM 13 Organic Chemistry ..... 5
CHEM 20 Introductionto General Chemistry ..... 4
CHEM $21 \quad$ Organic/Biological Chemistry ..... 4
PHYS 5 Physics for Engineers 1 ..... 4
PHYS 6 Physics for Engineers 2 ..... 4
PHYS 7 Physics for Engineers 3 ..... 4
PHYS 20 General Physics 1 ..... 4
PHYS 21 General Physics 2 ..... 4
Minimum Support Course Units: ..... 15
Total Minimum Units Required: ..... 25

## Business, General

| A.S. Degree: | 30 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. |
| :--- | :--- |
| (See page 54). |  |

## ACHIEVEMENT CERTIFICATE

Students completing the General Business certificate will have a background in business vocabulary, organizational structure, human relations, ethics, marketing, and other topics that will prepare them for entry into a pre-supervisory position. Supervision skills are very important to all organizations. Students seeking a General BusinessA.S. Degree maytake the General Business Certificate requirementplus General Education and graduation requirements for an A.S. Degree in Business Management.
Course Numbers Core Courses ..... Units
BUS 18 Business Law ..... 4
BUS 82 Introductionto Business ..... 3
BUS 184 BusinessCommunication ..... 3
BUS 185 Ethics in Business and Industry ..... 3
BUS 188 Human Relations in Business ..... 3
BUS 230 Supervision Management for the First-Line Supervisor ..... 3
COMP 5 Computer Concepts (4)
Introductionto Personal Computers ..... 4
BUS 112/SPCH 112 Public Speaking for Business ..... 4
COMP 228 IntroductiontotheWorld WideWeb ..... 1
Minimum Core Course Units: ..... 28
Course Numbers Support Courses ..... Units
Select 2 additional units from this list to complete the total units required.
ACCT 101 Essentials of Accounting ..... 5
BUS 155 E-Commerce ..... 3
BUS 174 Marketing Principles ..... 3
BUS 231 Starting aNew Business ..... 3
BUS 266 Professional EmploymentPrep ..... 3
BUS 297 Personal Finance ..... 3
COMP 140 Windows and DOS ..... 3
COMP 227 Presentation Software for business ..... 1.5
COMP 229 Web Page Design and Development ..... 3
WEXP 193 Occupational Cooperative Education/Internship - 1st semester. ..... 1-4
WEXP 194 Occupational Cooperative Education/Internship (2nd Semester) ..... 1-4
WEXP 195 Occupational Cooperative Education/Internship (3rd Semester) ..... 1-4
WEXP 196 Occupational Cooperative Education/Internship(4thSemester) ..... 1-4
Minimum Support Course Units: ..... 2
Total Minimum Units Required: ..... 30

# A.S. Degree: 30 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.) <br> Certificate: Certificate not available. <br> Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. 

## A.S. DEGREE

n The Associate Degree will be granted upon the completion of 60 units chosen from courses numbered 1 to 299 and the following requirements:

A certificate in Business, General or:
Marketing Management Certificate plus General Education and graduation requirements.
$\mathbf{n} \quad$ Students planning to transfer to a four-year school are encouraged to review specific requirements with a counselor and check the major sheet of the university they plan to attend.

## Major and Certificate Requirements

## q Associate Degree q Certificate

# California Dairy Products Training Institute (Concepts) 

A.S. Degree: Degree not available.<br>Certificate: $\quad 15$ units in courses listed below with a minimum of a "C" grade in all courses.

## SKILL CERTIFICATE

The California Dairy Products Training Institute (CDPTI) Certificate is designed for students who seek a certificate in the Dairy Processing field. The course work provides the fundamentals for job entry-level skills in the dairy processing field. The COS CDPTI Certificate is a very popular one with students and provides a framework for careers in dairy food processing leading to employment.

| Course Numbers | Core Courses Units |
| :---: | :---: |
| AGMT 108AB | Introduction to Ag Computer Applications ............................................................... 3 |
| DPTI 201 | Fluid Stream ................................................................................................. 1 |
| DPTI 202 | GMP/Sanitation .............................................................................................. 1 |
| DPTI 203 | Industrial Safety ................................................................................................. 1 |
| DPTI 204 | Sensory Evaluation \& Grading ............................................................................. 1 |
| DPTI 205 | HACCP/Food Safety ........................................................................................... 1 |
| DPTI 206 | Human Resources ............................................................................................. 1 |
| DPTI 207 | Process Equipment \& Engineering ........................................................................ 1 |
| DPTI 208 | Laboratory Skills ................................................................................................. 1 |
| DPTI 209 | Dairy Products and Marketing .............................................................................. 1 |
| DPTI 210 | Transportation .................................................................................................. 1 |
| DPTI 211 | Cheese \& Whey Processing ................................................................................ 1 |
| DPTI 212 | Warehousing (Dry and Refrigerated) ..................................................................... 1 |
|  | Total Minimum Units Required: ........................................................................ 15 |

## Chemistry

# A.S. Degree: $\quad 30$ units with a minimum " $C$ " grade plus General Education and graduation requirements for a total of 60 units. (See page 54.) <br> Certificate: Certificate is not available. <br> Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. 


#### Abstract

A.S. DEGREE

The Chemistry major provides the student with the background necessary to pursue upper division study in chemistry. Students should check for additional specific requirements at four-year institutions, particularly in the math and physics courses required.

Employment opportunities with an A.S. in chemistry may be limited to those employers that use chemical testing for quality control and/or need a laboratory technician.


| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| CHEM 1 | General Chemistry | --- 5 |
| CHEM 2 | General Chemistry | --- 5 |
| CHEM 12 | Organic Chemistry | -- 5 |
| CHEM 13 | Organic Chemistry |  |
|  | Minimum Core Co | --- 20 |
| Course Numbers | Support Courses | Units |

Select 10 additional units from this list.


MATH $61 \quad$ Survey of Calculus 1 (3)
or MATH 75 Calculuswith Analytic Geometry 1 (5) ------------------------------------------------------------------- 3 or 5

Minimum Support Course Units: -------------------------------------------------------------------------10
Total Minimum Units Required: -----------------------------------------------------------------------30

## Major and Certificate Requirements

## $\Varangle$ Associate Degree <br> $a$ Certificate

## Child Development

$\begin{array}{ll}\text { A.S. Degree: } & \begin{array}{l}\text { Certificate courses with a minimum "C" grade plus General Education and graduation requirements for a total of } 60 \\ \text { units. (See page 54.) }\end{array} \\ \text { Certificate: } & 24 \text { units in courses listed below with a minimum of a "C" grade in all courses. } \\ \text { Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. }\end{array}$

## ACHIEVEMENT CERTIFICATE

Increased attention is being focused on the educational needs and potential of children, from birth through adolescence. Students trained in Child Development will have a direct impact on these children. As more parents enter the work force and need early childhood programs, there is growing need for trained men and women who have a sound understanding of the social, emotional, physical, cognitive, and creative needs of children. Employment opportunities include jobs in privately and publicly funded child care programs, family child care, and school ages programs. The Child Development Program provides the twelve units required by the State for a Child Development Permit, as well as degree, transfer, and certificate classes.
Course Numbers Core Courses Units
CHLD 39/PSY $39 \quad$ Child Development-DS1 ..... -3
CHLD 42 Child, Family and Society - DS 2 ..... 3
CHLD 134 Child Abuse ..... $-2$
CHLD 140 Principles of Early Childhood Education - DS 3 ..... 3
CHLD 141 Practices in Childhood Education - DS 3 ..... - 3
CHLD 148 Child Health and Safety - DS 7 ..... 3
CHLD 158 Cultural Diversity in ECE - DS 3 ..... 3
Minimum Core Course Units: ..... 20
Course Numbers Support Courses ..... Units
Select 4 additional units from this list to complete the total units required.
CHLD 112 Children's Nutrition ..... - 3
CHLD 135 Music Experiences in Childhood Education - DS 3 ..... 1
CHLD 136 Children's Literature-DS3 ..... - 3
CHLD 137 Science Experiences in Childhood Education ..... - 1
CHLD 138 Science Experiences in School-Age Education ..... $-1$
CHLD 142 Mentor Teacher ..... $-2$
CHLD 143 Administration of Childhood Education - DS6 ..... - 3
CHLD 144 Advanced Administration of Childhood Education- DS6 ..... - 3
CHLD 145 Parenting ..... - 3
CHLD 146 Exceptional Child ..... - 3
CHLD 147 Infant/Toddler Childcare-DS4 ..... - 3
CHLD 149AB Creative Activities for Young Children - DS 5 ..... $-2$
CHLD 152 School Age Child Care ..... - 3
CHLD 153 Creative Movement for the Classroom ..... $-1$
CHLD 154 Introduction to Early Intervention ..... - 3
CHLD 155 Child Guidance ..... - 3
CHLD 156 Family Day Care Management ..... $-1$
CHLD 157 Family Day Care Principles \& Practices ..... $-1$
CHLD 159 Child Development Permits: Professional Growth Training ..... $-2$
CHLD 160 Literacy/Language in Children ..... - 3
CHLD 163 After-School Programs - ..... - 4
CHLD 164 Family Child Care Mentor ..... - 2
CHLD 238 Food Experience With Young Children ..... $-1$
CHLD 239 Introduction to Child Development ..... - 2
CHLD 242 The Socialization of the Child ..... -- 2
CHLD 249 Introduction to Preschool Activities ..... - 2
CHLD 199 Topics Courses ..... 1
Minimum Support Course Units: ..... $-4$
Total Minimum Units Required: ..... 24

# Child Development, Early Childhood Education, Option II 

Associate Degree
Certificate

Degree: Degree Not Available.
Certificate: $\quad 26$ units in courses listed below with a minimum of a " $C$ " grade in all courses.

## ACHIEVEMENT CERTIFICATE

Current legislation has mandated that young children with special needs, who are high risk or disabled, be served starting at birth in natural environments. Teachers and practitioners who work in Early Childhood Education and Care Giving settings require training and experience with specific course work related to Early Intervention and Early Childhood Special Education. The Early Childhood Special Education Option provides the twelve units required by the State of California for private day care centers and the twenty-four units required by the State for a Child Development Permit, as well as degree, transfer and certificate classes.

Core Courses Course Names Units
CHLD 39/PSY 39 Child Development ......................................................................................................... 3
CHLD 42 Child, Family and Society - DS 2 ..................................................................................... 3
CHLD 140 Principles of Early Childhood Education - DS 3 ................................................................ 3
CHLD 146 Exceptional Child .......................................................................................................... 3
CHLD 147 Infant/Toddler Childcare - DS 4 ....................................................................................... 3
CHLD 148 Child Health and Safety - DS 7 ........................................................................................ 3
CHLD 154 Introduction to Early Intervention ................................................................................... 3
CHLD 158 Cultural Diversity in ECE - DS 3 .................................................................................... 3
WEXP193 Cooperative Work Experience in Early Intervention and Special Education ................................................................................ $2^{* * *}$

Total Minimum Units Required: ................................................................................ 26
***One unit of Work Experience MUST BE in an Early Intervention setting working with infants and toddlers who are high risk or disabled, and must be supervised by an approved practitioner in the field. The other unit of Work Experience will be done at a center based Special Education classroom, supervised by a professional with appropriate California Special Education credentials.

## Major and Certificate Requirements



## CISCO CCNA Academy

$\begin{array}{ll}\text { Degree: } & \text { Degree not available. } \\ \text { Certificate: } & 17 \text { units in courses listed below with a minimum of a "C" grade in all courses. }\end{array}$

## SKILL CERTIFICATE

This program offers entry-level vocational training for students desiring employment as a network designer or technician, and preparation for students who wish to pursue advanced study in information technology. The course of study combines lecture and laboratory instruction, and includes the theory and analysis of LAN and WAN computer networks, network design, programming routers and switches, installing, configuring, upgrading, troubleshooting, and repairing computer networks with CISCO internet working devices. Career Opportunities include: network technician or engineer; help desk; network administrator; trainer; consultant; and network designer.

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| IT 130AC | CISCO Academy 1 | - 3 |
| IT 131AC | CISCO Academy 2 | -- 3 |
| IT 132AC | CISCO Academy 3 | -- 3 |
| IT 133AC | CISCO Academy 4 | 3 |
|  | Minimum Core Co | -- 12 |
| Course Numbers | Support Courses | Units |

The following courses may be taken as electives for this certificate, or may be substituted for core courses. Permission to substitute these or other courses must be obtained from the division. These electives are suggested to enhance one's career opportunities.

Select 5 additional units from this list to complete the total units required.










COMP 132 Microcomputer Operations: Advanced DOS ---------------------------------------------------------------------



ELEC 112 Microprocessor Applications ---------------------------------------------------------------------------------------

Minimum Support Course Units: ------------------------------------------------------------------------ 5

Total Minimum Units Required: ---------------------------------------------------------------------17

## Comp TIA A+

Associate Degree
Certificate

| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | 17 units in courses listed below with a minimum of a "C" grade in all courses. |

SKILL CERTIFICATE

This program offers entry-level vocational training for students desiring employment as a computer service technician, and preparation for students who wish to pursue advanced study in information technology. The course of study combines lecture and laboratory instruction, and includes the theory and analysis of computer operation, installing, configuring, upgrading, troubleshooting, and repairing microcomputer systems.
Course Numbers Core Courses Units


COMP 5 Computer Concepts -----------------------------------------------------------------------------------------------1
COMP 140 Windows and DOS -------------------------------------------------------------------------------------------------3
Minimum Core Course Units: -------------------------------------------------------------------------14

Course Numbers Support Courses Units
The following courses may be taken as electives for this certificate, or may be substituted for core courses. Permission to substitute these or other courses must be obtained from the division. These electives are suggested to enhance one's career opportunities.

Select 3 additional units from this list to complete the total units required.
IT 120 Computer Networking Fundamentals ..... 3
IT 121AC Comp TIA Network + Exam Preparation ..... 3
IT 122AC Computer Network Administration ..... - 3
IT 123AC TCP/IP and IP Routing ..... - 3
IT 130AC CISCO Academy 1 ..... - 3
IT 131AC CISCO Academy 2 ..... - 3
IT 132AC CISCO Academy 3 ..... - 3
IT 133AC CISCO Academy 4 ..... -3
IT 140AC MCSE Windows 2000 Pro ..... $-2$
IT 141AC MCSE Windows 2000 Server ..... - 2
COMP 6 Programming Fundamentals ..... - 3
COMP 132 Advanced DOS ..... - 2
COMP 133 Database Processing ..... - 3
ELEC 111 Microprocessor/PCL Fundamentals ..... $-3$
ELEC 112 Microprocessor Applications ..... - 3
Minimum Support Course Units: ..... $-3$
Total Minimum Units Required: ..... 17

## Major and Certificate Requirements

## Comp TIA Network +

| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | 17 units in courses listed below with a minimum of a "C" grade in all courses. |

## SKILL CERTIFICATE

This program offers entry-level vocational training for students desiring employment as a network designer or technician, and preparation for students who wish to pursue advanced study in information technology. The course of study combines lecture and laboratory instruction, and includes the theory and analysis of LAN and WAN computer networks, network design, programming routers and switches, installing, configuring upgrading, troubleshooting, and repairing computer networks with CISCO internet working devices. Career Opportunities include: network technician or engineer; help desk; network administrator; trainer; consultant; and network designer.
Course Numbers Core Courses ..... Units
IT 120 Computer Networking Fundamentals ..... - 3
IT 121AC Comp TIA Network + Exam Preparation ..... - 3
IT 122AC Computer Network Administration ..... - 3
IT 123AC TCP/IP and IP Routing ..... - 3
Minimum Core Course Units: ..... 12
Course Numbers Support Courses ..... Units
Select 5 additional units from this list to complete the total units required.
COMP 5 Computer Concepts ..... - 4
COMP 6 Basic Programming ..... - 3
COMP 132 Microcomputer Operations: Advanced DOS ..... - 2
COMP 133 Database Processing ..... - 3
COMP 140 Windows and DOS ..... - 3
ELEC 111 Microprocessor/PCL Fundamentals ..... - 3
ELEC 112 Microprocessor Applications ..... - 3
IT 110 PC Troubleshooting and Repair ..... - 3
IT 111AC Comp TIA A+ Exam Preparation ..... - 4
IT 130AC CISCO Academy 1 ..... - 3
IT 131AC CISCO Academy 2 ..... - 3
IT 132AC CISCO Academy 3 ..... - 3
IT 133AC CISCO Academy 4 ..... - 3
IT 140AC MCSE Windows 2000 Pro ..... $-2$
IT 141AC MCSE Windows 2000 Server ..... - 2
Minimum Support Course Units: ..... $-5$
Total Minimum Units Required: ..... 17

## Commercial Art

Associate Degree
Certificate

```
Degree: Degree not available.
Certificate: 33 units in courses listed below with a minimum of a "C" grade in all courses.
```


## ACHIEVEMENT CERTIFICATE

Commercial Art is a vital component of stimulating messages for advertising, education and politics. There is a demand for commercial artists. Today's commercial artist not only creates with brush and pen, but also with video and computer graphics. We see these images all around us in newspapers, magazines, television and motion pictures and other areas where they are a vital part of commerce. Students in this program learn skills in illustration, lettering, layout and graphics.
Course Numbers Core Courses Units
ART 1 Art Appreciation ..... -3
ART 6/CFS 6 Color and Design ..... - 3
ART 8 Drawing Fundamentals ..... - 3
ART 15 Beginning Printmaking (3)or ART 127 IntroductiontoPrintmaking$-3$
ART 23AD Macintosh Basics for Artists and Designers ..... - 3
PHOT 1 Beginning Photography ..... - 3
GD 160 Graphic Design ..... - 4
GD 151 Independent Study (2)IndependentStudy$-2$
Minimum Core Course Units: ..... 24
Course Numbers Support Courses ..... Units
Select 9 additional units from this list to complete the total units required.
ART 9 Drawing Fundamentals ..... - 3
ART 10AD Figure Drawing (3) ..... 3-12
ART 12AD Watercolor Painting (3) ..... -3-12
ART 13AD Studio Painting (3) ..... 3-12
ART 16AC AdvancedPrintmaking ..... - 2
ART 25AD Digital Imaging for Artists (3) ..... 3-12
ART 121AC Serigraphy/Screen Printing (3) ..... 3-9
ART 126AD Digital Painting (3) ..... 3-12
Minimum Support Course Units: ..... 9
Total Minimum Units Required: ..... 33

## Major and Certificate Requirements

q Associate Degree
© Certificate

## Computer Applications

| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | 30 units in courses listed below with a minimum of a "C" grade in all courses. |

## ACHIEVEMENT CERTIFICATE

Students with a Computer Applications certificate will be prepared for entry-level positions requiring computer application skills.
Course Numbers Core Courses Units
BUS 82 Introduction to Business (3)
or BUS 184 Business Communications .....  3
BUS 112/SPCH 112 Public Speaking for Business(4) ..... 4
COMP $5 \quad$ Computer Concepts (4)
or COMP 130 Introduction to Personal Computers .....  4
COMP 133 Database Processing .....  3
COMP 136 Word Processing (3)
or COMP 221AD Beginning Word (1.5) and
Advanced Word (1.5) 3
COMP 138 Spreadsheet Design for Business (3)
or COMP 223AD Beginning Excel (1.5) and
COMP 224AD Advanced Excel (1.5) ..... 3
COMP 140 Windows and DOS ..... 3
COMP 227 Presentation Software for Business (1.5) ..... 1.5
Minimum Core Course Units: ..... 24.5
Course Numbers Support Courses ..... Units
Select at least 6 additional units from this list to complete the total units required.
ART 23AD Macintosh Basics for Artists and Designers .....  3
BUS 155 E-Commerce ..... 3
BUS 174 Marketing Principles ..... 3
BUS 188 Human Relations in Business ..... 3
COMP 6 Programming Fundamentals .....  3
COMP 135 Desktop Publishing for Business .....  4
COMP 108 Programming Concepts (Java) .....  4
COMP 109 Advanced Application Software .....  3
COMP 210 MO-Computer Accounting .....  3
COMP 228 Introduction to the World Wide Web ..... 1
COMP 229 Web Page Design and Development .....  3
COMP 230 Java Script/XML .....  3
DRFT 114 Introduction to AutoCAD .....  4
GD 164AD Digital Animation ..... 4
IT 110 PC Troubleshooting/Repair ..... 3
Minimum Support Course Units: .....  6
Total Minimum Units Required: ..... 30

## Computer/Information Systems

A.S. Degree: Certificate courses with a minimum "C" grade plus Gneral Education and graduation requirements for a total of 60 unts. (See page 54.)<br>Certificate $\quad 30$ units in courses listed below with a minimum of a " C " grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

Students with a Computer and Information Systems certificate or degree will be prepared for entry-level computer positions such as data entry, technical support, and office positions involving computer skills.
Course Numbers Core Courses Units
BUS 82 Introductionto Business ..... 3
COMP 5 ComputerConcepts(4)
or COMP 130 Introductionto Personal Computers ..... 4
COMP 6 Programming Fundamentals ..... 3
COMP 108 Programming Concepts(Java) ..... 4
COMP 133 DatabaseProcessing ..... 3
COMP 136 Word Processing ..... 3
COMP 138 Spreadsheet Design for Business (3)
or COMP 223AD Beginning Excel (1.5) and
COMP 224AD Advanced Excel (1.5) ..... 3
COMP 140 Windows and DOS ..... 3
IT 110 PCTroubleshooting/Repair ..... 3
Minimum Core Course Units: ..... 29
Course Numbers Support Courses ..... Units
Select at least 1 additional unit from this list to complete the certificate.
ACCT 101 Essentials of Accounting (5)
or ACCT 1 Principles of Accounting ..... 4 or 5
BUS 112/SPCH 112 Public Speaking for Business ..... 4
BUS 155 E-Commerce ..... 3
BUS 184 BusinessCommunications ..... 3
BUS 185 Ethicsin Business and Industry ..... 3
BUS 188 Human Relations in Business ..... 3
COMP 109 Advanced ApplicationSoftware ..... 3
COMP 132 Advanced DOS ..... 2
COMP 135 Desktop Publishing for Business ..... 4
COMP 210 MO-Computer Accounting .....  3
COMP 227 Presentation Software for Business ..... 1.5
COMP 228 Introduction to the World Wide Web ..... 1
COMP 229 Web Page Design \& Development ..... 3
COMP 230 JavaScript/XML ..... 3
IT 120 Computer Networking Fundamentals ..... 3
Minimum Support Course Units: ..... 1
Total Minimum Units Required: ..... 30

## Major and Certificate Requirements

## q Associate Degree

## Computer Web Technician

| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | The14 core units listed below with a minimum of "C" grade, plusthe Computer Applications Certificate (30 units) or the Computer |
|  | and Information Systems Certificate ( 30 units) for a total of 44 units. |

## SKILL CERTIFICATE

Students with a Computer Web Technician certificate will be prepared for a variety of entry-level computer positions so important in today's business world. This course of study includes afoundation of computer applications, including courses that specialize in designing, creating, and maintaining Websites and intranets.
Course Numbers Core Courses ..... Units
COMP 108 Programming Concepts(Java) ..... 4
COMP 229 Web Page Design and Development ..... 3
COMP 230 JavaScript/XML ..... 3
GD 160 Graphic Design ..... 4
Minimum Core Course Units ..... 14
Course Numbers Support Courses ..... Units
Select additional units from this list for further study.
ART 23AD Macintosh Basics for Artists and Designers ..... 3
BUS 174 Marketing Principles ..... 3
BUS 184 Business Communications ..... 3
BUS 185/ITEC 185 Ethics in Business and Industry ..... 3
BUS 231 Starting a New Business ..... 3
IT 110 PC Troubleshooting/Repair ..... 3
IT 120 Computer Networking Fundamentals ..... 3
ENGL 1 College Reading and Composition ..... 3
ENGL 251 Fundamentals of College Writing ..... 3
WRK EXP 193 Work Experience (1st semester) ..... 1-4
Minimum Support Course Units: ..... 0
Computer Applications or Information Systems certificate ..... 30
Total Minimum Units Required: ..... 44

# Computerized Office Procedures 

Certificate

A.S. Degree: Certificate courses with a minimum "C" grade plus General Education and graduation requirements for atotal of 60 units. (See page 54.)<br>Certificate: $\quad 30.5-32$ units in courses listed below with a minimum of a "C" grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

The Computerized Office Procedures Program teaches a wide variety of skills such as compiling reports, organizing data, preparing statements, writing letters, and working with computers. Research shows that a high percentage of all new jobs are in the general office field. With the service sector of our economy growing rapidly, there is a large demand for persons trained in computerized office procedures. Students should be able to find entry-level employment in all phases of business including jobs as clerk typists, receptionists, and word processing operators.
Course Numbers Core Courses Units
BUS 271 College Keyboarding, Level 2 ..... 3
BUS 184 BusinessCommunications ..... 3
BUS 188 Human Relations in Business ..... 3
BUS 268 Electronic Calculating ..... 2
BUS 293 Business English ..... 4
BUS 295 Business Mathematics(3)or BUS $119 \quad$ Quantitative Methods (3)or BUS 20BusinessStatistics3
COMP 5 Computer Concepts(4) or COMP 130 Introductionto Personal Computers ..... 4
COMP $136 \quad$ Word Processing Using WordPerfect (3)
or COMP 221AD Beginning Word (1.5) and COMP 222AD Advanced Word (1.5) ..... 3
COMP 140 Windows and DOS ..... 3
BUS 112/SPCH 112 Public Speaking for Business (4)
or COMP 227 Presentation Software for Business (1.5) andCOMP 228 Introduction to the World Wide Web (1) $=(2.5)$2.5-4
Minimum Core Course Units: ..... 30.5-32
Course Numbers Support Courses ..... Units
Select additional units from this list for further study.
BUS 82 Introductionto Business ..... 3
BUS 155 E-Commerce ..... 3
BUS 185 Ethics in Business and Industry ..... 3
BUS 266 Professional EmploymentPreparation ..... 3
COMP 133 DatabaseProcessing ..... 3
COMP 135 Desktop Publishing for Business ..... 4
COMP 138 Spreadsheet Design for Business ..... 3
COMP 220 Essential Computer Concepts ..... 2
COMP 229 Web Page Design \& Development ..... 3
Minimum Support Course Units: ..... 0
Total Minimum Units Required: ..... 30.5-32

## Major and Certificate Requirements

ब Associate Degree
© Certificate

## Construction Inspection

A.S. Degree: Certificate courses with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: $\quad 21$ units in courses listed below with a minimum of a " $C$ " grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

The Construction Inspection certificate is offered to students majoring in Building Construction who desire employment in the field of building construction and supervision. The classes can be taken in any order.

The following courses may be taken in any order the student wishes.

| Course Numbers | Core Courses Units |
| :---: | :---: |
| CT 170AD | Concrete Inspection ........................................................................................... 3 |
| CT 171AD | Wood \& Metal Inspection .................................................................................... 3 |
| CT 172AD | Building Codes ................................................................................................. 3 |
| CT 173AD | Electrical Codes .................................................................................................. 3 |
| CT 174AD | Mechanical Inspection ....................................................................................... 3 |
| CT 175AD | Plumbing Inspection .......................................................................................... 3 |
| CT 176AD | Architecture Inspection ....................................................................................... 3 |
|  | Total Minimum Units Required: ........................................................................ 21 |

## Construction Technology

Certificate

A.S. Degree: 46 units with a minimum " $C$ " grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: $\quad 46$ units in courses listed below with a minimum of a "C" grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

The Construction Technology Program is designed to provide students with the skills and education necessary for employment in one of the many fields related to the construction industry. Some of the job opportunities are: house framer, finisher, house painter, house designer, building materials sales person or manager. Students in this program will enroll in four nine-week (approximately) classes each worth seven units and six units of support classes. A student may enroll at any of the nine week starting points. The program consists of classroom instruction which deals with nomenclature, building materials, fasteners, building layout, roof framing, stair construction, rough and finish carpentry and cabinet design, construction and installation. The students will participate in the construction of an actual custom home which will provide them with real-world experience in the building trades/construction industry.
Course Numbers Core Courses Units
CT 114AB Residential Construction1 ..... 5
CT 115AB Residential Construction2 ..... 5
CT 118AB Advanced Residential Construction1 ..... 5
CT 119* Residential Construction 4 ..... 4
CT 100AB Construction Drawing/DesignAnalysis1 ..... 4
CT 101* Drawing/Building Construction2 ..... 2
CT 104AB Construction Theory/Practice 1 ..... 4
CT 105* Carpentry 2, Residential Construction ..... 3
CT $150 \quad$ Fundamentals/CabinetMaking1 ..... 4
CT 160 Cabinet Making 2 ..... 4
Minimum Core Course Units: ..... 40
Course Numbers Support Courses ..... Units
Select 6 additional units from this list to complete the total units required.
CT 108* Advanced Carpentry 1, Roof Framing ..... 3
CT 109 * Advanced Carpentry 2, Stair Building ..... 3
CT 130 Managing Residential Construction ..... 3
CT 132 BasicConstructionSystems ..... 3
CT 135 BlueprintReading/Residential Construction ..... 2
CT 138 Contractors License Law ..... 3
CT 190AD Supervised Practice ..... 1-3
CT 205AB Plumbing ..... 3
CT 270AB ResidentialWiring ..... 3
CT 113AB Residential Construction/PreFrame ..... 4
Minimum Support Course Units: ..... 6
Total Minimum Units Required: ..... 46

[^2]
## Major and Certificate Requirements

## あ Associate Degree

## Consumer/Family Studies

| A.S. Degree: | 21 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. <br> (See page 54. ) |
| :--- | :--- |
| Certificate: | Certificate not available. |

## A.S. DEGREE

This program gives a general overview of the various Consumer/Family Studies areas. It enables men and women to develop skills that improve the quality of life and help them prepare to function effectively in changing family, community and work environments. Designed to give practical training in every day living, the program is also a starting point for those who want to become home economists. Students who continue studies at a four-year college can become home economists with a wide-ranging field with career opportunities in teaching, dietetics, fashion merchandising and design, consumer affairs, family counseling and adult and child services.

| Core Courses | Course Names |
| :--- | :--- |
| or | CFS 80 |
| CHLD 39/PSY 39 |  |$\quad$| Life-Span Development (3) |  |
| :--- | :--- |
|  | Child Development(3) ................................................................................................ 3 |

## Cosmetology

Associate Degree
Certificate
A.S.Degree: Certificate units with a minimum grade of a "C" plus General Education and graduation requirements. (See page 154) Certificate: $\quad 24-40$ units with a minimum grade of a " C " in all courses.

## ACHIEVEMENT CERTIFICATE

Cosmetologists (beauticians) provide beauty services to their customers. A majority of time is spent shampooing, tinting, bleaching, cutting, and styling hair. Cosmetologists may also give manicures and scalp and facial treatments, provide makeup analysis and shape eyebrows. Students receive much practical experience and also learn the theory of cosmetology, anatomy, physiology and chemical composition of skin and nails, and disorders and diseases of the skin, scalp and hair.

After passing the state licensing exam, cosmetologists have career opportunities as beauticians, beauty shop owners, and specialty fields such as electrologists and manicurists. The certificate requires 1600 hours to complete.
Course Numbers Core Courses Units
COSM 261 Basic Cosmetology ..... 6-12
COSM 262 IntermediateCosmetology ..... 6-12
COSM 263AB (A) AdvancedCosmetology ..... 6-8
COSM 263AB (B) Cosmetology. ..... 6-8
Total Minimum Units Required: ..... 24-40

Students must complete a minimum of 252 hours per semester in order to receive six units of credit. Additional hours attended will result in additional units based upon 42 hours equals one (1) unit. Students may attend a maximum of four semesters which would be COSM $261,262,263 A B(A)$ and $263 A B(B)$. The maximum number of hours a student may attend is 1,600 or four semesters, whichever is less.

Minimum 252 hours = 6 units credit
Minimum 294 hours $=7$ units credit
Minimum 336 hours $=8$ units credit
Minimum 378 hours $=9$ units credit
Minimum 420 hours $=10$ units credit
Minimum 462 hours $=11$ units credit
Minimum 504 hours $=12$ units credit

## Dairy Science

$\begin{array}{ll}\text { A.S. Degree: } & \begin{array}{l}\text { Certificate courses with a minimum "C" grade plus General Education and graduation requirements for atotal of } 60 \text { units. } \\ \text { (See page 54.) }\end{array} \\ \text { Certificate: } \quad 30 \text { units in courses listed below with a minimum of a "C" grade in all courses. } \\ \text { Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. }\end{array}$

## ACHIEVEMENT CERTIFICATE

The Dairy Science Program is designed for students who seek a certificate, degree or transfer program in the Dairy Science field. The coursework provides the fundamentals for job entry-level skills in dairy management as well as providing degree applicable units for the Associate in Science degree with a major in Dairy Science. Many Dairy Science courses transfer to four-year universities and are required lower division classes. The COS Dairy Science Certificate/Degree major provides a framework for students interested in the dairy industry.
Course Numbers Core Courses ..... Units
AGMT 108AB Introduction to Agriculture Computer Applications (1st semester) ..... 3
DSCI 101 Elements of Dairying ..... 3
DSCI 102 Principles of Milk Herd Production .....  3
DSCI 103 Commercial Dairy Management ..... 3
DSCI 104 Breeding \& Selection .....  3
DSCI 108 Dairy Nutrition ..... 3
DSCI 200 Applied Mechanics in Dairy Science ..... 2
WEXP 193 Agricultural Occupational Cooperative Education/Internship (1stsemester) .....  3
Minimum Core Course Units: ..... 23
Course Numbers Support Courses ..... Units
Select 7 additional units from this list to complete the total units required.
AG 201 Agricultural Mathematics ..... 3
AG 200AD Agriculture Leadership .....  1
AG Other Approved Agriculture Classes With Approval of Department ..... 1-4
AGMT 108AB Introduction to Agriculture Computer Applications (2nd semester) .....  3
DSCI 105AD Dairy Cattle Judging/Selection(1 unitfor 4 semesters) ..... 4
DSCI 106AB Introduction to Dairy Production Technology ..... 3
PLSI 104 Forage Crops ..... 3
Minimum Support Course Units: ..... 7
Total Minimum Units Required: ..... 30

## Dance

| A.A. Degree: | 26 units with a minimum "C" grade in all required courses, plus General Education and graduation requirements for a total <br> of 60 units. (See page 54.) |
| :--- | :--- |
| Certificate: | Certificate not available. |

## A.A. DEGREE

Dance comes from the inner self and the need to communicate. Before there was written work, there was dance. This course of study provides the person who loves dance with the training to go on to a four-year institution. The Dance major will find jobs in private studios, recreation programs, YMCA's and schools, directing dance programs, drill teams, and cheerleading squads. They may find employment at entertainment parks such as Disneyland, Universal Studios, or Six Flags, or with semi-professional or professional theater companies or dance companies throughout the United States. Some dancers specialize in Dance therapy, offering a holistic approach to healing.
Course Numbers Core Courses Units
ART 1 Art Appreciation ..... 3
DANC 6AD Choreography ..... 1
DANC 8AD Beginning Ballet ..... 1
DANC 10AD Modern Dance .....  1
DANC 12AB Beginning Jazz ..... 1
DANC 13AD Advanced Jazz ..... 1
DANC 16AD Beginning Tap .....  1
DRAM 2 Fundamentals of Acting .....  3
DRAM 12AB Costuming ..... 3
DRAM 17AB Make up ..... 3
HW 1 Personal \& Community Health ..... 3
MUS 10 Appreciation of Music History ..... 3
Minimum Core Course Units: ..... 24
Course Numbers Support Courses ..... Units
Select 2 additional units from this list to complete the total units required
DANC 41AD Musical Theater Performance ..... 2
HW 3 Standard First Aid ..... 3
HW $40 \quad$ Care \& Prevention of Athletic Injuries ..... 3
HW 60 Concepts of Health \& Fitness ..... 3
PE 36 Introduction to Physical Education .....  3
PE 188 Peak Performance for Athletes ..... 3
Minimum Support Course Units: ..... 2
Total Minimum Units Required: ..... 26

## Major and Certificate Requirements

## Drafting Technology

A.S. Degree: $\quad 40$ units with a minimum " C " grade plus General Education and graduation requirements for a total of 60 units.
Certificate: $\quad 30$ units in courses listed below with a minimum of a " C " grade in all courses. (See page 54)
Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

Drafting is a major component of design for any product that is to be manufactured or constructed. The graphic documents necessary to convey sizes, shapes, materials, locations, assembly methods, standards, and processes are mandatory in today's global industrial market. The computer has allowed drafters speed and accuracy in production as well as remote communication and access to document information. Computer assisted drafting now dominates the field. Students with very strong computer knowledge and skills will find many career opportunities.

| Course Numbers | Core Courses Units |
| :---: | :---: |
| First Semester |  |
| ARCH 20 | Introduction to Graphics and Perspective ............................................................... 3 |
| COMP 139 | Windows ........................................................................................................... 2 |
| DRFT 100 | Applied Drawing ................................................................................................ 3 |
| DRFT 114 | Introductionto AutoCAD ........................................................................................ 4 |
| Second Semester |  |
| ARCH 131 | Light Wood Frame Construction ........................................................................... 3 |
| ARCH 161AD | ComputerAssisted Architectural Detailing ................................................................ 3 |
| DRFT 115 | Advanced AutoCAD ............................................................................................ 4 |
|  | Minimum Core Course Units: ............................................................................ 22 |
| Course Numbers | Support Courses Units |
| Select 8 (certificate) or 18 (A.S. Degree) additional units from this list to complete the total units required. |  |
| ARCH 21 | Basic Graphics ................................................................................................. 3 |
| ARCH 160 | Materials of Construction ..................................................................................... 3 |
| COMP 228 | Introduction to the World Wide Web ...................................................................... 1 |
| COMP 229 | Web Page Design and Development....................................................................... 3 |
| DRFT 116AD | AutoCADApplications .......................................................................................... 4 |
| DRFT 151AD | IndependentStudy ............................................................................................. 1-9 |
| GD 190AD | SupervisedPractice ............................................................................................. 1-12 |
| GD 199 | Special Topics ................................................................................................... 1-12 |
| GD 159 | Adobe Illustrator ................................................................................................ 2 |
| GD 160 | Graphic Design .................................................................................................. 4 |
| WEXP 191-196 | Work Experience ...............................................................................................1-6 |
|  | Minimum Support Course Units for Certificate: ................................................. 8 |
|  | Total Maximum Units Required for a Certificate: ................................................. 30 |
|  | Minimum Support Course Units for Degree: ...................................................... 18 |
|  | Total Maximum Units Required for a Degree: ...................................................... 40 |

## Dramatic Arts: Acting

Associate Degree
Certificate
$\begin{array}{ll}\text { A.A. Degree: } & \begin{array}{l}31 \text { units with a minimum "C" grade plus General Education and graduation requirements for a total of } 60 \text { units. } \\ \text { (See page 54.) }\end{array} \\ \text { Certificate: } & \text { Certificate not available. } \\ \text { Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. }\end{array}$

## A.A. DEGREE

The Dramatic Arts program is a two-year course of study designed to prepare students to enter all fields of Theatre; i.e., set design and construction, lighting, costuming, makeup and acting. Emphasis is placeduponthe practical application of classroomlearning into fully realized stage productions. The Dramatic Arts program has two areas of emphasis, each with its own requirements: Acting and Technical.
Course Numbers Core Courses Units
DRAM 1 Introduction to the Theatre ..... 3
DRAM $2 \quad$ Fundamentals of Acting I ..... 3
DRAM $3 \quad$ Fundamentals of Acting 2 ..... 3
DRAM $4 \quad$ Intermediate Acting 1 ..... 3
DRAM 5 Intermediate Acting 2 ..... 3
DRAM 6 Shakespeare ..... 3
DRAM 19AD Theatre Workshop 1 (2 semesters/2 units each) (4)
Theatre Arts Workshop 2 (2) ..... 2 or 4
Minimum Core Course Units: ..... 20-22
Course Numbers Support Courses ..... Units
Select 8 or 10 additional units from this list to complete the total units required.
DRAM 12AB/FASH12AB Costuming ..... 3
DRAM 13 AB BeginningStagecraft ..... 3
DRAM 17 AB/FASH 17AB Makeup ..... 3
DRAM 8 History of Theater and Drama ..... 3
DRAM 19AD Theater Workshop 1 (2)
or DRAM 21AD Theater Workshop 2 ..... 2
DRAM 20AD Music Theatre Performance ..... 2
DRAM 22AD One-ActPlay Production ..... 2
DRAM 30AB Stage Movement/StageCombat ..... 2
DRAM 40AB MusicalTheatre ..... 3
DRAM 102AB Writing the Professional Screenplay ..... 3
DRAM 180AD CommunicationStrategies ..... 2
DRAM 202AD Acting for the Camera ..... 1
Minimum Support Course Units: ..... 8-10
Total Minimum Units Required: ..... 31

## Dramatic Arts: Technical

$\begin{array}{ll}\text { A.A. Degree: } & \begin{array}{l}31 \text { units below with a minimum "C" grade plus General Education and graduation requirements for a total of } 60 \text { units. } \\ \text { (See page 54.) }\end{array} \\ \text { Certificate: } & \text { Certificate not available. } \\ \text { Transfer Students: } & \text { Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. }\end{array}$

## A.A. DEGREE

The Dramatic Arts program is a two-year course of study designed to prepare students to enter all fields of Theatre; i.e., set design and construction, lighting, costuming, makeup, and acting. Emphasis is placed upon the practical application of classroom learning into fully realized stage productions. The Dramatic Arts Program has two areas of emphasis, each with its own requirements: Acting and Technical.
Course Numbers Core Courses ..... Units
DRAM 1 Introduction to the Theatre ..... 3
DRAM $2 \quad$ Fundamentals of Acting 1 ..... 3
DRAM 12AB/FASH 12AB Costuming (1 semester) ..... 3
DRAM 13AB Beginning Stagecraft(1 semester) ..... 3
DRAM 15AB Beginning Stage Lighting (1 semester) ..... 3
DRAM 17AB/FASH 17AB Makeup (1 semester) ..... 3
DRAM 19AD Theatre Workshop 1 (2 semesters/2 units each)(4)
or DRAM 22AD One-Act Play Production (2) and
DRAM 21AD Theatre Arts Workshop 2 (2) ..... 4
Minimum Core Course Units: ..... 22
Course Numbers Support Courses Units
Select 9 additional units from this list to complete the total units required.
DRAM 6 Shakespeare ..... 3
DRAM 8 History of Theater and Drama ..... 3
DRAM 12AB Costuming (2 ${ }^{\text {nd }}$ semester) ..... 3
DRAM 13AB Stagecraft (2 $2^{\text {nd }}$ semester) ..... 3
DRAM 14AB Intermediate Stagecraft (both semesters) ..... 6
DRAM 15AB Beginning Stage Lighting (2 ${ }^{\text {nd }}$ semester) ..... 3
DRAM 16AB Intermediate Stage Lighting (both semesters) ..... 6
DRAM 17AB Makeup (2 ${ }^{\text {nd }}$ semester) ..... 3
DRAM 18AB Advanced Theatre Crafts ..... 3
DRAM 20AD Music Theatre Performance ..... 2
DRAM 22AD One-ActPlay Production ..... 2
DRAM 180AD CommunicationStrategies ..... 2
Minimum Support Course Units: ..... 9
Total Minimum Units Required: ..... 31

# Educational Paraprofessional 

Associate Degree
Certificate

A.A.Degree: $\quad$ NotAvailable<br>Certificate: $\quad 47$ units listed below with a minimum of a "C" grade in all courses

## ACHIEVEMENT CERTIFICATE

The Educational Paraprofessional Certificate Program is designed to prepare individuals to work in K-12 educational facilities as paraprofessionals in instructional programs. Many people in this occupation work directly in the classroom assisting the teacher, while others work at schools in libraries, instructional media/resource centers or in special programs. Supportcourses are taken to complete the unitcertificate requirement and can be chosen to support the area in which the paraprofessional desires to work.
Course Numbers Core Courses Units
CHLD 39/PSY $39 \quad$ Child Development-DS1 ..... 3
CHLD 152 School Age Child Care-DS 5 ..... 3
CHLD 160 Literacy and Language Acquisition ..... 3
CHLD 136 Children's Literature - DS 3 ..... 3
MATH 360 Pre-Algebra (Or higher level math course) ..... 4
IS 241 Math Learning ..... 2
ENGL 360 Reading and Writing Skills (6)
Business English (4) ..... 4-6or BUS 293
ENGL270 Reading Instruction for K-12 ..... 2
ENGL275 Writing Mechanics ..... 2
COMP 130 Introduction to Personal Computers (4)
or COMP 220 Essential Computer Concepts (2) and
COMP 221AD Beginning Word (1.5)
or COMP 306AC Introduction to WordPerfect (1)
or COMP307AC Introduction to Word Processing for ESL (1) ..... 3-4
COMP 228 Introductionto World Wide Web (1)
Internet Information Resources (1) .....  1
or LIBR 102
California Natural History (3)
BIOL200
BIOL200
Biology and Earth Science for Educators (4) ..... 3-4
or NSCl 132
America(3)
or HIST 17 People ofthe United States (3) ..... 3
HW1 Personal and Community Health ..... 3
IS 150 Introductionto Teaching ..... 2
IS 230 CBEST TestPreparation ..... 1
WEXP 193 WorkExperience (1stsemester) ..... 1
Minimum Core Course Units ..... 43-47
Course Numbers Support Courses ..... Units
Select additional units from this list to complete the total units required.
CHLD 134 Child Abuse ..... 2
CHLD 138 Science ExperiencenSchool-Age Education ..... 1
CHLD 148 Child Health and Safety-DS7 ..... 3
CHILD 158 Cultural Diversity in ECE ..... 3
CHLD 163 After School Program ..... 4
COMP 133 Data Base Processing ..... 3
LIBR 101 Library Research Strategies ..... 1
LIBR 201 IntroductiontoLibraries ..... 2
LIB 203 Technical Services ..... 3
LIBR 204 School/Children's Services ..... 3
Total Minimum Units Required ..... 47

## Electronics Technology

A.S. Degree: 35 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: $\quad 35$ units in courses listed below with a minimum of a " C " grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.


#### Abstract

CERTIFICATE This program offers pre-employment vocational training for students desiring employment in the electronics industry, and preparation for students who wish to pursue advanced study at a four-year college. The two-year course of study combining lecture and laboratory instruction, and includes theory and analysis of basic electronics and electronic circuits. Use of test equipment and troubleshooting techniques are emphasized in all classes. Employment opportunities are available in communications, consumer products servicing, microprocessor-based systems, and manufacturing.


Course Numbers Core CoursesELEC 101 Direct Current Circuits ................................................................................................... 5
ELEC 102 Alternating Current Circuits ..... 5
ELEC 103 Semiconductor Circuits .....
ELEC 104 Communication Circuits .....
ELEC 110 Digital Circuits ..... 3
ELEC 111 Microprocessors/PLC Fundamentals ..... 3
ELEC 112 Microprocessor Applications ..... 4
ELEC 114 Operational Amplifier Circuits ..... 3
Minimum Core Course Units: ..... 33
Course Numbers Support Courses ..... Units
The following courses may be taken as electives for this certificate, or may be substituted for core courses. Permissionto substitute these or other courses must be obtained from the division. These electives are suggested to enhanceone's career opportunities. Select two additional units from this list to complete the total units required.
CT 270AB ResidentialWiring ..... 3
ELEC 105 Industrial Fabrication and Design ..... 3
IT 110 PC Troubleshooting and Repair ..... 3
IT 111AC Comp TIA A+ Exam Preparation ..... 4
IT 120 Computer Networking Fundamentals ..... 3
IT 121AC Comp TIA Network + Exam Preparation ..... 3
IT 122AC NetworkAdministration ..... 3
IT 123AC TCP/IP and IP Routing ..... 3
IT 130AC CISCO Academy 1 ..... 3
IT 131AC CISCO Academy 2 ..... 3
IT 132AC CISCO Academy 3 ..... 3
IT 133AC CISCO Academy 4 ..... 3
IT 140AC MCSE Windows 2000 Pro ..... 2
T 141AC MCSE Windows 2000 Server ..... 2
ITEC 273 Electrical Motor Controls ..... 2
Total Support Course Units Required for Associate of Science Degree ..... 2
Total Minimum Units Required for Associate of Science Degree: ..... 35

A.S. Degree: Degree is not available.<br>Certificate: $\quad 4$ units in courses listed below with a minimum of a " C " grade in all courses.

## SKILL CERTIFICATE

The certificates offered by the Division of Nursing and Health Science are issued by the State of Californiathroughthe Department of Consumer Affairs. The programs offered are single courses which prepare the student to receive a certificate permitting practice within that career. Careers include Emergency Medical Technician A, Nursing Assistant and Home Health Aide. For each of these careers, jobs are plentiful and offered at many sites throughoutthe college district.

To qualify for the state certificate, the student must pass the course with a grade of "C" or better and may also be required to successfully pass a state examinationto verify competence inthe area. Fingerprintclearance by the Department of Justice may be required. Specific information aboutthe criminal record review involved may be obtained from the Division office.

The Emergency Medical Technician B course prepares the student for certification for entry level positions with ambulance companies and in hospital emergency rooms. Opportunities for full or part time employment in emergency medical services are available to qualified applicants.

Those who complete the EMT B program (formerly EMT 1) are eligible for Tulare County Certification and employment by government and private emergency health care services in the area. They are also eligible to enter Emergency Medical Technician II training, which provides opportunity for career advancement, higher pay, and greater responsibility in providing emergency health care. Some EMTs enter nursing and other advanced health care fields after they have learned about career possibilities through their work as an EMT. Call the Nursing and Health Science Division Office for more information (730-3732).

| Course Numbers | Core Courses |
| :--- | :--- |
| EMT 251B | Emergency Medical Technician B ................................................................................. 4 |
|  | Total Minimum Units Required: ............................................................................................. 4 |

## Major and Certificate Requirements

ब Associate Degree
q Certificate

## Engineering

$\begin{array}{ll}\text { A.S. Degree: } & 30 \text { units with a minimum "C" grade plus General Education and graduation requirements for a total of } 60 \text { units. } \\ \text { (See page 54.) }\end{array}$

## A.S. DEGREE

Students receiving the associate degree in engineering usually transfer to four year institutions to complete their bachelors degree in engineering. Employment opportunities will depend on the area of specialization and the economic state of the various industries hiring those specializations. For this reason students are urged to gain as broad an exposure to the field as possible.
Course Numbers Core Courses Units
ENGR 1 Graphics ..... 3
ENGR 2 Statics ..... 3
ENGR 3 Materials .....  3
PHYS 5 Physics for Engineers 1 ..... 4
PHYS 6 Physics for Engineers 2 ..... 4
PHYS 7 Physics for Engineers 3 ..... 4
ENGR 110 Introduction to Engineering ..... 1
MATH 76 Calculus with Analytic Geometry2 ..... 5
Minimum Core Course Units: ..... 27
Course Numbers Support Courses ..... Units
Select three (3) additional units from this list to complete the total units required.
MATH 77 Calculus 3...................................................................................................................... 3
MATH 80 Linear Algebra ..... 3
MATH 81 Differential Equations ..... 5
Minimum Support Course Units: ..... 3
Total Minimum Units Required: ..... 30

## English

| A.A Degree: | 18 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. <br> (See page 54.) |
| :--- | :--- |
| Certificate: | Certificate is not available. |
| Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. |  |

## A.A. DEGREE

English with a Literature Emphasis serves the needs of students who plan to major in English at the four-year level. Four-year institutions presume a broad exposure to literature in their upper division students, just the kind of background our general literature courses offer.

Students may also find this major helpful if they plan to work in education, publishing and editing, journalism, humanities-based careers, pre law, theater or the entertainment fields. Students completing this major will find their lives enriched as often motifs and themes of great literature undergird the philosophies of and provide insight into other disciplines.

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| ENGL 2 ENGL4 | Logic and Composition. |  |
|  | College Composition and Literature |  |
|  | Minimum Core Course Units: . |  |
| Course Numbers | Support Courses | Units |
| Select 12 units from this list to complete the total units required. |  |  |
| ENGL 10 | Chicano Literature | 3 |
| ENGL 14AB | CreativeWriting | 3 |
| ENGL 15 | Survey of British Literature 1 | 3 |
| ENGL16 | Survey of British Literature 2 | 3 |
| ENGL 17 | Native American Literature | 3 |
| ENGL18 | BlackAmerican Literature | 3 |
| ENGL19 | Women in Literature | 3 |
| ENGL 25 | Asian-American Literature | 3 |
| ENGL 30 | American Literature 1 | 3 |
| ENGL31 | AmericanLiterature 2 | 3 |
| ENGL 32 | The Bible as Literature | 3 |
| ENGL44 | World Literature 1 | 3 |
| ENGL45 | World Literature 2 | 3 |
| ENGL 46 | Shakespeare | 3 |
|  | Minimum Support Course Units: | .. 12 |
|  | Total Minimum Units Required: ............................................................................. 18 |  |
| NOTE: | A sequence of history courses Please check with your counsel |  |

## Environmental Control Technology

A.S. Degree: Certificate courses with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: $\quad 29$ units in courses listed below with a minimum of a " $C$ " grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

This educational program is designed to prepare a person who possesses appropriate aptitudes for entry into employment or advanced study in the several areas of air conditioning. Students should have a broad understanding of the principles of science and mathematics. It is expected that the student will develop job entry knowledge and skills necessary for the maintenance and repair of air conditioning, refrigeration, cooling and heating equipment. From this base, a person should also be able to do well in related occupations. A student may complete a certificate in one year by following a prescribed course of study.

## Course Numbers Core Courses <br> Units

## First Semester

ECT 180 Electricity and Controls for HVAC .................................................................................. 4
ECT 181 Basic Air Conditioning.................................................................................................... 10
Second Semester
ECT 182 Advanced Air Conditioning/Refrigeration Commercial/Domestic
.12
ITEC 142 Air Conditioning Sheet Metal .......................................................................................... 3
Minimum Core Course Units: ..................................................................................... 29

Course Numbers Support Courses Units
The following courses may be substituted for required courses. Permission to substitute must be obtained from the division. These electives are suggested to enhance one's career opportunities.

ACCT 287 Accounting for Service Businesses................................................................................. 3
CT 270AB Residential Wiring .......................................................................................................... 3
DRFT 200 Beginning Mechanical Drawing ..................................................................................... 2
ECT 190AD Supervised Practice ....................................................................................................... 1-3
ECT 200 Introduction to Industrial Ammonia Refrigeration ............................................................. 3
ECT 201 Advanced Ammonia Refrigeration .................................................................................. 3
ECT 260 Basic Refrigeration ........................................................................................................ 2
ECT 261 Introduction to Air Conditioning \& Refrigeration-Commercial/Domestic ............................ 2
ECT 262 Heating Systems and Controls ....................................................................................... 2
ECT 263 Commercial RefrigerationSystems\&Controls ................................................................... 2
ECT 265 AirCond Control Systems ............................................................................................... 2
ITEC 143 Advanced Air Conditioning DuctSheetMetal .................................................................... 3
ITEC 273 Electric Motor Controls ................................................................................................. 2
WELD 161 Oxy-AcetyleneWelding .................................................................................................. 4
Minimum Support Course Units: ..... 0
Total Minimum Units Required: ..... 29

## Equine Science

Associate Degree
Certificate

| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | 30 units in courses listed below with a minimum of a "C" grade in all course |

## ACHIEVEMENT CERTIFICATE

The Equine Science Program includes classes in many phases of the horse industry. Students will have the opportunity to train their own horses, along with the college owned stock. Many universities offer courses in Equine Science which will lead to degrees in this field. The employment outlook for students who complete this course of study is bright. Careers include horse trainer, breeder, nutritionist, and horse health care technician.

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| AGMT 108AB | Introductionto Agriculture Computer Applications (firstsemester) |  |
| ASCl 22 | Horse Husbandry . | 3 |
| ASCI 104 | Animal Disease and Sanitation | 3 |
| ASCI 120AD | Basic Equitation (1stsemester and 2nd semester 2+2) | 4 |
| ASCI 121AD | PEfor the Equestrian | 1 |
| ASCI 123 | Horse Production. | 3 |
| ASCI 124AB (A) | Colt Breaking (1stsemester and 2nd semester 2+2) | 4 |
| WEXP193 | Occupational Cooperative Education/Internship(1stsemester) | 2 |
|  | Minimum Core Course Units: ............................ |  |
| Course Numbers | Support Courses | Units |
| Select 7 additional units from this list to complete the total units required. |  |  |
| AG 201 | Agricultural Mathematics |  |
| AG | Other Approved Agriculture Classes |  |
|  | With Approval of Department | 3 |
| AGMT 102 | Agricultural Sales and Marketing | 3 |
| ASCI 227 | The Snaffle Bit Futurity | 1 |
| ASCl 228 | Bits and Biting ... | 1 |
| ASCl 229 | Equine Racing Industry | 1 |
|  | Minimum Support Course Units: .................................... |  |
|  | Total Minimum Units Required: ..................................... | . 30 |

## Major and Certificate Requirements



## Family Child Care Mentor Training

| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | 2 units in course listed below with a minimum of a " $C$ " grade. |

## SKILL CERTIFICATE

This skill certificate prepares the studentto work with adults in afamily child care home. Training includes communication, staff development, licensing requirements and regulations. Professionalism is stressed. This certificate provides the mandatory training required for applications to the Family Child Care Mentor Program that provides a financial stipend.
Course Numbers Core Courses Units

CHLD 164 Family Child Care Mentor Training ................................................................................... 2

## Fashion Design

Associate Degree
Certificate

| A.S. Degree: | Certificate courses with a minimum "C" grade plus General Education and graduation requirements for atotal of 60 units. <br> (See page 54.) |
| :--- | :--- |
| Certificate: | 20 units in courses listed below with a minimum of a "C" grade. |
| Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. |  |

## ACHIEVEMENT CERTIFICATE

The fashion design option will teach you how to design and create for this growing industry or in your own business. Career opportunities include fashion designer, fashion illustrator, pattern drafter, pattern grader, sample maker, production manager, shipping manager, manufacturer's sales representative, dressmaker, and alterationist.
Course Numbers Core Courses Units
CFS 6/ART 6 Color and Design ..... 3
FASH 76 Introductionto Textiles ..... 2
FASH 160AB Clothing Construction ..... 3
FASH 161AB Tailoring ..... 3
FASH 164 The World of Fashion ..... 2
FASH 166 FashionCollection Development ..... 1
SPCH 1 Fundamentals of Speech ..... 3
Minimum Core Units ..... 17
Course Numbers Support Courses ..... Units
Select 3 additional units from this list to complete the total units required.
FASH 12AB Costuming ..... 3
FASH 162 Creative Pattern Design ..... 3
Minimum Support Course Units: ..... 3
Total Minimum Units Required: ..... 20

## Major and Certificate Requirements

$\begin{array}{ll}\Varangle & \text { Associate Degree } \\ \text { Ø } \\ \text { Certificate }\end{array}$

## Fashion Merchandising

A.S. Degree: Certificate courses with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: 19 units in courses listed below with a minimum of a "C" grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

Apparel is California's number two industry. Millions of people are employed in fashion production designing, manufacturing, advertising, and marketing. Career opportunities infashion merchandising include retail sales, buyer or manager, fashion coordinator, fashion consultant, display specialist, public relations, teacher, plus related opportunities such as fashion journalism, advertising, and manufacturer's sales representative.
Course Numbers Core Courses Units
COMP 5 ComputerConcepts ..... 4
CFSIART 6 Color and Design .....  3
FASH 76 Introductionto Textiles ..... 2FASH 164FASH 166The World of Fashion2
Fashion Collection Development ..... 1FASH 171
Fashion AdvertisingASH171
FASH 172 Fashion Buying ..... 1
FASH 261AD Principles of Clothing Construction .....  1
SPCH 4 Interpersonal Communications ..... 3
WEXP 193 Fashion Occupational Cooperative Education ..... 1
Minimum Core Course Units: ..... 19
Minimum Support Course Units: ..... 0
Total Minimum Units Required: ..... 19

## Fire Academy

Associate Degree
Certificate

$$
\begin{array}{ll}
\text { Certificate: } & 12 \text { units awarded in the below listed course. } \\
\text { Degree: } & \text { Degree not available. }
\end{array}
$$

## SKILL CERTIFICATE

Course Description: Manipulative and technical training in basic concepts in fire service organization and theories of fire control, including laws and regulations affecting the fire service personnel, and functions; fire organizations; principles of fire behavior; and the basic consideration in fire strategy and tactics.

| Objectives: | To provide the student with technical information relating to the functions and responsibilities of the fire service <br> and to develop manipulative skills in fire department operations and use of related equipment, which will provide <br> the knowledge necessary for the student to perform as an entry-level fire fighter in any fire department in the |
| :--- | :--- |
|  | State of California. |


| Course Number | Core Course | Units |
| :---: | :---: | :---: |
| FIRE 270 | Basic Fire fighter 1 Academy .. |  |
|  | Minimum Units ................ |  |

[^3]Fire Technology
$\begin{array}{ll}\text { A.S. Degree: } & \begin{array}{l}32 \text { units with a minimum " } \mathrm{C} " \text { " grade plus } G \text { General Education and graduation requirements for a atotal of } 60 \text { units. } \\ \text { (See page } 54 .)\end{array} \\ \text { Certificate: } & 30 \text { units with a minimum grade of a " } \mathrm{C} \text { " in all courses. }\end{array}$

## ACHIEVEMENT CERTIFICATE

The Fire Technology program at COS is designed to increase the professional knowledge and skills of people presently employed in fire protection fields as well as prepare others interested in careers related to fire-fighting or safety in private industry, insurance agencies and government. COS offers the in-service firefighter a chance to improve himself professionally to be prepared for promotions to positions of higher responsibility and pay. The student, by completing 30 units of study in this area, including the five core courses, will earn a Certificate of Completion. Or the student can earn an AS degree by completing a combination of the approved Fire Technology and COS graduation requirements.

Fire fighting offers many career opportunities for graduates including positions in municipal fire departments, county departments, fire protection districts, and more than 250 California state fire protection agencies. There are also employment opportunities in forestry agencies, correctional institutions, military bases, and numerous federal agencies. Specialists are also in demand by industry and by such agencies as the Insurance Service Office, Underwriters Laboratory, National Fire Protection Association, and the insurance industry.


## Fire Technology

Associate Degree
Certificate
FIRE 171 S.F.M. Fire Instructor 1A ..... 2
FIRE 172 S.F.M. Fire Instructor 1B ..... 2
FIRE 241 Fire Command 2A ..... 2
FIRE 242 Fire Command 2B. ..... 2
FIRE 243 Fire Control 4A and 4B ..... 5
FIRE 265 Fire Control 3 ..... 5
FIRE 277 S.F.M. Fire Management 1 ..... 2
FIRE 267 S.F.M. Fire Control 6 (Wildland Fire) ..... 5
FIRE 290 Confined Space Rescue Operations ..... 1.5
Minimum Section D Core Course Units: ..... 8
Optional Electives Units: ..... 1.5
Total Minimum Units Required: ..... 30

NOTE: Units for classes which are duplicated in the above sections may not be considered in more than one section.


#### Abstract

A.S. DEGREE

Career opportunities in Fire Service cover a wide range of options, some of which require very specialized andtechnical knowledge and skills. Hazardous Material Technicians, Arson Investigators, ParamedicsandChiefAdministratorsare examples offire department positionsthatrequire significanteducation and training beyond the basics. Positions for Fire Technology graduates are available in the insurance industry, engineering firms, multinational corporations and safety organizations. - Municipal Fire Fighter • Rural Fire Fighter • Wildland Fire Fighter • Fire Apparatus Driver/Operator • Law/Code Enforcement - Fire Investigator • Hazardous Materials Technician • Paramedic • Company Officer • Chief Officer Course Numbers Core Courses Units FIRE 125 Fundamentals of Fire Apparatus and Equipment ..... 3 FIRE 155 Fire Behavior and Combustion ..... 3 FIRE 157 Fire Prevention Technology ..... 3 FIRE 159 ~ Fire Protection Organization (prerequisite course) ..... 3 FIRE 163 Fire Protection Equipment \& Systems ..... 3 FIRE 182 Building Constructionfor Fire Protection ..... 3 For career opportunities in fields other than a fire fighter choose additional support courses in the Fire Technology discipline listed in this catalog which total. ..... 10 Minimum Core Course Units: ..... 28


To receive an A.S. Degree AND to meet minimum qualifications for employment as a fire fighter, the followingcourses are REQUIRED.
EMT 251B Emergency Medical TechnicianB ..... 4
FIRE 270 Basic Fire Fighter 1 Academy ..... 12
Minimum Support Course Units: ..... 16
Total Minimum Units Required: ..... 32
~ Delivered on an "as needed" basis determined by the Tulare/Kings Counties Fire Chiefs Association and the Tulare/Kings Counties Fire Training Officers Association

Note: Due to the fact that Fire Technology is a small program and courses are taught only in the evening, it is difficult for students to complete all the required courses in a two-year time frame.

## Major and Certificate Requirements



## FloralTechnology

| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | 30 units in courses listed below with a minimum of a " $\mathrm{C} "$ grade in all courses |

## ACHIEVEMENT CERTIFICATE

The Floral Technology Program is designed for those seeking occupations in the floral industry. The sale of cut flowers, house plants, dried, and silk flowers has increased rapidly in recent years. This is because of increased population and family income, and also because of increased interest in the use of flowers.
Course Numbers Core Courses ..... Units
AGMT 108AB Introductionto AgricultureComputer Applications (firstsemester) ..... 3
OH 101 Basic Ornamental Horticulture ..... 3
OH $111 \quad$ Floral Design ..... 3
OH 112 Sympathy Flowers ..... 3
OH 113 Wedding Flowers ..... 3
OH 119 Interiorscapes ..... 3
OH 123 Silk and Dried Floral Design ..... 3
WEXP 193 Occupational Cooperative Education/Internship (1st semester) ..... 3
Minimum Core Course Units: ..... 24
Course Number Support Courses ..... Units
Select 6 additional units from this list to complete the total units required.
AG 201 Agricultural Mathematics ..... 3
AGMT 102 Agricultural Sales and Marketing ..... 3
OH 7 Landscape Design ..... 3
OH 104 Nursery Practices ..... 3
OH 105 Plant Propagation ..... 3
OH 106 Landscape Drafting ..... 3
OH 129 Horticulture/Floral Business Management ..... 3
OH 271 Introductionto Horticulture ..... 3
AG Other Approved Agriculture Classes
With Approval of Department ..... 3
Minimum Support Course Units: ..... 6
Total Minimum Units Required: ..... 30

## Food Service 1: Basic Certificate

Associate Degree
Certificate

Degree: Degree not available.<br>Certificate: $\quad 13$ units in courses listed below with a minimum of a " $C$ " grade in all required courses.

## SKILL CERTIFICATE

Students in this field will find a wide variety of entry-level employment opportunities in the restaurant industry, schools, hospitals, day care centers for the young and the elderly and other commercial food facilities and residential health facilities. The Food Service I-Basic Certificate offers students an introduction to and basic skills for the food service industry.
Course Numbers Core Courses ..... Units
NUTR 18 Nutrition ..... 3
NUTR 101 Foods (3)orNUTR 105
Professional Cooking 1 ..... 3
NUTR 107 Sanitation and Safety ..... 2
NUTR 109 Food Service Experience (2)
or
NUTR 111 Dietetic Service Supervisor Work Experience ..... 2
NUTR 201 Introductionto Food Service \& Nutrition Professions ..... 1
NUTR 301 Food Service \& Nutrition Skills I ..... 1
NUTR 302 Food Service \& Nutrition Skills II ..... 1
Total Minimum Units Required: ..... 13

## Major and Certificate Requirements

$q$ Associate Degree
Ø Certificate

## Food Service 2: Dietetic Service Supervisor

Degree: Degree not available.
Certificate: 22 units in courses listed below with a minimum of a " C " grade in all courses.

## ACHIEVEMENT CERTIFICATE

Employment opportunities are available in hospitals, skilled nursing facilities, residential health facilities and other food service institutions.

The Food Service II - Dietetic Service Supervisor Certificate is designed to meet the requirements of the California Department of Health Services to become a qualified Dietetic Service Supervisor.
Course Numbers Core Courses ..... Units
NUTR 18 Nutrition ..... 3
NUTR 105 Professional Cooking 1 ..... 3
NUTR 107 Sanitation and Safety ..... 2
NUTR 108 Introduction to Food Service Management ..... 3
NUTR 111 Dietetic Service Supervisor Work Experience ..... 2
NUTR 113 Dietetics ..... 3
NUTR 201 Introduction to Food Service \& Nutrition Professions ..... 1
NUTR 202 Professionalism in the Workplace ..... 3
NUTR 301 Food Service \& Nutrition Skills 1 ..... 1
NUTR 302 Food Service \& Nutrition Skills 12 ..... 1
Total Minimum Units Required: ..... 22

# Foreign Language Studies 

Certificate

A.A. Degree: 21 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: $\quad$ Certificate is not available.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.


#### Abstract

A.A. DEGREE

By studying different languages (French, Spanish, and ASL), the student gains an appreciation for various cultures and the ability to communicate in each one. Many career opportunities are available for a student who is multilingual. Business, foreign trade, education, banking, travel, and interpreting are some of the possibilities.


Course Numbers Core Courses Units
Select one level four class from this group (3-4 units):
ASL $4 \quad$ Advanced American Sign Language (3)
or FREN $4 \quad$ Advanced French 4 (4)
or SPAN 4 Advanced Spanish (4) ..... 3 or 4
Select one level two class from a language different than the level four (3-4 units):
ASL $2 \quad$ Beginning American Sign Language (3)
or FREN $2 \quad$ Elementary French 2 (4)
or SPAN $2 \quad$ Elementary Spanish 2 (4) ..... 3 or 4
Minimum Core Course Units: ..... 6-8
Course Numbers Support Courses ..... Units
Select 13-15 additional units from this list to complete the total units required
ART 3 Art History ..... 3
ART 4, 5/ANTH 4,5 Pre-Columbian Art ..... 3/3
ASL 1, 2, 3 Beginning through Intermediate Sign Language ..... 4/3/3
ENGL 10 Chicano Literature ..... 3
ENGL 44 World Literature 1 ..... 3
ENGL 45 World Literature 2 ..... 3
FREN 1,2,3 Elementary French 1 and Intermediate French 3 ..... 4/4/4
GEOG2 World Regional Geography ..... 3
GEOG 3 Cultural Geography ..... 3
HIST 4 History of Western Civilization to 1648 ..... 3
HIST 5 History of WesternCivilization Since 1648 ..... 3
HIST 23 Mexican-American History ..... 3
PORT 1 Elementary Portuguese ..... 4
SPAN 1, 2, 3, Elementary Spanish 1 and 2 and Intermediate Spanish ..... 4/4/4
SPAN 12 Hispanic Literature ..... 3
Minimum Support Course Units: ..... 13-15
Total Minimum Units Required: ..... 21

## Major and Certificate Requirements

## French

| A.A. Degree: | 18 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. <br> (See page 54.) |
| :--- | :--- |
| Certificate: | Certificate is not available. |
| Transfer Students: | Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. |

## A.A. DEGREE

A major in French at COS allows students to gain understanding of a new language and culture, and, by comparison, greater insight and appreciation for their own language and culture. A second language expands students' research capacities and facilitates participation in the international communications systems. Knowing French will enhance students' opportunities to be involved in, or employed by, international businesses, banking systems, journalism, cultural and medical exchanges, government agencies, and in education.
Course Numbers Core Courses Units
FREN 2 Elementary French2 ..... 4
FREN 3 Intermediate French3 ..... 4
FREN 4 Advanced French 4 ..... 4
Minimum Core Course Units: ..... 12
Course Numbers Support Courses ..... Units
Select 3 additional units from this list
ENGL 44 World Literature 1 ..... 3
ENGL 45 World Literature 2 ..... 3
HIST 4 The History of Western Civilization to 1648 ..... 3
HIST $5 \quad$ The History of Western Civilization Since 1648 ..... 3
Select 3 additional units from this list to complete the total units required
ART 2 Art History ..... 3
ART 3 Art History ..... 3
ENGL 44 World Literature 1 ..... 3
ENGL 45 World Literature 2 ..... 3
FREN 1 Elementary French 1 ..... 4
GEOG 2 World Regional Geography .....  3
GEOG 3 Cultural Geography ..... 3
HIST 4 The History of Western Civilization to 1648 ..... 3
HIST $5 \quad$ The History of Western Civilization Since 1648 ..... 3
PHIL 5 Ethics ..... 3
PHIL 25 Critical Thinking ..... 3
Minimum Support Course Units: ..... 6
Total Minimum Units Required: ..... 18

## Graphic Design

A.S. Degree: 43 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.) *ART 25A, and COMP 135 or COMP 229 can be used for General Education.<br>Certificate: $\quad 31$ units in courses listed below with a minimum of a "C" grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

The certificate programis designedtoprovide studentswiththetechnical knowledge and skills necessarytoenter directly intothe workforce. The opportunity exists for each student to excel in the program and become a desirable asset for any Graphic Design firm.

Course Numbers

Core Courses

Units

## First Semester

ART 25AD Digital Imaging for Artists (Firstsemester) .......................................................................... 3
GD 159 Adobe Illustrator............................................................................................................ 2
GD 160 Graphic Design .............................................................................................................. 4
COMP 135 DesktopPublishing for Business ....................................................................................... 4
COMP 229 Web Page Design and Development............................................................................... 3

## Second Semester

GD 161AD Graphic Design Applications (Firstsemester) .................................................................... 4
GD 162AD Integrated Graphics (Firstsemester) ................................................................................ 4
GD 163 DigitalMechanicals .......................................................................................................... 3
GD 164AD Digital Animation(Firstsemester) ...................................................................................... 4
Minimum Core Course Units: ...................................................................................... 31

## ASSOCIATE OF SCIENCE DEGREE

The degree program is designed to provide students with the specialization and breadth classes to develop into productive and informed citizens. The recipients will be prepared technically and culturally for the working environment or higher education. Students planning to transfer to a university and pursue a higher degree should be aware of all the requirements set by that university and select classes accordingly.
Course Numbers Core Courses Units

## First Semester

GD 159 Adobe lllustrator.................................................................................................. 2

ART 25AD** Digital Imaging for Artists (Firstsemester) ...................................................................... 3
COMP 135** Desktop Publishing for Business .................................................................................. 4
General Education ..............................................................................................................

## Second Semester

GD 161AD Graphic DesignApplications (Firstsemester) .............................................................. 4
GD 162AD Integrated Graphics (Firstsemester)..................................................................... 4
COMP 229** WebPage Design and Development....................................................................... 3


## Major and Certificate Requirements

## © Associate Degree Certificate

Continued from previous page.

Third Semester
GD 161AD Graphic DesignApplications (Second semester) ..... 4
GD 163AD Digital Mechanicals (Firstsemester) ..... 3
GD 164AD Digital Animation (Firstsemester) ..... 4
General Education ..... 4
Fourth Semester
GD 161AD Graphic Design Applications(Third semester) ..... 4
GD 162AD Integrated Graphics(Second semester) ..... 4
General Education ..... 7
Minimum Core Course Units: ..... 43

[^4]
## Health Education

Associate Degree
Certificate

| A.A. Degree: | 30 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. <br> (See page 54.) |
| :--- | :--- |
| Certificate: | Certificate not available. |
| Transfer: | Preparation requirements for the Health related major vary from university to university. Some of the courses included in this <br> program may fulfill transfer requirements. Students planning to transfer to a four-year school are encouraged to review <br> specific requirements with a counselor and check the major sheet of the university they plan to attend. |
|  | s. |

## A.A. DEGREE

The Health Education major will enable students to develop a background to pursue a career in any of the health fields. The area of Public Health provides employment opportunities in hospitals, rehabilitation centers, geriatric facilities, and sales of medical supplies. In Community Health, employment is available through OSHA, HAZMAT, mosquito abatement, pest control, and environmental control agencies. In the private sector, employment opportunities include sales and promotion, pest control businesses, and environmental control agencies. Students who transfer to a four-year institution may pursue a Bachelors degree in Health Science and a Masters degree in Public Health.


| A.S. Degree: | 36 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. <br> (See page 54.) |
| :--- | :--- |
| Certificate: | 36 units with a minimum grade of a "C" in all required courses. |
| Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. |  |

## A.S. DEGREE

Communities today require a variety of social services to provide for the economic and emotional needs of those in difficulty. Agencies on a variety of levels require trained individuals to provide such services. Some of these programs have positions available for those with two years of college instruction. The Human Service program prepares students to work in a community setting or beginning paraprofessional level, to train as aides in welfare eligibility work, mental health and other social service agency positions. Students will be required to spend several hours weekly as community service interns during the two-year program.
Course Numbers Core Courses Units
COMP $5 \quad$ Computer Concepts(4)
or COMP 130 Introduction to Personal Computers ..... 4
CFS 186 Personal Management/Consumer Economics (3) or BUS 297 Personal Finance ..... 3
HSRV 120 Introduction to Social Welfare ..... 3
HSRV 121 Interviewing ..... 4
HSRV 122 Introduction of Human Services ..... 3
HSRV 228 Alcoholism, Intervention, Treatment, and Recovery ..... 2
HSRV 229 Physical \& Psychological Aspects of Drug Use ..... 2
PSY 1 General Psychology ..... 3
PSY 10 Human Sexuality ..... 3
SOC 26 Marriage and Family Life ..... 3
WEXP 193 Human Services Work Experience/Internship ..... 2
WEXP 194 Human Services Work Experience/Internship ..... 2
WEXP 195 Human Services Work Experience/Internship ..... 2
Minimum Core Course Units: ..... 36
Course Numbers Support Courses ..... Units
Select additional units from this list for further study.
WEXP 196 Human Services Work Experience/Internship. ..... 1-4
Minimum Support Course Units: ..... 0
Total Minimum Units Required: ..... 36

## Humanities

Associate Degree
Certificate

| A A. Degree: | 30 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. |
| :--- | :--- |
| (See page 54.) |  |

## A.A. DEGREE

The program in Humanities provides an interdisciplinary approach to education. The major surveys relationships among philosophy, literature, music, architecture, sculpture and painting. Students explore interrelationships among arts and ideas. This solid grounding in the liberal arts helps graduates who plan to continue in professional careers such as teaching, library, museum or curatorial work.

Select 30 units from among the following disciplines. Select transfer courses from at least four different disciplines listed below :

Anthropology<br>Art<br>Ethnic Studies<br>History<br>Literature<br>Music<br>Philosophy<br>Theater Arts<br>Advanced level Foreign Language

Total Minimum Units Required:
30

| A.S. Degree: | Certificate courses with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. <br> (See page 54.$)$ |
| :--- | :--- |
| Certificate: | Option $\mathrm{A}: 26$ units in courses listed below with a minimum of a "C" grade in all courses. <br> Option $\mathrm{B}: 30$ units in courses listed below with a minimum of a "C" grade in all courses. (EVENING) |
| Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. |  |

## ACHIEVEMENT CERTIFICATE MAINTENANCE TECHNICIAN, OPTION A

Maintenance Technician, Option A, is a one-year (two semester) 25 hours per week training program to provide students with job entry skills. The two degree applicable, thirteen unit classes will provide students with over 850 hours of skill training in the areas of electricity, electronics, welding, machining, refrigeration, hydraulics, pneumatics, programmable logic controllers, motor control, and other maintenance areas. The class is designed for entry level training and requires no previous experience. A certificate is awarded upon successful completion of two semesters.

| Course Numbers | Core Courses Units |
| :---: | :---: |
| First Semester <br> ITEC 100 <br> Second Semester <br> ITEC 101 |  |
|  | Industrial Maintenance Technology, Option A ................................................ 13 |
|  |  |
|  | Industrial Maintenance Technology, Option A ............................................... 13 |
|  | Minimum Core Course Units ...................................................................... 26 |
| Course Numbers | Support Courses Units |
| ITEC 185/BUS 185 SPCH 4 | Ethics in Business and Industry .................................................................. 3 |
|  | Interpersonal Communications ..................................................................... 3 |
|  | Minimum Support Course Units ................................................................ 0 |
|  | Total Minimum Units Required: .................................................................. 26 |

## ACHIEVEMENT CERTIFICATE MAINTENANCE TECHNICIAN, OPTION B (EVENING)

Maintenance Technician, Option B, is a two-year (four semester) 6 hours per week training program to provide students with job entry skills. The degree applicable, six unit classes will provide students with skill training in the areas of electricity, electronics, welding, machining, refrigeration, hydraulics, pneumatics, programmable logic controllers, motor control, and other maintenance areas. Work experience is required to meet the requirements for a certificate.

Course Numbers Core Courses Units
ITEC 105AD Industrial Maintenance Technology, Option B (4 units/4 semesters).................. 16
ITEC 193-196 Work Experience ................................................................................................. 14
Minimum Core Course Units ............................................................................... 30
Course Numbers Support Courses Units
ITEC 273 Electrical Motor Controls ...................................................................................... 2
ITEC 274 Electrical Motor Controls-Program Controllers ..................................................... 2
Minimum Support Course Units ........................................................................ 0
Total Minimum Units Required: ......................................................................... 30

Associate Degree
Certificate

A.S. Degree: Degree not available.<br>Certificate: 17 units in courses listed below with a minimum of " $C$ " grade in all required courses.

## ACHIEVEMENT CERTIFICATE

This certificate is designed to be completed within two semesters enabling students to prepare for the three California Judicial Council/Administrative Office of the Courts Certified Interpreter Exam in English and Spanish. This Certificate demonstrates that a minimum competency in oral and written translation in English and Spanish has been obtained by the student for use in a variety of governmental and medical settings.

Note: This certificate has a minimum of 17units and students must complete at least one or more courses or equivalent competencies under each of the four following areas of competency with a "C" or better. The Spanish Department will assist Students in finding placements for work experience.
I. English Competency:

Course Numbers Core Courses Units
BUS $293 \quad$ Business English (4)
or ENGL 251 Fundamentals of College Writing (3)
or ENGL 1 College Reading \& Composition (3) 3 or 4

## II. Spanish Competency:

Course Number Core Course Units
SPAN $4 \quad$ Advanced Spanish* (4)
or SPAN 24 Spanish 4 for Bilingual Student (4)...................................................................... 4
III. Interpreting Competency:

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| SPAN 280** | Interpreters Written Exam Prep (Fall Semester) | 1 |
| SPAN 281AD | Interpreting Skill in Spanish (Spring Semester) | 3 |

IV. Vocabulary \& Terminology:
Course Numbers Core Courses Units
ENGL $280 \quad$ Vocabulary Building for Tests ............................................................................... 1

SPAN 180 Legal/Medical Terms in Spanish (Fall Semester) ............................................... 3
PARA 102 Legal Terminology ................................................................................................ 2
BUS 256 Medical Terminology ............................................................................................ 3
(Select at least two courses in Area IV)
Minimum Core Course Units
17

Course Numbers Support Courses Units

AJ 112 Criminal Evidence .................................................................................................. 3
AJ 115 Criminal Law II ...................................................................................................... 3
PARA 101 Introduction to Paralegalism ................................................................................ 3
PARA 236 Administrative Law ................................................................................................ 3
WEXP 193 Work Experience .................................................................................................. 1-4
Minimum Support Course Units .......................................................................... 0
Total Minimum Units Required: ............................................................................ 17

[^5]
## Major and Certificate Requirements

## © Associate Degree

## J ournalism

$\begin{array}{ll}\text { A.A. Degree: } & \begin{array}{l}18 \text { units with a minimum "C" grade plus General Education and graduation requirements for a total of } 60 \text { units. } \\ \text { (See page 54.) }\end{array} \\ \text { Certificate: } & \text { Certificate not available. } \\ \text { Transfer Students: } & \text { Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. }\end{array}$

## A.A. DEGREE

This major is designed for students who plan to pursue a higher degree in media communications as well as those who plan to secure employment with area newspapers, public relations firms, advertising firms, or non-profit agencies. It is also appropriate for those seeking jobs requiring photography or computer skills, and for those interested in law, criminal justice, graphic arts, and web page design. This major offers several options. Language skills are heavily emphasized.
Course Numbers Core Courses Units
ENGL 2 Logic and Composition ..... 3
JOUR 1 Writing for the Media ..... 3
JOUR 7/GOVT 7 MassCommunication ..... 3
JOUR 103AD Newspaper Production (1st semester) ..... 4
Minimum Core Course Units: ..... 13
Course Numbers Support Courses ..... Units
Select 2-4 additional units from this list:
JOUR 103AD Newspaper Production (2nd semester) ..... 4
JOUR 104AD Editorial Board ..... 2
JOUR 110AD Photo Journalism ..... 3
Select 3-4 additional units from this list to complete the total units required:
ART 23AD Macintosh Basics Art/Design ..... 2
CINA 31 Motion Picture Appreciation ..... 2
CINA 32 Motion Picture Appreciation ..... 2
COMP 229 Web Page Design and Development ..... 3
DRAM 101AD Introductionto TV Production ..... 4
GD 160 Graphic Design ..... 4
GD 161AD Graphic DesignApplications ..... 4
GOVT 25/BUS 25/AJ 25 Constitutional Law ..... 3
JOUR 103AD Newspaper Production (3rd \& 4th semesters) .....  $4 / 4$
JOUR 104AD Editorial Board (3rd and 4th semesters) ..... 2/2/2/2
JOUR 110AD Photo Journalism(3rd and 4th semesters) ..... 3/3/3/3
SPCH $1 \quad$ Fundamentals of Public Speaking ..... 3
SPCH 5 Argumentation and Debate ..... 3
SPCH 4 Interpersonal Communication ..... 3
SPCH 112/BUS 112 Public Speaking for Business ..... 4
Minimum Support Course Units: ..... 5
Total Minimum Units Required: ..... 18

Degree: Degree not available<br>Certificate: $\quad 17(13)$ units in courses listed below with a minimum of a "C" grade in all courses.

## SKILL CERTIFICATE

The Laboratory Technician Program will provide the student with the necessary educational and technical background to work in a laboratory setting. Students will learn basic cell biology and general biological chemistry. The laboratory courses will train students in proper laboratory practices and the use of laboratory instrumentation.
Course Numbers Core Courses Units
BIOL 60 Introduction to Cell Biology ..... 3
CHEM $30 \quad$ General and Biological Chemistry ..... 5
BIOL/CHEM 180 Lab Techniques \& Practices ..... 2
BIOL/CHEM 185 Applied Lab Practices ..... 2
BIOL270 Microbiology Techniques ..... 1
MATH 200 Beginning Algebra** ..... 4
Minimum Core Course Units: ..... 17 (13)
Course Numbers Support Courses ..... Units
Select additional units from this list for further study.
DPTI 202 GMP and Sanitation ..... 1
DPTI 203 Industrial Safety ..... 1
DPTI 208 Laboratory Skills ..... 1
Minimum Support Course Units: ..... 0
Total Minimum Units Required: ..... 17 (13)

[^6]
## Major and Certificate Requirements

## q Associate Degree Certificate

## Landscape Design

| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | 30 units in courses listed below with a minimum of a "C" grade in all required courses. |

## ACHIEVEMENT CERTIFICATE

The certificate in Landscape Design prepares students to successfully design and plan landscapes and gardens using current standards. Students will be able to design landscapes using new water and environmental requirements. Included in the certificate program are courses that develop skills in selecting, grouping, and placing plant materials into various landscape styles, situations and themes. Career opportunities include golf course design, park design, and public area designs. Most universities offering agriculture programs also offer degrees in related Horticulture areas.

| Course Numbers | Core Courses Units |
| :---: | :---: |
| AG 4 | Soils ............................................................................................................. 3 |
| OH 2 | PlantIdentification1 ............................................................................................ 3 |
| OH 3 | PlantIdentification2 ............................................................................................. 3 |
| OH 7 | Landscape Design ............................................................................................. 3 |
| OH 106 | Landscape Drafting ........................................................................................... 3 |
| OH 108 | Landscape Construction .................................................................................... 3 |
| OH 109 | Landscape Maintenance .................................................................................... 3 |
| OH 118 | Xeriscape ....................................................................................................... 3 |
| WEXP 193 | Occupational Cooperate Education/Internship (1st semester)..................................... 3 |
|  | Minimum Core Course Units: ........................................................................... 27 |

Course Numbers Support Courses Units

Select 6 additional units from this list to complete the total units required.
AG 3 Entomology ..... 3
AGMT108AB Introductionto Agriculture Computer Applications (1stsemester) ..... 3
OH 101 Basic Ornamental Horticulture ..... 3
OH 105 Plant Propagation ..... 3
OH 119 Interiorscapes ..... 3
OH 120 Diseases of Ornamentals ..... 3
OH 121 Plant Combination Theory ..... 3
OH 271 Introductionto Horticulture ..... 3
AG Other Approved Agriculture Classes
With Approval of Department ..... 1-4
Minimum Core Course Units: ..... 3
Total Minimum Units Required: ..... 30

## Landscape Management

A.S. Degree: Certificate courses with a minimum "C" grade plus General Education and graduation requirements for atotal of 60 units. (See page 54.)<br>Certificate: $\quad 30$ units in courses listed below with a minimum of a " C " grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

The certificate in Landscape Management develops skill and knowledge in the management of residential, commercial, and industrial landscapes and gardens. The field of landscape management is one of the fastest growing occupations in the nation and particularly in the San Joaquin Valley. This program prepares students for work as landscape contractors, turf managers, grounds maintenance managers, pest control operators, and landscape water auditors. Heavy emphasis is placed on plant culture and care, disease and pest management, turf culture, and water management. Many of the required courses will transfer to universities.
Course Numbers Core Courses
AGMT 108AB Introductionto AgComputer Applications(1stsemester) ..... 3
AGTC 209AD Small Engines and Equipment ..... 2
OH $2 \quad$ Plant Identification 1 .....  3
OH 3 Plant Identification 2 ..... 3
OH 109 Landscape Maintenance ..... 3
OH 110 Turfgrass Management ..... 3
OH 117 Sprinkler Irrigation ..... 3
OH 122 Pests of Ornamentals ..... 3
WEXP 193 Occupational Cooperative Education/Internship (1st semester) ..... 3
Minimum Core Course Units: ..... 26
Course Numbers Support Courses ..... Units
Select 4 additional units from this list to complete the total units required.
AG 103AC Applied Agricultural Practicums ..... 2
AG 201 Agricultural Mathematics ..... 3
AG Other Approved Agriculture Classeswith Approval of Department3
AGMT 108AB Introduction to Agriculture Computer Applications (2nd semester) ..... 3
OH 101 Basic Ornamental Horticulture ..... 3
OH 105 Plant Propagation ..... 3
OH 118 Xeriscape ..... 3
OH 119 Interiorscapes ..... 3
OH 120 Diseases of Ornamentals .....  3
OH 121 Plant Combination Theory ..... 3
OH 271 Introductionto Horticulture ..... 3
Minimum Support Course Units: ..... 4
Total Minimum Units Required: ..... 30

## Major and Certificate Requirements



| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | The $10.5-14$ units below a minimum of a "C" grade and the P.O.S.T. Basic Police Academy Certificate |
|  | $(30$ units $)$ for a minimum of 42 units. |

## ACHIEVEMENT CERTIFICATE

Educational requirements have made entry intothe law enforcementfield highly competitive. An increasing number of prospective employers now require interested persons to have completed basic training requirements before applying for full-time or reserve positions.

The Law Enforcement program equips students with the skills and knowledge to enter this highly rewarding field. The Law Enforcement program provides in-service training for employed peace officers, correctional personnel and security guards.

Each of the courses listed below offers a certificate of completion as well as unit credit. To qualify for a Law Enforcement Certificate, the student must complete the Basic Police Academy (AJ 200 Modules 1-4 in sequence), plus a minimum of 12 units from any combination of the other courses listed below.
Course Numbers Core Courses Units
Select from this list below to complete the 12 units required.
AJ 204 Supervisory Techniques ..... 5
AJ 213 Interviewing/Interrogation Techniques ..... 1.5
AJ 214 Arrest and Control Techniques ..... 1
AJ 215 Drug Symptomology and Enforcement ..... 1
AJ216 SearchWarrantPreparation ..... 5
AJ 217 Radar Operation .....  5
AJ218AD Perishable Skills Update .....  5
AJ 299 Topics Courses ..... 5-4
Minimum Core Course Units: ..... 10.5-14
Course Numbers Required Support Courses ..... Units
AJ 200M1 Basic Police Academy - Module 1 ..... 3
AJ200M2 Basic Police Academy - Module 2 .....
AJ200M3 Basic Police Academy - Module 3 ..... 8
AJ200M4 Basic Police Academy - Module 4 ..... 14
P.O.S.T. Basic Academy Certificate: ..... 30
Total Minimum Units Required: ..... 42

## Law Office Clerk/Receptionist

```
Degree: Degree not available.
Certificate: }\quad14\mathrm{ units in courses listed below with a minimum of a "C" grade in all courses and completion of a typing certificate.
    Established Fall, 1997.
```


## SKILL CERTIFICATE

A certificate designed to train the student to perform basic entry-level functions in a law office. This certificate program is designed to be completed within one semester and is the first part of a three step legal career ladder offered at COS. Though the three step ladder is designed to train the student to perform increasingly complex job skills, the student may pursue any of the certificate majors without completing the others. Students seeking the Law Office Clerk/Receptionist Certificate will learn basic computer skills, legal terminology, and office procedures including filing and service of process. This certificate has a minimum of 14 units and students must complete the required typing certificate and courses under each of the five areas of competency listed below with a " C " or better.
I. Keyboarding Competency:

Typing certificate within the last 18 months verifying atyping speed of 45 CWPM -5 min.
(Contact a local Adult School or a COS keyboarding instructor for an appointment)
II. Computer Competency:

| Course Number | Course Title |
| :--- | :--- |
| COMP 140* | Windows and DOS (3) |
| or COMP 136 | Word Processing (3) |
| or COMP 221AD + 222AD | Beginning and Advanced Word (1.5 and 1.5=3) |
| or COMP 5* | Computer Concepts (4) |
| or COMP 130* | Introduction to Personal Computers (4) ................................................................... 3 or 4 |

III. Legal Terminology IProcedure:

| Course Number | Course Title |
| :--- | :--- |
| PARA 101* | Introduction to Paralegalism ............................................................................... 3 |

and PARA 102* Legal Terminology ................................................................................................ 2
IV. Law Office Procedure Competency:

Course Number Course Title Units
PARA 110* Legal Ethics, Management \& Interviewing ..................................................................... 3
WEXP 193 (optional) WorkExperience(1stsemester) ...................................................................................1-4
v. Writing Competency:

Course Number Course Title Units
BUS 293 Business English (4)
or BUS 184 Business Communications (3)
or ENGL $251 \quad$ Fundamentals of College Writing (3)
or ENGL 1* College Reading/Composition (3) ......................................................................... 3 or 4

* Asterisk indicates courses that apply toward the Paralegal Degree.

Legal Career Ladder at College of the Sequoias<br>One Semester: Law Office Clerk/Receptionist<br>Two Semesters: Legal Secretary<br>Three or four Semesters: Paralegal Degree/Certificate - Approved by the American Bar Association.

## Major and Certificate Requirements

## q Associate Degree Certificate

## Legal Secretary

| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | 17 units with a minimum of a "C" grade in all courses and completion of a typing certificate. Established Fall, 1997. |

SKILL CERTIFICATE

This certificate program is designed to be completed within two semesters. Upon completion of the certificate program a student will be qualified to obtain an entry-level document-processing position in a law office. Students will learn the process of civil or family law litigation, discovery, and how to draft basic legal documents with the use of Judicial Council computerized forms. This certificate program is part of a three-step legal career ladder offered at COS. The other step on the ladder includes the Law Office Clerk Certificate; and step three, a Paralegal degree. Students can complete all of the requirements necessary for the step one, Law Office Clerk/Receptionist Certificate, while also working on step two, Legal Secretary Certificate. Although the three-step ladder is designed to train the student to perform increasingly complex job skills, the student may pursue any of the three career certificates or majors without completing the others. This certificate requires meeting each of the following six areas of competency with a " $C$ " grade or better and a minimum of 17 units of credit.
I. Keyboarding Competency: (First Semester)

Typing certificate within the last 18 months verifying a typing speed of 45 CWPM -5 min.
(Contact a local Adult School or a COS keyboarding instructor for an appointment)
II. Computer Competency: (One course either semester)

| Course Number | Course Title |
| :--- | :--- |
| COMP 140* | Windows \& DOS (3) |
| COMP 136 | Word Processing/WordPerfect(3) |
| COMP 221AD+222AD | Beginning \& Advanced Word (1.5 and 1.5) (3) |
| COMP 5* | Computer Concepts (4) |
| COMP 130* | Introduction to Personal Computers (4) ......................................................................... 3 or 4 |

III. Legal Terminology /Procedure: (First Semester)
Course Number Course Title Units

PARA 101* Introduction to Paralegalism .......................................................................................... 3
and PARA 102* Legal Terminology ........................................................................................................ 2

| IV. Writing Competency: | (First Semester) <br> Course Title |
| :--- | :--- |
| BUS 293 | Business English (4) |
| or BUS 184 | Business Communications (3) |
| or ENGL 251 | Fundamentals of College Writing (3) |
| or ENGL 1* | College Reading/Composition (3) .............................................................................................. 3 or 4 |

V. Law Office Procedure Competency: (Second Semester)

| Course Number | Course Title |
| :--- | :--- |
| PARA 110* | Legal Ethics, Management and Interviewing ................................................................... 3 |


| VI. Litigation Competency: | (Second Semester) <br> Course Title |
| :--- | :--- |
| Course Number Civil Procedures I (4) <br> PARA 103* Family Law (3) ............................................................................................................. 3 or 4 |  |

(PARA 101 is a corequisite for both courses)
*Asterisk indicates courses that apply toward the Paralegal Degree

[^7]
# Major and Certificate Requirements 

## Liberal Arts

Associate Degree
Certificate
A.A. Degree: See below.

Certificate: Certificate not available.

## Liberal Arts Transfer AA

Liberal Arts Associate Degree


#### Abstract

A.A. DEGREE

Completion of the CSU or IGETC GE requirements or GE requirements at any accredited university and the balance of 60 units in electives numbered 1-199.

Completion of the COS GE and graduation requirements, and the balance of 60 units in electives numbered 1-299.


## Major and Certificate Requirements



## Library Technician

Degree: Degree not available.
Certificate: $\quad 17$ units in the courses listed below with a minimum grade of " C " in all courses.

## SKILL CERTIFICATE

Today, more than ever, libraries provide a variety of resources to help people of all ages read, learn and connect with resources that are needed for school, work or personal fulfillment. Libraries have become the navigator for exploration in the world of information. Electronic catalogs, on-line databases, and networks provide almost unlimited access to this world.

The COS Library Technician Certificate leads to employment in school, college or public libraries as library technicians, library media clerks, or library mediaspecialists.
Course Numbers Support Courses Units

First Semester
LIBR 201 Introduction to Libraries ................................................................................................. 2
LIBR 203 TechnicalServices ........................................................................................................ 3

Second Semester
LIBR 202 CollectionDevelopment .................................................................................................. 2
LIBR 204 School/Children's Services ............................................................................................ 3

Third Semester
LIBR 205 Library Media Services ................................................................................................... 2
LIBR 206 Public Service/Reference ............................................................................................... 3
Minimum Core Course Units ...................................................................................... 15

Course Numbers Support Courses Units
Select a minimum of 2 units from the following courses.
LIBR 101 Library Research Strategies ..... 1
LIBR 102 Internet Information Resources ..... 1
WEXP 193 Library Work Experience ..... 1
WEXP 194 Library Work Experience ..... 2
WEXP 195 Library Work Experience ..... 3
Minimum Support Course Units ..... 2
Total Minimum Units Required: ..... 17

## Marketing Management

Associate Degree
Certificate

Degree: Degree not available.<br>Certificate: The 31-unit program below with a minimum of a " C " grade in all courses.

## ACHIEVEMENT CERTIFICATE

Marketing is a wide-ranging concept, involving much more than advertising and promoting products. Students in this program study project development, distribution, pricing, research and sales. Any job in retailing, wholesale or service industries requires a working knowledge of marketing. Approximately one out of three jobs is directly or closely related to marketing.

Entry level jobs exist with manufacturers, service firms, wholesalers, retailers, advertising agencies, consulting firms, and private and public nonprofit organizations such as hospitals. Students seeking an A.S. Degree in Business Management may take the Marketing Management Certificate requirements plus the General Education and graduation requirements.
Course Numbers Core Courses ..... Units
BUS 18 Business Law ..... 4
BUS 82 IntroductiontoBusiness ..... 3
BUS 155 E-Commerce ..... 3
BUS 174 Marketing Principles ..... 3
BUS 184 BusinessCommunications ..... 3
BUS 185/ITEC 185 Ethics in Business and Industry ..... 3
BUS 188 Human Relationsin Business ..... 3
COMP 5 Computer Concepts (4)or COMP 130Introductionto Personal Computers4
BUS 112/SPCH 112 Public Speaking for Business ..... 4
COMP 228 IntroductiontotheWorldWideWeb ..... 1
Minimum Core Course Units: ..... 31
Course Numbers Support Courses ..... Units
ACCT 101 Essentials of Accounting ..... 5
BUS 170 Introduction to Sales ..... 3
BUS 231 Starting a New Business ..... 3
COMP 140 Windows \& DOS ..... 3
COMP 227 Presentation Software for Business ..... 1.5
COMP 229 Web Page Design \& Development ..... 3
WEXP 193 Occupational CooperativeEducation/Internship(1stsemester) ..... 1-4
WEXP194 Occupational Cooperative Education/Internship (2nd semester) ..... 1-4
WEXP 195 Occupational Cooperative Education/Internship (3rd semester) ..... 1-4
WEXP196 Occupational Cooperative Education/Internship (4th semester) ..... 1-4
Minimum Support Course Units: ..... 0
Total Minimum Units Required: ..... 31

## Major and Certificate Requirements

## Mathematics

A.S. Degree: 26 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: Certificate not available.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## A.S. DEGREE

The focus of the required core and support courses for this A.S. Degree are relevant to a student who will transfer to a four-year institution in the field of mathematics and/or a related science. It is not realistic to think that a student that has completed these degree requirements will terminate his or her education with the A.S. Degree to seek employment.

| Course Numbers | Core Courses Units |
| :---: | :---: |
| MATH 75 | Calculus with Analytic Geometry 1 ......................................................................... 5 |
| MATH 76 | Calculus with Analytic Geometry 2 ......................................................................... 5 |
| MATH 77 | Calculus 3 ....................................................................................................... 3 |
| MATH 15 | Computer Science 1 (3) |
| or MATH 16 | ComputerScience 1 ............................................................................................ 3 |
|  | Minimum Core Course Units: ........................................................................... 16 |

Course Numbers Support Courses ..... Units
Select 10 additional units from this list to complete the total units required.
MATH 18 Computer Science 2 ..................................................................................................... 3
MATH 80 Linear Algebra ..... 3
MATH 81 Differential Equations ..... 5
PHYS 5 PhysicsforEngineers 1 ..... 4
Minimum Support Course Units: ..... 10
Total Minimum Units Required: ..... 26

## Mathematics - Science

A.S. Degree: 21 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: Certificate not available.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.


#### Abstract

A.S. DEGREE

The Science and Math major provides the student with some of the introductory courses that make up the lower division requirements of a variety of science majors. In order to develop marketable skills in one of the disciplines of science, the student must plan on the lower division requirements for a discipline-specific major such as physics, chemistry or biology, and then complete the upper division courses for that major at a four-year campus. There are very few entry level jobs for individuals with only these courses.


Course Numbers Core Courses Units
Select TWO of the following science sequences from this list to complete the total units required
BIOL 1 Principles of Biology (5)
and
BIOL2 Principles of Biology ..... 5/5
CHEM 1 General Chemistry (5)
and
CHEM 2 General Chemistry ..... 5/5
PHYS 20 General Physics 1 (4)
andPHYS 21 General Physics 24/4
PHYS 5 Physics for Engineers 1 (4) andPHYS $6 \quad$ Physics for Engineers 2 (4) andPHYS $7 \quad$ Physics for Engineers 3 (4)4/4/4
Minimum Core Course Units: ..... 18-20
Course Numbers Support Courses ..... Units
Select one course from this list to complete the total units required
MATH 61 Survey of Calculus ..... 3
or MATH 75 Calculus With Analytic Geometry 1(5)
or MATH 75 \& 76 Calculus With Analytic Geometry 1 \& 2 ..... 5/5
Minimum Support Course Units: ..... 3-10
Total Minimum Units Required: ..... 21

## Major and Certificate Requirements

q Associate Degree

## Microsoft MCSE

Certificate: $\quad 17$ units in courses listed below with a minimum of a " C " grade in all required courses.

## SKILL CERTIFICATE

This program offers advanced vocational training for students desiring employment as a network administrator of Information Technology manager, and preparing for students who wish to pursue advanced study in Information Technology. The course of study combines lecture and laboratory instruction, to study of Microsoft networking software. The topics include network operating systems, server software, network security, Active Directory, and Network Infrastructure. Career Opportunities include: network administrator or engineer, help desk, trainer, consultant, and network designer.
Course Numbers Core Courses Units
IT 140AC MCSE Windows 2000 Pro ..... 2
T 141AC MCSE Windows 2000 Server ..... 2
IT 142AC MCSE Network Structure ..... 3
IT 143AC MCSE Active Directory ..... 3
IT 144AC MCSE Network Security ..... 3
IT 190AD IT Supervised Practice ..... 2
Minimum Core Course Units: ..... 15
Course Numbers Support Courses ..... Units
Select 2 units from this list to complete the total units required
IT 110 PC Troubleshooting \& Repair ..... 3
IT 111AC CompTIA A+ Exam Preparation ..... 4
IT $120 \quad$ Computer Networking Fundamentals ..... 3
IT 121AC CompTIA Network+ Exam Preparation ..... 3
IT 122AC Network Administration ..... 3
IT 123AC TCP/IP and IP Routing ..... 3
IT 130AC CISCO Academy 1 ..... 3
IT 131AC CISCO Academy 2 ..... 3
IT 132AC CISCO Academy 3 ..... 3
IT 133AC CISCO Academy 4 ..... 3
COMP 5 Computer Concepts ..... 4
COMP 6 Programming Fundamentals ..... 3
IT 190AD Supervised Practice ..... 2
Minimum Support Course Units: ..... 2
Total Minimum Units Required: ..... 17

# Music: Instrumental 

| A.A Degree: | 31 units listed below with a minimum grade of " $C$ " plus General Education and graduation requirements for a total of 60 units. <br> The AA degree in music will not be awarded until the student has met these requirements to the satisfaction of the music <br> faculty. Please see the music faculty member in the Instrumental Emphasis area for more details. <br> (See page 54.) |
| :--- | :--- |
| Certificate: | Certificate not available. |
| Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. |  |

## A.A. DEGREE

The Associate of Arts degree in Music provides the Music major with the necessary course work and skills to transfer to upper division institutions or prepare for jobs opportunities such as studio musicians, independent instrumental/vocal instructors, accompanists, church organists, and choral directors.

The Music program offers four areas of emphasis: instrumental, vocal, keyboard, and theory/composition. All music majors must perform in the student recital both semesters, scheduled in May and December.

All music majors are advised to enroll in a piano class upon entrance into the department. Organ class may be substituted.
Course Numbers Core Courses Units
MUS 4** Comprehensive Musicianship1 ..... 4
MUS 5 Comprehensive Musicianship2 ..... 4
MUS 6 Comprehensive Musicianship3 ..... 4
MUS 7 Comprehensive Musicianship 4 ..... 4
MUS 41AD*** Applied Music Lessons (4 semesters, 1 uniteach) ..... 4
MUS 74AD* Concert Band 1(4 semesters, 2 units each) ..... 8
Minimum Core Course Units: ..... 28
Course Numbers Support Courses ..... Units
Select 3 additional units from this list to complete the total units required.
MUS $20 \quad$ Piano 1 ..... 1
MUS 21 Piano 2 ..... 1
MUS 22AD Intermediate \& Advanced Piano ..... 1
MUS 60AD Brass Instruments ..... 1-4
MUS 61AD Percussion Instruments ..... 1-4
MUS 62AD Woodwind Instruments ..... 1-4
MUS 72AD* Jazz Ensemble 1 ..... 2-8
Minimum Support Course Units: ..... 3
Total Minimum Units Required: ..... 31

* requires a departmental audition.
** MUS 4 has an advisory of Music 1.***MUS 41 requires concurrent enrollment in a major performance ensemble.


## Music: Keyboard


#### Abstract

A.A.Degree: $\quad 31$ units listed below with a minimum grade of " $C$ " plus General Education and graduation requirements for a total of 60 units. The AA degree in music will not be awarded until the student has met these requirements to the satisfaction of the music faculty. Please see the music faculty member in the Keyboard Emphasis area for more details. (See page 54.) Certificate: Certificate not available. Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.


#### Abstract

A.A. DEGREE

The Associate of Arts degree in Music provides the music major with the necessary course work and skills to transfer to upper division institutions or prepare for job opportunities such as studio musicians, independent instrumental/vocal instructors, accompanists, church organists, and choral directors.

The Music Program offers four areas of emphasis: instrumental, vocal, keyboard, and theory/composition. All music majors must perform in the student recital both semesters, scheduled in May and December.


All music majors are advised to enroll in a piano class upon entrance into the department. Organ class may be substituted.
Course Numbers Core Courses Units
MUS 4** Theory and Musicianship 1 ..... 4
MUS 5 Theory and Musicianship 2 ..... 4
MUS 6 Theory and Musicianship 3 ..... 4
MUS 7 Theory and Musicianship 4 ..... 4
MUS 21* Piano 2 ..... 1
MUS 22AD* Intermediate and Advanced Piano (1 unit, 4 semesters) 4
or MUS 23AD* Organ 1,2,3,4 ( 1 unit, 4 semesters) 4
or MUS 41AD*** Applied Music Lessions (1 unit, 4 semesters) ..... 4
MUS 34AD* ConcertChoir(2 units, 2 semesters) 4
or MUS 54AD* Symphony Orchestra(2units, 2 semesters) 4
or MUS 74AD* Concert Band 1(2units, 2 semesters) ..... 4
Minimum Core Course Units: ..... 25
Course Numbers Support Courses ..... Units
Select 3 additional units from this list to complete the total units required
MUS 22A*** Intermediate/Advanced Piano(1st-4th semesters)
or MUS 23A Organ 1,2,3,4 (1st-4th semesters) ..... 1-4
MUS 34AD* Concert Choir
MUS 54AD* Symphony Orchestra
MUS 74AD* ConcertBand ..... 2-4
Select 3 additional units from this list to complete the total units required.
MUS 10 Appreciation of Music History and Literature ..... 3
MUS 11 Appreciation of Jazz .....  3
MUS 13 Music of the World ..... 3
Minimum Support Course Units: ..... 6
Total Minimum Units Required: ..... 31
*requires departmental audition
**MUS 4 has an adivsory of MUS 1
***MUS 41 requires concurrent enrollment in a major performance ensemble

# Music: Theory/Composition 

Associate Degree
Certificate


#### Abstract

A.A. Degree: $\quad 31$ units listed below with a minimum grade of "C" plus General Education and graduation requirements for a total of 60 units. The AA degree in music will not be awarded until the student has met these requirements to the satisfaction of the music faculty. Please see the music faculty member in the Theory/Composition Emphasis areafor more details. (See page 54.) Certificate Certificate not available. Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.


#### Abstract

A.A. DEGREE

The Associate of Arts degree in Music provides the music major with the necessary course work and skills to transfer to upper division institutions or prepare for job opportunities such as studio musicians, independent instrumental/vocal instructors, accompanists, church organists and choral directors.

The Music Program offers four areas of emphasis: instrumental, vocal, keyboard, and theory/composition. All music majors must perform on the student recital both semesters, scheduled in May and December.


All music majors are advised to enroll in a piano class upon entrance into the department. An organ class may be substituted.


## Music: Vocal

| A.A Degree: | 31 units listed below with a minimum grade of "C" plus General Education and graduation requirements for a total of 60 units. <br> The AA degree in music will not be awarded until the student has met these requirements to the satisfaction of the music <br> faculty. Please see the music faculty member in the Vocal Emphasis area for more details. (See page 54 .) |
| :--- | :--- |
| Certificate: $\quad$ Certificate not available. |  |


#### Abstract

A.A. DEGREE

The Associate of Arts degree in Music provides the music major with the necessary course work and skills to transfer to upper division institutions or prepare for jobs as studio musicians, independent instrumental/vocal instructors, accompanists, church organists and choral directors. The Music Program offersfour areas ofemphasis: instrumental, vocal, keyboard, and theory/composition. Allmusic majors mustperform inthe student recital both semesters, schedule in May and December. All music majors are advised to enroll in a piano class upon entrance into the department. An organ class may be sustituted.



$\qquad$

Course Numbers Support Courses Units
Select 3 additional units from this list to complete the total units required.

| MUS 10 | Music Appreication .............................................................................................. 3 |
| :---: | :---: |
| MUS 11 | Apporeciation ofJazz ............................................................................................. 3 |
| MUS 13 | Music oftheWorld .................................................................................................. 3 |
| MUS 20 | Piano 1............................................................................................................ 1 |
| MUS 21AD |  |
| MUS 22AD | Intermediate and AdvancedPiano ....................................................................... 1 |
| MUS 31AD | IntermediatVoice .............................................................................................-. |
| MUS 36AD* | ChamberSingers .....................................................................................2-8 |
|  | Minimum Support Course Units: ........................................................................ 3 |
|  | Total Minimum Units Required: ....................................................................... 31 |
|  | *requires departmental audition <br> ${ }^{* *}$ MUS 4 has an adivsory of MUS 1 |
|  | S 41 requires concurrent enrollment in a major performance ensemble ................ |

# Nursery Management 

A.S. Degree: Certificate courses with a minimum "C"grade plus General Education and graduation requirements for atotal of 60 units. (See page 54.)<br>Certificate: $\quad 30$ units in courses listed below with a minimum of a "C"grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

Nursery Management is an ideal field for people with a "green thumb." Students work in a two-acre nursery area of the COS farm, propagating plants in the three large greenhouses, growing and maintaining house or garden plants, and learning to package them attractively for sale to retail and wholesale industries. Job opportunities in this field include nursery manager, owner and salesperson, grower production foreman, turf specialist, landscape estimator, and nurseryman. Many of these required courses will transfer to universities.
Course Numbers Core Courses Units
Ag 4 Soils ..... 3
AGMT 108AB Introduction to Agriculture Computer Applications(1stsemester) ..... 3
OH 2 Plant Identification 1 ..... 3
OH 3 Plant Identification 2 ..... 3
OH 7 Landscape Design ..... 3
OH 101 Basic Ornamental Horticulture ..... 3
OH 104 Nursery Practices ..... 3
OH 105 Plant Propagation ..... 3
OH 109 Landscape Maintenance ..... 3
WEXP 193 Occupational Cooperative Education/Internship ..... 3
Minimum Core Course Units: ..... 30
Course Numbers Support Courses ..... Units
Select additional units from this list for further study.
AG 3 EconomicEntomology ..... 3
AGMT 103 Introductionto Agricultural Management ..... 3
AGMT 104 Agricultural Accounting ..... 3
AGMT 108AB Introduction to Agriculture Computer Applications (2nd semester) ..... 3
OH 106 Landscape Drafting ..... 3
OH 118 Xeriscape ..... 3
OH 119 Interiorscape ..... 3
OH 129 Horticulture/Floral Business Management ..... 3
OH 271 Introductionto Horticulture ..... 3
AG Other Approved Agriculture Classes
With Approval of Department ..... 3
Total Minimum Units Required: ..... 30

## Major and Certificate Requirements

q Associate Degree

## Nursing Assistant

A.S. Degree: Degree not available.

Certificate: 6 units in courses listed below with a minimum of a " C " grade in all courses.

## SKILL CERTIFICATE

The certificate offered by the Division of Nursing and Health Science is issued by the State of Californiathrough the Department of Health Services. The program offered is a single course which prepares the student to receive a certificate permitting practice as a Nursing Assistant. Jobs are plentiful and offered at many sites throughout the college district.

To qualify for the state certificate, the student must pass the course with a grade of "C" or better, and successfully pass a state examination to verify competence inthe area. Fingerprint clearance by the Department of Justice is required. Specific information about the criminal record reviewinvolved may be obtained from the Division office.

## Ornamental Horticulture

A.S. Degree: Certificate courses with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: $\quad 30$ units in courses listed below with a minimum of a "C"grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

Ornamental Horticulture Technology continues to be one of California's fastest growing industries. Students learn to grow and arrange plants and flowers, preparing for workin nursery production and operations, landscape drafting, design and construction, and plant care and maintenance. Many former COS students are now employed in ornamental horticulture and related agriculture fields as floral designers, cut flower growers, plant propagators, retail florists, production foremen, plant inspectors, pest control operators, and garden writers. Many of the courses will transfer to universities.
Course Numbers Core Courses Units
AG 4 Soils ..... 3
AGMT 108AB Introductionto Ag Computer Applications ..... 3
OH 2 Plant Identification 1 ..... 3
OH 3 Plant Identification 2 ..... 3
OH 101 Basic Ornamental Horticulture ..... 3
OH 104 Nursery Practices ..... 3
OH 105 Plant Propagation ..... 3
OH 106 Landscape Drafting ..... 3
OH 109 Landscape Maintenance ..... 3
WEXP 193 Occupational Cooperative Education/Internship (1st semester) ..... 3
Minimum Core Course Units: ..... 30
Course Numbers Support Courses ..... Units
Select 3 additional units from this list to complete the total units required.
AG 3 Economic Entomology ..... 3
AG 103AC Applied Agriculture Practicums ..... 3
OH 7 Landscape Design ..... 3
OH 108 Landscape Construction ..... 3
OH 110 Turfgrass Management ..... 3
OH 111 Floral Design ..... 3
OH 113 Wedding Flowers ..... 3
OH 118 Xeriscape ..... 3
OH 119 Interiorscapes ..... 3
OH 121 Plant Combination Theory ..... 3
OH 123 Silk and Dried Floral Design ..... 3
OH 271 Introductionto Horticulture ..... 3
AG Other Approved Agriculture Classes
With Approval of Department ..... 3
Minimum Support Course Units: ..... 0
Total Minimum Units Required: ..... 30

| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | The 30 unit program below with a minimum of a "C" grade in all courses. |

## ACHIEVEMENT CERTIFICATE

The Basic Police Academy is designed for anyone who desires a career as a law enforcement officer. Peace officers must be certified, and the COS Academy is certified by the State of California Commission on Peace Officer Standards and Training (P.O.S.T.).

This intensive course prepares a person to enter full-time police work with all the basic skills necessary, including training in firearms, driver's training, CPR, intoxilizer, officer survival, community relations, patrol procedures, investigation, traffic enforcement, cultural awareness, and criminal law. Students must be in good physical health, over 18 years of age, and have no felony record.

| Course Numbers | Core Courses Units |
| :---: | :---: |
| AJ 200M1 | Basic Police Academy - Module 1.............................................................. 3 |
| AJ 200M2 | Basic Police Academy - Module 2 .............................................................. 5 |
| AJ 200M3 | Basic Police Academy - Module 3 ............................................................... 8 |
| AJ 200M4 | Basic Police Academy - Module 4.............................................................. 14 |
|  | Total Minimum Units Required (860 hrs) : .................................................... 30 |
|  | All applicants must: |
|  | Be in good physical health |
|  | Be certified by a doctor to participate in a strenuous physical activity program |
|  | Have a high school diploma or GED |
|  | Be over 18 years of age |
|  | Have no felony convictions |
|  | Have a valid California drivers license |
|  | Pass the academy pretest |
|  | Have a California Department of Justice Fingerprint Clearance to possess a firearm |
|  | A material fee is charged in addition to normal college fees. |
|  | Interested persons should contact the law enforcement training department, (559) 730-3752, prior to registering for the course and for details of the application process. |
| Prerequisite: | Passing score on the P.O.S.T. Entry Level Reading and Writing Test. This is a standardized examination administered at the college for no charge by the State of California Commission on Peace Officer's Standards and Training. |

The Associate of Science degree in Paralegalism requires at least 60 units of satisfactory work, only four of which can be "Internship". Thirty units mustbe selected from the core and support paralegal courses listed below. Students mustselect 18 General Education units and 1 computer course from the courses listed on this page as well as establishing keyboarding competency. Alegal assistant or paralegal is a person qualified by education, training or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible. A paralegal is not an attorney and therefore cannot give legal advice or represent another in court except under very limited circumstances provided by law.

Admissions Requirement: A student admitted to the program must have a high school diploma or the equivalent as established by the department..
Certificate: 60 units. Available only with approved general education course work listed on the next page (18 units plus computer/ keyboarding requirement courses) for a total of 60 units or an Associate Degree or a Bachelor's Degree plus 30 units of Paralegal courses and required computer/keyboarding courses. A minimum of a "C" grade is required in all Paralegal major courses.
A.S. Degree: 30 paralegal units listed below, plus the computer/keyboarding requirements and general education courses approved for the paralegal major as well as other graduation requirements such as Math, U. S. History and Health and Wellness courses for a total of 60 units. A minimum of a "C" grade is required in all Paralegal major courses.
Transfer: This is NOT a four-year transfer program or a Prelaw program. Preparation requirements for a law major vary from university to university. Some of the courses included in this program may fulfill transfer requirements. Students planning to transfer to a four-year school are encouraged to review specific requirements with a counselor and check the major sheet of the university they plan to attend.

| Course Numbers | Core Courses Units |
| :---: | :---: |
| PARA 101 | Introduction to Paralegalism (F/S)* ................................................................................... 3 |
| PARA 102 | Legal Terminology (F/S)* ............................................................................................... 2 |
| PARA 103 | Civil Procedure 1 (F/S)**.............................................................................................. 4 |
| PARA 104 | Civil Procedure 2 (S)* ................................................................................................. 3 |
| PARA 105 | Legal Research \& Writing I (F/S)* ................................................................................... 4 |
| PARA 110 | Legal Ethics, Management, and Interviewing (F/S)* ............................................................... 3 |
| PARA 237 | Family Law (F/S)*......................................................................................................... 3 |
| PARA 193 | Paralegal Internship(F/S)* ............................................................................................... 2 |
|  | Minimum Core Course Units: $\qquad$ .. 24 <br> *(F/S means the course is offered in the Fall and Spring) |
| Course Numbers | Support Courses Units |
| PARA 194 | Paralegal Internship(F/S)* ............................................................................................... 2 |
| PARA 206 | Advances in Legal Research ......................................................................................... 3 |
| PARA 232 | Wills, Trusts and Elder Law ............................................................................................ 2 |
| PARA 233 | ProbateProcedures ....................................................................................................... 2 |
| PARA 236 | Administrative Law ........................................................................................................ 3 |
| ACCT 1, 101, or 287 | Principles of Accounting, Essentials of Accounting \& Accounting for Service Businesses ..................4,5,3 |
| BUS 18 | Business Law ........................................................................................................... 4 |
|  | (Only one Administration of Justice course is allowed) |
| AJ 112 | Legal Aspects of Evidence (3) |
| AJ 115 | Criminal Law 2 ......................................................................................................... 3 |
|  | Minimum Support Course Units: ................................................................................... 6 |
| Course Numbers | Computer/Keyboarding Course Requirements Units |
| COMP 5 or COMP 130 | Computer Concepts (4) or Intro to Personal Computer (4) ........................................................ 4 |
| and | Typing certificate within the last 18 months verifying typing speed of 45 cwpm for 5 minutes or completion of BUS 270 or 271 with a "C" or better or equivalent course. |

## Major and Certificate Requirements

© Associate Degree
Q Certificate

## Paralegal

Approved by the American Bar Association. Established Fall, 1984
GENERAL EDUCATION FOR PARALEGAL MAJ OR
Take one class from each area (18 units plus required computer courses) :
(Plus graduation requirements such as Math, US History and Health and Wellness)
Area A1: ENGL 1; CLEP English Examination (Test 1) Note: Grade of " $C$ " or higher required in area A1
Area A2: $\quad$ SPCH 1, 4, 5, 7, 8, 112
Area B: Any science course on the CSU or IGETC GE Pattern; CLEP Natural Science Examination (Test III) (Lab Science recommended)
Area C: ANTH 4, 5; ART 1, 2, 3; ENGL 4, 10, 15-46; MUS 10, 11, 13; Foreign Language (1-199); PHIL (1-199); ASL (1-199) SPAN 12; CLEP Humanities Examination (Test IV)
Area D: ANTH 10; GOVT 5, 7, 25; PSY 5, 39; ECON 1, 2; GEOG 2, 3; SOC 2 HIST 4, 5, 17, 18, 19, 20, 23, 31; CLEP Social Science/History Examination (Test II)
Area E: Any additional 3 units from any of the above listed courses OR PSY 1, SOC 1, 26.

| SUGGESTED SCHEDULE <br> for Paralegal Students Seeking an AS Degree in Paralegalism - 60 Units |  |
| :---: | :---: |
| First Semester | Second Semester |
| PARA 101 ............................... 3 | PARA 103 .............................. 4 |
| PARA 102 ............................. 2 | PARA 110 ............................. 3 |
| COMP 5, 130 ......................... 4 | Area B (Science) ...................... 3 |
| Area A1 (ENGL 1) ................... 3 | Area C (PHIL 20,25) ................ 3 |
| Area A2 (Speech) .................... 3 | BUS 18 ................................ 4 |
| HW 1, 7, 104 ......................... 3 |  |
| BUS 360AC, BUS 270, or |  |
| BUS 271 ................................1-3 |  |
| Please note: Third semester Paralegal courses cannot be taken until computer courses and at least 18 units of General Education credit are completed or concurrently taken with the advanced courses. |  |
| Third Semester | Fourth Semester |
| PARA 105 ................................ 4 | PARA 104 (Spring only) ............ 3 |
| PARA 193 .............................. 1 | PARA 237 .............................. 3 |
| Paralegal Elective .................... 3 | PARA 194, Paralegal Internship .. 1 |
| (Admin Law or Wills/Probate) | Paralegal Electives .................. 3 |
| GE \& Grad Requirements .......... 6 | GE or Elective ......................... 6 |


| SUGGESTED SCHEDULE <br> for Paralegal Students Who Have already Completed GE Courses - 34 Units |  |  |
| :---: | :---: | :---: |
| First Semester | Second Semester | Summer or Third Semester |
| PARA 101 ........................................... 3 PARA 102 ............................. 4 PARA 103 ......................... 4 PARA 110 _...................... 3 COMP 5,130 ....................... 4 Total ........................... 16 |  | PARA Electives $\qquad$ <br> PARA 194 $\qquad$ <br> Total $\qquad$ |
| The Paralegal Department requires students take their English, Computer, and General Education courses early in their college schedule. Research and Writing should not be taken until ENGL 1 is completed. Paralegal internship should not be taken until students have enrolled in PARA 103; it should be taken the last two semesters before graduation. |  |  |
| The General Education areas A-E must be satisfied from courses listed on the Paralegal General Education Pattern found on this page. The courses in parentheses are recommendations only. |  |  |

# Pharmacy Technician 

Associate Degree
Certificate

| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | The 10 unit program below with a minimum of a "C" grade in all courses. |

## SKILL CERTIFICATE

This is a 10 unit Pharmacy Technician certificate program that can be completed in two (2) semesters. The program will prepare the student for an entry level position as a Pharmacy Technician in a retail or hospital pharmacy. After successful program completion, the student is eligible for California State Pharmacy Technician registration.

The curriculum for this program is adapted from the "Model Curriculum for Pharmacy Technician Training" which was developed by the American Society of Health-System Pharmacists under the guidance of a steering committee comprised of representatives from the American Association of Colleges of Pharmacy, the American Pharmaceutical Association, the Pharmacy Technicians Educators Council, and the American Association of Pharmacy technicians. Copyright ASHP 1996.
Course Numbers Core Courses ..... Units
PT 210 Introduction to Health Systems ..... 1
PT 211 Pharmacy Technician Theory 1 .....  3
PT 212 Pharmacy Technician Practice 1 ..... 1
PT 220 Pharmacy Technician Practice 2 .....  2
PT 221 Pharmacy Technician Theory 2 ..... 1
PT222 Pharmacy Technician Clinical Practice ..... 2
Total Minimum Units Required: ..... 10

## Major and Certificate Requirements

q Associate Degree
Ø Certificate

## Phlebotomy Technician

A.A.Degree: Degree not available

Certificate: $\quad 3.5$ units listed below with a minimum of a " C " grade in all courses.

## SKILL CERTIFICATE

The Phlebotomy TechnicianCertificate signifiesthe satisfactory completion ofthe classroom and practical training required by the State of California. After receivingthis certificate, the studentcan submittoexaminationbyaState approvedagency. Once the State approved examinationissuccessfully completed, the student can apply to the State of California for a license as a Certified Phlebotomist1.

Course Numbers Core Courses Units

NURS 200 BasicPhlebotomy ........................................................................................................... 1
NURS 201
NURS 202
AdvancedPhlebotomy .................................................................................................... 1.5
PhlebotomyPracticum ...................................................................................................... 1

Total Minimum Units Required: ................................................................................. 3.5

## Physical Education

Associate Degree
Certificate

| A.A. Degree: | 30 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. <br> (See page 54.) |
| :--- | :--- |
| Certificate: | Certificate not available. |
| Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. |  |

## A.A. DEGREE

The Physical Education major may find employment in recreational programs or transfer to a four-year institution to become qualified as an instructor or to pursue a career in athletic coaching.
Course Numbers Core Courses Units
BIOL 30 Anatomy ..... 4
BIOL 31 Physiology ..... 4
HW 1 Personal \& Community Health ..... 3
HW 3 Standard First Aid ..... 3
HW 60/SMED 60 Concepts of Health \& Fitness ..... 3
HW $119 \quad$ Nutrition for Fitness (3)
or NUTR 119 Nutrition for Fitness ..... 3
PE 36 Introduction to Physical Education ..... 3
PE Activity Minimum of 4 units in PE Activity ..... 4
Minimum Core Course Units: ..... 27
Course Numbers Support Courses ..... Units
Select additional 3 units from this list to complete the total units required.
HW 7 Sports Health ..... 3
IA 131AD Intercollegiate Equestrian/Women ..... 1
PE 37 Introduction to Coaching ..... 2
PE 113AD Conditioning for Baseball ..... 1
PE 124AD ConditioningforSoftball ..... 1
PE 178AD Modified Fitness ..... 1
PE 179 ModifedSelf-Defense ..... 1
PE 188 PeakPerformance forAthletes ..... 3
SMED 40 Introductionto Sports Injuries ..... 3
Minimum Support Course Units: ..... 3
Total Minimum Units Required: ..... 30

## Major and Certificate Requirements

## © Associate Degree

## Physical Science

$\begin{array}{ll}\text { A.S. Degree: } & \begin{array}{l}30 \text { units with a minimum "C" grade plus General Education and graduation requirements for a total of } 60 \text { units. } \\ \text { (See page 54.) }\end{array} \\ \text { Certificate: } & \quad \text { Certificate not available. } \\ \text { Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. }\end{array}$

## A.S. DEGREE

The Physical Science major provides the student with a full range of lower division courses in the physical sciences. This major will not replace lower division coursework necessary for discipline-specific majors in chemistry, geology, or physics. Employment opportunities would be limited to employers requiring entry level skills in the applied physics/sciences.

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| CHEM 1 | General Chemistry | ... 5 |
| CHEM 2 | General Chemistry . |  |
| PHYS 20 | General Physics 1(4) |  |
| and PHYS 21 | General Physics 2 (4) | . 8 |
| or PHYS 5 | Physics for Engineers 1 (4) |  |
| PHYS 6 | Physics for Engineers 2 (4) |  |
| PHYS 7 | Physics for Engineers 3 (4) | ... 12 |
| GEOL 1 | Physical Geology ......................... | ... 4 |
| MATH 75 | Calculus with Analytic Geometry 1(5) |  |
| or MATH 21 | Introduction to Statistics (4) | .. 4 or 5 |
|  | Minimum Core Course Units: ...... | ... 26 |
| Course Numbers | Support Courses | Units |
| Select 4 additional units from this list to complete the total units required. |  |  |
| MET 1 | Elementary Meteorology .... | 3 |
| MATH 76 | Calculus with Analytic Geometry 2 | .. 5 |
| GEOL 12 | Environmental Geology . |  |
| BIOL 1 | Principles of Biology (5) |  |
| or BIOL 20 | Frontiers in Biology (4) ........ | ... 4 or 5 |
| GEOG 1 | Physical Geography .................. | ... 3 |
|  | Minimum Support Courses ........... | ..... 4 |
|  | Total Minimum Units Required ...... | ..... 30 |

## Physics

Associate Degree
Certificate

# A.S. Degree: 33 units with a minimum " $C$ " grade plus General Education and graduation requirements for a total of 60 units. (See page 54.) <br> Certificate: Certificate is not available. <br> Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements. 

## A.S. DEGREE

The primary benefit of this degree to the student would be the ability to transfer to a four-year institution with less difficulty. This type of focus is generally an enhancement to a student's transcript and resume. Employment opportunities with the A.S. Degree would be limited to employers requiring apprentice level skills in applied mathematics and/or physics.

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| MATH 75 | Calculus With Analytic Geometry 1 | 5 |
| MATH 76 | Calculus With Analytic Geometry 2 | 5 |
| MATH 77 | Calculus With Analytical Geometry 3. | 3 |
| MATH 80 | Linear Algebra | 3 |
| MATH 81 | Differential Equations | 5 |
| PHYS 5 | Physics for Engineers 1 | 4 |
| PHYS 6 | Physics for Engineers 2 | 4 |
| PHYS 7 | Physics for Engineers 3 | 4 |
|  | Total Minimum Units Required: | .... 33 |

## Plant Science

A.S. Degree: Certificate courses with a minimum"C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)<br>Certificate: $\quad 30$ units in courses listed below with a minimum of a " C " grade in all courses.<br>Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## ACHIEVEMENT CERTIFICATE

One of the greatest challenges to mankind is to produce enough food and fiber for future generations. To meet this need, students in the Plant Science Program study all aspects of crop production that will maximize yields as well as profits. Working on the COS Farm, they receive practical as well as technical experience in soils, irrigation, weed control, plant diseases and pests, fertilizers, and cultivation of crops. Good job opportunities exist in farming, irrigation and crop production as well as related industries such as equipment sales, fertilizers, plant protection and consulting. Major universities offering agriculture programs offer a variety of courses that will lead to degrees in Plant Science.
Course Numbers Core Courses ..... Units
AG 3 Economic Entomology ..... 3
AG 4 Soils ..... 3
AG 105 Fertilizer ..... 3
AGTC 108 Irrigation ..... 3
AGMT 108AB Introduction to Agriculture Computer Applications (1st semester) ..... 3
PLSI 1 Introduction to Plant Science ..... 3
WEXP 193 Occupational Cooperative Education/Internship (1st semester) ..... 3
Minimum Core Course Units: ..... 21
Course Numbers Support Courses ..... Units
Select 9 additional units from this list to complete the total units required.
AG 200AD Agriculture Leadership ..... 1
AG 201 AgricultureMathematics ..... 3
PLSI 12 Fruit and Nut Tree Production ..... 3
PLSI 102 Row Crops ..... 3
PLSI 103 Cereals and Oil Crops ..... 3
PLSI 104 Forage Crops ..... 3
PLSI 105 Weeds and Weed Control ..... 3
PLSI 110 IntegratedPestManagement ..... 3
PLSI 111 Citrus Production ..... 3
PLSI 113 Grape and Vine Production ..... 3
AG Other Approved Agriculture Classes
With Approval of Department ..... 3
Minimum Support Course Units: ..... 9
Total Minimum Units Required: ..... 30

## Plumbing

Associate Degree
Certificate

```
Degree: Degree not available.
Certificate: 9 units in courses listed below with a minimum of a "C" grade in all courses.
```


## SKILL CERTIFICATE

This certificate program is designed to prepare students to enter the plumbing installation and repair industry.

| Course Numbers | Core Courses |
| :--- | :--- |
| CT 175AD | Plumbing Inspection .................................................................................................... 3 |
| CT 205AB | Plumbing (two semesters, 3 unitseach) .............................................................................. 6 |
|  | Minimum Core Course Units: ......................................................................................... 9 |

## Major and Certificate Requirements

q Associate Degree

Degree: Degree not available.
Certificate: $\quad 5$ units in courses listed below with a minimum of a " C " grade in all courses.

## SKILL CERTIFICATE

This certificate program will provide students knowledge and hands on training in the use of programmable logic controllers. Training materials use Allen-Bradley RS Logic programming.

| Course Numbers | Core Courses | Units |
| :---: | :---: | :---: |
| ITEC 274 | Electric Motor Controls/Programmable Controllers |  |
| ITEC 276 | Advanced PLC | 3 |

## Real Estate

Degree: Degree not available.<br>Certificate: 33 units in courses listed below with a minimum of a " $C$ " grade in all courses.

## ACHIEVEMENT CERTIFICATE

The COS Real Estate program gives introductory training which is helpful in studying for the state Real Estate license, and it provides continuing education for people seeking license renewal.

Real Estate is an exciting and energetic business with large amounts of money at stake. Real Estate professionals bring together buyers and owners of property to work transactions. Working under the supervision of a real estate broker, they sell, exchange, and rent real estate for clients. Tasks include obtaining "listings" (agreements to sell property), locating potential customers, making appraisals, showing property, negotiating agreements, renting and managing property, and developing new building projects.
Course Numbers Core Courses Units
BUS 18 Business Law ..... 4
BUS 185/ITEC 185 Ethics in Business and Industry ..... 3
COMP 5 ComputerConcepts ..... 4
COMP 130 Introductionto Personal Computers ..... 4
COMP 229 Web Page Design \& Development ..... 3
REAL 140 Real Estate Principles ..... 3
REAL 141 Real Estate Finance (3)Real Estate Law3
REAL 143 Real EstateEconomics ..... 3
REAL 144 Real Estate Practice ..... 3
REAL 145 Real Estate Appraisal ..... 3
Minimum Core Course Units: ..... 33
Course Numbers Support CoursesSelect additional units from this list for further study.
ACCT 101or ACCT $1 \quad$ Principles of Accounting (4)4 or 5
BUS 231 Starting a New Business ..... 3
BUS 297 Personal Finance ..... 3
COMP 140 Windows and DOS ..... 3
COMP 228 IntroductiontotheWorldWideWeb ..... 1
SPCH 1 Fundamentals of Public Speaking ..... 3
SPCH 112/BUS 112 Public Speaking for Business ..... 4
REAL 146 Property Management ..... 3
Minimum Support Course Units: ..... 0
Total Minimum Units Required: ..... 33

## Registered Nursing

A.S. Degree: $\quad 80.5$ units with a minimum "C" grade plus General Education and graduation requirements. (See page 54. .)
Certificate: $\quad$ Certificate is not available.
Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

## A.S. DEGREE

The Registered Nursing major at College of the Sequoias is a two-year program leading to an A.S. Degree. The program is approved by the California Board of Registered Nursing, and successful completion of the requirements qualifies the graduate to sit for the National Licensing Examination for Registered Nurses. The successful R.N. may begin employment in a wide variety of entry level positions. Jobs are readily available and there is full employment for those who choose to work. Graduates of this program are readily accepted at university-level baccalaureate programs and enter into upper division nursing courses.

High school preparation for Nursing should include a good foundation in math, science and English. A career ladder exists: C.N.A. to L.V.N. to R.N. to B.S.N. to M.S.N.

Admission Requirements: 1. Graduation from an accredited high school or GED equivalency. 2. GPA of 2.5 or higher over all and on all required pre-nursing courses. 3. All qualified candidates may apply. 4. See page 54.

Prerequisites (must be taken before program admission):

| Course Numbers | Core Courses Units |
| :---: | :---: |
| BIOL 30 | Human Anatomy ......................................................................................................... 4 |
| BIOL 31 | Human Physiology ...................................................................................................... 4 |
| BIOL 40 | General Microbiology .................................................................................................... 4 |
| CHEM 20 | General Chemistry ...................................................................................................... 4 |
| CHEM 30 | General and Biological Chemistry ..................................................................................... 5 |
| ENGL 1 | College Reading and Composition .................................................................................... 3 |
| NUTR 18 | Nutrition ..................................................................................................................... 3 |
| PSY 1 | General Psychology .................................................................................................. 3 |
| SOC 1 | Introductionto Sociology (3) |
| ANTH 10 | Cultural Anthropology (3) |
| NURS 106 | Cultural Diversity in Healthcare ......................................................................................... 3 |
| SPCH 1 | Fundamentals of Public Speaking (3) |
| SPCH 4 | Interpersonal Communications(3) |
| SPCH 8 | Group Communication ................................................................................................. 3 |
|  | Minimum Prerequisite Units: ........................................................................................ 31 |

Other courses required for graduation (A.S. Degree):
GENERAL EDUCATION Humanities Course (COS Area C) ........................................................................................ 3
HIST 17 The People of the United States to1865 (3)
or HIST 18 The People of the United States after 1865(3)
or GOVT 5 Federal State and Local Government ......................................................................................... 3
Additional Required Units for A.S. Degree: ............................................................................. 6
Nursing courses--taken after admission into the program:
NURS 161 Maintaining Optimal Wellness ............................................................................................................ 11

NURS 163 Promote \& Restore Wellness 1 ............................................................................................................ 9
NURS 164 Promote \& Restore Wellness 2 ........................................................................................................ 8
NURS 165 Promote \& Restore Wellness3 ......................................................................................................... 2
NURS 166 Nursing Leadership .......................................................................................................................... 3
Minimum Required Course Units: .............................................................................................. 43.5
Total minimum Units Required: .................................................................................................... 80.5

Refer to next page for details on nursing courses taken after admission into the program.

## A.S. Degree: $\quad 80.5$ units with a minimum "C" grade plus General Education and graduation requirements. (See page 54. ) Certificate: $\quad$ Certificate is not available.

Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.

Continued from previous page.

## Advanced Placement Candidates:

For LVN's and other candidates who may be considered for advanced placement, the prerequisite of BIOL 30 , Human anatomy is waived. With division approval this studenttakes:
Nursing courses--taken after admission into the program:
NURS 160 Transition Class
Upon acceptance nto the R.N. Program the advanced placement student will take the following:
NURS 163 Promoting and RestoreWellness1 ............................................................................................. 9
NURS 164 Promote and RestoreWellness2 .............................................................................................. 8
NURS 165 Promote and Restore Wellness 3 ................................................................................................ 2
NURS 166 Nursing Leadership ................................................................................................................... 3
The nursing courses listed on the previous page begin fall 2002 with phasing out of the current RN curriculum as follows below.

| Fall2 2002 | NURS 161 | Delete NURS 101 and NURS 122 |
| :--- | :--- | :--- |
| Spring2003 | NURS 162 | Delete NURS 102 |
| Fall 2003 | NURS 163 \& NURS 165 | Delete NURS 103 |
| Spring2004 | NURS 164 \& NURS 166 | Delete NURS 104 |

## Major and Certificate Requirements

## Sequoia Theatre Conservatory Theatre Arts/Acting

Please Note: This is not an approved major or certificate program which has been approved by the College of the Sequoias Community College District. Interested students should contact the Fine Arts Department.<br>Letter of Completion: Completion of either one of the two, forty-eight unit programs below with a minimum grade of "B" in all courses.

## LETTER OF COMPLETION

The Sequoia Theatre Conservatory is designed for the career-oriented theatre student. This two year training program is rigorous and disciplined, with a curriculum established to meet the vocational demands of the profession. Students are encouraged to develop their own unique personal resources in an atmosphere of mutual trust and support. The conservatory environment places a premium on personal discipline, high standards, and a positive attitude.

The Conservatory program offers two emphases, each with its own set of requirements: acting and technical. The Acting emphasis includes a wide range of acting styles and techniques such as Musical Theatre and Shakespeare. The Technical emphasis includes experience in all aspects of theatre work behind the scenes such as lighting design and set construction. In addition, flexible enrollment options will prepare transfer-track students for successful entry into the most prestigious university theatre programs in the country.
Course Numbers Core Courses ..... Units
DRAM 1 Introduction to the Theatre ..... 3
DRAM $2 \quad$ Fundamentals of Acting I ..... 3
DRAM 3 Fundamentals of Acting2 ..... 3
DRAM $4 \quad$ Intermediate Acting 1 ..... 3
DRAM 5 Intermediate Acting 2 ..... 3
DRAM 6 Shakespeare ..... 3
DRAM 130AB Stage Movement/Stage Combat ..... 4
DRAM 140AB Musical Theatre ..... 3
DRAM 180AD Communication Strategies (4 semesters/2 units each) ..... 8
Minimum Core Course Units: ..... 33
Course Numbers Support Courses ..... Units
Select 15 additional units from this list to complete the total units required.
DANC 6AD Choreography ..... 1
DRAM 8 History of Theater and Drama ..... 3
DRAM 12AB/FASH 12AB Costuming (Firstsemester) ..... 3
DRAM 13AB Beginning Stagecraft (First semester) ..... 3
DRAM 15AB Beginning Stage Lighting (First semester) ..... 3
DRAM 17AB/FASH 17AB Make-up (Firstsemester) ..... 3
DRAM 19AD Theatre Arts Workshop 1 (2 semesters/2 units each) ..... 4
DRAM 21AD Theatre Arts Workshop 2 (2 semesters/2 units each) ..... 4
DRAM 101AD Introductionto TV Production ..... 4
DRAM 20AD Musical Theatre Performance ..... 2
DRAM 202 Acting for the Camera ..... 1
MUS 30AD Beginning Voice ..... 3
Minimum Support Course Units: ..... 15
Total Minimum Units Required: ..... 48

# Sequoia Theatre Conservatory Theatre Arts/Technician 

# Please Note: $\quad$ This is not an approved major or certificate program which has been approved by the College of the Sequoias Community College District. Interested students should contact the Fine Arts Department. <br> Letter of Completion: Completion of either one of the two, forty-eight unit programs below with a minimum grade of " B " in all courses. 

## LETTER OF COMPLETION

The Sequoia Theatre Conservatory is designed for the career-oriented theatre student. This two year training program is rigorous and disciplined, with a curriculum established to meet the vocational demands of the profession. Students are encouraged to develop their own unique personal resources in an atmosphere of mutual trust and support. The conservatory environment places a premium on personal discipline, high standards, and a positive attitude.

The Conservatory Program offers two emphases, each with its own set of requirements: acting and technical. The Acting emphasis includes a wide range of acting styles and techniques such as Musical Theatre and Shakespeare. The Technical emphasis includes experience in all aspects of theatre work behind the scenes such as lighting design and set construction. In addition, flexible enrollment options will prepare transfer-trackstudents for successful entry into the most prestigious university theatre programs in the country.
Course Numbers Core Courses ..... Units
DRAM 1 Introduction to the Theatre ..... 3
DRAM 2 Fundamentals of Acting I ..... 3
DRAM 12AB/FASH 12AB Costuming ..... 3
DRAM 13AB Stagecraft ..... 3
DRAM 14AB Intermediate Stagecraft ..... 3
DRAM 15AB Beginning Stage Lighting ..... 3
DRAM 16AB Intermediate Stage Lighting ..... 3
DRAM 17AB/FASH 17AB Makeup ..... 3
DRAM 19AD Theatre Arts Workshop 1 (2 semesters/2 units each) ..... 4
DRAM 21AD Theatre Arts Workshop2(2 semesters/2 units each) ..... 4
Minimum Core Course Units: ..... 32
Course Numbers Support Courses Units
Select 16 additional units from this list to complete the total units required.
ART 2 ArtHistory/Ancient-Gothic ..... 3
ART 3 ArtHistory/Gothic-Modern ..... 3
DRAM $3 \quad$ Fundamentals of Acting 2 ..... 3
DRAM 6 Shakespeare .....  3
DRAM 20AD Musical Theatre Performance ..... 2
DRAM 101AD Introduction to TV Production ..... 4
DRAM 130AB Stage Movement/StageCombat ..... 4
Minimum Support Course Units: ..... 16
Total Minimum Units Required: ..... 48

## Major and Certificate Requirements

## © Associate Degree <br> q Certificate

## Social Science

$\begin{array}{ll}\text { A.A. Degree: } & \begin{array}{l}30 \text { units with a minimum "C" grade plus General Education and graduation requirements for a total of } 60 \text { units. } \\ \text { (See page 54.) }\end{array} \\ \text { Certificate: } & \text { Certificate not available. }\end{array}$

## A.A. DEGREE

A multidiscipline curriculum for students with a wide range of interests in human problems, the Social Sciences major is designed to provide a liberal arts education and supply insights and tools for a variety of employment opportunities in government services, business, commerce, and industry. It may also lead to advanced degrees and elementary and secondary teaching qualifications in the area of social studies or any of the social sciences.


## Spanish

Associate Degree
Certificate

| A.A. Degree: | 21 units with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. <br> (See page 54.) |
| :--- | :--- |
| Certificate: | Certificate not available. |

## A.A. DEGREE

Many career opportunities are available for students who are proficient in both English and Spanish. After completing an A.A. degree in Spanish, a student is able to engage in conversation, understand the essential points of a narrative or explanation, read and comprehend some literature and most factual information addressed to a general reader, and write summaries, descriptions or events, and correspondence. Business, finance, education, health care, social services, travel, and interpreting are some of the fields that a student could enter with a Spanish major.
Course Numbers Core Courses ..... Units
HIST 23 Mexican-American ..... 3
SPAN 4 Advanced Spanish ..... 4
SPAN 12 Hispanic Literature ..... 3
Minimum Core Course Units: ..... 10
Course Numbers Support Courses ..... Units
Select 11 additional units from this list to complete the total units required.
ART 4, 5 Pre-Columbian Meso Amer/Pre-Columbian Culture/Central \& So. America ..... 3/3
ENGL 10 Chicano Literature ..... 3
GEOG 3 Cultural Geography ..... 3
SPAN 1 Elementary Spanish1 ..... 4
SPAN 2 Elementary Spanish2 ..... 4
SPAN 3 Intermediate Spanish ..... 4
SPAN 22 Spanish 2 for Bilingual Students ..... 4
SPAN 23 Spanish3 for Bilingual Students ..... 4
Minimum Support Course Units: ..... 11
Total Minimum Units Required: ..... 21

## Major and Certificate Requirements

## © Associate Degree q Certificate

## Speech Communication

A.A. Degree: $\quad 30$ units in courses with a minimum "C" grade plus General Education and graduation requirements for a total of 60 units. (See page 54.)
Certificate: Certificate not available.
Transfer Students: Transfer preparation varies from university to university. Meet with a COS counselor to review requirements.
A.A. DEGREEThe Speech Program is designed to prepare students to continue studies toward a B.A. degree in Speech Communication or enter the work forcewith competent communication skills. Employment opportunities can be very diverse from College Professor in Speech Communications, to PublicRelations or Personnel Officer within a corporation, to a career in Mass Communications such as radio and television.
Course Numbers Core Courses Units
SPCH $1 \quad$ Fundamentals of Public Speaking ..... 3
SPCH 3 Oral Interpretation ..... 3
SPCH 4 Interpersonal Communication ..... 3
SPCH 5 Argumentation and Debate ..... 3
SPCH $7 \quad$ Persuasion ..... 3
SPCH 8 Group Communication ..... 3
SPCH 9 Intercultural Communication ..... 3
Minimum Core Course Units: ..... 21
Course Numbers Support Courses Units
Select 9 additional units from this list to complete the total units required.
PHIL 25 Critical Thinking ..... 3
MATH 21 IntroductiontoStatistics ..... 4
SPCH 112/BUS 112 Public Speaking for Business ..... 4
SPCH 151AD Independent Study in SpeechCommunication ..... 2-3
Minimum Support Course Units ..... 9
Total Minimum Units Required: ..... 30

| Degree: | Degree not available. |
| :--- | :--- |
| Certificate: | The 17-unit program below with a minimum of a "C" grade in all courses. |

## SKILL CERTIFICATE

The Veterinary Technician program gives students entry level training in animal health care. Instruction is offered in nutrition, diseases and sanitation, small animal care, as well as basic livestock handling. Upon completion of the coursework and after completing state licensing criteria, students may find employment as veterinary technicians and veterinary assistants. Many of the courses are transferable to universities for degrees in Animal Science areas.
Course Numbers Course Names Units
ASCI 104 Animal Diseases and Sanitation ..... 3
ASCI 113 Farm Animal Biology ..... 3
VT 109 Intro To Veterinary Technology ..... 3
VT115 Infectious Diseases of Small Animals ..... 3
VT 116 Veterinary Office Practices ..... 3
WEXP193 Agricultural Occupational Cooperative Education/Internship (1-3)[1stsemester] ..... 2
Minimum Core Course Units: ..... 17
Course Numbers Support Courses Units
Select additional units from this list for further study.
BIOL 22 Animal Biology/Lab ..... 3
ASCI 110 Swine Production and Management ..... 3
ASCI 111 BeefProductionand Management ..... 3
ASCI 112 Sheep Production and Management ..... 3
ASCI 123 Horse Production ..... 3
Minimum Support Course Units: ..... 0
Total Minimum Units Required: ..... 17

## Major and Certificate Requirements

q Associate Degree

## Waste Water Treatment

Degree: Degree not available.
Certificate: $\quad 6$ units in courses listed below with a minimum of a "C" grade in all courses.

## SKILL CERTIFICATE

This certificate program is designed to prepare students for the California State Certification Exams in Water Treatment Operator and Wastewater Treatment Plant Operator.


For more information, please contact:
Dean, Vocational Education, (559) 730-3808, or
Division Chairperson for Industry and Technology, (559) 730-3777.

## Welding Technology

Associate Degree
Certificate

$$
\begin{array}{ll}
\text { A.S. Degree: } & \text { The } 30 \text {-unit program below with a minimum of a "C" grade in all required courses, plus General Education and graduation } \\
\text { requirements for a total of } 60 \text { units. (See page } 54 .)
\end{array}
$$

## ACHIEVEMENT CERTIFICATE

California is one of the leading employers of welders in the United States. Qualified welders are needed both in our valley agriculture industries and in our urban industries. The Welding Technology Certificate can lead to careers in food processing installation, fabrication in a variety of industries, construction, and repair.
Course Numbers Core Courses ..... Units
DRFT 200 Beginning Mechanical Drawing ..... 2
WELD161 Oxy-AcetyleneWelding ..... 4
WELD162 Shielded Metal Arc Welding ..... 4
WELD171 AdvancedWelding ..... 4
WELD172 AdvancedWelding ..... 4
WELD181 BlueprintReading/Ferrous Metal ..... 3
WEXP 193AD AG Occupational CooperativeEducation/Internship ..... 3
Minimum Core Course Units: ..... 24
Course Numbers Support Courses ..... Units
Select 6 additional units from this list to complete the total units required.
AGTC 212AD Welding Power Source \& App ..... 1
SPCH 4 Interpersonal Communications ..... 3
WELD 105AC Basic Metalcraft Welding \& Forging ..... 3
WELD 106 Forging \& Wrought Iron ..... 2
WELD 173 Stainless SteelWelding/Repair ..... 2
WEXP 194AD Occupational Cooperative Education/Internship ..... 1-4
Minimum Support Course Units: ..... 6
Total Minimum Units Required: ..... 30

## Major and Certificate Requirements

## Word Processing

Degree: Degree not available.<br>Certificate: The 30-unit program below with a minimum of a " C " grade in all courses.

## ACHIEVEMENT CERTIFICATE

The Word Processing Program teaches concepts, procedures, and terminology, as well as the skills necessary to operate computers. To be prepared for the information explosion in today's high tech office, the employee must be prepared to produce high-quality written documents. By becoming computer proficient, students completing this program will be able to produce the written documents needed to make requests, explain, illustrate, and convince. In addition, students will know where and how to access information.

The high performance employer today needs word processors for the information explosion occurring in the global business arena. Word processing specialists find jobs in the automated office utilizing personal computers and various software packages such as word processing, database management, desktop publishing, and spreadsheets.


"The finest gift you can give anyone is encouragement.
Yet, almost no one gets the encouragement they need
to grow to their full potential.
If everyone received the encouragement they need to grow,
the genius is most everyone would blossom and the world would produce abundance
beyond our wildest dreams."

## Course Numbering System at College of the Sequoias

The Course Numbering System provided below is to help our students easily identify those courses needed as they plan their studies at College of the Sequoias.

All courses numbered 299 or lower are associate degree credit courses. They can be applied toward the 60 unit AA/AS graduation requirement and for vocational certificates.

| Course Numbers | Explanation |
| :--- | :--- |
| 1 -99 | ........................................... Courses accepted by the University of California System (See UC |
| Transfer Course List for unit limitations). For specific course articulation |  |
| (equivalency), consult the Counseling Office or the Transfer Center. |  |

## ACCOUNTING

ACCT $001 \quad$ Principles of Accounting 4 UNITS
Hours: 5 Lecture/Discussion
A course that introduces students to fundamental business organization; recording of business financial activities; accounting statements preparation and interrelationships; and the analysis of financial activities for sole proprietorship, partnerships and corporations.
Advisory on Recommended Preparation: Sophomore standing (at least 30 college units completed.). CAN BUS 2.

ACCT 002 Principles of Accounting
4 UNITS
Hours: $\quad 5$ Lecture/Discussion
This is a second transfer-level Principles of Accounting course which expands the discussion of corporate financing and ownership; continues financial statement analysis and interpretation; studies managerial control, information systems, cost accumulation and capital budgeting techniques; and other measuring and reporting methods.
Advisory on Recommended Preparation: ACCT 1 or equivalent college course with "C" or better. CAN BUS 4.

## ACCT 101 Essentials of Accounting <br> 5 UNITS <br> Hours: 5 Lecture/Discussion

Accounting 101 is an introduction to accounting for students not majoring in business as well as students pursuing a career in accounting. Students will learn accounting principles and practices including the effects of transactions, adjusting, closing, and reversing entries on the assets, liabilities, and owners equity elements of professional, service, and merchandising businesses.

## ACCT 202 Gen Vocational Accounting <br> 5 UNITS

Hours: 5 Lecture/Discussion
This course continues to apply the fundamental accounting equation to additional, more mature and complex topics of business that might be encountered by a full charge accountant, office manager, general manager or owner.
Advisory on Recommended Preparation: ACCT 101 or 1 or equivalent college course with " $C$ " or better, or the completion of high school bookkeeping (accounting) with a grade of "A" or " $B$ " in each of the four semesters.

ACCT 210 Computer Accounting
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Materials Fee: $\$ 6.00$
Equivalent Course: COMP 210.
This course will teach students to use computer-based accounting packages to handle the accounting procedures for a business. These packages are usually referred to as "General Ledger Accounting" packages. This course is an introduction to accounting applications software for accountants and business managers. Students will use standard accounting programs, including general ledger, accounts receivable/ payable, payroll and inventory control. Students will survey current accounting applications for microcomputers.
Advisory on Recommended Preparation: ACCT 101 or 1 or equivalent college course with "C" or better; and microcomputer experience.

ACCT 282 Individual Income Tax
5 UNITS
Hours: 5 Lecture/Discussion

## Materials Fee: $\$ 5.00$

A study of the Federal and California income tax laws that apply to the individual taxpayer(s), the application of the laws by computation of various practical problems and the completion of forms required by the Internal Revenue Service and the California State Franchise Tax Board. The requirements for becoming a licensed tax preparer and the rules and regulations governing licensed tax preparers are also included. This course may be taken for personal use, but is primarily designed for the vocational student; to orient the student toward working with these problems in an accounting office, a financial institution, an enrolled agent's office, the Internal Revenue Service, the California State Franchise Tax Board, a state licensed tax preparer's office, or in their own office.

## ACCOUNTING

ACCT 287 Accnting for Serv Businesses
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
A vocational course in accounting principles and practice covering the effect of transaction, adjustment, and closing entries on the asset, liability and owners equity elements of professional and/or service businesses.

ACCT 292 Fund of Governmental Account 3 UNITS
Hours: 3 Lecture/Discussion
Fundamentals of Governmental Accounting is an introduction to governmental or fund accounting. The student will learn basic accounting principles and practices as they apply to governmental and not-for-profit organizations.
Advisory on Recommended Preparation: Keyboarding/ten key calculator experience helpful.

ACCT 295 California School Accounting 3 UNITS
Hours: 3 Lecture/Discussion
California School Accounting is an introduction to accounting for California public schools. The student will learn accounting and reporting processes unique to kindergarten through twelfth grade public schools.
Advisory on Recommended Preparation: Keyboarding/10-key experience, ACCT 101, ACCT 292, and 202, or ACCT 1, or one year accounting experience. (ACCT 292 preferred.).

## ADMINISTRATION OF J USTICE

AJ 011
Intro to Criminal Justice
3 UNITS

Hours: 3 Lecture/Discussion
Introduction to Criminal Justice offers an overview of the Criminal Justice System, including law enforcement, courts, and corrections. Students will examine the structure, function and decision making processes of the criminal justice system from the perspective of the criminal, police, courts and corrections.
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility of ENGL 1 determined by COS Placement Procedures. CAN AJ 2.

AJ 013 Community Relations 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course explores the roles of criminal justice practitioners and the criminal justice systems. In addition to the interaction of various justice systems, the student will examine the relationship of those systems with the community.
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

AJ 014
Hours:
Criminal Law 1
3 UNITS

An introduction to the historical development, philosophy and basic legal concepts of criminal law. The course includes an examination of constitutional provisions, legal research, legal analysis and the functioning of law as a social force.
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with a "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN AJ 4.

AJ 025 Constitutional Law 3 UNITS
Hours: $\quad 3$ Lecture/Discussion

## Equivalent Course: BUS 025, GOVT 025.

This course allows students to study and apply logic and critical thinking to written and oral communication in the study of the fundamental rights of all citizens as protected by the United States Constitution. Case studies will be used as examples of the application of law. Students will be required to write a total of 6,000 to 8,000 words.
Advisory on Recommended Preparation: ENGL 1 and SPCH 1 or equivalent college courses with "C" or better.

## ADMINISTRATION OFJ USTICE

## ADMINISTRATION OFJ USTICE

AJ $110 \quad$ Police Patrol Procedures 3 UNITS

Hours: 3 Lecture/Discussion
A practical and thorough study of the procedures, philosophies, and concepts of the police patrol system. This course covers the important areas of patrol preparation, field observation, field interviews, patrol systems, arrest powers, basic investigative techniques, public service responsibilities, and their relationship to the criminal justice system.
AJ 111
Writing for Criminal Justice
3 UNITS
Hours:
3 Lecture/Discussion

Techniques of communicating facts, information, and ideas effectively in a simple, clear, and logical manner in the various types of criminal justice system reports; letters, memoranda, directives, and administration reports; emphasis on criminal justice terminology, use of English and organization of information; practical experience in note taking and report writing; presentation of testimony in court.

AJ 112
Legal Aspects of Evidence
3 UNITS
Hours:
3 Lecture/Discussion
Origin, development, philosophy and constitutional basis of evidence; judicial decisions and statutory rules of evidence governing the admissibility of testimony, writings and material objects for motions and criminal trial; constitutional and procedural considerations affecting searches and seizures and methods of identification. CAN AJ 6.

AJ 113 Juvenile Laws \& Procedures 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course covers the organization, functions, processes and laws pertaining to the juvenile justice system. Topics include processing and detention of juveniles, juvenile case disposition, juvenile status, and court procedures at the state and federal levels. This course is useful to both the students entering the juvenile justice system and those already employed in the system.
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

AJ 114
Juvenile Delinquency
3 UNITS
Hours:

## 3 Lecture/Discussion

This is an introductory course designed to explore the concept of juvenile delinquency. Emphasis is on defining delinquency, identifying delinquents, examining theories of causation, identifying institutions for delinquents and identifying community based programs designed to prevent delinquency.
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.
AJ 115
Criminal Law 2
3 UNITS
Hours: 3 Lecture/Discussion

An in-depth study of the substantive criminal laws commonly enforced by California state, county and municipal law enforcement officers. The course provides a complex analysis of both state law, as created by the legislature, and case law as defined in state and federal appellate court decisions.

AJ 116 Probation/Parole 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
An introduction to the historical and theoretical development, philosophy and basic concepts of probation/parole and community corrections.
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with a "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.
AJ 117
Correction/Counseling
3 UNITS
Hours:
3 Lecture/Discussion

An Administration of Justice course designed for students who are either employed in a law enforcement/corrections setting or intend to pursue a career in this field. A foundation course which includes areas of professional ethics, psycho-diagnostic procedures in counseling, critical thinking and communication skills.
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

AJ 118 Criminal Investigation 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course examines the basic principles of criminal investigation. Topics include the crime scene, physical evidence identification, collection and preservation. It will also cover investigative techniques, patterns, modus operandi, the management of the investigation and concepts related to the prevention and suppression of crime. CAN AJ 8.
AJ 119
Criminal Identification
3 UNITS
Hours: $\quad 3$ Lecture/Discussion

The theory and practice in the study of fingerprint identification, description of persons, the history of criminal investigation, and modus operandi and its application to individual characteristics in the field of criminal investigation and identification.

| AJ 120 | Women in Criminal Justice |
| :--- | :--- |
| Hours: | 3 Lecture/Discussion |

An in depth study of women in the criminal justice system. The course will examine women as offenders, crime victims and professionals employed in the field. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

AJ 121 Intro to Corrections 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This is an introductory course designed to review concepts of criminal and juvenile corrections. Emphasis is focused on exploring the history, principles and practices in the field of corrections, including local, state, and federal correctional institutions.
AJ 122
Criminal Justice Procedures
3 UNITS

Hours: $\quad 3$ Lecture/Discussion
An in-depth study of the origin, development, philosophy and legal bases of criminal procedure in California. Procedural statute law, case law and constitutional law governing laws of arrest, use of force, motions, rules of discovery, applicable rules of evidence, the California court system, pre-trial procedures, trial procedures an the appellate process.
AJ 123
Criminal Justice Ethics
3 UNITS
Hours: $\quad 3$ Lecture/Discussion

This course allows students to examine and discuss various ethical issues and values of concern to Administration of Justice professionals. Topics include principles of justice with ethical applications in policing, in the courts, in corrections and in the profession.
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with a "C" or better, or eligibility for ENGL 1 determined by COS placement procedures.

| AJ 200M1 | Basic Police Academy, Module 1 | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 50 Lecture/Discussion |  |
|  | 30 Lab |  |

Materials Fee: $\$ 17.00$
This is the first module of a four-module series leading to completion of the Basic Police Academy Course. The course will survey the following topics: professional orientation, criminal law, rules of evidence, laws of arrest, arrest methods, use of force, community relations, and handgun shooting techniques.
Advisory on Recommended Preparation: Because this course requires strenuous lifting, reaching, falling, and range of motion activities, students should be free of any medical or physical conditions which could be aggravated by participating in the course. Students must participate fully in order to successfully complete the course. Limitations on Enrollment: 1. Passing score on the POST Entry Level Reading and Writing Test; 2. High school diploma or GED; 3. No felony convictions; 4. Valid California driver's license; 5. Recent medical clearance by a licensed physician; 6. Fingerprint clearance from the California Department of Justice; 7. Possession of all required equipment, uniforms, supplies and materials; 8. Payment of all enrollment, material and subsidiary fees.

## ADMINISTRATION OF J USTICE

## ADMINISTRATION OFJ USTICE

AJ 200M2
Basic Police Academy, Module 2
112 Lecture/Discussion
20 Lab
Materials Fee: $\$ 4.50$
This is the second module of a four-module series leading to completion of the Basic Police Academy Course. The course will contain advanced discussion of several topics surveyed in Module 1, including ethics \& professionalism, laws of arrest, use of force, firearms, professional orientation, physical control of arrested persons. This module will focus intensively on such topics as First Aid, CPR, and statewide information systems.
Advisory on Recommended Preparation: Because this course requires strenuous lifting, reaching, falling, and range of motion activities, students should be free of any medical or physical conditions which could be aggravated by participating in the course. Students must participate fully in order to successfully complete the course. Limitation on Enrollment: 1. Passing score on the POST Entry Level Reading and Writing Test; 2. High School diploma or GED; 3. No felony convictions; 4) Valid California Driver's License; 5) Recent medical clearance by a licensed physician; 6. Fingerprint clearance from the California Department of Justice; 7. Possession of all required equipment, uniforms, supplies and materials; 8. Payment of all enrollment, material and subsidiary fees; 9. Satisfactory completion of AJ 200 M 1 , or equivalent college course. 10. Current certification (within the last three years) in PC 832 training requirements.
Prerequisites: AJ 200M1 or equivalent college course with "C" or better

| AJ 200M3 | Basic Police Academy, Module 3 | 8 UNITS |
| :--- | :--- | :--- |
| Hours: | 223 Lecture/Discussion |  |
|  | 60 Lab |  |

Materials Fee: \$4.00
This is the third module of a four-module series leading to completion of the Basic Police Academy. Students who complete this module may be appointed as Level II Reserve Peace Officers. This module will provide advanced training in California criminal law, search \& seizure, presentation of evidence; and intermediate-level training in firearms, arrest and control techniques, and investigative report writing. Advisory on Recommended Preparation: Because this course requires strenuous running, lifting, reaching, falling, and range of motion activities, students should be free of any medical or physical conditions which could be aggravated by participating in the course. Students must participate fully in order to successfully complete the course. Limitation on Enrollment: 1. Passing score on the POST Entry Level Reading \& Writing Test; 2. High School Diploma or GED; 3. No felony convictions; 4. Valid California Driver's License; 5. Recent medical clearance by a licensed physician; 6. Recent fingerprint clearance from the California Department of Justice; 7. Possession of all required equipment, uniforms, supplies and materials; 8. Payment of all enrollment, material and subsidiary fees; 9. Satisfactory completion of AJ 200M1 and AJ 200M2 or equivalent college-level courses; 10. Current certification in First Aid and CPR training requirements for public safety personnel as prescribed by the State of California Emergency Medical Services Authority and set forth in the California Code of Regulations, Title 22, Division 9, Chapter 1.5, Sections 100005-100028; 11. Current certification (within the last three years) in PC 832 Training Requirements. Prerequisites: AJ 200M1 and AJ 200M2 or equivalent college courses with "C" or better.

| AJ 200M4 | Basic Police Academy, Module 4 | 14 UNITS |
| :--- | :--- | :--- |
| Hours: | 322 Lecture/Discussion |  |
|  | 83 Lab |  |

## Materials Fee: $\$ 5.50$

This is the final module of the four-module series leading to the completion of the POST Basic Police Academy. Students who complete this module may be appointed as either full-time peace officers or Level 1 reserve officers. This module will provide advanced training in such skill areas as firearms, arrest and control techniques, preliminary investigation, investigative report writing, emergency vehicle operation, and traffic enforcement. Exercise and scenario testing are prominent in this module. Advisory on Recommended Preparation; Because this course requires strenuous running, lifting, reaching, falling and range of motion activities, students should be free of any medical or physical conditions which could be aggravated by participating in the course. Students must participate fully in order to successfully complete the course. Limitation on Enrollment: 1. Passing score on the POST Entry Level Reading and Writing Test; 2. High school diploma or G.E.D.; 3. No felony convictions; 4. Valid California Driver's License; 5. Recent medical clearance by a licensed physician; 6. Recent fingerprint clearance from the California Department of Justice; 7. Possession of all required equipment, uniforms, supplies and materials; 8. Payment of all enrollment, material and subsidiary fees 9. Satisfactory completion of AJ 200, Modules 1, 2, 3, or equivalent college level courses; 10. Current certification in First Aid and CPR training requirements for public safety personnel as prescribed by the State of California Emergency Medical Services Authority and set forth in the California Code of Regulation, Title 22, Division 9, Chapter 1.5, Sections 100005-100028; 11. Current certification (within the last 3 years) in PC 832 Training Requirements. Prerequisites: AJ 200M1 and AJ 200M2 and AJ 200M3 or equivalent college courses with "C" or better.

AJ 203 Traffic Collision Investigatn 2 UNITS
Hours: $\quad 36$ Lecture/Discussion
4 Lab
This 40-hour course is intended to upgrade officer's skills in conducting preliminary investigations of traffic collisions. Topics include: Review of the California Collision Investigation Manual, court decisions pertaining to liability, collision scene management, collision scene evidence and correct completion of the report. Advisory on Recommended Preparation: AJ 200 or AJ 200M1, AJ 200M2, AJ 200M3, and AJ 200M4 or equivalent course with "C" or better, or recommendation of department.

Hours: 80 Lecture/Discussion
5 UNITS

Materials Fee: \$10.00
This course satisfies a state mandate for the training of law enforcement first-line supervisors. Topics include: values, ethics, professional performance appraisal and corrective counseling.
Prerequisites: (AJ 200M1 and AJ 200M2 and AJ 200M3 and AJ 200M4) or (AJ 200) or equivalent college courses with "C" or better.

AJ 208
PC 832 (Non Firearms)
2 UNITS
Hours: 32 Lecture/Discussion
8 Lab
Materials Fee: $\quad \$ 2.00$
Designed to satisfy the curriculum standards of the Commission on Peace Officers Standards and Training (POST) as required by Penal Code Section 832. It is required for probation officers, correctional officers, and other diverse peace officer classifications that are not required to carry sidearms.

AJ 209 PC 832/Agency Firearms 1.5 UNITS
Hours: 16 Lecture/Discussion
8 Lab
Materials Fee: $\$ 5.00$
Designed to satisfy the curriculum requirements of the California Commission on Peace Officers Standards as required by Penal Code Section 832. This course is required for probation officers, correctional officers and other diverse peace officer classifications whose jobs require the carrying of a sidearm.
Prerequisites: AJ 208 or equivalent college course with "C" or better.

## ADMINISTRATION OF J USTICE

AJ 210
Hours:

Level 3-Reserve Officer Trng
6 Lecture/Discussion
2 Lab
Materials Fee: $\$ 20.00$
Designed to satisfy the curriculum standards of the Commission on Peace Officers Standards and Training as required by Penal Code Section 832 in regards to Level III Reserve Peace Officers.

AJ 211
Level 2-Reserve Officer Trng
5 UNITS
Hours:
8 Lecture/Discussion
16 Activity
Materials Fee: $\$ 20.00$
Designed to satisfy the curriculum standards of the Commission on Peace Officers Standards and Training as required by Penal Code Section 832 in regards to Level 2 Reserve Peace Officers.
Prerequisites: AJ 210 or equivalent college course with "C" or better.
AJ 212
Level 1-Reserve Officer Trng
3 UNITS
Hours: 8 Lecture/Discussion
Materials Fee: $\$ 20.00$
Designed to satisfy the curriculum standards of the Commission on Peace Officers Standards and Training as required by Penal Code section 832 in regards to Level 1 Reserve Peace Officers. Material Fee: $\$ 20.00$.
Prerequisites: AJ 211 or equivalent college course with "C" or better.

AJ 213AB
Interview \& Interrogation
1 UNIT
Hours:
20 Lecture/Discussion
4 Lab
Materials Fee: $\$ 7.00$
This course presents practical approaches and techniques for conducting interviews and interrogations for people interested in a career in the public safety professions. The course will end with practical application and scenario testing. This course may be repeated once.
Advisory on Recommended Preparation: AJ 200 or AJ 200M1, AJ 200M2, AJ 200M3, and AJ 200M4 or equivalent college course with a "C" or better.

AJ 214AC
Arrest \& Control Techniques
1 UNIT
Hours:
16 Lecture/Discussion
16 Activity
Materials Fee: $\$ 7.00$
This course presents an optimal set of techniques to physically subdue unarmed, but violently resisting persons. The instruction methods are a blend of martial arts and wrestling techniques. All are designed and taught to involve the minimal use of force needed to accomplish control. This course may be repeated two times to review and enhance techniques.
Advisory on Recommended Preparation: Because this course requires strenuous lifting, reaching, falling, and range of motion activities, students should be free of any medical or physical conditions which could be aggravated by participating in the course. All students must participate fully in order to successfully complete the course.
Prerequisites: (AJ 200M1 and AJ 200M2 and AJ 200M3 and AJ 200M4) or (AJ 200) or equivalent college courses with " $C$ " or better.

AJ 215
Hours: 16 Lecture/Discussion
1 UNIT
8 Lab
Materials Fee: $\$ 14.00$
This course addresses the signs, symptoms, packaging and concealment of opiates and other illicit drugs. It also discusses the physical and psychological affects of narcotics. The course will conclude with discussions of clandestine laboratories and courtroom testimony.
Advisory on Recommended Preparation: AJ 200 or AJ 200M1, AJ 200M2, AJ 200M3, or AJ 200M4, or equivalent college course with a grade of "C" or better.

## ADMINISTRATION OFJ USTICE

| AJ 216AB | Search Warrant Preparation | .5 UNITS |
| :--- | :--- | :--- |
| Hours: | 4 Lecture/Discussion |  |
|  | 20 Activity |  |

This course will impart basic skills for preparing search warrants and affidavits, working with magistrates, serving non-high risk warrants, and preparing warrant returns. Students will apply lecture material by preparing, simulated search warrant packages. The student will need access to a word processing computer or a typewriter in order to complete course required assignments. This course may be repeated once.
Advisory on Recommended Preparation: Successful completion of AJ 200 or AJ 200M1, AJ 200M2, AJ 200M3, and AJ 200M4 or equivalent college level course.

AJ 217 Radar Operator
. 5 UNITS
Hours: 4 Lecture/Discussion

## 20 Activity

This course will certify law enforcement officers to operate police traffic radar devices. Topics include history, theory and laws relating to traffic radar operation. Emphasis will be upon the practical use of radar, set-up, equipment calibration, and courtroom testimony. Students will need calculators capable of cosine and tangent functions.
Advisory on Recommended Preparation: Successful completion of AJ 200 or AJ 200M1, AJ 200M2, AJ 200M3, and AJ 200M4, or equivalent college course.

| AJ 218AD | Perishable Skills Update | . 5 UNITS |
| :--- | :--- | :--- |
| Hours: | 4 Lecture/Discussion |  |
|  | 20 Lab |  |
| Materials Fee: $\$ 6.00$ |  |  |

Materials Fee: $\$ 6.00$
This course provides an opportunity to acquire or refine technical and decisionmaking skills in the areas of emergency vehicle operation, use of force, weapons proficiency, arrest and control techniques, interpersonal communications and tactical communications. The course will involve hands-on application and practice. This course may be repeated three times.
Advisory on Recommended Preparation: Successful completion of AJ 200 or AJ 200M1, AJ 200M2, AJ 200M3, and AJ 200M4 or equivalent college level courses with a grade of "C" or better.
AJ 251AD Independent Study-AJ $1-4$ UNITS

Hours: $\quad 3.09$ TO 12. Lab
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

| AJ 299 | Topics - Admin of Justice | $.5-4$ UNITS |
| :--- | :--- | :--- |
| Hours: | 8 TO 70 Lecture/Discussion |  |
|  | 24 Activity |  |

This course trains officers to become child passenger safety technicians. Topics include the need for passenger safety programs, federal safety standards, crash dynamics, and occupant protection systems.
AJ 301
Practical Law
2 UNITS
Hours: 2 Lecture/Discussion
Equivalent Course: PARA 301.

This basic skills class enhances study skills and basic competencies in math, reading, oral communication and written communication in a legal content course. This class is meant to supplement the skills learned in other precollegiate courses. It is recommended for students interested in pursuing a law related career, but not yet ready for degree applicable courses.

## ADMINISTRATION OFJ USTICE

## AGRICULTURALMANAGEMENT

AJ 313AB
Basic Academy Preparation
3 UNITS
Hours:

## 64 Lecture/Discussion

20 Lab
This course stresses the integration of reading, writing, and study skills with concepts of cultural awareness and law enforcement professional values and ethics. This course is designed for students with intermediate level reading and writing skills as demonstrated by completion of ESL 310 and ESL 320, an equivalent course, or through instructor evaluation of a writing sample. The intent of this course is to assist students with developing the requisite skills for entering and completing the Basic Police Training Academy. This course may be repeated one time.
Advisory on Recommended Preparation: ESL 310, or equivalent college course with "C" or better, or eligibility for ESL 320, determined by COS placement procedures.
AJ 320AD
Basic Firearms
1 UNIT
Hours:
12 Lecture/Discussion
4 Lab

Specialized training for private and industrial security as well as for persons seeking skills with personal firearms. This course may be repeated three times.

AJ 321
Side Handle Baton
. 5 UNITS
Hours: 8 Lecture/Discussion
4 Lab
Specialized training for security guards, peace officers and other interested persons. This course is designed to meet specific requirements of the California Bureau of Consumer Affairs and the Commission on Peace Officer Standards and Training (P.O.S.T.).

| AJ 360 | Applied Math/Legal Careers | 3 UNITS |
| :--- | :---: | ---: |
| Hours: | 3 Lecture/Discussion |  |
| Equivalent Course: PARA 360. |  |  |

Equivalent Course: PARA 360.
This is a non-degree applicable math course designed to improve student's math skills in a legal career contextual setting. Students will improve their practical problem solving skills covering topics covered by the COS Math Competency Test.

## AGRICULTURAL MANAGEMENT

AGMT 001 Agriculture Economics 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
Economic principles of resource allocation, production cost analysis, and market price equilibrium with primary application to the agricultural sector; supply and demand in commodity pricing under perfect and imperfect competition; survey of agricultural credit, marketing and policy issues.

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AGMT 102 Ag Sales and Marketing 3 UNITS
Hours: 3 Lecture/Discussion
    1 Lab
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This course covers the selling technique as it relates to the agriculture industry. Agriculture selling strategies and approaches are emphasized. Market research, prioritizing potential customers, and defining the dominant buying urge are covered. Techniques used in pre-call planning, group and individual sales presentations are used to give students a basic understanding of the selling process. Improving selfimage and oral communications skills are stressed for each student.

AGMT 103 Intro to Ag Management
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
Materials Fee: $\quad \$ 5.00$
AGMT 103 is part of the Agriculture Business Management Curriculum at COS. The course is designed to give students a basic understanding of the management process as it relates to agriculture. Management techniques, types of organizational structures, and discussion of managing styles makes this course vital for students who are working in the agriculture industry today or plan to transfer to four year institutions for advanced management course work.

AGMT 104 Hours:

Agriculture Accounting
3 Lecture/Discussion
1 Lab

## Materials Fee: $\$ 5.00$

Principles of agricultural accounting systems and types of records, their use and how to compute and use measures of earnings and cost of production to improve agribusiness efficiency. Also included are farm income tax, Social Security, and employee payroll records.

AGMT 106 Dairy Industries Tour 1 UNIT
Hours: 26 Lab
The course is designed for agriculture business management and dairy science students as part of the Agriculture Business Management and Dairy Science Certificate programs at COS. The course will offer students an opportunity to visit various organizations within the agriculture industries in a field study atmosphere.

AGMT 108AB Intro to Ag Computer Applica
3 UNITS
Hours: 3 Lecture/Discussion
1 Lab
Materials Fee: $\$ 10.00$
This course is vital to all agriculture majors a COS. Every phase of the agriculture industry uses computer wordprocessing and spreadsheet software. Microsoft Word and Excel are two such popular software applications. This course is designed to give students a working knowledge and skills of using these two software programs with agriculture applications. This course may be repeated one time.
Advisory on Recommended Preparation: The ability to type 20 wpm .
AGMT 271 Orientation to Ag Bus Indust 3 UNITS
Hours: 3 Lecture/Discussion
This course is designed to be an introductory course in the exploration of career choices in the agriculture industry. The basics of careers in agricultural sales, management crops, animal science, accounting and leadership will be covered. Advisory on Recommended Preparation: Recommended 20 words per minute typing skills.

## AGRICULTURALTECHNOLOGY

AGTC 101
Basic Farm Mechanics
3 UNITS
Hours: $\quad 3$ Lecture/Discussion 1 Lab
Basic Farm Mechanics is an introductory course in the Ag Engineering discipline. It is designed to give students a basic understanding of the theory and practical operation of agriculture shops. CAN AG 4.

AGTC 103 Farm Power
Hours: $\quad 3$ Lecture/Discussion
1 Lab
Farm Power, deals with the theory, operation, adjustment and maintenance of the farm tractor and its mechanical systems. The systems include power train, steering and hydraulic mechanism. Cooling, electrical, fuel, clutch, equipment application and safety will be included. CAN AG 16.

AGTC 105AD Farm Structures 3 UNITS
Hours: 3 Lecture/Discussion 1 Lab
The course will stress farmstead layout, cost of construction, foundation, types and sizes, column sizes and strength, live and static loads, and determining beam sizes and strengths. Students are given projects and activities that require not only his higher level of skill, but also new and more complex situations that require higher levels of analysis, abstraction, and creativity. This course may be repeated three times.

## AGRICULTURALTECHNOLOGY

3 UNITS
AGTC 106AD Agriculture Welding
Hours: $\quad 3$ Lecture/Discussion
1 Lab
A study of the fundamental principles and practices of welding used in Agriculture construction, fabrication and repair. All positions, joint types, hard surfacing, cutting, brazing, SMAW, GMAW, and OFW will be studied. This course may be repeated three times.

| AGTC 108 | Irrigation | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 1 Lab |  |

A course designed to give students an understanding of basic soil and water relationships. The Blaney-Griddle formula is the foundation for irrigation design of when to irrigate and how much water to apply. Pumps, measurement, transport of water and salt problems will be an important part of the study.

AGTC 112 Introduction to Precision Ag 1 UNIT
Hours: 16 Lecture/Discussion
Precision Agriculture is an emerging high technology agricultural management system. This course will provide an overview of new satellite and computer based technologies that are used as tools to increase farm yields and reduce costs.

AGTC 113 Precision Agriculture
1 UNIT
Hours: 16 Lecture/Discussion
Precision agriculture will cover the emerging technology of geographic information systems (GIS) as it relates to variable rate application technology and other computer applications for modern agriculture.

AGTC 200AD Pro Tech Service Protocol
1 UNIT
Hours: 14 Lecture/Discussion 8 Lab
This course is for students in the John Deere Pro Tech training program. Class will cover services, diagnostic procedures, and operations of John Deere equipment. This course can be repeated three times.

AGTC 202AD Farm Equipment Construction 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
Farm equipment construction is an introductory course designed to give students a basic understanding of the mechanics and technology of building and repair of agriculture implements. This is a project-based course with emphasis placed on design and construction of student generated projects. This course is repeatable three times.

AGTC 209AD Small Engines \& Equipment
2 UNITS
Hours: 2 Lecture/Discussion
2 Lab
A study in the basic principles of modern small engines, lawn and garden equipment. Operation, service, repair and safety will be covered in lecture and lab assignments. This course may be repeated three times.

AGTC 210AD Ag Project Construction
3 UNITS
Hours: 3 Lecture/Discussion
1 Lab
Materials Fee: $\$ 15.00$
This is an introductory course designed to give students a basic understanding of the mechanics and technology of fabrication. This class will study the characteristics, types, and costs of construction materials for their use in Agriculture and industrial equipment fabrication. This course may be repeated three times.

## AGTC 212AD Welding Power Sources/Applic 1 UNIT

Hours: 17.5 Lecture/Discussion
This is a short term course designed to explore the many different makes and models of new welding power sources. Operation, capabilities, uses and power requirements will be covered. Students will see demonstrations as well as be able to try new welding machines. This course may be repeated three times.

## AGRICULTURALTECHNOLOGY

AGTC 213AC Hydraulics Prin and Applica
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
This is an introduction to the principles and the various designs and systems in hydraulics. Application of hydraulics to both farm and light industrial equipment is emphasized. Design, application, operation, adjustment, and maintenance of hydraulic units are studied. This course can be repeated two times.

## AGTC 214 Outdoor Power Equipment 3 UNITS Hours: 3 Lecture/Discussion

This is a course in the theory of operation, diagnosis and repair, predelivery procedures, including assembly and adjustment of attachments and add on accessories of small power equipment utilized in lawn, turf, garden, and the rental equipment industry.

| AGTC 215AD | Outdoor Power Equipment Applic |
| :--- | :--- |
| Hours: | 2 Lecture/Discussion |
|  | 1 Lab |

This course provides students technical knowledge and hands on experience in the operation and repair of small gas and diesel engines. This course may be repeated three times.

| AGTC 216AC | Applied Hydraulics |
| :--- | :--- |
| Hours: | 2 Lecture/Discussion |
|  | 1 Lab |

Theory, principles, application, diagnostics, repairs and testing of hydraulic circuits and components of modern equipment. This course is repeatable two times.

| AGTC 217 | Power Techn Skills/Practices | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 1 Lab |  |

An introduction to the skills of the Diesel Mechanic and Agriculture Power Mechanic. Ignition, fuel systems, and operation of both gas and diesel engines will be covered. Emphasis is on diagnostic and repair skills.

| AGTC 218 | Power Trains |
| :--- | :--- |
| Hours: | 2 Lecture/Discussion |
|  | 1 Lab |

2 UNITS

A study of the power train from clutch to final drive. It includes a study of clutch type, torque converters, transmissions, and final drives. Troubleshooting and servicing of these components will be stressed in this course.

AGTC 271 Ag Mech Skills \& Practices 3 UNITS
Hours: 3 Lecture/Discussion
1 Lab
This course is an introductory course in Ag Mechanics. Its curriculum is basic and is intended for the student that has no, or very little, Ag Mechanic experience. Basic skills will be taught in safety, hand and power tool use, welding, plumbing and measurement.

## AGRICULTURE

## AG 001 <br> Ag, Society \& Environment <br> 3 UNITS

## Hours: 3 Lecture/Discussion

An overview of the science, history, and practice of modern agriculture. This course is designed for students with no previous agriculture background who would like to develop a better understanding of the industry. Special emphasis will be given to the relationship between agriculture, society and environment in California. Field trips are part of this course. Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 as determined by COS placement procedures.

AG 003 Economic Entomology
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
A general study of western insects, their life cycles, classification, and identification, methods of control, and economic importance in California.

## AGRICULTURE

AG 004
Soils
3 UNITS
Hours:
2 Lecture/Discussion
2 Lab
This course provides a basic knowledge of the physical, chemical, and biological properties of soils and their characteristics. The course includes factors of: fundamental soil properties, soil and plant relationships, principles of soil formation, fertilizers and soil management, salinity, pH , erosion management, and nonagricultural uses. CAN AG 14.

AG 103AC
Hours:
Applied Ag Practicums
2 Lecture/Discussion
2 Lab
This course is designed to prepare students as crop and plant managers, landscape foremen and nursery managers. Students design and manage their own practicum under supervision of the instructor. This course repeatable two times.

AG 105
Fertilizers
3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
A broad study of fertilizers and soil amendments is done regarding their chemical and physical properties, methods of application, value in plant nutrition, interaction with soils and plants and visual recognition of typical plant nutrient deficiencies. Advisory on Recommended Preparation: AG 4 or equivalent college course with "C" or better.

AG 106
Hours:

## Career Opportun for Women/Ag <br> 2 Lecture/Discussion <br> 2 Lab

2 UNITS

Women in Agriculture is a lecture course designed to introduce women to the vast amount of job opportunities and careers in the agricultural industry. The students will experience first hand a variety of fields within agriculture including ornamental horticulture, equine, dairy science and agricultural businesses in general. This course is an introduction to the agricultural curriculum offered at College of the Sequoias intended for women who want to experience the many different fields of agriculture, and pursue a career which utilizes their skills and interests.
AG 107
Ag Education Orientation
3 UNITS
Hours:
3 Lecture/Discussion
1 Lab

The purpose of this course is to provide students with an overview of Vocational Agriculture Education in California. Through class instruction and field experience, students will learn the principle components of Agriculture Education; develop academic and career plans, and observe in a secondary agriculture classroom.

AG 108AB Ag Enterprise Lab-Wheat
2 UNITS
Hours: $\quad 6$ Lab
This is an application course for the Agriculture Enterprise Certificate. Students shall perform all culture practices for the identified commodity. Laboratory meeting days and hours will vary in accordance with the cultural needs of the identified commodity. Students must successfully complete the Agriculture Enterprise Project Wheat Certificate. Only then will they have the opportunity to share in any net profits from the sale of crops or commodities produced through the enterprise project program. Prerequisites: AG 117 or equivalent college course with "C" or better (AG 117 may be taken concurrently).

| AG 109AC | Ag Enterprise Lab - Cotton |
| :--- | :--- |
| Hours: | 6 Lab |

Hours: $\quad 6$ Lab
This is an application course for the Agriculture Enterprise Certificate. Students shall perform all culture practices for the identified commodity. Laboratory meeting days and hours will vary in accordance with the cultural needs of the identified commodity. Students must successfully complete the Agriculture Enterprise Project Cotton Certificate. Only then will they have the opportunity to share in any net profits from the sale of crops or commodities produced through the Enterprise Project Program. Prerequisites: AG 117 or equivalent college course with " C " or better (AG 117 may be taken concurrently).

## AGRICULTURE

AG 110AB
Hours:
Ag Enterprise Lab - Alfalfa
6 Lab
This is an application course for the Ag Enterprise Certificate. Students shall perform all culture practices for the identified commodity. Laboratory meeting days and hours will vary in accordance with the cultural needs of the identified commodity. Students must successfully complete the Agriculture Enterprise Project Alfalfa Certificate. Only then will they have the opportunity to share in any net profits from the sale of crops or commodities produced through the Enterprise Project Program.
Prerequisites: AG 117 or equivalent college course with " C " or better (AG 117 may be taken concurrently).

| AG 111AB | Ag Enterprise Lab - Corn | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 6 Lab |  |

This is an application course for the Agriculture Enterprise Certificate. Students shall perform all culture practices for the identified commodity. Laboratory meeting days and hours will vary in accordance with the cultural needs of the identified commodity. Students must successfully complete the Agriculture Enterprise Project Corn Certificate. Only then, will they have the opportunity to share in any net profits from the sale of crops or commodities produced through the Enterprise Project Program. Prerequisites: AG 117 or equivalent college course with " $C$ " or better (AG 117 may be taken concurrently).

AG 117 Ag Enterprise
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
Students will develop a plan for field operations, a working budget and finance plan, a commodity marketing plan, a crop protection plan, and an irrigation management plan. Students will also be engaged in management decisions directly related to the Enterprise Agribusiness. Students must complete the Agriculture Production Enterprise Certificate to have the opportunity to share in any net profit from the sale of crops or commodities produced through the Enterprise Project Programs.

## AG 125 Principles of Pesticide Use <br> 3 UNITS <br> Hours: 3 Lecture/Discussion

Principles of pesticide use is part of the agriculture pest management curriculum at COS. The course is designed to assist persons seeking agriculture pest control licensing and provide continuing education for currently licensed persons. Knowledge gained of pesticide laws and regulations, makes this course extremely important for persons preparing for a career in the production of food and fiber.

AG 151AD Ag Independent Study 1-4 UNITS Hours: $\quad 3.09$ TO 12. Lab
The purpose of independent study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, student must file an Independent Study form through the Admissions Office to obtain approval to enroll.
AG 200AD
Ag Leadership
1 UNIT

Hours: 1 Lecture/Discussion
The objective of the course is to build leadership skills in students. Through the COS Agriculture Ambassador program, students will learn team building, speaking ability, self-confidence and communication skills. This course may be repeated three times.

AG 201 Agricultural Mathematics
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
Practical problem solving utilizing basic algebraic techniques in soils, crops, dairy, horticulture, livestock, poultry, and fees; discounts and interests, percentages, linear measurements, area, volume, metric measures, rations and proportions and their application in today's agriculture. This course prepares students to attain the College of the Sequoias competency certification for mathematics. A successful score (at least $70 \%$ ) in the final examination for this course will meet the College of the Sequoias requirement for mathematics (computation) competency.

## AGRICULTURE

AG 204
Ag Newsletter Production
1 UNIT

Hours: 1 Lecture/Discussion
Students will write articles for the Ag Tribune. They will also edit, proof read and design the COS Agriculture Division newsletter, both in print and online. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better; or JOUR 1 or equivalent college course with "C" or better.
AG 205
Careers in the Ag Industry
1 UNIT
Hours: 1 Lecture/Discussion

The objective of the course is to get agriculture students to research career opportunities in the agriculture industry. The course will also prepare them to seek job opportunities, prepare resumes, portfolios and conduct job interviews.

AG 206
Pesticide Regulations
1 UNIT
Hours:
16 Lecture/Discussion
This course is an outline of California's pesticide laws and regulations. Critical areas of compliance with the laws and regulations, restricted material use and handling will be covered. Preparation for State licensing test will be stressed.
AG 207
Pesticides for Landscapes
1 UNIT
Hours:
16 Lecture/Discussion

This course is specifically directed to the landscaper or gardener. Students will be instructed in IPM, pests, weeds, vertebrates, diseases and other issues facing the professional in work situations. This class will prepare the student to take the State license examination in the category of landscape maintenance for the QAC or QAL.

AG 208
Plant Ag \& Pesticides
1 UNIT
Hours:
16 Lecture/Discussion
This course is specifically directed to the grower, advisor, or the handler using pesticides. Students will be instructed in IPM, pests, weeds, vertebrates, diseases, and other issues facing the agricultural community. This class will prepare the student to take the state license examination in the category of plant agriculture for the QAC or QAL.

AG 209 Resid \& Indust Pest Control 1 UNIT
Hours: $\quad 16$ Lecture/Discussion
This course is specifically directed to the warehouser, fumigator, or persons in industry using pesticides. Students will be instructed in IPM, pests, weeds, vertebrates, diseases and other issues facing the stored product pests. This class will prepare the student to take the state license examination in the category of residential, industrial and institutional for the QAC or QAL.

AG 210 Forest and Right-Of-Way 1 UNIT
Hours: 16 Lecture/Discussion
This course is specifically directed to those persons using pesticides in forestry and right-of-way situations. Students will be instructed in IPM, pests, weeds, vertebrates, diseases, and other issues facing these areas. This class will prepare the student to take the State license examination in the category of Forestry and Right-of-Way for the QAC or QAL.

AG 230
Understand Parliamentary Pro
1 UNIT
Hours:

## 12 Lecture/Discussion <br> 8 Lab

A short course designed to familiarize student with parliamentary law. The course will cover rules of parliamentary procedure, use motions and proper methods in conducting a meeting.

AG 251AD Independent Study-Ag 1-4 UNITS
Hours: $\quad 3.09$ TO 12. Lab
The purpose of independent study is to provide an opportunity for students, under the directions of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

## AGRICULTURE

AG 280
Wool \& Fiber Application
1 UNIT
Hours: 18 Lecture/Discussion
This is a basic course in the study and application of material fiber, including wool, mohair and cotton. The selection, grading and processing of fiber will be covered. Processing on the home front including washing, carding, and basic spinning will be covered.
AG 301AD
Vector Control 1
1 UNIT
Hours: 16 Lecture/Discussion
4 Activity

A course of regional training for public agency Vector Control personnel to meet biannual State certification requirements. This course can be repeated three times. Limitation on Enrollment: Prospective or certified local public health Vector Control personnel, or by permission of division faculty.

## AG 363 Spanish for Farmers <br> 2 UNITS <br> Hours: 2 Lecture/Discussion <br> 1 Lab

A course for farmers/growers or anyone working in agriculture with Spanish speaking workers.

## AMERICAN SIGN LANGUAGE

ASL $001 \quad$ Beg Amer Sign Lang $1 \quad 4$ UNITS Hours: 4 Lecture/Discussion
This course is a study of fundamentals of American Sign Language. Students will learn the basics of visual/ gestural communication and grammatical structures with emphasis on receptive and expressive skills, including intensive practice, finger spelling and individual evaluation and basic information on Deaf culture.
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better.
ASL 002
Beg Amer Sign Lang 2
3 UNITS

## Hours: 3 Lecture/Discussion

A continuation of ASL 1. The skills introduced in ASL 1 will be expanded. Students will be able to express considerably more complicated needs and will become more adept at functioning in the Deaf community.
Prerequisites: ASL 001 or equivalent college course with "C" or better.
ASL 003
Inter Amer Sign Lang
3 UNITS
Hours: $\quad 3$ Lecture/Discussion

Continuation of ASL 2. The skills introduced in ASL 1 and 2 will be expanded to the point where students can function comfortably in a wide variety of situations in the Deaf community.
Prerequisites: ASL 002 or equivalent college course with "C" or better.
ASL 004 Advanced Amer Sign Lang 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
A continuation of ASL 1, 2, AND 3. Emphasis on fluency in functional conversational skills in cultural context. Morphology and grammar of American Sign Language will be explored in depth.
Prerequisites: ASL 003 or equivalent college course with "C" or better.
ASL 110AD Sign Language Interpreting 4 UNITS
Hours: 4 Lecture/Discussion
Introduction to the profession of sign language interpretation, emphasizing a professional code of ethics applied to real situations. Training will develop skills from consecutive to simultaneous interpreting. Advanced techniques will include legal, medical, educational, mental health, religious, and deaf/blind interpreting. Course may be repeated three times.
Prerequisites: ASL 004 or equivalent college course with "C" or better.

## AMERICAN SIGN LANGUAGE

ASL 151AD Independent Study-ASL 1-4 UNITS
Hours: $\quad 3.09$ TO 12. Lab
The purpose of Independent Study is to provide an opportunity to students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, student must file an Independent Study form through the Admissions and Records Office to obtain approval to enroll.

## ASL 190AD Supervised Practice <br> 1-3 UNITS

Hours: 3 TO 9 Lab
Under the supervision of an instructor, selected students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling and other employment or volunteer situations where the students is expected to take a leadership role. This course may be repeated three times.
Limitation on Enrollment: Permission of the department.

## ANIMALSCIENCE

| ASCI 001 | Intro to Animal Science | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

A survey course of the world's hunger problems and supply of animal products. The origin, characteristics, and adaptation of the more important breeds of livestock are discussed, along with job opportunities in animal agriculture. It is a required course that can be applied toward the Animal Science Certificate. CAN AG 6.

ASCI 002AB Livestock Selection/Evaluatn
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
A study of the animal form in relation to its various functions. Beef, sheep, and swine species are evaluated using performance data and live observation. This course is repeatable one time.

ASCI 022
Horse Husbandry
3 UNITS
Hours: 3 Lecture/Discussion
1 Lab
An introductory course to the current status of the horse industry, evaluation of the horse, breeds of horses, and their uses. Anatomy, diseases, unsoundness, vices, gaits, selection, and management of the equine. CAN AG 26.

ASCI 093AD PE for the Equestrian
1 UNIT
Hours: .5 Lecture/Discussion 1.5 Activity

Equivalent Course: ASCI 121AD.
A one unit activity course designed to improve the individuals' overall fitness through an understanding and application of the basic principles and techniques of equitation. This course is repeatable three times.

ASCI 101AD Livestock Management Skills
1 UNIT
Hours: 1 Lecture/Discussion
2 Lab
1 Activity
This course is designed to give students a chance to gain practical skills in livestock production. Students will be able to care for and feed beef cattle, swine, and sheep species with instructor approval. Other skills learned will be feeding your stock, exhibiting and general livestock work. This class may be repeated three times.

## ANIMALSCIENCE

ASCI 103
Hours:
utrition
3 UNITS
3 Lecture/Discussion
1 Lab
A study of the constituents of feeds, the digestion and utilization of feedstuffs, and identification of feeds for each class of livestock. An introduction to feeding standards and computation of simple rations, and the economics in feeding and purchasing feeds by nutritive values.
Advisory on Recommended Preparation: ASCI 1; And AG 201 or MATH 230, or equivalent college courses with "C" or better. CAN AG 12.

| ASCI 104 | Animal Diseases \& Sanitation | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 1 Lab |  |

Animal Science 104 is a study of the common diseases and parasites of livestock. Cause, symptoms, prevention, and treatment of common diseases and parasites found in livestock, are taught in this course.

| ASCI 105AD | Prepar Livestk Sales/Sho | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |

A general study of handling beef, sheep, and swine species, selecting high quality livestock, and grooming them to their best advantage for shows and sales. This course may be repeated three times.
ASCI 107
Intro to Meat Science
3 UNITS
Hours: 3 Lecture/Discussion
1 Lab

A study of the meat processing industry, USDA Grading Service, and marketing and nutritional aspects of meat products. Basic skills include the processing, handling, inspection, and storing of livestock and poultry species.

ASCI 108AB Meat Grading and Selection
2 UNITS
Hours: 4 Lecture/Discussion
56 Activity
An advanced course designed to train students in determining USDA Quality and Yield Grades of beef, lamb, and pork carcasses, along with the selection of wholesale cuts. Students may compete in Intercollegiate Judging events locally and out-ofstate. This course may be repeated once.

| ASCI 110 | Swine Production \& Managem't | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 1 Lab |  |

A study of swine production and herd management in California. Basic skills include pre- and post-natal care, nutrition, and breed selection. CAN AG 24.

| ASCI 111 | Beef Production \& Management |
| :--- | :--- |
| Hours: | 3 Lecture/Discussion |
|  | 1 Lab |
| A study of beef production and herd management in California. Basic skills focus |  |
| primarily on purebred and commercial cow-calf operations. CAN AG 20. |  |

ASCI 112 Sheep Production \& Managem't 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
A study of sheep production in California with a special emphasis on basic management practices. CAN AG 22.
ASCI 113
Farm Animal Biology
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab

This course is an introduction to the scientific concepts of farm animal biology. The objective of the course is to familiarize students with basic biology concepts of farm animals. Laboratory exercise will include hands-on training of the anatomy and physiology of farm animals for those students seeking employment or advanced degrees in the animal sciences.

## ANIMALSCIENCE

ASCI 114 Hours:

Advanced Swine Management
3 UNITS
3 Lecture/Discussion
1 Lab
An in-depth analysis of pork production and marketing systems. This course will emphasize the business and management skills, as well as the technology needed to operate a modern successful swine ranch.
Prerequisites: ASCI 110 or equivalent college course with "C" or better.

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ASCI 120AD
Basic Equitation
2 UNITS
Hours: 2 Lecture/Discussion
2 Lab
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The students will learn the proper way to catch, groom, saddle, bridle, and mount the horse. A great deal of time is spent on the proper use of their natural-aids. Riding both bareback and under saddle, this class is designed to teach not only the students with little or no experience, but also the advanced riders wanting to develop their riding skills further. This class may be repeated three times.

| ASCI 123 | Horse Production | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 1 Lab |  |
| Materials Fee: | $\$ 45.00$ |  |

Materials Fee: $\$ 45.00$
This course is designed to give students a broad basis of information for decision making in the management and operation of a horse herd. Herd health, costs of production, reproductive efficiency, marketing, and the use of computers to facilitate all of these duties make this course very important for students preparing for a career in Animal Science.

## ASCI 124AD Colt Breaking <br> Hours: 2 Lecture/Discussion <br> 2 Lab

2 UNITS

Materials Fee: $\$ 50.00$
This course is designed to give students hands-on experience in breaking horses safely and under control. It will also provide the student a broad basis for decision making concerning the type of tack they should use, and condition of the tack with regards to safety. Considerable time will be spent on ground work, learning the proper method of driving and lunging so the colt has a solid foundation from which to start its riding career. All of the students will ride their colts at the end of the class.
$\begin{array}{lll}\text { ASCI } 225 & \text { Equine Industry } & 1 \text { UNIT } \\ \text { Hours: } & 40 \text { Activity } & \end{array}$
This required field trip will include visitations to several facilities that produce, raise, and sell horses on a commercial basis. Students will also visit the nation's largest independent breed association offices and magazine that handles the advertising and marketing for thousands of breeders.

ASCI 226
Equine Reproductive Mgmt
1 UNIT
Hours:

## 8 Lab

This equine science course will cover reproduction of the horse. Artificial insemination including semen handling and mare estrus cycle management will be used thoroughly.

ASCI 227 The Snaffle Bit Futurity
1 UNIT
Hours: 12 Lecture/Discussion
8 Lab
This equine science course will cover aspects of the Snaffle Bit Futurity including rules, regulations, scoring and how these are applied during the various Futurity competitions.

ASCI 228
Bits \& Bitting
1 UNIT
Hours: 12 Lecture/Discussion

## 8 Lab

This Equine Science course will cover the aspects of all major bits, how to use them and what makes them work.

## ANIMALSCIENCE

ASCI 229
Equine Racing Industry
1 UNIT
Hours: 12 Lecture/Discussion 8 Lab

This Equine Science class will be a study of the California Racing Industry, including track operations, management, rules of the horse race and the racing regulatory structure. This course includes a mandatory field trip.

ASCI 231AB Equine and the High Sierra 2 UNITS
Hours: 32 Lecture/Discussion
16 Lab
This course shall offer students the opportunity to learn the proper use of pack stock in the High Sierras. Students shall study and apply the policies of the "Leave No Trace Program." A several day pack trip shall be an integral part of this class. Extra costs to the student will be associated with this trip. This class may be repeated one time.

| ASCI 232AB | Equine Grooming | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 16 Lecture/Discussion |  |
|  | 8 Lab |  |

This course will provide instruction in fitting and grooming the equine athlete for show and presentation. Equipment and coat care products, grooming, and braiding will be covered. This course may be repeated one time.

## ASCI 233AB Equine Hoof Care <br> 1 UNIT <br> Hours: 16 Lecture/Discussion 8 Lab

This course will instruct students in proper hoof care. Anatomy of the hoof and leg and how they relate to soundness as well as trimming for proper maintenance and corrective trimming, will be covered. This course may be repeated one time.

## ASCI 260 Sheep Exhibiting Prep/Show 1 UNIT <br> Hours: 18 Lecture/Discussion

This short course is designed for the student, 4-H leaders and FFA advisors, who exhibit either market or breeding sheep. Livestock show ethics and rules, fitting equipment and techniques, and conditioning of sheep will be covered. Students may bring their own sheep or lab sheep will be available.

| ASCI 270 | Llama Management \& Uses | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 17.5 Lecture/Discussion |  |

This course is designed to create an understanding of the llama. While based deeply in the science of llama management, the course will offer practical knowledge in selection, feeding, health concerns, and uses of the llama, the only American camel.

| ASCI 271 | Advanced Llama Training | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 8 Lecture/Discussion |  |
|  | 9.5 Lab |  |

This course is an advanced training and packing course of the llama. Maintaining llama nutrition and health while on the trail will be covered. Training and packing lessons will be stressed and utilized.

| ASCI 272 | Livestock Industry Intro | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 1 Lab |  |

This class is an introductory course to the Livestock Industry. Topics will include exploration of breeds, products, markets and management skills. This course is for the novice stockperson.

## ANTHROPOLOGY

ANTH $004 \quad$ Pre-Col. Culture/Meso. 3 UNITS Hours: $\quad 3$ Lecture/Discussion

## Equivalent Course: ART 004.

A survey of the major cultures of Mesoamerica from the Early Hunters Stage until the European Conquest. This course uses art as a vehicle for understanding these peoples' philosophy, religion, politics, history, and economics. Included are the Olmec, Zapotecc, Tajin, Mixtec, Maya and Aztec.

## ANTHROPOLOGY

ANTH 005
Pre-Col. Cult./Cen.,S.Amer
3 Lecture/Discussion

Hours: $\quad 3$ Lecture/Disc
Equivalent Course: ART 005.
A survey of the major cultures of Central and South America from the Early Hunters Stage until the European Conquest. The course uses art as a vehicle for understanding these people's philosophy, religion, politics, history, and economics.

ANTH $010 \quad$ Cultural Anthropology 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course explores the diversity of human culture around the world and throughout history, as well as the impacts of globalization on us all. This is an introductory course on the principles of anthropology, ethnographic research and the elements of human culture. Topics discussed include: race v. ethnicity, family organization, marriage practices, gender and sexuality, subsistence patterns, language, and religion. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN ANTH 4.

ANTH $011 \quad 3$ UNITS
Hours: $\quad 3$ Lecture/Discussion
The course discusses the behavioral characteristics of the living primates, the emergence of man, and the evidence presented by human fossils. Human genetics and the probable reasons for human variation are considered, as is the physical adaptation of the human species to its environment.
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN ANTH 2.

## ARCHITECTURE

ARCH 010 Architectural Design 1
4 UNITS
Hours:
3 Lecture/Discussion
3 Lab
Materials Fee: $\$ 20.00$
An introductory course that emphasizes design process, concept development, and creative problem solving as the means to create architectural form and space. Design projects are presented utilizing "tactile", (by hand) two and three-dimensional visual communication and sale modeling techniques. Verbal presentations in the form of critiques are also required for the purpose of communicating designs and intended concepts.

ARCH 011 Architectural Design 2
4 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
Materials Fee: $\$ 20.00$
An advanced course that continues the issues introduced in the introductory course plus emphasizes program development, site and context analysis, precedent study, and structure as the means to create architectural form and space. Design projects are presented utilizing "tactile", (by hand) two and three- dimensional visual communication and scale modeling techniques. Verbal presentations in the form of critiques are also required for the purpose of communicating designs and intended concepts.
Advisory on Recommended Preparation: ARCH 10 or equivalent college course with "C" or better.

ARCH 020 Intro to Graphics \& Perspect
Hours: 2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 20.00$
This course introduces the basic graphic techniques used in design communication utilizing both traditional hand drawing techniques and computer image generation. The basic elements of form, theories of space and perception, composition, orthographic and isometric projection, mechanical perspective, critical evaluation, and shades and shadows are introduced. The course is recommended for students in any field of environmental design.

## ARCHITECTURE

ARCH 021
Hours:
Basic Graphics
3 UNITS

Materials Fee: $\quad \$ 20.00$
This course introduces graphic techniques used in the representation of threedimensional forms and environments. Freehand and constructed drawing techniques, and computer image generation, are used to explore space and form, composition, color theory and use, shades and shadows, texture and materials, and entourage. The course is recommended for students in any field of environmental or graphic design.

ARCH 070 Architecture History 1
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Materials Fee: $\$ 10.00$
This course covers the history of architecture from the Prehistoric to Gothic periods. The relationship between architecture and art, science, historical events, religion, society, culture, philosophy, politics, economics, and physical conditions are studied. Formerly ARCH 170.
$\begin{array}{lll}\text { ARCH } 071 & \text { Architecture History } 2 & 3 \text { UNITS } \\ \text { Hours: } & 3 \text { Lecture/Discussion }\end{array}$
Hours: $\quad 3$ Lecture/Discussion
Materials Fee: $\$ 10.00$
History of architecture from the Renaissance to the 21st Century periods. The relationship between architecture and art, science, historical events, religion, society, culture, philosophy, politics, economics, and physical conditions.
Advisory on Recommended Preparation: ARCH 70 or equivalent college courses with "C" or better. Formerly ARCH 171.

ARCH 112 Architect Digital Design 1
4 UNITS
Hours: $\quad 3$ Lecture/Discussion 3 Lab
Materials Fee: $\$ 20.00$
An introductory course of professional computer software and techniques utilized to facilitate the architectural design process and problem solving. Its goal is to enhance design ability utilizing the electronic media's interactive processes of conceptualization, visualization, expression through drawing, and graphic presentation. Techniques explored include digital analysis, conceptual studies, dimensional orthographic, and three dimensional modeling and rendering.
Advisory on Recommended Preparation: COMP 5 or COMP 130, and ARCH 10 and ARCH 11, or equivalent college course with "C" or better, or equivalent skills as determined by division assessment.

ARCH 113 Architect Digital Design 24 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
Materials Fee: \$20.00
An advanced course of professional computer software and techniques utilized to facilitate the architectural design process and problem solving. Its goal is to enhance design ability utilizing the electronic media's interactive processes of conceptualization, visualization, expression through drawing, and graphic presentation. Techniques explored include three dimensional modeling and rendering, desktop formats, digital hybrids, and multimedia.
Advisory on Recommended Preparation: COMP 5 or COMP 130, and ARCH 10, ARCH 11, and ARCH 112, or equivalent college courses with "C" or better, or equivalent skills as determined by division assessment.

ARCH 120 Freehand Drawing 3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 20.00$
This is the initial course in freehand drawing. It is an extensive application of the media and techniques for developing interpretative and conceptual drawings within an environmental design context. The architectural entourage is the subject matter for graphical problem solving and commutative skill development. This class is required for all students majoring in architecture and is recommended for students interested in any design profession.

## ARCHITECTURE

ARCH 151AD Independent Study-Arch
1-4 UNITS
Hours: $\quad 3.09$ TO 12. Lab
The purpose of this independent study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, student must file an Independent Study form through the Admissions Office to obtain approval to enroll.

ARCH 160 Materials of Construction
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Materials Fee: $\$ 20.00$
An introduction to the materials and systems of materials used in building construction. This course combines the theories of materials and structures with practical applications of these theories. Field trips will be made to the construction sites of various types of structures under construction.

ARCH 161AD Computer Asst Arch Detailing
3 UNITS
Hours: 2 Lecture/Discussion
3 Lab
Materials Fee: $\$ 20.00$
An up-to-date and comprehensive exploration of CAD and computer modeling and rendering for the architectural/engineering design professions and the construction industry. While developing a greater knowledge of building materials and construction practices students will learn correct and efficient production of construction documents, computer-added visualization and form generation as design tools, computer rendering techniques and the application of computer animation for realtime simulation and walk-through. This course may be repeated three times.

ARCH 162 Conceptual Structural Analysis
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Materials Fee: $\$ 20.00$
A nonmathematical investigation of structural systems and components with respect to their behavior; selection of the most appropriate structural system for various building typologies.
Advisory on Recommended Preparation: ARCH 10 and ARCH 160 or equivalent college course with " $C$ " or better.

ARCH 163 Construction Documents
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
Materials Fee: $\mathbf{\$ 2 0 . 0 0}$
This course provides a detailed introduction to the process of construction documentation. A full set of residential construction documents emphasizing light wood frame construction is created utilizing a computer assisted drafting (CAD) program. A residential light wood frame construction scale model is also created. Prior CAD experience is required. Formerly ARCH 131, Light Wood Frame Construction.
Advisory on Recommended Preparation: ARCH 160 or equivalent college courses with "C" or better.
Prerequisites: DRFT 114 or equivalent college course with "C" or better.
ARCH 190AD Supervised Practice 1-3 UNITS

## Hours: $\quad 3$ TO 9 Lab

Under the supervision of an instructor, selected students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling, and other employment volunteer situations where the student is expected to take a leadership role.
Limitation on Enrollment: Permission of Department. This course may be repeated three times.

## ARCHITECTURE

ARCH 221AC Perspective Alternatives
3 UNITS
Hours: 3 Lecture/Discussion 3 Lab
A study of the fundamental concepts, principles, and applications of accelerated architectural perspective and rendering techniques. By utilizing charts, entourage, underlayment sheets, and photographs students will generate finished architectural renderings. This course is an invaluable career asset for people interested in architecture, illustration, building trades, and interior design. This course may be repeated twice.

ARCH 251AD Independent Study-Arch 1-4 UNITS
Hours: 3 TO 12 Lab
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

## ART <br> ART 001 Art Appreciation 3 UNITS <br> Hours: 3 Lecture/Discussion

Art 1 introduces the student to a wide range of approaches to the visual arts, from a study of the personal, social, and physical functions of the arts to an understanding of the elements and principles of design and their utilization in visual analysis. The course also includes an abbreviated survey of the major periods and artists of art history.

## ART 002 Art History/Ancient-Gothic <br> 3 UNITS

Hours: $\quad 3$ Lecture/Discussion
ART 2 traces the development of art from the Paleolithic era through the Middle Ages. The interrelationships between art and religion, politics, historical events, and philosophy are major foci of study. CAN ART 2.

## ART 003 Art History/Gothic-Modern <br> Hours: 3 Lecture/Discussion

A survey of the history of art of the Western world and its sociocultural milieu from the Proto-Renaissance to the Present. Illustrated lectures. ART 2 is NOT a prerequisite to ART 3. CAN ART 4.
ART 004 Pre-Col. Art/Meso Amer.
3 UNITS

## Hours: 3 Lecture/Discussion

Equivalent Course: ANTH 004.
A survey of the major cultures of Mesoamerica from the Early Hunters stage until the European conquest. The course uses art as a vehicle for understanding these people's philosophy, religion, politics, history, and economics. Included are the Olmec, Zapotecc, Tajin, Mixtec, Maya and Aztec.

| ART 005 | Pre-Col. Cult./Cen.,S. Amer. | 3 UNITS |
| :--- | :---: | :---: |
| Hours: | 3 Lecture/Discussion |  |
| Equivalent Course: ANTH 005. |  |  |

## Equivalent Course: ANTH 005.

A survey of the major cultures of Central and South America from the Early Hunters Stage until the European conquest. The course uses art as a vehicle for understanding these people's philosophy, religion, politics, history, and economics.

| ART 006 | Color and Design | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 5 Activity |  |

## Materials Fee: \$10.00

Equivalent Course: CFS 006.
This is a basic course in art with a primary purpose of familiarizing the students with elements and principles of design. It includes fundamental concepts of line, value, color shape/form, space, texture, and color in two dimensions. CAN ART 14.

## ART

## ART

ART 007 Advanced Color and Design 3 UNITS
Hours: 1 Lecture/Discussion
5 Activity
Materials Fee: \$10.00
Equivalent Course: CFS 007.
ART 7 is an intermediate level course on visual dynamics. This course will study what makes a strong composition in a two-dimensional artwork and explores giving form to ideas on the two-dimensional plane. This course also covers color theory and will study the effects of different color harmonies. CAN ART 16.
Advisory on Recommended Preparation: ART/CFS 6 or equivalent college course with "C" or better.

ART 008 Drawing Fundamentals
3 UNITS
Hours: 1 Lecture/Discussion
5 Activity
Materials Fee: \$10.00
A basic course designed to introduce the beginning student to the fundamentals of drawing. Lecture and studio practice emphasize such fundamentals as perspective and shading, using various media. This course is strongly recommended for beginning art majors and persons wishing to develop non-verbal communication skills. CAN ART 8.

ART 009 Drawing Composition
3 UNITS
Hours: 1 Lecture/Discussion
5 Activity
Materials Fee: $\$ 10.00$
A second semester drawing course exploring the expressive and compositional aspects of drawing.
Prerequisites: ART 008 or equivalent college course with "C" or better.

ART 010AD Figure Drawing 3 UNITS
Hours: 1 Lecture/Discussion
5 Activity
Materials Fee: $\$ 10.00$
This class provides students the opportunity to learn ways of visually interpreting the human figure. Both traditional and contemporary styles and techniques will be explored. Students will work from live models and other sources. This course is repeatable three times.
Prerequisites: ART 008 or equivalent college course with "C" or better.
ART 011AD Sculpture
3 UNITS
Hours: 1 Lecture/Discussion
5 Lab
Materials Fee: $\$ 20.00$
This course in sculpture is designed to develop awareness, knowledge, and skills regarding historical and contemporary three dimensional design concepts. The emphasis is on personal expression through a variety of materials and a wide range of possible applications. This course may be repeated three times. CAN ART 12.

ART 012AD
Watercolor Painting
3 UNITS
Hours: 2 Lecture/Discussion 2 Lab
Materials Fee: $\$ 10.00$
The theory and techniques of watercolor painting as developed through creative problem solving exercises. Studio practice in figurative, abstract, and non-objective solutions using watercolor media. This course may be repeated three times. Advisory on Recommended Preparation: ART/CFS 6 or ART 8 or equivalent college course with "C" or better.

ART 013AD Studio Painting
3 UNITS
Hours: 1 Lecture/Discussion
5 Activity
Lecture and studio practice in the theory, techniques, and styles of easel painting. Emphasis on oil and acrylic mediums. This course may be repeated three times. CAN ART 10.
Advisory on Recommended Preparation: ART/CFS 6 and ART 8 or equivalent college courses with "C" or better.
$\begin{array}{ll}\text { ART 015 } & \text { Beginning Printmaking } \\ \text { Hours: } & 1 \text { Lecture/Discussion }\end{array}$
5 Activity
Materials Fee: $\$ 30.00$
This is a course in the basics of intaglio, relief, and monotype printmaking. Relief techniques covered will include traditional woodcut and/or linocut printing. Monotype processes will include color printing. Basic intaglio techniques will include collagraphy, mezzotint, alternative-ground (non-toxic) etching, and non-toxic photo intaglio. CAN ART 20.

ART 016AC Advanced Printmaking
3 UNITS
Hours: 1 Lecture/Discussion
5 Activity
Materials Fee: \$30.00
This is an advanced course in intaglio, relief, and waterless-lithography printmaking. Students are encouraged to further develop their skills acquired in ART 15 or in previous printmaking experiences, and this course also introduces basic techniques in waterless-lithography and multiple-plate color printing. This course may be repeated two times.
Prerequisites: ART 015 or equivalent college course with "C" or better.
ART 017AD Handbuilding Ceramics
3 UNITS
Hours: 1 Lecture/Discussion
5 Lab
Materials Fee: $\$ 20.00$

This course covers the fundamentals of ceramics and hand built clay construction including pinch, coil, hard and soft slab techniques as well as basic history, glazing and firing. This course may be repeated three times. CAN ART 6.

| ART 018AD | Wheel Thrown Ceramics | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 5 Lab |  |
| Materials Fee: | $\$ 20.00$ |  |

This course is an overview study of materials, methods and design of ceramics with the primary emphasis on utilization of the potter's wheel. This course is designed to develop growth and stimulate individual creative expression within the ceramic medium. This course may be repeated three times.
Advisory on Recommended Preparation: ART 17A or 17B or an equivalent college course with a "C" or better.

## ART 023AD Macintosh Basic Art/Design 3 UNITS <br> Hours: 2 Lecture/Discussion <br> 4 Lab

Macintosh Basics for Artists will enable visual artists to utilize the Macintosh computer and applications such as Adobe Photoshop, Illustrator, and PageMaker as vehicles for creative design and visual communication. Two- and threedimensional imaging, desktop publishing, and animation will be introduced. Students will also learn trouble-shooting skills for hardware and software problems. This course is repeatable for a maximum of three semesters.
Advisory on Recommended Preparation: Advise ART/CFS 6 or equivalent college course with "C" or better or recommendation of the department.

ART 025AD Digital Imaging for Artists
3 UNITS
Hours: 2 Lecture/Discussion
4 Lab
Digital Imaging for Artists will enable visual artists to: explore digital image making through the processes of scanning images into the computer, creating photo collage, photo retouching and manipulation of images to final printing of the created image. Macintosh computers and state-of-the-art imaging software, particularly Adobe Photoshop, will be utilized. This course is repeatable for a maximum of three semesters.
Advisory on Recommended Preparation: Basic computer skills as determined by departmental assessment.
ART

ART 101AD $\quad$| Arts and Crafts |
| :--- |
| Hours: |
| 2 Lecture/Discussion |
| 2 |$\quad 3$ UNITS

Materials Fee: $\$ 20.00$
This course provides an emphasis on exploratory experiences with, and the use
of, a wide variety of art media, techniques and applications. This course would
benefit liberal arts majors, teaching majors, art majors and everyone interested in
crafts. No experience in art of crafts is necessary. This course may be repeated
three times.

| ART 105AC | Metalcraft Welding/Forging | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 3 Lab |  |
|  |  |  |

Materials Fee: \$15.00
Equivalent Course: WELD 105AC.
Instruction in metal craft welding and forging techniques, basic tools for welded craft projects and sculpture, and construction of abstract shapes and finished sculptures. This course may be repeated two times.

| ART 111AD | Exhibition, Design, Gallery | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |

This course covers: the theory and technique of the proper presentation of artworks; the exhibition of student, local and national professional artists work; the examination and analysis of exhibition techniques in major art galleries and museums in California. ART 111AD may be repeated three times.
$\begin{array}{ll}\text { ART 119AD } & \text { Stained Glass Design } \\ \text { Hours: } & 1 \text { Lecture/Discussion }\end{array}$
5 Lab
Materials Fee: $\$ 20.00$
This introductory course is designed to familiarize students with the fundamentals of the art of stained glass. It includes the exploration of design sources and principles as well as the study of fabrication and embellishment techniques. This course is repeatable three times.
ART 121AC Serigraphy/Screen Printing
3 UNITS
Hours: 1 Lecture/Discussion
5 Activity
Materials Fee: \$20.00

A basic course designed to introduce the beginning student to introductory screen printing techniques. The emphasis of the class is the traditional serigraphic printmaking process and includes screen printing, stencil printing and gum dichromate prints on a variety of substrates including paper, fabric and glass. This course may be repeated two times.

ART 124AD Web Imaging/Artists \& Desig

## 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab
This is a course for commercial artists and graphic designers which covers the principles and techniques of designing and creating images for web sites that perform optimally regardless of the end users, browser or hardware. Macintosh computers with Photoshop, Illustrator, Image Ready, GoLive and Dreamweaver will be used. This course can be repeated three times.
Advisory on Recommended Preparation: ART 23AD or ART 25AD, or equivalent college course with a " $C$ " or better or equivalent experience with computer graphics applications.

| ART 126AD | Digital Painting | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |

Introduction to Fractal Design painter in creating images for commercial and fine art applications. Students will explore similarities between traditional methods of art making and those found in digital work. Images will be made from a wide range of mediums then translated into computer imagery, utilizing Macintosh computers, scanners and printers. This course may be repeated three times.
Advisory on Recommended Preparation: ART 6, or ART 8, or ART 23AD or an equivalent college course with "C" or better.

ART

| ART 127 | Introduction to Printmaking | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 4 Lab |  |
| Materials Fee: | $\$ 30.00$ |  |

This is a survey course in printmaking, covering relief printing, intaglio and etching, monoprint, collagraph, and lithography. It is designed to familiarize the beginning art student with the vast number of printing processes and techniques and affords intermediate and advanced students the opportunity to explore mediums that are not covered in other class offerings.
Advisory on Recommended Preparation: ART 8 or equivalent college course with "C" or better.
ART 128AD Lithography
3 UNITS
Hours: 2 Lecture/Discussion
4 Lab
Materials Fee: $\$ 30.00$

The students will study the history and technique of lithographic processes, including traditional and contemporary methods. Students will learn both stone and aluminum plate lithography and will be challenged with techniques appropriate to their skill level. Students will explore color lithographic processes, including four color process digital lithography after completing the second semester. This course can be repeated three times.
Advisory on Recommended Preparation: ART 8 or equivalent college course with "C" or better.

| ART 129AD | Waterless Lithography | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 5 Activity |  |
| Materials Fee: $\$ 30.00$ |  |  |

Materials Fee: $\$ 30.00$
Waterless Lithography is a new non-toxic lithographic technique utilizing silicone to process plates. Students will learn to prepare plates, create and draw and/or paint on plates using media totally different from traditional lithography. Students will learn this non-toxic printmaking medium on aluminum plates and will be challenged with techniques appropriate to their skill level. This class may be repeated three times. Advisory on Recommended Preparation: ART 127 or ART 15 or equivalent college course with a grade of "C" or better.

ART 151AD Independent Study-Art 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, student must file an Independent Study form through the Admissions Office to obtain approval to enroll.

ART 190AD Supervised Practice - Art 1-3 UNITS
Hours: $\quad 3$ TO 9 Lecture/Discussion
Under the supervision of an instructor, selected students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling, and other employment volunteer situations where the students are expected to take a leadership role.
Limitation on Enrollment: Permission of Department. This course may be repeated three times.

ART 210 Art Study Tour 1 UNIT Hours: 18 Lecture/Discussion
ART 210 is an art tour course for general students, the public, and art majors. Participants are expected to prepare themselves prior to the tour by reading pertinent materials selected by the instructor and by attending introductory lectures. The purpose of the course is to expose students, first hand, to major works of art (including painting, sculpture, and architecture). Students should consult the current schedule of classes for any additional fees.

## ART

## AUTOMOTIVETECHNOLOGY

ART 212AD Photo Realism 3 UNITS
Hours: 1 Lecture/Discussion
5 Activity
Exploration and practice of the historical and contemporary use of photography as the subject and as an aid to painting. Beginning and advanced work in oils and/or acrylics. This course is repeatable three times.
Advisory on Recommended Preparation: Art/CFS 6 and Art 8 or equivalent college courses with "C" or better.

ART 251AD Independent Study-Art 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form though the Admissions and Records Office.

## ASTRONOMY

ASTR 010 Introduction to Astronomy 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
A survey course covering the basic concepts, theories, history, and laws of astronomy. Emphasis will be given to motions of the moon, sun, and planets; use of astronomical instruments; study of stellar spectra; properties of the stars: stellar evolution; planetology and characteristics of the bodies of our solar system. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures; and MATH 230 or MATH 235 or equivalent college course with "C" or better, or eligibility for MATH 10, 21, 45, 61, 70, 75, or 154 as determined by COS Placement Procedures.

## AUTOMOTIVETECHNOLOGY

| AUTO 100 | Safety, Benchwrk \& Serv Proce |
| :--- | :--- |
| Hours: | 2 Lecture/Discussion |

AUTO100 is the first course in the Automotive Program and is recommended for all Automotive Technology students. Topics that will be covered are development of shop skills, safe conduct and use of tools, fastener tightening procedures, bolt size selection, use of correct fluids, tire construction and service, service writing procedures, service and parts sales and the "Write it Right" program from the Bureau of Automotive Repair.

AUTO 101 Auto Elect/Electronic Systems 4 UNITS
Hours: $\quad 3$ Lecture/Discussion
4 Lab
AUTO 101 is a study course of the automotive electrical and electronic systems. Instruction covers the inspections, testing and repair of the total electrical system and component parts. The lab portion of the course is conducted in a service and repair type atmosphere which allows the students to receive as much hands-on experience as possible.
Prerequisites: AUTO 100 or equivalent college course with "C" or better (AUTO 100 may be taken concurrently).

AUTO 102
Hours:
Auto Fuel and Cooling Systems
2 Lecture/Discussion
4 Lab
AUTO 102 is a core course in automotive fuel and cooling systems. Instruction covers the testing and repair of the complete automotive fuel system; cooling system operation, testing and repair; emission control systems inspection and repair. The student will be working with both trainer models and operational units. Prerequisites: AUTO 100 and AUTO 101 or equivalent college courses with "C" or better (AUTO 100 and/or AUTO 101 may be taken concurrently).

AUTO 104
Automotive Power Train
3 UNITS
Hours: 2 Lecture/Discussion
4 Lab
A study of the mechanical transmission of power utilized in the modern automobile and light truck. Study includes clutch operation and repair; three, four, and five speed transmission operation and repair; drive shaft, differential and drive axle operation and repair. Corequisites may be waived with equivalent college courses with a letter grade of " $C$ " or better, or equivalent skills and knowledge as determined by departmental assessment.
Prerequisites: AUTO 100 and AUTO 101 or equivalent college courses with "C" or better (AUTO 100 and/or AUTO 101 may be taken concurrently).

| AUTO 105 | Automotive Brakes/Braking Syst |
| :--- | :--- |
| Hours: | 2 Lecture/Discussion |
|  | 4 Lab |

This course covers new concepts and repair procedures as well as the fundamentals affecting the service and maintenance of the automotive hydraulics, pneumatics, brakes and braking systems. Instruction in anti-lock braking systems, associated electronics and the safe and proper use of shop tools and equipment for service and repair procedures will be included.
Prerequisites: AUTO 100 and AUTO 101 or equivalent college courses with "C" or better (AUTO 100 and/or AUTO 101 may be taken concurrently).

| AUTO 106 | Automatic Transmissions | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 6 Lab |  |

A study of automatic transmissions and transaxles currently used in domestic and import automobiles and light trucks. Study includes torque converter operation and diagnosis; hydraulic system function and diagnosis; planetary gear theory and application. These theories and principles are then put into practice by overhauling specified two and three speed automatic transmissions.
Prerequisites: AUTO 101 or equivalent college course with "C" or better.

AUTO 107 Advanced Auto Transmissions 3 UNITS
Hours: 2 Lecture/Discussion
4 Lab
AUTO 107 is an advanced course in automatic transmission service and repair. The student will have already passed the basic course and will be ready to deal with today's more sophisticated transmissions. The course is generally directed toward the Chrysler, Ford, and General Motors automatic overdrive transmissions. Automatic transaxles are also covered in the course of study.
Prerequisites: AUTO 100 and AUTO 101 and AUTO 106 or equivalent college courses with "C" or better.

AUTO 108 Automotive Engine Tune-Up 5 UNITS
Hours: $\quad 3$ Lecture/Discussion
6 Lab
Instruction in advanced electrical theory, related to the entire electrical system transistor ignition and regulation. Transistor distributor and alternator overhaul. Tune up and trouble-shooting of the engine and related circuits.
Prerequisites: AUTO 100 and AUTO 101 and AUTO 102 or equivalent college courses with "C" or better (AUTO 102 may be taken concurrently).

## AUTOMOTIVETECHNOLOGY

AUTO 109
Air Condition and Accessories
3 UNITS
Hours:
2 Lecture/Discussion
4 Lab
Instruction in most automotive accessories with emphasis in heating and air conditioning system diagnosis and repair. Prerequisite/Corequisites may be waived with equivalent skills and knowledge as determined by departmental assessment.
Prerequisites: AUTO 100 and AUTO 101 or equivalent college courses with "C" or better (AUTO 100 and/or AUTO 101 may be taken concurrently).

| AUTO 112 | Adv Automotive Fuel Injection | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 1 Lab |  |

An in-depth study of automotive fuel injection systems and related emission control devices.
Advisory on Recommended Preparation: AUTO 202 or equivalent college course with "C" or better, or recommendation of department.

| AUTO 113 | Computerized Engine Control | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 4 Lab |  |

Instruction in advanced electrical theory related to computerized engine controls, trouble-shooting and repair of computer control systems on the modern automobile. Corequisites: AUTO 108.
$\begin{array}{ll}\text { AUTO 115 Auto Steering, Align \& Suspen } & 3 \text { UNITS } \\ \text { Hours: } & 2 \text { Lecture/Discussion }\end{array}$
4 Lab
New concepts and procedures as well as the fundamentals affecting the service and maintenance of vehicle front and rear suspension, alignment, and steering systems. Instruction in steering columns, automatic level ride systems and associated electronics, and the safe and proper use of shop tools and equipment will also be covered. Corequisites may be waived if student has equivalent skills and knowledge as determined by departmental assessment.
Prerequisites: AUTO 100 and AUTO 101 or equivalent college courses with "C" or better (AUTO 100 and/or AUTO 101 may be taken concurrently).

| AUTO 122 | Adv Engine Perform Diagnosis | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 1 Lab |  |

This course provides advanced diagnostic and troubleshooting skills for automotive service technicians. The design, function and operation of modern test equipment such as Lab Scopes, Scan Tools and Digital Multimeters will be included.
Advisory on Recommended Preparation: AUTO 101, 102, 113, 108 and 202 or equivalent college courses with "C" or better.

AUTO 190AD Supervised Practice 1-3 UNITS
Hours: $\quad 3$ TO 9 Lab
Supervised practice. This course may be repeated three times.
Limitation on Enrollment: $A n$ " $A$ " or " $B$ " in college automotive major courses and permission of department.

AUTO 199 Topics - Automotive .5-4 UNITS
Hours: 8 TO 70 Lecture/Discussion
Special topic courses in Automotive. (Transferable).
AUTO 201AD ASE Certification Preparation 1.5 UNITS
Hours: $\quad 36$ Lecture/Discussion
Instruction and examinations in engines, transmissions, steering, suspension, brakes, electrical, heating, air conditioning and tune-up. Preparation for the National Institute for Automotive Service Certification. This course may be repeated three times.
Advisory on Recommended Preparation: Completion of appropriate automotive courses or equivalent knowledge and skills learned through experience.

## AUTOMOTIVETECHNOLOGY

AUTO 202 Automotive Fuel Injection 3 UNITS
Hours: 3 Lecture/Discussion
AUTO 202 is an in-depth study of automotive fuel injection systems. Instruction covers testing, diagnosis and repair or modern electronic fuel injection systems. Fuel pumps, filters and support components of the automotive fuel system are covered in the course of study.
Advisory on Recommended Preparation: AUTO 100 and 101 with a " C " or better, or equivalent college courses with a "C" or better, or equivalent skills and knowledge as determined by departmental assessment.

| AUTO 203 | Automotive Engines | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 6 Lab |  |

Instruction in the construction, theory and repair of the automotive engine. The lab work will require that the student perform the necessary steps to rebuild an automotive engine. The student will be required to furnish an engine for their lab work. Advisory on Recommended Preparation: AUTO 100 and AUTO 101 or equivalent college courses completed with a grade of "C" or better.

## AUTO 253AD Bar Alternative Training <br> 2 UNITS <br> Hours: 54 Lecture/Discussion 18 Lab

This course is an introduction to the 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 Automobile Repair. This course is designed to help the student meet the State of California Bureau of Automotive Repair requirements for the Technicians Emissions License. This course may be repeated three times.
Advisory on Recommended Preparation: Students should have 180 instructional hours at an accredited or bureau recognized college or trade school or equivalent automotive work experience in the areas of automobile electrical and engine performance.

AUTO 254 Automotive Information Systems 1.5 UNITS
Hours: $\quad 27$ Lecture/Discussion
18 Lab
This course will assist the student to become competent in the field of automobile parts procurement and sales skills. Automotive service information for components, specifications, procedures, tools and equipment is discussed. This course will also help the students prepare for the ASE Automobile Parts Specialist test (ASE Test P2).

## AUTO 262AD BAR Smog Update 2003 . 5 UNITS

## Hours: 12 Lecture/Discussion

This course is an approved Bureau of Automotive Repair Smog Check Program Update Training Course for new Smog Check Technicians and a recertification course for currently licensed Smog Check Technicians. Any student may take this course for general knowledge, but to be eligible for certification, the student must be currently certified as a Basic Smog Check Technician or an Advanced Emissions Smog Check Technician. This course is repeatable three times.
Advisory on Recommended Preparation: One year of automotive experience in the engine performance and emissions area or current certification as a Basic Smog Check Technician, or as an Advanced Emissions Smog Check Technician.

## AUTO 263AD Basic Clean Air Car Course <br> Hours: 48 Lecture/Discussion <br> 24 Lab

The Basic Clean Air Car Course is a certification course designed as preparation for students to take the Bureau of Automotive repair's Basic Smog Check Technician licensing examination. ANY STUDENT MAY TAKE THIS COURSE, BUT MAY NOT BE CERTIFIED AS ELIGIBLE TO TAKE THE STATE LICENSING EXAMINATION. This course may be repeated three times.
Advisory on Recommended Preparation: AUTO 100, 101, 102, 108 and 113 or equivalent college courses with a "C" or better; or one year of automotive experience in the engine performance and emissions area; or related equivalent skills and knowledge as determined by departmental assessment.

## AUTOMOTIVETECHNOLOGY

## BIOLOGY

AUTO 264AD Advanced Clean Air Car Course
Hours: 32 Lecture/Discussion 16 Lab
The Advanced Clean Air Course is a certification course designed to prepare students to take the Bureau of Automotive Repair Advanced Smog Check Technician licensing examination. It will cover BAR 97 Transition Training, Advanced Emissions Diagnostics Training and Enhanced Area Inspection and Test Procedure Training. This course may be repeated three times.
Advisory on Recommended Preparation: AUTO 263AD or equivalent college courses with a "C" or better. An Automotive Technology Certificate from an accredited institution or trade school, a Basic Clean Air Car Course Certification, ASE A-6, A-8, and L1 Certifications or a current Basic Smog Check Technician License.

AUTO 265 Elect \& Alterna Fuel Vehicle
1.5 UNITS

Hours: 18 Lecture/Discussion
9 Lab
A study of alternative fuels and electric powered vehicles that are available and in use in the transportation industry today. This course of study will include the following; electric vehicles, compressed natural gas (cng), ethanol, methanol, and liquefied petroleum gas (lpg). This course will explain legislative and regulatory policies concerning alternative fuel vehicles.

AUTO 267 Auto Wheel Alignment/Service
2 UNITS
Hours: 2 Lecture/Discussion
1 Lab
Instruction in automotive front wheel alignment, steering geometry, front suspension systems, and wheel balancing.

AUTO 299 Topics - Automotive .5-4 UNITS
Hours: 8 TO 70 Lecture/Discussion
Special topics in Automotive.
$\begin{array}{lll}\text { AUTO } 300 & \text { Auto Familiarization } & \text { 1.5 UNITS } \\ \text { Hours: } & 2 \text { Lecture/Discussion } & \end{array}$
1 Lab
AUTO 300 is a nine week survey course in automotive technology. The course of study includes batteries, starters, ignitions systems, fuel systems, charging systems, brakes, tires and wheels.

## BIOLOGY

$\begin{array}{ll}\text { BIOL } 001 & \text { Principles of Biology } \\ \text { Hours: } & 3 \text { Lecture/Discussion }\end{array}$
Hours: $\quad 3$ Lecture/Discussion
6 Lab
BIOL 1 is the first semester of a two course introductory sequence for biology majors. The course covers the principles and applications of basic chemistry, biochemistry, cell structure and function, homeostasis, cell division, molecular and Mendelian genetics, cellular respiration, plus the taxonomy, development, comparative structure, organ system functions and behavior of animals. The philosophy and methods of science, and experimental design are emphasized.
Advisory on Recommended Preparation: CHEM 1 or 20 or equivalent college course with "C" or better. CAN BIOL 4.

BIOL 002 Principles of Biology
Hours: 3 Lecture/Discussion
6 Lab
The second semester of a general principles course for biology majors. Topics covered include microbiology, the comparative anatomy, physiology, phylogeny and taxonomy of plants. Population genetics, the mechanisms of evolution, the principles of population and community ecology, and community interactions are also considered. Laboratory exercises include several local field trips.
Advisory on Recommended Preparation: CHEM 1,20, or equivalent college courses with "C" or better. CAN BIOL 6.
Prerequisites: BIOL 001 or equivalent college course with "C" or better.

BIOL $020 \quad$ Frontiers in Biology 4 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
A general principles course for transfer students that are not life-science majors. The principles of homeostasis, genetics, energy flow, evolution, reproduction and ecology will be used to explore contemporary topics in biology. Note: Some fouryear institutions will not award credit for this class if it is taken AFTER BIOL 1 (majors biology).
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

| BIOL 021 | Plant Biology |
| :--- | :--- |
| Hours: | 3 Lecture/Discussion |
|  | 2 Lab |

3 UNITS

2 Lab
This is a general principles course in plant biology for the nonbiology major. The principle topics included are: general characteristics of plants, plant survey, methods of classification and nomenclature, plant structure and function, growth and development, reproduction and genetics, and ecology. (Not open to students who have received credit in BIOL 2.)
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. Approved for Distance Learning 5/5/2004.

| BIOL 022 | Animal Biology | $0-3$ UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 2 Lab |  |

A general principles course in animal biology designed to meet the needs of a transfer student who is not a life-science major. Not open to students who have received credit in BIOL 1. Field trips are part of the course.
Advisory On Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

| BIOL 025 | Human Ecology | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

This survey course covers ecological principles and the historic and modern impact of human societies as agents of ecosystem modification. Field trips are part of course. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

| BIOL 030 | Human Anatomy | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 3 Lab |  |

BIOL 30 is a general survey course designed to acquaint the beginning student with the anatomical principles necessary to understand the basic structure of the human body. Units received from this course are usually transferable to four- year institutions. The student is urged, however, to check with their specific transfer institution to confirm acceptance of this course. CAN BIOL 10.

BIOL $031 \quad 4$ UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
BIOL 31 is a course designed to acquaint the beginning student with enough physiological principles necessary to understand the basic functioning of the human body. Laboratory experiments and exercises are designed to reinforce theories and processes described in lecture and to introduce students to basic physiological scientific investigation.
Advisory on Recommended Preparation: BIOL 30; and CHEM 1,20, or 30, or equivalent college courses with "C" or better. CAN BIOL 12.

## BIOLOGY

## BIOLOGY

BIOL 040 General Microbiology 0-4 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
This course is designed for students entering the health sciences, home economics, as well as the life sciences. This course covers microbial diversity, classification, identification, growth, control measures, disease interactions, genetics, and applied microbiology.
Advisory on Recommended Preparation: CHEM 20 or equivalent college course with "C" or better; and any college level biology course. CAN BIOL 14.

BIOL 060 Introduction to Cell Biology 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This is a general course in cell biology for non-biology majors. The basic biochemistry, structures, functions, genetics, growth and development of animals, plant and microbial cells will be covered.
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

BIOL 151AD Independent Study-Biology 1-4 UNITS
Hours: 1 TO 4 Lab
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

BIOL 180
Lab Techniques \& Practices
2 UNITS
Hours: 1 Lecture/Discussion
3 Lab
Equivalent Course: CHEM 180.
This course introduces students to the techniques and practices used in laboratory settings. Topics will include lab safety, separation techniques, and measurements using a variety of instruments. Care and maintenance of instruments are also covered in the course. This is a required course for the Laboratory Technician Certificate.
Advisory on Recommended Preparation: Completion of or co-enrollment in a transfer level Chemistry course.

| BIOL 185 | Applied Lab Practices | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 3 Lab |  |

Equivalent Course: CHEM 185.
Students will work individually and in groups to solve independent laboratory research problems. Students will utilize proper protocols, and instrumentation to produce and collect data. They will analyze the experimental data and document their work in laboratory reports. Prerequisite may be waived with any transfer level Chemistry course with lab with "C" or better.
Prerequisites: CHEM 001 or CHEM 020 or CHEM 030 or equivalent college course with "C" or better.

BIOL $200 \quad$ California Natural History 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
A study of the natural history of California with emphasis on Central California, from the Sierras to the ocean. Topics include California geology, meteorology, geography, botany, ecology and zoology. Weekend field trips are part of the course.

BIOL 251AD Independent Study-Biology 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
The purpose of Independent Study is to provide an opportunity for the student, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the subject area. In addition, student must file an Independent Study form through the Admissions and Records Office.

| BIOL 270 | Microbiology Techniques | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 2 Lab |  |

This course will teach an introduction to basic microbiology techniques. These will include microscope usage, staining methods, isolation and cultivation of bacteria and fungi, media preparation and microbial screening tests.

## BUSINESS

BUS 018
Business Law
4 UNITS

Hours: $\quad 4$ Lecture/Discussion
This course is recommended for most business majors. It includes an introduction to the U.S. legal system; the relation of ethics to law; administrative, criminal, tort, and labor law; and legal aspects of international trade. Emphasis is on the study of the law of contracts and agency with case studies; discussion and analysis. CAN BUS 12.

## BUS 020 Business Statistics <br> 3 UNITS <br> Hours: $\quad 3$ Lecture/Discussion

This course is intended for business administration majors or anyone who wishes to gain an understanding of elementary data analysis, probability and statistics. The main course content incorporates the techniques and applications of probability, data analysis, and statistics. A high level of mathematical sophistication and dedication is required for successful completion of this course. Placement testing requirement may be waived (see Matriculation Policies; Exemption criteria for assessment). Prerequisites: MATH 230 or MATH 235 or equivalent college course with "C" or better or eligibility as determined by COS placement procedures.
BUS 025
Constitutional Law
3 UNITS

Hours: 3 Lecture/Discussion

## Equivalent Course: AJ 025, GOVT 025.

Students will apply logic and critical thinking to written and oral communication in the study of the fundamental rights of all citizens as protected by the United States constitution. Case studies will be used as examples of the application of law. Students will be required to write a total of 6,000 to 8,000 words.
Advisory on Recommended Preparation: ENGL 1 and SPCH 1 or equivalent college courses with "C" or better.

## BUS 082 Introduction to Business 3 UNITS <br> Hours: $\quad 3$ Lecture/Discussion

An introductory course which examines the business enterprise. The course covers a wide range of topics that include social responsibility and business ethics; business organization and functions; the historical, environmental and economic setting of business; the human resource; and the structure of American business.
Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS Placement Procedures; and computer word processing skills.

## BUSINESS

## BUSINESS

BUS $112 \quad$ Public Speaking for Business
Hours: $\quad 4$ Lecture/Discussion
Materials Fee: $\quad \$ 5.00$
Equivalent Course: SPCH 112 .
An introductory course in public speaking and presentation software. This course
covers a variety of formal public speaking styles and formats. Students will also
learn how to create a computerized slide show, as well as speaker outlines/notes
and audience handouts to assist in their presentations.
Advisory on Recommended Preparation: ENGL 251 or equivalent college
course with a "C" or better, or eligibility for ENGL 1 determined by COS
Placement Procedures. Keyboarding speed of 20 cwpm.

## BUS 119 Quantitative Methods <br> 3 UNITS <br> Hours: 3 Lecture/Discussion

This is an introductory course for Business Administration majors designed to develop an appreciation of the value of quantitative methods in decision-making by formulation and solution of common business problems. Topics include linear models, matrix algebra, linear programming, finance, and an introduction to probability.
Prerequisites: MATH 230 or MATH 235 or equivalent college course with "C" or better or eligibility as determined by COS placement procedures.

BUS 127 Investments
3 UNITS
Hours: 3 Lecture/Discussion
Students will become acquainted with alternative investments such as savings, stocks, bonds, mortgages, and other securities, mutual funds, credit unions, banks, real estate investment, trusts, insurance, portfolio management, and the operations of the financial markets.
Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS Placement Procedures.

BUS 151AD Independent Study-Business 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
Materials Fee: $\$ 7.00$
The purpose of Independent Study is to provide an opportunity for the student, under the direction of an instructor, to participate in advanced individualized studied to supplement and enhance existing courses. Independent Study requires a minimum of 54 units of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

## BUS 155 E-Commerce 3 UNITS <br> Hours: $\quad 3$ Lecture/Discussion

This course will incorporate introductory and intermediate business concepts into an e-business model. This interdisciplinary course provides instruction that emphasizes the incorporation of technology into the business model.
Advisory on Recommended Preparation: COMP 229 or equivalent course with "C" or better.

BUS 162 Advanced Keyboarding 3 UNITS
Hours: 2 Lecture/Discussion
3 Lab
Materials Fee: $\quad \$ 5.00$
Business 162 is an advanced keyboarding class which allows the student to demonstrate his/her proficiency in the application and knowledge of business keyboarding. Provides an opportunity to demonstrate speed and accuracy as well as his/her understanding of typical office problems such as keyboarding letters, legal documents, manuscripts, and business forms.
Advisory on Recommended Preparation: BUS 270 or equivalent college course with a " C " or better, and keyboarding speed of 40 cwpm.
$\begin{array}{ll}\text { BUS } 170 & \text { Introduction to Sales } \\ \text { Hours: } & 3 \text { Lecture/Discussion }\end{array}$
A practical course in retail sales principles and practices which emphasizes career opportunities, the current market environment, contemporary sales techniques and the sales promotion. Open to all students considering permanent or part-time retail sales positions. Required for marketing certificate, and the A.A.IA.S. degrees in marketing, general business/clerical skills, and home economics fashion merchandising majors.
Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS Placement Procedures.
BUS 171
Applied Prof Salesmanship
3 UNITS

Hours: 3 Lecture/Discussion
An examination, study, and analysis of general and individual factors and applied techniques which influence persons toward buying goods and services.

BUS 174 Marketing Principles
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course provides basic understanding of marketing principles as well as training and experience in planning, producing, storing, promoting, selling and distribution of commodities.

## BUS 184 Business Communications <br> 3 UNITS

Hours: 3 Lecture/Discussion
Materials Fee: $\quad \$ 5.00$
Business communication theory will be introduced. The student will learn the techniques of written and oral communications helpful in handling common business transactions, letters, memos, and reports.
Advisory on Recommended Preparation: ENGL 251 or BUS 293 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures; computer word processing skills.
$\begin{array}{lll}\text { BUS } 185 & \text { Ethics in Business \& Industry } & 3 \text { UNITS } \\ \text { Hours: } & 3 \text { Lecture/Discussion } & \end{array}$
Equivalent Course: ITEC 185.
This course is designed to better prepare students to deal with the many moral dilemmas they will inevitably face in their personal and professional lives. The focus of the class will be primarily on the application of ethics to contemporary issues occurring in today's business and industry. Students will research, discuss, analyze, and reflect on issues such as accountability, loyalty, confidentiality, honesty, justice, education, discrimination, etc.

BUS $188 \quad$ Human Relations in Business 3 UNITS
Hours: 3 Lecture/Discussion
Students will become acquainted with those accepted patterns of behavior and performance standards which will enhance their skills in the workplace. The student learner will be exposed to management techniques applicable in his/her business, domestic, personal, and social life. Discussion and classroom material explores possible problems and solutions in management and employee relationships. This course is a general education course in personnel relations which will be of value to both the business and nonbusiness student.
Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 as determined by COS Placement Procedures.

## BUS 230 Supervisn,Mgmt/1st Line Supr <br> 3 UNITS

Hours: $\quad 3$ Lecture/Discussion
This course is designed to begin the process leading to a career in supervision or the first step toward higher management. Topics include obtaining and training an employee, appraising employee performance, counseling employees, handling discipline and grievances, understanding the group dynamics of an organization, understanding unions, coping with ethics and institutional politics, increasing productivity, and self-appraisal.
Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS Placement Procedures.

## BUSINESS

## BUSINESS

BUS 231
Hours:

## Starting A New Business

3 Lecture/Discussion
This course assists students who wish to become small business owners or managers. Topics include development of a business plan, marketing, financing, accounting and management. Advisory on Recommended Preparation: Any general business class or previous business experience.

BUS 251AD Independent Study-Business 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
Materials Fee: $\$ 7.00$
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form though the Admissions and Records Office.

## BUS 256 Medical Terminology <br> 3 UNITS <br> Hours: $\quad 3$ Lecture/Discussion

This course is designed to provide a foundation for the understanding of medical terminology using simple, non-technical explanations of medical terms. The fundamentals of word analysis are explained to make the understanding of complex terminology easier. Advisory on Recommended Preparation: ENGL 360 or equivalent college course with a "C" or better, or eligibility for ENGL 251 determined by COS Placement Procedures.

BUS 258 People, Proced, Tech Off Pro
4 UNITS
Hours: 4 Lecture/Discussion
Materials Fee: $\$ 3.00$
Designed to help the office professional become familiar with protocol, routines and procedures encountered in today's automated office. In addition, this course is designed to sensitize students to cultural differences, familiarize the students with various responsibilities he/ she may have to assume, as well as to review the skills that are needed to obtain and retain employment in the automated office. Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS Placement Procedures; computer word processing skills; and intermediate keyboarding skills.

BUS 260 Career Dressing 1 UNIT
Hours: 1 Lecture/Discussion
Designed for students who want to update, enhance, and improve their career appearance. Specific methods for the selection of clothing and accessories suitable for the working environment are presented. Excellent preparation for all students desiring to make the right impression for interviews and career changes. Career Dressing is a required course for the fashion design and color/image consulting vocational certificates, and the AA Degree in Home Economics with a fashion merchandising major.
$\begin{array}{lll}\text { BUS 265 } & \text { Retail Career Preparation } & 1 \text { UNIT } \\ \text { Hours: } & 1 \text { Lecture/Discussion } & \end{array}$
Equivalent Course: FASH 265
This course will help students prepare for employment in retail and sales. Instruction will emphasize job search techniques, resume, application and correspondence related to job search, interview and portfolio presentation skills. The course provides the skills and concepts necessary to facilitate successful on-site work experience. Portfolio preparation and interview skills will also be enhanced towards the end of the certificate program. Advisory on Recommended Preparation: It is advised for students to take this course the same semester they take WEXP 193.

## BUS 266 Professional Employment Prep 3 UNITS <br> Hours: $\quad 3$ Lecture/Discussion

This course is designed to increase the student's understanding of researching jobs and organizations, employment interviewing, getting a job, professional development, including communication skills by presenting theories, techniques, and principles behind these skills. Advisory on Recommended Preparation: ENGL 251 or BUS 293 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.
$\begin{array}{lll}\text { BUS 267 Career Management } & 3 \text { UNITS } \\ \text { Hours: } & 3 \text { Lecture/Discussion } & \end{array}$
This course will address critical skills that new employees should possess in order to contribute to a company's profitability. Emphasis will be on soft skills which will develop personal and life skills, self-understanding, work culture, effective communications, problem solving, teamwork, self-improvement, customer service, stress and money management.

BUS 268 Electronic Calculating 2 UNITS Hours: 2 Lecture/Discussion
Materials Fee: $\$ 4.00$
This course introduces the student to the ten-key pad. Students will develop speed and accuracy using the touch method, review the principles of arithmetic, and transfer the skills to the solution of business problems. Advisory on Recommended Preparation: BUS 395 or MATH 360 or equivalent college course with "C" or better, or recent completion of an arithmetic class.

| BUS 270 | College Keyboarding Level 1 | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |
| Materials Fee: | $\$ 5.00$ |  |

## Materials Fee: $\$ 5.00$

College Keyboarding is a course designed to help students develop the strong keyboarding skills they need today along with the specific word processing, Internet, and general computer application skills they will need for tomorrow. The On-line Learning option includes lesson slides, quizzes, web links, enrichment material, flash cards, interactive exercises, and on-line reference of model documents.

| BUS 271 | College Keyboarding Level 2 | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |
|  |  |  |

## Materials Fee: \$5.00

Business 271 is an intermediate course with emphasis on business correspondence, forms, table, manuscripts, and production keyboarding. The student will review the fundamentals of keyboarding and will strive to improve his/her speed and accuracy not only on straight copy materials but on forms and letters as well. Advisory on Recommended Preparation: BUS 270 or equivalent college course with a "C" or better, or one year of previous typing instruction.
BUS 293 Business English
4 UNITS

Hours: 4 Lecture/Discussion
BUS 293 is a lecture/discussion class that is designed to help the business student become more proficient in and more comfortable with the use of the English language. It provides a complete review of and practice in using the fundamentals of English grammar: parts of speech, spelling, sentence structure, punctuation, and vocabulary building. Advisory on Recommended Preparation: ENGL 360 or equivalent college course with a "C" or better or eligibility for ENGL 251 determined by COS placement procedures.

BUS 295 Business Mathematics 3 UNITS
Hours: 3 Lecture/Discussion
A broad course designed to expose students to a wide variety of business computations and applications, such as percents, discounts, markups and markdowns, simple and compound interest, consumer credit, payroll, depreciation, and investments, as well as the applied use of algebra in solving business problems. Advisory on Recommended Preparation: BUS 395 or MATH 360 or equivalent college course with "C" or better, or eligibility determined by COS Placement Procedures.

## BUS 297 Personal Finance

3 UNITS
Hours: 3 Lecture/Discussion
In this general business course, open to both business and nonbusiness majors, students gain knowledge of personal income and expenditures. To be discussed are such topics as savings accounts; investments; borrowing money; budgets, charge accounts and installment buying; property, income, estate inheritance and gift taxes; life, health, accident, property, and miscellaneous insurance; pension plans and social security; trust funds and wills; inflation and business cycles; and problems of owning a house.

## BUSINESS

## CALIF DAIRY TRAININGINSTITUTE

BUS 299 Topic Courses - Business

## .5-4 UNITS

Special Topic courses in Business.
BUS 360AC Elementary Keyboarding
1 UNIT
Hours: 9 Lecture/Discussion 17 Lab
Materials Fee: $\quad \$ 5.00$
This course is designed to introduce the student to the computer keyboard. Students will use the touch method to key letters, numbers, symbols, and the numeric keypad. This course may be repeated twice.

BUS 361AC Elem Keyboarding for ESL
1 UNIT
Hours: 9 Lecture/Discussion 17 Lab
Materials Fee: $\$ 5.00$
This course is designed to introduce the ESL student to the computer keyboard. Students will use the touch method to key letters, numbers, symbols, and the numeric keypad. This course may be repeated twice. Limitation on Enrollment: Limited to students enrolled in the ESL program.

BUS 395 Rev/Arithmetic for Business 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course is designed to review the concepts and mechanics of addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals with an emphasis on business applications.

## CALIF DAIRY TRAINING INSTITUTE

DPTI 201 Fluid Stream 1 UNIT
Hours: 18 Lecture/Discussion
This is the first class in a group of twelve classes. It introduces the student to the basic elements of routing and uses of fluid milk throughout the dairy plant. Demonstrations of how fluids are utilized. Process flow from incoming raw milk throughout the plant to pasteurized finished products.

DPTI 202 GMP and Sanitation 1 UNIT
Hours: 18 Lecture/Discussion
Introduction to Dairy Plant Sanitation, Good Manufacturing Practices (GMP) guidelines and implementation, chemicals, pH and their roles in functional cleaning of the dairy plant and associated equipment.

DPTI 203 Industrial Safety
1 UNIT
Hours: 18 Lecture/Discussion
Introduction to the elements of industrial safety as it relates to a dairy processing facility. Topics to be covered, illness and injury prevention, confined space entry, lock-out tag-out programs, hazard communication programs, and industrial lift programs.

DPTI 204 Sensory Evaluation
1 UNIT
Hours: 18 Lecture/Discussion
This course is designed to develop the students skills for sight, taste, smell and touch, to evaluate various dairy products. Course content follows the California Agriculture Teaching Association Curriculum Code used for Career Development Events.

## DPTI 205 HACCP and Food Safety <br> Hours: 18 Lecture/Discussion

1 UNIT
An introduction to Hazardous Analysis Critical Control Point programs in the dairy processing facility. Importance of HACCP programs and identification of Critical Control Points. Class will demonstrate how to set up and implement a HACCP program.

DPTI 206
Hours:
Human Resources
1 UNIT
This course is designed to prepare students for employment procedures when applying for a position in the Dairy Food Processing industry. Students will learn resume preparation, interviewing skills, and techniques that are unique to the Dairy Processing industry.

DPTI $207 \quad$ Process Equipment \& Engineer 1 UNIT Hours: 18 Lecture/Discussion
Introduction and identification of equipment used in the processing facility. Function, cleaning, sanitizing and maintenance of processing equipment. How to perform equipment teardowns for inspections. Discussions of required Regulatory Licensing.
DPTI 208
Laboratory Skills
1 UNIT
Hours:
18 Lecture/Discussion

This course will introduce students to common tests performed in the dairy laboratory. Identification of various equipment used in the dairy lab, proper safety, and chemical disposal will be stressed. DPTI 208 is designed for the plant technician, not a laboratory technician.

DPTI 209 Dairy Products and Marketing 1 UNIT Hours: 18 Lecture/Discussion
Introduction of the standards of identity of milk and dairy foods, introduction of elementary dairy products, as well as marketing and handling will be covered in this course.

| DPTI 210 | Transportation | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 18 Lecture/Discussion |  |

Introduction of aspects in raw milk pick-up, routing, transportation to the milk plant, loading and transporting of finished/packaged dairy products will be covered.

DPTI 211 Cheese \& Whey Processing 1 UNIT Hours: 18 Lecture/Discussion
Introduction of aspects in the art of cheese making. Elementary techniques of whey processing will also be covered.

DPTI 212 Warehousing/Dry-Refrigerated 1 UNIT
Hours: 18 Lecture/Discussion
Students will be introduced to all aspects in routing, storage, and rotation of finished/ packaged dairy products, outline of pest control management essentials, and introduction of quality issues surrounding all raw material.
DPTI 213
Specialty Cheese Making
2 UNITS
Hours: 2 Lecture/Discussion

2 Lab
This is a course in the technique and art of specialty cheese making. Students will develop skills needed in cheese making and whey processing.

| DPTI 214 | Milk Pasteurization | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |

In this course students will apply all aspects of the milk pasteurization process. Operation of the HTST (High Temperature Short Time) pasteurizer, all State, Local and Federal pasteurization regulations and preparation for successfully passing the State Milk Pasteurization Test, will be stressed.

| DPTI 218 | Marketing Dairy Products | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |

One of a series of classes in applied dairy food manufacturing. The application of marketing will deal with all aspects of consumer point sales of dairy products. The course will deal with milk quality issues as they relate to retail marketing of products.

CHEMISTRY

CHEM 001
General Chemistry
5 UNITS
Hours: $\quad 3$ Lecture/Discussion
6 Lab
A study of the fundamental theories and laws of chemistry with an emphasis on the mathematical treatment as well as the underlying concepts and principles. Topics include stoichiometry, atomic structure, bonding theories, ionic reactions, and properties of gases. This course includes six hours of laboratory per week. CHEM 1 is designed for those intending to enter chemistry or professional fields requiring chemistry as a foundation. The recommended prerequisites are the minimum necessary to prepare the students for the depth of theory and rigor of calculations. CAN CHEM 2.
Prerequisites: (MATH 230 or MATH 235 or eligibility for MATH 021 as determined by COS placement procedures, and (CHEM 020 or CHEM 253) or equivalent college courses with "C" or better.

CHEM 002 General Chemistry 5 UNITS
Hours: $\quad 3$ Lecture/Discussion 6 Lab
A course for majors and pre-professionals involving the fundamental theories and laws of chemistry. Topics include liquids, solids, solutions, kinetics, acid/base theories, acid/base equilibrium, solubility and complex equilibrium, thermodynamics and electrochemistry. CAN CHEM 4.
Prerequisites: CHEM 001 or equivalent college course with "C" or better.

| CHEM 012 | Organic Chemistry | 5 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 6 Lab |  |

This is the first semester of a comprehensive study of organic chemistry. This course, taught at the sophomore level, is primarily for chemistry or biochemistry majors, premedical, pre-dental students, pre-pharmacy and medical technicians. Emphasis is on structural and functional group chemistry studied from a synthetic and mechanistic point of view. Topics include: nomenclature, stereochemistry, free radical processes, structure, bonding, hybridization of carbon compounds basic elimination and substitution reactions, introductory infrared and nuclear magnetic resonance spectroscopy.
Prerequisites: CHEM 002 or equivalent college course with "C" or better.

CHEM 013 Organic Chemistry
5 UNITS
Hours: 3 Lecture/Discussion

## 6 Lab

This is a continuation of CHEM 12, a comprehensive study of organic chemistry. The course, taught at a sophomore level, is primarily for chemistry, biochemistry and biology majors, premedical, predental, prepharmacy students, and medical technicians. Emphasis is on structural and functional group chemistry studied from a synthetic and mechanistic point of view. Topics include: reactions of aromatic compounds, condensations, natural products chemistry, introductory biochemistry, mass spectrometry and ultraviolet/visible spectroscopy. The course includes a laboratory use of micro/macro methods and techniques, synthesis and instrumentation. Prerequisites: CHEM 012 or equivalent college course with " C " or better.

CHEM 020 Intro to General Chemistry 4 UNITS
Hours: $\quad 3$ Lecture/Discussion 3 Lab
CHEM 20 is a one semester transferable college chemistry course designed to meet the needs of allied-health majors. The course is a study of the fundamental theories and laws of chemistry. The laboratory portion of the course involves experimentation and drawing conclusions from data. Advisory on Recommended Preparation: CHEM 253 or equivalent college course with a "C" or better; or high school chemistry with "C" or better in both semesters. MATH 200 or MATH 205 or equivalent college course with "C" or better; or eligibility for MATH 230 determined by COS Placement Procedures. CAN CHEM 6. Prerequisites: MATH 200 or MATH 205 or MATH 215 or equivalent college course with "C" or better or eligibility for MATH 230 as determined by COS placement procedures.

## CHEMISTRY

CHEM 021 Organic/Biological Chemistry
4 UNITS
Hours: $\quad 3$ Lecture/Discussion 3 Lab
CHEM 21 is the second semester of a full year college chemistry course which meets the needs of the allied-health majors. Content focuses on structural configurations, properties and reactions of organic and biochemical compounds. Both qualitative and quantitative aspects of these are part of lecture and laboratory. CAN CHEM 8. Prerequisites: CHEM 020 or equivalent college course with "C" or better.

| CHEM 030 | Genl \& Biological Chemistry | 5 UNITS |
| :--- | :--- | :--- |
| Hours: | 4 Lecture/Discussion |  |
|  | 3 Lab |  |

The theme of this course is the molecular basis of life. It will cover essential concepts of inorganic, organic, and biochemistry. Inorganic topics include atomic theory, stoichiometry and solution chemistry. Topics for organic and biochemistry are chosen to enhance the basic understanding of living processes. Advisory on Recommended Preparation: Completion of MATH 200 or MATH 205, or MATH 215 or placement in MATH 230 as determined by the COS Placement Procedures.

CHEM 151AD Independent Study - Chemistry 1-4 UNITS

## Hours: 3 TO 12 Lab

The purpose of Independent Study is to provide an opportunity to students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, student must file an independent study form through the Admissions Office to obtain approval to enroll.

| CHEM 180 | Lab Techniques \& Practices | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 3 Lab |  |

Equivalent Course: BIOL 180.
This course introduces students to the techniques and practices used in laboratory settings. Topics will include lab safety, separation techniques, and measurements using a variety of instruments. Care and maintenance of instruments are also covered in the course. This is a required course for the Laboratory Technician Certificate. Advisory on Recommended Preparation: Completion of or coenrollment in a transfer level chemistry course.

CHEM 185 Applied Lab Practices 2 UNITS
Hours: 1 Lecture/Discussion
3 Lab
Equivalent Course: BIOL 185.
Students will work individually and in groups to solve independent laboratory research problems. Students will utilize proper laboratory protocols, and instrumentation to produce and collect data. They will analyze the experimental data and document their work in laboratory reports.
Prerequisites: CHEM 001 or CHEM 020 or CHEM 030 or equivalent college course with "C" or better.

CHEM 190AD Supervised Practice 1-3 UNITS
Hours: $\quad 3$ TO 9 Lab
Supervised Practice. Limitation on enrollment: Permission of the department.

| CHEM 253 | Introduction to Chemistry | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 2 Lab |  |

This is a one-semester elementary class for students who have never taken high school chemistry or whose previous work in chemistry did not prepare them for CHEM 20. The course will prepare students for success in CHEM 20 by giving them a basic background in matter, energy, chemical reactions, measurements, formula writing, nomenclature, chemical calculations and a review of elementary algebra. Advisory on Recommended Preparation: MATH 200 or MATH 205 or 215 or equivalent college course with "C" or better, or eligibility for Math 230 as determined by COS Placement Procedures.

## CHILDDEVELOPMENT

$\begin{array}{ll}\text { CHLD } 039 & \text { Child Development-DS } 1 \\ \text { Hours: } & 3 \text { Lecture/Discussion }\end{array}$
Equivalent Course: PSY 039.
This course studies the development of humans from conception to adolescence in the areas of cognition, physical growth and development language, and social development. The course includes, theory, history and systems, application and practice of pertinent concepts in developmental psychology. CAN FSC 14.

CHLD $042 \quad$ Child, Family \& Society-DS2 3 UNITS
Hours: 3 Lecture/Discussion
A study of the social development of young children with emphasis on family, child care and community resources. Content will include public policy, child advocacy, and the current social issues and concerns. This course is required for the Child Development Permit and the core curriculum for employment in child care centers.

## CHLD 112 Children's Nutrition <br> 3 UNITS <br> Hours: $\quad 3$ Lecture/Discussion <br> Equivalent Course: NUTR 112.

A survey course on children's nutritional requirements. This course focuses on children's nutrition prior to conception through adolescence. Study centers on nutrition basics, feeding principles, and current topics. An appropriate course for students in education and social services and human development.

CHLD 134 Child Abuse
2 UNITS
Hours: 2 Lecture/Discussion
A study of child abuse that will include detection, reporting requirements, causes, prevention and treatment. Students will learn/develop knowledge related to understanding the impact of abuse on children. Community resources for prevention and treatment will be presented as well as information on healthy family dynamics.

## CHLD 135 Music Experiences in ECE-DS3 1 UNIT Hours: 17 Lecture/Discussion

This course investigates various methods of using musical experiences with children and evaluates the benefits of music activities. Topics include themes, creating and using musical instruments, songs and finger plays. Course is appropriate for teachers, aides, childcare providers, as well as parents.

## CHLD 136 Children's Literature-DS3 3 UNITS <br> Hours: 3 Lecture/Discussion

This course includes selection of appropriate literature for various ages of children, successful methods of presenting literature of various types and storytelling techniques. Appropriate for teachers, aides, care providers, parents, and others interested in selecting literature for children.

CHLD 137 Science Experiences in ECE-Ds3 1 UNIT
Hours: 1 Lecture/Discussion
This course investigates the various methods of integrating science experience and activities throughout the early childhood curriculum. Emphasis is placed on creating positive, age-appropriate activities, to excite children's interest in science in the world around them.

CHLD 138 Science Exp in School-Age Ed 1 UNIT

## Hours: 17 Lecture/Discussion

This course provides an overview of science activities appropriate for the schoolage environment. Students participate in preparation and completion of various science activities. The theory behind the science activities is also covered. Students will develop materials and methods appropriate for the school-age child.

## CHLD $140 \quad$ Prin in Early Child Ed-Ds3 3 UNITS <br> Hours: 2 Lecture/Discussion <br> 3 Lab

This course is designed for observation and study of young children in a laboratory setting in preparation for working with diverse families in the classroom setting and in the community. It includes study of behavior in children, theory, curriculum, best teaching practice and assessment. Limitation on Enrollment: A T.B. test clearance must be obtained prior to participation in lab exercises.

## CHILD DEVELOPMENT

| CHLD 141 | Practices in ECE DS3 |
| :--- | :--- |
| Hours: | 2 Lecture/Discussion |
|  | 3 Lab |

3 UNITS

The course is designed to prepare the student to classroom teaching, curriculum development and objective writing. Laboratory experience is a direct contact with children in a functioning program as a classroom teacher. Limitation on Enrollment: A T.B. test clearance must be obtained prior to participation in lab exercises. Advisory on Recommended Preparation:ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 as determined by COS Placement Procedures.
Prerequisites: CHLD 140 or equivalent college course with "C" or better.

CHLD 142 Adult Supervision/Mentor DS6 2 UNITS
Hours: 2 Lecture/Discussion
Course includes methods and principles of supervising teachers in the early childhood classroom and also meets the requirement of adult supervision units on the California Permit Matrix. This course is required for the Child Development Permit, levels of Master Teacher and above.
Prerequisites: CHLD 141 and CHLD 143 or equivalent college courses with "C" or better.

CHLD 143 Admin of Early Chldhd Ed-DS6 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Course focuses on administering programs for children with special emphasis on the management of child care programs, including program planning, organization, budgeting, personnel policies, record keeping, legal requirements and regulatory agencies. Required for Child Care Center Director. CHLD 143/144 meet the State Supervisor Permit. Advisory on Recommended Preparation: CHLD 141 or equivalent college course with "C" or better.
Prerequisites: CHLD 140 or equivalent college course with "C" or better.

CHLD 144 Adv Admin Erly Chldhd Ed-DS6 3 UNITS Hours: $\quad 3$ Lecture/Discussion
An advanced course in administration of quality early childhood education, including time management, staff development, parents and staff handbooks goal setting, marketing, evaluation and accreditation. Fulfills the State requirement for Child Care Center Director. CHLD 143 and 144 together fulfill requirements for a California site Supervisor permit. Advisory on Recommended Preparation: CHLD 141 or equivalent college course with "C" or better.
Prerequisites: CHLD 143 or equivalent college course with "C" or better.

CHLD 145 Parenting 3 UNITS Hours: $\quad 3$ Lecture/Discussion
The course studies topics pertaining to parenting such as attachment, appropriate guidance techniques, parenting styles, conflict resolutions, parenting children with special needs, parent/child interaction and home environment.

CHLD 146 Exceptional Child

## 3 UNITS

Hours: $\quad 3$ Lecture/Discussion
A study of characteristics of children with disabilities. Focus will be on etiology, legislation, curriculum, interventions, role of the teacher and family issues. CHLD DEV 146 fills 3 of the required 12 units for ECE employment in California and is required for the Child Development - Option II, Early Childhood Special Education Certificate.
$\begin{array}{lll}\text { CHLD } 147 & \text { Infant/Toddler-Chld Care-DS4 } \\ \text { Hours: } & 3 \text { Lecture/Discussion }\end{array}$
Study of the development and care of the infant/toddler. Includes areas of social/ emotional development, nutrition, cognitive/motor development, limit setting and language development. Socializing among children/families of diverse backgrounds, play and natural environments appropriate for the typically and atypically developing child will be explored.

## CHILDDEVELOPMENT

CHLD 148 Child Health/Safety-DS7 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
A comprehensive study of health, safety, nutrition and current issues in child development with the young child. This course is designed for childcare givers, teachers and parents.

CHLD 149AB Creativ Activ Young Chld-DS3
2 UNITS
Hours: 2 Lecture/Discussion
1 Lab
Materials Fee: $\$ 5.00$
This course is designed to prepare students in Child Development in the planning and preparation of a wide variety of creative activities for use with young children. It has an emphasis on age and developmentally appropriate practice. Students will study creative theory and prepare materials for classroom use, focusing on various curriculum areas as well as the seasons and holidays. This course may be repeated one time.

CHLD 151AD Independent Study-Chld Dev 1-4 UNITS

## Hours: 3 TO 12 Lecture/Discussion

The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

## CHLD 152 School-Age Child Care-DS5 <br> 3 UNITS

## Hours: $\quad 3$ Lecture/Discussion

This course is a study of child care provision for school-age children. The content includes an overview of the physical, social and cognitive development of schoolage children. This course investigates a variety of enrichment activities as well as curriculum development.

CHLD 153 Creative Movement Classroom 1 UNIT
Hours: 17 Lecture/Discussion
This course investigates various methods of incorporating movement experiences into the early childhood school age classroom curriculum. The class includes the study of creativity, locomotor skills, and perceptual motor development. Appropriate for teachers, care providers, parents and child development students.

CHLD 154 Intro to Early Intervention 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
As an introductory course in early intervention, this course gives an overview of high risk and handicapped infants, birth to age three, and the treatments, strategies and techniques used to serve them, according to PL99-457. The course is designed to meet the training needs of educators, parents and care providers who will serve this special needs population. The course will cover parent/ professional relationships, the normal grief process, identification and assessment, community resources, and development curriculum.

CHLD 155 Child Guidance DS3

## 3 UNITS

Hours: $\quad 3$ Lecture/Discussion
This course focuses on a child-centered approach to problem solving for teachers with groups of young children from infancy to school-age. It includes assessment and response to child behavior using positive, age-appropriate methods.

CHLD 156 Family Child Care Management 1 UNIT

## Hours: 16 Lecture/Discussion

This is an introductory course designed to meet the training needs of family child care providers. This course combines theory and practical application to introduce licensing guidelines, health and safety practices, record keeping, developing business policies, support services and procedures unique to family child care.

CHLD 157
Hours:
16 Lecture/Discussion
This is an introductory course designed to meet the training needs of family child care providers. This course combines theory and practical application to introduce daily routines for family child care, parent/provider relationships, problem-solving techniques, growth and development, discipline techniques, resources and avoiding provider burnout.

## CHLD 158 Cultural Diversity in ECE DS3 3 UNITS

Hours: $\quad 3$ Lecture/Discussion
Explores cultural and language acquisition issues that relate to the education of diverse populations of children, and acquaints students with non-bias multicultural teaching strategies and curriculum suitable for young children. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better.

CHLD 159 Permits: Professional Growth 2 UNITS
Hours: $\quad 36$ Lecture/Discussion
This is an introductory course designed to provide training to child development students on the Child Development Permits issued by California Commission on Teacher Credentialing. Training will also include information to help the students develop their professional growth plans, complete the renewal process and identify resources.

CHLD 160 Literacy/Language in Child 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course provides a theoretical framework for how humans acquire language and literacy from early childhood through adulthood. It will provide practical information for developing language and literacy classroom programs which will enhance language development, second language acquisition and cognitive/ academic development in culturally diverse contexts.

CHLD 163AD After School Programs 4 UNITS
Hours: 3 Lecture/Discussion
3 Lab
The course is a study of and practicum in literacy/ numeracy based after-school enrichment programs held in schools. It is designed to include social and cognitive development of school-age children, curriculum development, enrichment activities and classroom management. Lab experience includes direct contact with children in after-school programs at elementary schools. Students must submit a valid and current TB clearance slip to the instructor of record prior to participation in lab exercises. May be repeated three times.
CHLD $164 \quad$ Family Child Care Mentor 2 UNITS

## Hours: $\quad 36$ Lecture/Discussion

2 UNITS
This is an introductory course designed to study the philosophy and techniques of working with adults in a family child care home. Emphasis will be on communication, staff development, licensing, and professionalism in family child care. Students must pass this course to become a Family Child Care Mentor. Limitation Request on Enrollment: Students must be experienced, licensed family childcare providers.

## CHLD 190AD Supervised Practice <br> 1-3 UNITS <br> Hours: 3 TO 9 Lab

Under the supervision of an instructor, selected students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling and other employment or volunteer situations where the student is expected to take a leadership role. This course may be repeated three times. Limitation on Enrollment: Permission of the department.

CHLD 199 Topic Courses - Chld Dev .5-4 UNITS
Special topic courses in Child Development.
CHLD 238 Food Exper w/Young Children 1 UNIT
Hours: 16 Lecture/Discussion
This course explores and develops food experiences which can be incorporated into the learning environment of young children. It will include safety and sanitation with young children, recipe development for non-readers, and simple preparation techniques.

## CHILDDEVELOPMENT

## COMPUTER

CHLD 239 Introduction to Child Dev 2 UNITS
Hours:
36 Lecture/Discussion
Overview of the child care profession. Philosophical/theoretical basis for age appropriate curriculum for young children. Includes licensing requirements and standards for quality preschool programs. Units will apply toward a state certification. One hour observation required at COS Child Development Center or mentor site.

CHLD 242 Socialization of the Child 2 UNITS
Hours: 36 Lecture/Discussion
Course covers the early childhood classroom, family and community and their effects on the socialization of the child, including diverse families, and community resources. Class time will focus on developmentally appropriate environment in child care programs. Units apply toward a state certificate in child care.

CHLD 249 Intro Preschool Activities 2 UNITS
Hours: $\quad 36$ Lecture/Discussion
Course prepares students for employment in child care or continued education in child development. Focus is on planning, preparing materials and presenting curricular activities that are developmentally appropriate. Emphasis is on activities, developing and managing learning centers for an ECE environment. Credits apply towards state certificate.

CHLD 251AD Independent Study-Chld Dev 1-4 UNITS
Hours: $\quad 3$ TO 12 Lecture/Discussion
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, student must file an Independent Study form through the Admissions and Records office.

CHLD 299 Special Topics - Chld Dev
.5-4 UNITS
Hours: 8 TO 70 Lecture/Discussion
Special topic courses in Child Development.

## CINEMA ARTS

CINA 031 Motion Picture Appreciation 2 UNITS
Hours: 1 Lecture/Discussion
2 Lab
Explores the origin of motion picture production, objectives of various directors, actors and producers in their films, and technology esthetic changes in motion picture production. Students are taught to view the motion picture as an art form and to evaluate the objectives of motion pictures and their attainment. CINA 031, fall semester covers the period from beginning to the present, with emphasis on American films.

CINA 032

## Motion Picture Appreciation

## 2 UNITS

Hours: 1 Lecture/Discussion
2 Lab
An exploration of the origin of motion picture production, objectives of various directors, actors and producers in their films, and technology and aesthetic changes in motion picture production. Students are taught to view the motion picture as an art form and to evaluate the objectives of motion pictures and their attainment. CINA 32 is offered only in spring semester, covers contemporary film 1930 to present, with emphasis on international films.

COMP 005 Computer Concepts
Hours: 4 Lecture/Discussion
Materials Fee: $\quad \$ 6.00$
COMP 5 introduces students to: computer hardware and software systems, impact of computers on society, ethical issues, application of computer technology in many career fields. Students learn to use a microcomputer and applications software packages-word processing, spreadsheet, database and presentation programs. CAN BUS 6. Advisory on Recommended Preparation: Keyboarding speed of 20 cwpm.

| COMP 006 | Programming Fundamentals | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |

Materials Fee: $\quad \$ 6.00$
COMP 6 Programming Fundamentals introduces students to problem analysis and programming techniques for preparing computerized solutions using Visual Basic. The student analyzes and defines the problem, plans and selects the appropriate procedures, and utilizes the correct programming language commands leading to solution for typical business scenarios. Advisory on Recommended Preparation: COMP 5 or 130 or equivalent college course with "C" or better (at a minimum COMP 5 or 131 should be taken concurrently); keyboarding speed of 20 cwpm).

| COMP 007 | Cobol Programming | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 2 Lab |  |

Materials Fee: $\quad \$ 6.00$
This is an advanced computer class designed to teach students the Common Business Oriented Language (COBOL), how to plan and program typical business problems in Structured COBOL, how to find and correct errors in the program, and how to document the program. The student will develop increasingly challenging programs to prepare reports, construct and use tables, use data files, and on-line systems. Advisory on Recommended Preparation: COMP 5 or 131 or equivalent college course with " $C$ " or better (at a minimum COMP 5 or 131 should be taken concurrently); keyboarding speed of 20 cwpm.
CAN CSCI 8.
COMP 008 Programming Concepts (JAVA) 4 UNITS
Hours: $\quad 3$ Lecture/Discussion
2 Lab
Materials Fee: $\quad \$ 4.00$
This is an advanced computer class designed to teach students how to plan and program typical business problems utilizing a high-level, block structured JAVA language. Advisory on Recommended Preparation: COMP 5 or COMP 130 or equivalent college course with "C" or better. Keyboarding speed of 20 cwpm. Formerly COMP 108.

COMP 009 Advanced Application Software 3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 10.00$
This course advances the Visual Basic. Net techniques learned in COMP 6 with the inclusion of file handling techniques, interconnectivity to a RDB (such as MS Access, and advanced software development using the management of visual objects on microcomputers. Emphasis on structure and style, using visual environments (windows and graphs), program planning, and logic structures. Advisory on Recommended Preparation: COMP 6 or equivalent college course with "C" or better (at a minimum COMP 6 should be taken concurrently). Formerly COMP 109.

## COMPUTER

## COMPUTER

$\begin{array}{lll}\text { COMP 130 } & \text { Intro to Personal Computers } & 4 \text { UNITS } \\ \text { Hours: } & 4 \text { Lecture/Discussion } & \end{array}$
Materials Fee: $\$ 6.00$
This beginning course in microcomputers is designed for students who wish to learn how to use a computer. Topics include an introduction to computer concepts, Windows and DOS, and word processing, spreadsheet, and database applications. Most transfer business students should take COMP 5 instead of COMP 130, and COMP 130 is not recommended for students who have completed COMP 5 Advisory on Recommended Preparation: Keyboarding speed of 20 cwpm.

## COMP 131 Beginning DOS

3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Materials Fee: $\quad \$ 6.00$
COMP 131 is a first semester lecture/lab microcomputer course covering the basic disk operating system commands of Version 3.3 DOS. Students enrolling in the class will be able to understand the function each DOS command performs and be able to use those DOS commands to perform routine operations such as managing files, creating menus, working with sub-directories, making backups, and troubleshooting the system. No previous computer operating experience is required. An additional two to four hours of computer time will be needed each week to enable a student to complete his/her assignments. Advisory on Recommended Preparation: Keyboarding speed of 20 cwpm.

COMP 132 Advanced DOS 2 UNITS
Hours: 2 Lecture/Discussion
1 Lab
Materials Fee: $\$ 6.00$
The course provides information to help the computer user achieve maximum effectiveness on his/her personal computer. The course will enable DOS users to gain a better understanding of and insight into the DOS environment. Students will be able to analyze and explain various advanced batch files, interpret errors in the DOS environment, and attack and solve specific problems found in the DOS environment.
Advisory on Recommended Preparation: COMP 131 or equivalent college course with "C" or better.

COMP 133 Database Processing 3 UNITS
Hours: $\quad 3$ Lecture/Discussion

## Materials Fee: $\$ 6.00$

Database processing for microcomputers emphasizes relational database theory as well as design and implementation. Practical applications will include using the database software, first to recreate examples from the text, then to design a database, and last to build an application using the database. Advisory on Recommended Preparation: COMP 130 and 131 or equivalent college courses with "C" or better; and keyboarding speed of 20 cwpm.

COMP 135 Desktop Publishing for Bus
4 UNITS
Hours: 4 Lecture/Discussion
Materials Fee: $\$ 7.00$
This is a basic course in desktop publishing where students will learn the essentials of design, typography, graphics and text using Aldus PageMaker Software. Desktop Publishing for Business is the use of a microcomputer based system to produce publication materials. The materials include sales reports, project proposals, notices, fliers, office forms, brochures, reports, manuals, and newsletters. Desktop Publishing is the method to produce masters for reproduction. Advisory on Recommended Preparation: COMP 131 or equivalent college course with "C" or better; and ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS Placement Procedures; and intermediate keyboarding skills.

## COMP 136 Word Processing <br> Hours: $\quad 3$ Lecture/Discussion <br> Materials Fee: $\$ 5.00$

This course is designed to teach the fundamentals of word processing. Students will produce business and personal documents using the appropriate formatting techniques. The student will also learn to create charts and tables, merge documents, format graphics and text boxes, and work with Web documents and Desktop Publishing. Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS placement procedures; and computer experience and intermediate keyboard skills.

## COMP 138 Spreadsheet Design for Bus 3 UNITS Hours: 3 Lecture/Discussion

Materials Fee: $\$ 6.00$
This course emphasizes the design, creation, and use of spreadsheets for business applications. Students will learn beginning to advanced features of microcomputer spreadsheets including basic spreadsheet design and creation; beginning and advanced spreadsheet formatting; creating and using templates, macros, and tables; data entry and management; and presentation graphics, including report generation, creating and customizing graphs, and creating and running computer slide shows. Advisory on Recommended Preparation: Keyboarding speed of 20 cwpm and microcomputer experience.

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COMP 139
Hours: 2 Lecture/Discussion
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## Materials Fee: $\$ 6.00$

Designed to teach the Windows software program. Students will learn beginning to advanced features of Windows including getting started and exploring Windows, managing programs, managing files, using Write, using Paintbrush, transferring data between applications, managing printing, and customizing Windows. An additional two to four hours of computer time will be needed each week to enable a student to complete his/her assignments. Advisory on Recommended Preparation: COMP 131 or equivalent college course with "C" or better; and keyboarding speed of 20 cwpm.
COMP $140 \quad$ Windows and DOS
Hours: $\quad 3$ Lecture/Discussion
Materials Fee: $\quad \$ 5.00$
COMP 140, Operation Systems: Windows and DOS, is designed to provide the
computer student with a theoretical background to enable him/her to understand the
relationship of WINDOWS/DOS to his/her computer. Students will learn how to use
this software productively. The course includes practical applications of these two
operating systems. Advisory on Recommended Preparation: Keyboarding
speed of 20 cwpm. speed of 20 cwpm.

COMP 151AD Independent Study-Computer 1-4 UNITS
Hours: $\quad 3$ TO 12 Lecture/Discussion
Materials Fee: $\$ 8.00$
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition students must file an Independent Study form through the Admissions and Records Office.

COMP 210 Computer Accounting 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Materials Fee: $\$ 6.00$
Equivalent Course: ACCT 210.
This course will teach students to use computer-based accounting packages to handle the accounting procedures for a business. These packages are usually referred to as "General Ledger Accounting" packages. This course is an introduction to accounting applications software for accountants and business managers. Advisory on Recommended Preparation: ACCT 101 or 1 or equivalent college course with "C" or better; and microcomputer experience.

## COMPUTER

| COMP 220 | Essential Computer Concepts | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 36 Lecture/Discussion |  |

Materials Fee: $\$ 4.00$
This beginning course is designed to give the student a basic familiarity with the personal computer. Topics include what a computer is, terminology, an introduction to Windows, managing files with Windows Explorer, working with the Internet, and working with Outlook. This course is appropriate for anyone just starting to use a computer. Advisory on Recommended Preparation: Keyboarding speed of 20cwpm.

COMP 221AD Beginning Word
1.5 UNITS

Hours: 1.5 Lecture/Discussion
Materials Fee: $\$ 4.00$
This course is designed to teach the beginning fundamentals of the Word, word processing program. Students will produce business and personal documents using the appropriate Word formatting techniques. This course may be repeated three times. Advisory on Recommended Preparation: Eligibility for ENGL 251, computer experience, and intermediate keyboarding skills.

## COMP 222AD Advanced Word <br> Hours: 1.5 Lecture/Discussion

1.5 UNITS

Materials Fee: $\$ 5.00$
This course is designed to teach the advanced fundamentals of Microsoft Word, a word processing program. Students will produce business and personal documents using the advanced formatting features of Word, (i.e., WordArt, Draw, borders, frames, clip art columns.) This course is repeatable three times. Advisory on Recommended Preparation: Eligibility for ENGL 251; COMP 221 or equivalent college course with "C" or better, or equivalent experience with Word; intermediate keyboarding skills.

COMP 223AD Beginning Excel

### 1.5 UNITS

Hours: 1.5 Lecture/Discussion
Materials Fee: $\quad \$ 4.00$
This course is designed to teach the beginning fundamentals of the Microsoft Excel spreadsheet program. Students will learn how Excel can be used for business applications. It is recommended for AA/AS and certificate students pursuing business careers. This course may be repeated three times. Advisory on Recommended Preparation: Keyboarding speed of 20 cwpm.

COMP 224AD Advanced Excel
1.5 UNITS

Hours: $\quad 1.5$ Lecture/Discussion
Materials Fee: $\$ 5.00$
This course is designed to teach the advanced fundamentals of Microsoft Excel, a spreadsheet program. Students will learn how Excel can be used for advanced business applications. Spreadsheet skills are a prerequisite for many business jobs and are also necessary for upper division business courses. This course is repeatable three times. Advisory on Recommended Preparation: Completion of COMP 223 or equivalent college course with "C" or better, or equivalent experience with Excel; keyboarding speed of 20 cwpm; and MATH 360 or BUS 395 or equivalent college course with "C" or better.

COMP 227 Presentation Software
1.5 UNITS

Hours: 1.5 Lecture/Discussion
Materials Fee: $\quad \$ 5.00$
This course will teach students how to prepare a business presentation using Presentation software. Students will learn how to create a computerized slide show as well as speaker outlines/notes and audience handouts. Advisory on Recommended Preparation: Computer experience and keyboarding speed of 20 cwpm .
COMP $228 \quad$ Intro to World Wide Web 1 UNIT
Hours: $\quad 18$ Lecture/Discussion
Materials Fee: $\$ 3.00$
This beginning course is designed to give the student a basic familiarity with the
World Wide Web. Topics include a brief history of the Internet and World Wide Web,
browsing the Web, searching for and locating appropriate Web pages, downloading
files, and sending and receiving electronic mail. Advisory on Recommended
Preparation: COMP 5, COMP 130 or COMP 140 with a "C" or better or
familiarity with microcomputers and Windows.

COMP 228 Intro to World Wide Web 1 UNIT
Hours: 18 Lecture/Discussion

This beginning course is designed to give the student a basic familiarity with the World Wide Web. Topics include a brief history of the Internet and World Wide Web, browsing the Web, searching for and locating appropriate Web pages, downloading Preparation: CO familiarity with microcomputers and Windows.

COMP 229
Hours:
Web Page Design \& Development
3 UNITS

Materials Fee: $\$ 5.00$
This course emphasizes the design and creation of Web pages. Students will learn how to use a Web publishing software program, such as Microsoft Front Page, to create professionally looking Web sites. Content includes creating original Web images, adding animation, and publishing the finished site on a Web server. Advisory on Recommended Preparation: COMP 220, COMP 228, LIBR 102, or experience with Windows and the Internet.

COMP 230 Java Script/XML 3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 5.00$
This course teaches students to use JavaScript and advanced HTML techniques to add functionality including scrolling messages, animations and dynamic images, data input forms, pop-up forms, pop-up windows, and interactive quizzes to web pages. Advisory on Recommended Preparation: COMP 229 or equivalent college course with a "C" or better.

COMP 251AD Independent Study-Nontransf 1-4 UNITS
Hours: $\quad 3$ TO 12 Lecture/Discussion
Materials Fee: $\$ 7.00$
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, the student must file and Independent Study form through the Admissions and Records Office.

| COMP 304 | Intro to the Spreadsheet | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 9 Lecture/Discussion |  |
|  | 17 Lab |  |

Materials Fee: $\$ 5.00$
This course is designed for college students who want to learn general spreadsheet skills for business and personal use. It should satisfy any accounting or other area requirement for spreadsheet knowledge. Advisory on Recommended Preparation: Keyboarding speed of 20cwpm.

COMP 306AC Intro to WordPerfect 1 UNIT
Hours: 9 Lecture/Discussion
17 Lab
Materials Fee: $\$ 5.00$
This course is designed to introduce students to the WordPerfect word processing program. Students will learn how to create basic documents as well as the correct document formatting for letters, reports, tables, and columns. This course may be repeated two times. Advisory on Recommended Preparation: Keyboarding speed of 20 cwpm.

COMP 307AC Intro to Word Process for ESL 1 UNIT
Hours: 9 Lecture/Discussion
17 Lab
Materials Fee: $\$ 5.00$
This course is a lecture/lab which is designed to introduce ESL students to a word processing program. Students will learn how to create basic documents as well as the correct document formatting for letters and reports. This course is repeatable two times. Advisory on Recommended Preparation: Keyboarding speed of 20 cwpm. Limitation on Enrollment: Limited to students enrolled in the ESL program. It will be taught in the classroom designated for the ESL student. The Business Division offers COMP 306 for all other students and the courses are the same.

COMP 311AD Beginning Computer Use
. 05 UNITS
Hours: 18 Lab
Equivalent Course: LS 311AD.
This course is designed for students who are new to computer use. Skills necessary for formatting and creating documents will be introduced, as well as basic Internet navigation. This course may be repeated three times.

## CONSTRUCTION TECHNOLOGY

## CONSTRUCTION TECHNOLOGY

CT 100AB
Hours:

Const Draw/Design Analysis 1
4 UNITS

## 2 Lab

Materials Fee: $\$ 5.00$
Equivalent Course: ARCH 100.
Architectural drafting techniques and standards; progressing from fundamentals to completion of light construction drawings, basic floor plans, elevations, details, and respective building code analysis. The course utilizes computer automated drafting. This course is repeatable one time.

CT 101
Drawing/Bldg Construction 2
2 UNITS
Hours: 2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 5.00$
This course is a required course in drawing for all building trades students. The fundamentals of architectural drafting, blueprint reading, details, symbols, codes and specifications are covered. Advisory on Recommended Preparation: CT 100, 104, and 114 or equivalent college courses with "C" or better. CT 105 and 115 should be taken concurrently.

CT 104AB Construction Theory/Practice 1
4 UNITS
Hours: 4 Lecture/Discussion
2 Lab
Basic construction practices and theory for residential construction; site preparation through frame inspection, codes applications, construction schedules, and budgeting. Course content parallels CT 114 AB and is designed to be taken concurrently with CT 114AB and CT 150 as the core of the Construction program, and is repeatable one time. Advisory On Recommended Preparation: Should be taken concurrently with CT 114AB and CT 150.

## CT 105 <br> Carpentry 2, Resid Construc <br> 3 UNITS <br> Hours: <br> \section*{3 Lecture/Discussion}

This is the second course in residential construction that covers various phases of house building as they occur on the job. Drywall, interior finish work, and exterior finish work are the primary subjects in this course. Advisory on Recommended Preparation: CT 100, 104, 114, or equivalent college course with "C" or better. CT 101 and 115 should be taken concurrently.

CT 108
Adv Carpentry 1, Roof Framing
3 UNITS
Hours: 2 Lecture/Discussion
4 Lab
A study of the fundamental concepts, principles, and applications of roof framing covering the many phases of: roof design, planning and estimating, safety, use of materials, trade nomenclature, the identification of proper use and maintenance of hand tools, and power tools used in the construction of the cut and stack type of roofs. The student will study the techniques of laying out and cutting the various kinds of roofs. Advisory on Recommended Preparation: CT 101, 105, 115, or equivalent college course with "C" or better. CT 118 should be taken concurrently.

CT 109 Adv Carpentry 2, Stair Bldg
3 UNITS
Hours: 2 Lecture/Discussion 4 Lab
A study of the fundamental concepts, principles, and applications of stair building, estimating, and lot descriptions. Advisory on Recommended Preparation: CT $100104,105,108,114$ and 115 or equivalent college courses with "C" or better, or equivalent trade experience and recommendation of department. CT 119 should be taken concurrently.

CT 113AB Residential Construct-Preframe
4 UNITS
Hours: 4 Lecture/Discussion
4 Lab
This course covers the opening phase of building a residence. Real estate acquisition, construction documentation, permit processes, required licenses, preconstruction issues, building layout, form construction and concrete placement and finishing are covered. This course can be repeated one time.

CT 114AB Residential Construction 1
5 UNITS
Hours: $\quad 3$ Lecture/Discussion
6 Lab
Construction theory and hands-on building experience covering the construction of a house, on site, in a building neighborhood, from lot layout through frame inspection. This course is designed to be taken concurrently with CT 104AB and CT 150 to complete a construction program core. This course is repeatable one time. Advisory on Recommended Preparation: Should be taken concurrently with CT 104AB and CT 150.
$\begin{array}{lll}\text { CT 115AB } & \text { Residential Construction } 2 & 5 \text { UNITS } \\ \text { Hours: } & 3 \text { Lecture/Discussion } & \end{array}$
6 Lab
Construction theory and hands on building experience and construction of a house, on-site, from drywall through final inspection are studied in this course. This course is repeatable one time. Advisory on Recommended Preparation: CT 114AB or equivalent college courses with "C" or better, or equivalent skills and knowledge determined by assessment. CT 105AB and CT 151 should be taken concurrently.

CT 118AB Advanced Residential Constr $1 \quad 5$ UNITS
Hours: $\quad 3$ Lecture/Discussion
6 Lab
This course is an advanced construction theory and hands-on building experience that includes the actual construction of a house, on site, from lot layout through frame inspection. This course is repeatable one time. Advisory on Recommended Preparation: CT 115AB or equivalent college courses with "C" or better, or equivalent skills and knowledge as determined by assessment. CT 100AB and CT 108AB should be taken concurrently.
CT 119
Residential Construction 4
4 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab

The fourth class in the Construction Technology program that provides theory as well as hands-on learning by constructing a house which includes building layout, construction of ceiling and roof framing systems, roof covering, plumbing, window and door installation, and insulation. Advisory on Recommended Preparation: CT 118 or equivalent college course with "C" or better, or equivalent trade experience and recommendation of department. CT 109 should be taken concurrently.

CT 121AB Residential Construction 17 UNITS
Hours: $\quad 90$ Lecture/Discussion

### 121.5 Lab

Materials Fee: $\$ 3.00$
This course, one of four nine-week courses, covers safety; building systems, materials and layout; framing layout and construction; drafting equipment and techniques; cabinet systems, nomenclature and materials. Students will participate in construction of a single-family house both on the job and in the classroom. This course may be repeated one time.

CT 122AB Residential Construction $2 \quad 7$ UNITS
Hours: 90 Lecture/Discussion
121.5 Lab

Materials Fee: $\$ 3.00$
This course is one of a nine-week course, covers wall and roof framing layout and construction, roof coverings, insulation, floor plan design and drafting and cabinet layout and joinery. Students will participate in of a single-family house both on the job and in the classroom. This course may be repeated one time.

## CT 123AB Residential Construction $3 \quad 7$ UNITS <br> Hours: 90 Lecture/Discussion <br> 121.5 Lab <br> Materials Fee: \$3.00

This course, one of four nine-week courses, covers windows; installation and finish of interior walls; exterior wall finish; job site safety; drafting foundation and roof plans; layout and construction of cabinets. Students will participate in construction of a single-family house both on the job and in the classroom. This course may be repeated one time.

## CONSTRUCTION TECHNOLOGY

## CONSTRUCTIONTECHNOLOGY

CT 124AB
Hours:
Residential Construction 4
7 UNITS

## Lab

This course, one of four nine-week courses, covers interior door trim and finish; exterior siding and trim; job site safety; drafting of sections, electrical plans and elevations; cabinet installation and trim. Students will participate in construction of a single-family house both on the job and in the classroom. This course may be repeated one time.

CT 125

## Fundamental Remodeling

4 UNITS
Hours:
Lecture/Discussion
3 Lab
Materials Fee: $\quad \$ 6.00$
This course will cover framing, plumbing, electrical, insulation, drywall, finish carpentry, and painting. Designed for persons interested in remodeling, from the novice to the experienced builder.

CT 130 Managing Resident Construct
3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
This course prepares a student for employment in the construction industry management or supervision level. Students will study construction resources, manager's relationship with engineers, upper management internal operations, subcontractors, regulatory officials and utility companies. Students will work with managers from the construction industry. Advisory on Recommended Preparation: CT 121, 122, 123, 124, and COMP 130, or equivalent college courses with "C" or better, or equivalent skills and knowledge as determined by division assessment.

## CT 132 Basic Construction Systems <br> 3 UNITS <br> Hours: $\quad 3$ Lecture/Discussion

This course deals with basic building systems including structural concrete, steel and wood, their applications in construction, building codes, regulations, safety and quality management. This course leads to employment in the construction industry or to a university Construction Management Program. Advisory on Recommended Preparation: CT 121, 122, 123, 124; and COMP 130, or equivalent college courses with "C" or better, or equivalent skills as determined by division assessment.

CT 134
Residential Const Estimating
2 UNITS
Hours: 2 Lecture/Discussion
1 Lab
A study of the fundamental concepts, theories, principles and applications covering the many phases of residential construction estimating. Such items as cost, materials, quality of materials, materials take off, and trade nomenclature will be discussed and studied for each phase of estimating.

CT 135
Hours:

## Blueprint Reading/Res Constr

2 UNITS
LecturelDiscussion
1 Lab
A study of the fundamental concepts, principles, and applications of blueprint reading. The student will learn the basic fundamentals of reading and interpreting building plans and specifications. It is of great value to the person pursuing a career in drafting, construction inspection, real estate, or maintenance engineers.

## CT 138 Contractors License Law 3 UNITS <br> Hours: $\quad 3$ Lecture/Discussion

A study of the fundamental concepts, principles, and applications of construction laws, lien laws, safety, and business laws concerning the construction industry. CT 138 is designed for the individual interested in taking the California State examination for the General Contractors (B) License, or the Specialty Contractors (C) License, or for the student interested in the laws governing the construction trade.

| CT 149AD | Careers-Women Cabinetmaking | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 3 Lab |  |

The study of the fundamentals, concepts, principles and applications of cabinetmaking and millwork covering: tool and machine safety, identification of hand tools, hand power tools and machines used in the cabinet shop, proper use of hand tools, hand power tools and machines, tool and machine maintenance, woodworking construction, cabinet and milling details and drawings, various methods of layout and the construction of cabinets. This course may be repeated three times.

## CT 150 <br> Fundamentals/Cabinetmaking 1 <br> 4 UNITS <br> Hours: 3 Lecture/Discussion <br> 3 Lab

A study of the fundamental concepts, principles, and applications of cabinet making and mill work covering many phases of cabinet design, safety, use of materials, cabinet drafting and sketching, planning and estimating, trade nomenclature, glues and fasteners.
CT 151
Cabinetmaking 3-Layout/Tec
4 UNITS
Hours: 4 Lecture/Discussion
2 Lab

A study of the fundamental concepts, principles, and applications of cabinetmaking and millwork covering the many phases of cabinet design, safety, use of materials, cabinet hardware, glues, clamps, trade nomenclature, cabinet construction, methods of layout, counter tops, and the installing of cabinets and topics. This course is an invaluable career asset for people interested in the cabinetmaking, woodworking, or furniture making fields. Advisory on Recommended Preparation: CT 150 and 160 or equivalent college course with a "C" or better, or equivalent skills and knowledge as determined by departmental assessment.

| CT 160 | Cabinetmaking 2 (Tools/Mill) | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 3 Lab |  |

Materials Fee: $\quad \$ 5.00$
A study of the fundamental concepts, principles, and applications of cabinetmaking and millwork covering the many phases of: tool and machine safety, the identification of, proper use of, and maintenance of, the hand tools, hand power tools and machines used in the cabinet shop. Advisory on Recommended Preparation: CT 150 or equivalent college course with "C" or better (at a minimum CT 150 should be taken concurrently), or equivalent skills as determined by division assessment.

CT 161
Cabinetmaking 4 (Cab Constr)
3 UNITS
Hours: 2 Lecture/Discussion
4 Lab
A study of the concepts, principles, and applications of cabinetmaking and millwork. The study of woodworking techniques, cabinet and milling details and drawings, the study and construction of cabinet doors and drawers, various methods of layout, and the construction of project house cabinets. This course is an invaluable career asset for people interested in cabinetmaking or furniture making fields. Advisory on Recommended Preparation: CT 150 and 160 or equivalent college courses with "C" or better. CT 151 should be taken concurrently.

| CT 162AB | Basic Cabinetmaking | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 3 Lab |  |

This course includes the study of the fundamentals, concepts, principles and applications of cabinetmaking and millwork covering: tool and machine safety, identification of hand tools, hand power tools and machines used in the cabinet shop, proper use of hand tools, hand power tools and machines, tool and machine maintenance, the study of woodworking techniques, cabinet and milling details and drawings, various methods of layout and the construction of cabinets. This course may be repeated once. Advisory on Recommended Preparation: Construction experience or department recommendation.

## CONSTRUCTIONTECHNOLOGY

## CONSTRUCTIONTECHNOLOGY

| CT 163AB | Commercial Cabinet Construct | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 4 Lab |  |

The study of woodworking techniques, cabinet and milling details and drawings, the study and construction of cabinet doors and drawers, various methods of layout, and the construction of commercial cabinets. This course may be repeated one time. Advisory on Recommended Preparation: Construction experience or department recommendation.

## CT 170AD Concrete Inspection

3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course is for persons engaged in supervision and inspection of building construction. Principles of concrete: engineering, materials, placement and construction are covered. This course can be repeated three times.

CT 171AD Wood \& Metal Inspection 3 UNITS
Hours: 3 Lecture/Discussion
This course is for persons engaged in supervision and inspection of building construction. Principles of wood, metal, masonry and paving are covered. This course can be repeated three times.

## CT 172AD

Building Codes
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course is for persons engaged in supervision and inspection of building construction. The Uniform Building Code and the California Building code will be studied. This course can be repeated three times.

CT 173AD Electrical Codes
3 UNITS
Hours: 3 Lecture/Discussion
This course is for persons engaged in supervision and inspection of building construction. Topics will include: methods and techniques used in electrical plan review, related math and field inspection of electrical systems. This course can be repeated three times.

## CT 174AD Mechanical Inspection <br> 3 UNITS <br> Hours: 3 Lecture/Discussion

This course is for persons engaged in supervision and inspection of building construction. Topics to be covered are: methods and techniques used in plan review, related math and field inspection of mechanical systems. This course can be repeated three times.

CT 175AD Plumbing Inspection 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course is for persons engaged in supervision and inspection of building construction. Topics covered are methods and techniques of plumbing systems, the plumbing code and field inspection and supervision of plumbing projects. This course can be repeated three times.

CT 176AD Architecture Inspection
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course is for persons engaged in supervision and inspection of building construction. Topics covered are engineering, symbols, model codes and related math. This course can be repeated three times.

CT $180 \quad$ Multi Resident Fire Sprinklr
2 UNITS
Hours: 1.5 Lecture/Discussion
1 Lab
Trains and educates the student to inspect and/or design fire sprinkler systems for homes, apartments and motels.
CT 190AD Supervised Practice 1-3 UNITS

## Hours: $\quad 3$ TO 9 Lab

Supervised Practice. This course may be repeated three times. Limitation on enrollment: $A$ " $B$ " in a carpentry major and permission of department.
CT 205AB
Plumbing
3 UNITS
Hours: 2 Lecture/Discussion
3 Lab

This is a basic course in plumbing for individuals who wish to pursue a plumbing career or for their general knowledge. This course teaches basic plumbing theory, materials and installation procedures. This is done in the classroom and through the plumbing of a house. This course is repeatable one time.

## CT 270AB Residential Wiring <br> 3 UNITS <br> Hours: $\quad 3$ Lecture/Discussion

This course covers theory and application of electrical principals and practices currently used in the design and installation of residential electrical systems. The students will learn circuit design criteria, and proper methods of component installation for main service entrance panels, sub-panels, and branch circuits with multiple switching locations utilizing the applicable codes and regulations. This course is repeatable one time.

## CONSUMER/FAMILY STUDIES

| CFS 006 | Color and Design | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 5 Activity |  |

## Materials Fee: $\$ 10.00$

## Equivalent Course: ART 006.

Basic course in art with a primary purpose of familiarizing the students with elements and principles used in design art. Fundamental concepts of form, shape, line and color in 2nd and 3rd dimensions. CAN ART 14.

| CFS 007 | Advanced Color and Design | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 5 Activity |  |

## Materials Fee: $\$ 10.00$

Equivalent Course: ART 007.
CFS 7 is an intermediate level course on visual dynamics. This course will study what makes a strong composition in a two-dimensional artwork and explores giving form to ideas on the two-dimensional plan. This course covers color theory and will study the effects of different color harmonies. Advisory on Recommended Preparation: ART/CFS 6 or equivalent college course with a "C" or better. CAN ART 16.
CFS 026
Marriage and Family Life
3 UNITS
Hours: 3 Lecture/Discussion

## Equivalent Course: SOC 026.

This course covers the following topics in marriage and family: dating and mateselection, communication and conflict resolution, dual career families, human sexuality, family planning, parenthood, divorce and remarriage, changing gender roles and family economics. CAN FSC 12.

## CFS 080 Lifespan Development <br> 3 UNITS <br> Hours: 3 Lecture/Discussion

A study of human development incorporating the major stages of life from conception to old age and death. Emphasis on physical, cognitive, social, emotional and moral development. The interrelationship of heredity and environment in these areas and the effect on human development will be explored. Major topics include human behavior, theories, sexuality, nutrition, health and stress.

CFS 136 Introduction to Aging 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Equivalent Course: SSCI 136.
An introductory course covering topics in gerontology/aging; demographics, theories, concepts, perspectives, and research, including biophysical, psychosocial, cultural, political, and ethnic topics which impact individuals, families, and society.

## CONSUMER/FAMILY STUDIES

## CONSUMER/FAMILY STUDIES

CFS 151AD Independent Study-CFS 1-4 UNITS

Hours: 54 TO 216 Lab
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit.This class may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

CFS 186 Personal Mgmt/Consumer Econ 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course is designed to approach financial management from a personal point of view. Topics include, budgeting, use of personal credit, selection of consumer goods and services, such as insurance, autos, housing and durable goods. A valuable course for all students that provides important tools for success.

CFS 190AD Supervised Practice 1-3 UNITS
Hours: $\quad 3$ TO 9 Lab
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of work per unit.This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses from COS or equivalent college course in the selected subject area. In addition, students must file and Independent Study form through the Admissions and Records Office.

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CFS 251AD Independent Study-CFS
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## 1-4 UNITS

Hours: $\quad 3$ TO 12 Lab
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit.This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

## CFS 401 Positive Discipline

0 UNITS
Hours: $\quad 9$ Lecture/Discussion
This interactive class, designed for foster parents and relative care providers, will address basic parenting skills, including punishment versus discipline and methods of intervention such as time-outs, disapproval, natural and logical consequences, and behavioral penalties.

CFS $402 \quad$ Behavior \& Anger Management 0 UNITS
Hours: $\quad 9$ Lecture/Discussion
This class, designed for foster parents and relative care providers, will address the dynamics of maladaptive and adaptive behaviors, fundamentals of anger, and strategies/concepts to manage and redirect for positive outcomes.

CFS 403
Interpersonal Skills
0 UNITS
Hours:
10 Lecture/Discussion
This course, designed for foster youth, will address interpersonal skills, including relationships, values and morals, communication, and conflict resolution and problem-solving. The class will also discuss methods for stopping the cycle of abuse/domestic violence and the benefits and pitfalls of reunification based on personal life goals, career goals and values.

CFS 404 Parenting With Love \& Logic
0 UNITS
Hours: $\quad 9$ Lecture/Discussion
This interactive class, designed for foster parents and relative care providers, will provide students with instruction on the Parenting and Love and Logic techniques for dealing with the challenging child, helping that child to become joyful, productive and responsible.

CFS 405<br>Hours:<br>Nutrition \& Cooking<br>0 UNITS<br>6 Lab

This course, designed for foster youth, will include basic nutrition, menu planning, grocery budgeting and shopping, food safety practices, table etiquette, and teamwork. Students will have hands-on practice in food handling, cooking (microwave, cook top, and oven), and table setting and etiquette.
CFS $406 \quad$ Ages \& Stages 0 UNITS

Hours: $\quad 9$ Lecture/Discussion
This class, designed for foster parents and relative care providers, will introduce the ages and stages concept of child development to students, enabling them to identify when a child's behavior is normal for their age. Students will also learn some techniques for modifying or managing behaviors, and to recognize if there may be developmental, physical, or mental health issues which need to be professionally assessed.

CFS 407
FKCE First Aid \& Safety/CPR
0 UNITS
Hours: 5 Lecture/Discussion
3 Lab
This course, designed for foster parents and relative care providers, will provide students with Pediatric Medic First Aid \& CPR Training and two-year certification to give basic emergency care in the event of an injury or sudden illness, until the victim can receive professional medical assistance. Limitation on Enrollment: This class is open only to Foster Parents who are licensed, or who are pending licensure, through Kings or Tulare counties, or kinship care providers.

CFS 408
ILP First Aid \& Safety/CPR
0 UNITS
Hours:
5 Lecture/Discussion
3 Lab
This course, designed for foster youth, will provide students with provide students with Pediatric Medic CPR \& Firsts Aid training and two-year certification to give basic emergency care in the event of an injury or sudden illness, until the victim can receive professional medical assistance. Limitation on Enrollment: This course is open only to current or former foster youth who are eligible to the Independent Living Program.
CFS 413
Reactive Attachment Disorder
0 UNITS

Hours: 8 Lecture/Discussion
The course will study Reactive Attachment Disorder, including causes, normative attachment process, bonding, brief and loss, emotional and social problems, and behaviors. Additionally, discussion will include assessment techniques and behavior interventions that foster parents/ caregivers can use.

CFS 414 Foster Care Connections 0 UNITS
Hours: 13 Lecture/Discussion
Learn what services are available for children in the foster care system, and how to help the child feel safe and welcome in an out-of-home placement. Presentations will focus on services available for families involved with the Child Welfare Services (CWS) System, such as health, education, legal, and CWS services. Limitation on Enrollment: This off-campus, overnight course is limited to Kinship Care Providers and County-licensed Foster Parents, as the Foster \& Kinship Care Education Program is funding the majority of the costs (contracted presenters, lodging and meals).

## COSMETOLOGY

COSM 261 Basic Cosmetology
6-12 UNITS
Hours:
5 Lecture/Discussion 25 Lab
A study of basic scientific theories and techniques as they apply to cosmetology. Limitation On Enrollment: Admission to a Cosmetology School accredited by the National Accreditation Commission of Cosmetology, Arts and Sciences which has contracted with College of the Sequoias.

## COSMETOLOGY

## DAIRY SCIENCE

$\begin{array}{ll}\text { COSM } 262 & \text { Intermediate Cosmetology } \\ \text { Hours: } & 5 \text { Lecture/Discussion }\end{array}$ 25 Lab

6-12 UNITS

A study of intermediate scientific theories and techniques as they apply to cosmetology. Limitation On Enrollment: Admission to a Cosmetology School accredited by the National Accreditation Commission of Cosmetology, Arts and Sciences which has contracted with College of the Sequoias. Prerequisite may be waived with 500 hours of cosmetology training.
Prerequisites: COSM 261 or equivalent college course with "C" or better.

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COSM 263AB Advanced Cosmetology
6-8 UNITS
Hours: 5 Lecture/Discussion
    25 Lab
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COSM 263AB is a 10 week course that includes the advanced study and performance of scientific theories and techniques applied to cosmetology. The course covers treatments of the hair, skin, scalp and nails; ethics in cosmetology; and salon business and management skills. The second section will allow refinement of skills, encourage problem solving in more depth, and provide a State Board review. This course may be repeated once.
Prerequisites: COSM 261 or COSM 262 or equivalent college course with "C" or better.

## DAIRY SCIENCE

| DSCI 101 | Elements of Dairying |
| :--- | :--- |
| Hours: | 3 Lecture/Discussion |
|  | 1 Lab |

3 UNITS

DSCI 101 is a part of the dairy science curriculum at COS. It is the first in a sequence of six dairy courses currently being offered in the agriculture program. The course is designed to give students an insight into the diary industry in Tulare County. Both dairy and non-dairy majors are encouraged to take the course because of the large number of career opportunities in the dairy field. CAN AG 28.

| DSCI 102 | Principles/Milk Production | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 1 Lab |  |

This course is designed to give students the factors involved in milk production by dairy cows. Includes anatomy and physiology of the mammary gland, udder health, automatic milking equipment, dairy sanitation, and use of antibiotics in diary cattle.

DSCI 103
Commercial Dairy Herd Mgt
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
Materials Fee: $\$ 5.00$
DSCI 103 is part of the Dairy Science curriculum at COS. The course is designed to give students a broad basis for decision-making in commercial dairy operations. Cost of production, herd health, milk pricing, and use of computer programs makes this course very important for students preparing for a career in the dairy industry.

DSCI $104 \quad$ Breed/Select of Dairy Cattle
3 UNITS
Hours: $\quad 3$ Lecture/Discussion

## 1 Lab

Materials Fee: $\$ 5.00$
A course designed to instruct students how to select, evaluate, and breed dairy cattle. Use of computer software programs, cow and bull evaluation, and analysis techniques are covered. Use of insemination in the dairy industry is covered along with embryo transplantation, splitting, and gene splicing.

DSCI 105AD Dairy Cattle Judge/Selection
1 UNIT
Hours: 1 Lecture/Discussion
1 Lab
An introductory course in the selection of dairy cattle. It is designed to give students a basic understanding of how dairy cattle are selected based on body conformation and type. Students also have the option to compete on the local, state, and national level. Students will also have the opportunity to fit dairy cattle for contests and exhibit them at various shows. This course can be repeated three times.

DSCI 106AB Intro to Dairy Products Tech
Hours: $\quad 3$ Lecture/Discussion
1 Lab
This course is designed to familiarize students with the dairy industry and its processes. Lab time is spent in local milk plants to afford the student first hand observation and proper milk manufacturing procedures. This course can be repeated one time.

| DSCI 107AD | Practical Skills in Dairying | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 2 Lab |  |

DSCI 107AD is designed to give students a chance to gain practical skills in dairy production applications. Students will be able to milk and feed cows on the COS Dairy or on other dairies with instructor approval. Other skills learned will be feeding calves, fresh cow care, equipment repair, fitting and showing cattle and general dairy work. This course differs from Agricultural Work Experience in that it is designed specifically for dairy majors and applies toward a dairy certificate. A similar course is offered at Cal Poly State University where a student can take up to 12 quarter units by working on the college dairy in a similar fashion. This course can be repeated three times.
DSCI 108
Dairy Nutrition
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab

Designed to give advanced dairy students an in depth study of dairy cattle nutrition. Nutrient requirements of dairy cattle, commodity feeding, ration formulation and feeding systems will be discussed. Computer application of ration formulation will be used along with using spreadsheets to project feed inventories and usage.
DSCI 200
Applied Mec in Dairy Science
2 UNITS
Hours: 2 Lecture/Discussion

## 2 Lab

This course will focus on the various types of equipment used in the dairy industry today. Basic welding and repair of commonly found equipment and fences on dairies, service and maintenance of dairy equipment such as feed wagons, tractors, skip loaders and trailers will be covered. Barn equipment service and repair will be shown on items such as vacuum pumps, milk pumps, refrigeration equipment, basic electrical devices, pulsators and vacuum regulators. The dairy industry consists of a variety of mechanical devices that students should be able to provide maintenance for.

DANCE

DANC 006AD Choreography 1 UNIT
Hours: . 5 Lecture/Discussion
1.5 Activity

Choreography is an introductory course in the study of elements and form of movement theories as applied to the art of creating dance. This course may be repeated three times.

DANC 008AD Beginning Ballet
1 UNIT
Hours: . 5 Lecture/Discussion
1.5 Activity

This is a course designed for the beginning dance student to learn the basic principles of classical ballet technique. Barre wor, port de bras, and allegro work are also introduced. This course can be repeated three times.

DANC 010AD Modern Dance 1 UNIT
Hours: . 5 Lecture/Discussion
1.5 Activity

This course is an introduction to basic modern dance techniques. Emphasis is placed on the importance of breath, body alignment, rhythmic movement, and the exploration of movement through space, energy and time. This course can be repeated three times.

## DANCE

DRAFTING

DANC 012AD Jazz Dance
Hours: .5 Lecture/Discussion 1.5 Activity

This course is designed for the beginning student to learn general principles of current trends and traditional forms of Jazz Dancing, using a ballet foundation. This course can be repeated three times.

DANC 013AB Advanced Jazz Dance
1 UNIT
Hours: 1 Lecture/Discussion
2 Activity
An in-depth study of jazz dance technique, taught at an accelerated rate. Emphasis is on different individual styles and techniques and freedom of movement. This course may be repeated one time. Advisory on Recommended Preparation: DANC 12AD or equivalent college course with "C" or better, or recommendation by the department.

DANC 016AB Beginning Tap Dance
1 UNIT
Hours: . 5 Lecture/Discussion
1.5 Activity

This course is designed for the beginning student in the study of tap dance techniques. Students will learn the art of making rhythmic sounds by the learned articulation of the feet. This course can be repeated one time.

DANC 041AD Musical Theater Perf-Dance 2 UNITS
Hours: 120 Activity
Equivalent Course: DRAM 020AD, MUS 097AD.
Experience dance, music, drama and theater through active participation in a major musical production. Includes training and experience in all facets of the theater. This course can be repeated three times. This is a short-term course which meets 120 activity hours.

DANC 118AD Social Dance
1 UNIT
Hours: .5 Lecture/Discussion
1.5 Activity

An introductory course on social dance skills and the development of various dance styles including ballroom, swing, contemporary, and country-western dance. Skills and proficiency are enhanced by supervised repetition and practice within class periods. This course may be repeated three times.

DANC 120AD World Theatre \& Dance
3 UNITS
Hours: $\quad 36$ Lecture/Discussion
216 Activity
Equivalent Course: DRAM 120AD.
This course includes readings, lectures, and discussions on the theory and practice of playwriting, theatre and dance history, choreography, producing, acting, dancing, directing, criticism, theatre architecture, set design, costume design, light design, and the use of props for the performing arts of theatre and dance. Also offered as DRAM 120AD. This course can be repeated three times.

## DRAFTING

DRFT 100

## Applied Drawing

3 UNITS
Hours: $\quad 3$ Lecture/Discussion

## 3 Lab

A study of the fundamentals of technical drawing and practical applications. Emphasis will be placed upon: sketches, lettering, orthographic projection, working drawings, auxiliary views, dimensioning, developments, threads and fasteners, sections, pictorial drawing, duplication, and the interrelationships of each to manufacturing design. The course is required in all drafting technology certificate and degree programs. It is a recommended course for all engineering and industrial technology students. Advisory on Recommended Preparation: DRFT 200 or equivalent college course with "C" or better.

DRFT 114
Hours:
Introduction to Autocad
4 UNITS

Materials Fee: $\quad \$ 20.00$
This course introduces students to the basic concepts and applications of computer assisted drafting. Each student will use the computer to solve a series of simple drafting problems in architectural, electrical, and technical illustrations. From the vast menu, the student will use multiple options and initialize selected commands to generate simple graphic documents. The student will learn to make decisions based upon previous input and predicted output by becoming adept at using all the menu options necessary to complete various drawings.
Prerequisites: DRFT 100 or equivalent college course with " C " or better.

| DRFT 115 | Advanced Autocad | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 3 Lab |  |
| Materials Fee: | $\$ 20.00$ |  |

Materials Fee: $\$ 20.00$
This course is designed to provide students with a methodology to rapidly generate accurate and scientifically correct pictorial images. To supplement and amplify working drawings and to visualize conceptual designs are typical of the problems constantly facing today's designers. A systematic approach to solving these problems is combined with computer technology and allows efficient and accurate pictorial images to be generated. The students are continually developing problem solving skills by utilizing both drawing knowledge and computer technology.
Prerequisites: DRFT 114 or equivalent college course with "C" or better.
DRFT 116AD Autocad Applications
4 UNITS
Hours: $\quad 3$ Lecture/Discussion
2 Lab
Materials Fee: $\$ 20.00$
This course will provide advanced AutoCAD students with a systematic approach to rapidly solve drafting and design problems, and generate accurate presentation and scientifically correct conceptual or working drawings utilizing computer image generation skills and knowledge. This course can be repeated three times.
Prerequisites: DRFT 115 or equivalent college course with "C" or better.
DRFT 130 Intro Computer Asst Cabinet 4 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
A study of the fundamental concepts, principles, and applications of a computerized system covering all phases of cabinet design. By utilizing computers, students will design cabinets, generate cabinet drawings, cutting lists, estimates for material and labor, and contract documents. This course is an invaluable career asset for people interested in architecture, construction, cabinet and furniture manufacturing, drafting, and computer applications.

DRFT 131 Adv Computer Assist Cabinet 4 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
Materials Fee: $\$ 10.00$
A study of the fundamental concepts, principles, and applications of a computerized system covering all phases of cabinet design. By utilizing computers, students will design cabinets, generate cabinet drawings, cutting tests, estimates for labor and material, do job costing, and write job contracts.
Prerequisites: DRFT 130 or equivalent college course with "C" or better.
DRFT 151AD Independent Study-Drafting 1-4 UNITS
Hours: 3 TO 12 Lab
The purpose of independent study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office to obtain approval to enroll.

DRAFTING
DRAMA

## Hours: 3 TO 9 Lab

Under the supervision of an instructor, selected students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling and other employment or volunteer situations where the student is expected to take a leadership role. This course may be repeated three times. Limitation on Enrollment: Permission of the department.

## DRFT 200 Beginning Mechanical Drawing 2 UNITS <br> Hours: 2 Lecture/Discussion <br> 2 Lab

A rapid comprehensive coverage of the fundamentals of mechanical drawing and modern drafting practices, including but not confined to the following: lettering, geometric drawing, orthographic projection, pictorial representation and reproduction. This course is a basis for all drafting related majors and is recommended for students that have had no high school drafting but plan to enter architecture, engineering, drafting, or other graphic communication field.

DRFT 251AD Independent Study-Drafting 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
The purpose of independent study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses, offered at COS or equivalent college course in the selected subject area. In addition, student must file an Independent Study form through the Admissions and Records Office to obtain approval to enroll.

## DRAMA

DRAM 001 Intro to the Theatre
3 UNITS
Hours: 3 Lecture/Discussion
This course is intended as a critical analysis of theatre from an audience perspective. Elements of play production from the dramatic structure, style and historical perspective of the script to the final presentation before an audience will be explored. Attendance at College Theatre Arts productions is required. CAN DRAM 18.

DRAM 002 Fundamentals of Acting 1
3 UNITS
Hours: 3 Lecture/Discussion

## 1 Lab

Intensive application of acting techniques through study and performance and the learning of basic exercises for the actor, study and development of characters in performance from the contemporary theatre and recent internationally representative plays and musicals. CAN DRAM 8.

DRAM 003 Fundamentals of Acting 2
3 UNITS
Hours:

## 3 Lecture/Discussion

1 Lab
This course is designed to exercise the separate parts of the composite art of acting which includes thought, emotion, and specific movement and vocal techniques. Emphasis is placed on the appraisal and analysis of stage techniques, acting theories, and practices in performance from experimental dramas and the theater of the absurd. The ultimate goal is to develop a firm foundation in basic acting techniques.

DRAM 004 Intermediate Acting 1
3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
This course is designed as an advanced level of study of acting proficiency and technique begun in DRAM 2 and 3. Class lecture, discussion, and scene work focus on text and character analysis, clarity of characterization, vocal and physical expressiveness and emotional release. Acting scene material is taken from the plays of the classical Greek Theatre, William Shakespeare and the Restoration comedies of the 18 century. Advisory on Recommended Preparation: DRAM 2 and 3 or equivalent college courses with "C" or better, or recommendation of department.

## DRAM 005 Intermediate Acting 2 <br> Hours: 2 Lecture/Discussion 2 Lab

Continuation of DRAM 4 in which play texts are studied and presented with concentration on in-depth analysis of subject material, intensity of action, freedom of emotional release, and clarity of expression. Acting scenes are chosen from European and American plays of the late nineteenth century through the social dramas of the 1930's. Students may enroll in this course without having taken DRAM 4. Advisory on Recommended Preparation: DRAM 2 and 3 or equivalent college courses with "C" or better, or recommendation of department.
DRAM 006
Shakespeare
3 UNITS

Hours: $\quad 3$ Lecture/Discussion
DRAM 006 is an introductory course that stresses student involvement with the literary and dramatic aspects of Shakespeare's works through the use of lecture, reading from the text, text analysis, acting scenes, and video. Each student will participate in the reading and interpretation of selected plays. It will also treat the playwright's life, times, sources, and influences on his work.

## DRAM 008 History of Theatre and Drama <br> 3 UNITS

Hours: 3 Lecture/Discussion
A survey of the history of theatre arts including literature, staging, style and practice emphasizing the relationship between theatre and its impact on and reflection of its cultural context within Western, Asian, South American and African cultures from pre-history to the 17th Century.

DRAM 009 History of Theatre and Drama 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
A survey of the history of theatre arts including literature, staging, style and practice emphasizing the relationship between theatre and its impact on and reflection of its cultural context within Western, Asian, South American and African cultures from the 17th Century to the present.

DRAM 011AD Rehearsal and Performance 3 UNITS
Hours: $\quad 90$ Activity
Rehearsal and performance in COS summer repertory theatre. (Six hours activity per week) This course may be repeated three times. Limitation on Enrollment: Audition by department.

DRAM 012AB Costuming
3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
4 Activity
Equivalent Course: FASH 012AB.
Principles and practice of costume construction from pattern to completed garments. This course can be repeated one time.

DRAM 013AB Beginning Stagecraft
3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
4 Activity
A survey is made through lecture, demonstration and laboratory experience, of all technical phases of scene production including construction, painting, rigging, placement, and manipulation of stage scenery and properties. Additional hours required for crew work on college productions. This course can be repeated one time. CAN DRAM 12

DRAM 014AB Intermediate Stagecraft
3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
4 Activity
Designed as an intermediate class for the student who has completed DRAM 13AB. This course may be repeated one time. Advisory on Recommended Preparation: DRAM 13AB or equivalent college course with "C" or better.

DRAMA
DRAMA

DRAM 015AB Beginning Stage Lighting
3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
This course introduces the student to the basic concepts of theatre lighting. Study includes the operation of stage lighting. Additional hours are required for crew work on college productions. This course can be repeated one time.

DRAM 016AB Intermediate Stage Lighting
3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
Students will continue the study of Stage Lighting by being assigned the added responsibilities of lighting crew and production staff leadership. This course may be repeated one time. Advisory on Recommended Preparation: DRAM 15AB or equivalent college course with a "C" or better.

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DRAM 017AB Makeup
Hours: 2 Lecture/Discussion
2 Lab
4 Activity
Equivalent Course: FASH 017AB.
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3 UNITS

This course is designed to introduce the student to the basic techniques and materials of makeup: Theatrical, TV, photos, special occasions, business and evening. This course can be repeated one time. CAN DRAM 14.

DRAM 018AB Advanced Theatre Crafts
3 UNITS
Hours: 2 Lecture/Discussion 2 Lab
Studies the function and application of design principles in the theatre crafts: stagecraft, stage lighting, costuming and makeup. This course can be repeated three times. Advisory on Recommended Preparation: Recommendation of department.

## DRAM 019AD Theatre Workshop 1 <br> 2 UNITS

Hours: 120 Activity
Experience in drama and theatre through active participation in major dramatic productions. Includes training and experience in acting, costuming, make-up, set design, scenery, props, and lighting. This course can be repeated three times.

DRAM 020AD Musical Theatre Perf-Theatre
2 UNITS
Hours: 120 Activity

## Equivalent Course: DANC 041AD, MUS 097AD.

Experience in drama and theatre through active participation in major musical and dramatic productions. This course can be repeated three times. Short term course: Meets 120 Activity hours performance.

DRAM 021AD Theater Workshop $2 \quad 2$ UNITS
Hours: 120 Activity
Experience in 20th Century Contemporary Theater through active participation in major dramatic productions. Includes training and experience in acting, costuming, make-up, set design, scenery, props, and lighting. This course can be repeated three times.

DRAM 022AD One Act Play Production
2 UNITS
Hours: 1 Lecture/Discussion
4 Lab
This course is designed to introduce the student to the background, function and techniques of stage direction and play production leading to the staging of a one act play before an audience. This course may be repeated three times. Advisory on Recommended Preparation: DRAM 1 or equivalent college course with a "C" or better; DRAM 2, 3, 4, or 5 or equivalent college course with " C " or better; DRAM 12, 13 , or 15 or equivalent course with " $C$ " or better.

DRAM 030AB Stage Movement/Stage Combat 2 UNITS
Hours: 1 Lecture/Discussion
3 Lab
This course is designed as an introduction of the function and the application of stage movement and stage combat as it applies to the actor and theatrical productions. This course can be repeated one time.

DRAM 040AB Music Theater
3 UNITS Hours: 3 Lecture/Discussion 1 Lab
This course is designed as an introduction to the fundamental skills and knowledge that musical theater students must apply to performance situations. The course also examines musical theater as an art form and studies its place in history as well as contemporary culture. This course may be repeated one time. Advisory on Recommended Preparation: MUS 30AD and DRAM 2 or equivalent college courses with "C" or better.

DRAM 060 African-American Theater 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This class is an interpretive survey of the history, impact and current direction of African-American Theatre.

DRAM 101AD Intro to TV Production 4 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
2 Activity
This course will combine lecture, studio experience at locations such as TV production sites, distance learning sites, and independent work. Specifically, it covers producing, directing, camera work, graphics, editing and writing. Students will be required to submit a completed videotape that reflects their efforts in all aspects of the course as their final class project. This course can be repeated three times.

DRAM 102AB Writing the Prof Screenplay
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course is designed to introduce students to the fundamentals of developing and writing screenplays for film and television. The course emphasizes story, plot, characterization, dialogue, structure, script format, and writing process. Other topics are designed to introduce students to the contemporary Hollywood film environment. This course may be repeated one time. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 as determined by COS Placement Procedures.

DRAM 120AD World Theatre \& Dance
3 UNITS
Hours: $\quad 36$ Lecture/Discussion
216 Activity
Equivalent Course: DANC 120AD.
This course includes readings, lectures, and discussions on the theory and practice of playwriting, theatre and dance history, choreography, producing, acting, dancing, directing, criticism, theatre architecture, set design, costume design, lighting design, and the use of props for the performing arts of theatre and dance. This course can be repeated three times.

## DRAM 151AD Independent Study-Drama <br> 1-4 UNITS <br> Hours: 3 TO 12 Lab

The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office to obtain approval to enroll.

DRAM 170 Modeling 3 UNITS
Hours: 3 Lecture/Discussion
Equivalent Course: FASH 170.
An introduction to the modeling industry and the roles of models and agencies. Instruction will include experience in basic fashion and photographic techniques; portfolio preparation; stage and photographic makeup; runway techniques; posture, gesture and movement and participation in a fashion production. Students will also analyze and evaluate personal diet, nutrition and exercise, skin care and makeup.

## DRAMA

## ECONOMICS

DRAM 180AD Communication Strategies
2 UNITS
Hours: 2 Lecture/Discussion
This course is designed to offer students enrolled in the Sequoias Theatre Conservatory an opportunity to learn and exercise professional responsibility skills in the context of college level theatre. These responsibilities may include production analysis, theatre management, time management, conflict management, creating a video portfolio to be used in the theatrical classroom and as an employment resume, as well as public communication relation strategies. This course may be repeated three times. Limitation on Enrollment: Admittance into the Sequoias Theatre Conservatory.

DRAM 190AD Supervised Practice 1-3 UNITS
Hours: $\quad 3$ TO 9 Lab
Under the supervision of an instructor, selected students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling, and other employment or volunteer situations where the student is expected to take a leadership role. This course may be repeated three times. Limitation on Enrollment: Permission of Department.

DRAM 202AD Acting for the Camera
1 UNIT
Hours: 9 Lecture/Discussion
24 Lab
This course teaches On Camera Acting Techniques. It familiarizes the student with movement and performance in front of the camera ( $3 / 3$ shot, medium shot, close up, reversal, pan, walk in shot, two shot). The course is equally helpful for the student who intends to go into the motion picture directing field. The course is repeatable three times. Advisory on Recommended Preparation: Some acting experience, either in college high school or community theater.

DRAM 251AD Independent Study-Drama 1-4 UNITS Hours: $\quad 3$ TO 12 Lab
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office to obtain approval to enroll.

## ECONOMICS

ECON $001 \quad$ Principles of Macroeconomics 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Macroeconomics explores the sectors of the economy that contribute to national output; consumption, investment, government spending and exports. Topics important to macroeconomics include inflation and unemployment, banking systems, international trade and finance, and economic schools of thought. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN ECON 2.

ECON 002 Principles of Microeconomics 3 UNITS Hours: $\quad 3$ Lecture/Discussion
A study of principles and applications of Microeconomics with a focus on the forces of supply and demand. Topics include price determination, allocations of scarce resources, theories of producer and consumer behavior, and the role of government. Various market structures are reviewed including pure competition, pure monopoly, monopolistic competition and oligopoly. Advisory on Recommended Preparation: MATH 200 or MATH 205 or MATH 215 or equivalent college course with "C" or better or eligibility for MATH 230 determined by COS Placement Procedures; and ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN ECON 4.

ECON 151AD Independent Study-Economics 1-4 UNITS Hours: $\quad 3$ TO 12 Lab
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit.This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

ECON 251AD Independent Study-Economics 1-4 UNITS Hours: $\quad 3$ TO 12 Lab
The purpose of this course is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

## EDUCATION

EDUC 101AD Cross Cultural Education 2 UNITS
Hours: 2 Lecture/Discussion
This course is designed to acquaint students with cross cultural experiences with migrant children. This course can be repeated three times.

EDUC 150 Introduction to Teaching 2 UNITS
Hours: 1 Lecture/Discussion
2 Lab
An exploratory field experience course providing a general orientation to duties and responsibilities of public school teachers, the operation of schools, and requirements for teaching and admission to a credential program. Thirty-two hours of school visitation required. Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS Placement Procedures.

| EDUC 230 | CBEST Test Preparation | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 18 Lecture/Discussion |  |

This course will prepare those entering the teaching profession to take the CBEST test. It will focus on developing test taking skills and not acquisition of new knowledge in content area. Advisory on Recommended Preparation: Completion of college level English and mathematics.

## ELECTRONICS

ELEC 101 Direct Current Circuits 5 UNITS
Hours: 4 Lecture/Discussion
4 Lab
Materials Fee: $\quad \$ 5.00$
This is the introductory class in the COS Electronics program. It offers training for students entering the electronics field. ELEC 110 should be taken concurrently. Advisory on Recommended Preparation: MATH 200 or MATH 205 or MATH 215 or equivalent college course with "C" or better, or one year high school algebra with "C" or better; and ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

## ELECTRONICS

ELECTRONICS

ELEC 102
Hours:
Alternating Current Circuits
5 UNITS

Materials Fee: $\quad \$ 5.00$
This is the second semester in the COS Electronics program. It offers continued training for students entering the electronics field. Includes lecture and laboratory instruction with AC circuits including mathematics, circuit analysis, use of test equipment and soldering. It is the second semester of study of obtaining F.C.C. general radio telephone license or its equivalent.
Prerequisites: ELEC 101 or equivalent college course with "C" or better.

ELEC 103 Semiconductor Circuits
5 UNITS
Hours: 4 Lecture/Discussion
4 Lab
Materials Fee: $\quad \$ 5.00$
This is a course in the third of four semesters in the COS Electronics program. It includes lecture and laboratory projects including: solid state devices, power supplies, audio circuits, and use of test equipment for testing and trouble-shooting. Prerequisites: ELEC 102 or equivalent college course with "C" or better.

ELEC 104
Communication Circuits
5 UNITS
Hours: 4 Lecture/Discussion
4 Lab
Materials Fee: $\$ 5.00$
This is a fourth class in the COS Electronics program. It offers training for students seeking employment in electronic communications, including broadcasting and twoway communications. Includes lecture and laboratory instruction with emphasis on use of equipment and trouble- shooting. At completion students should be qualified to obtain an F.C.C. general radio telephone commercial license or equivalent. Students should also be able to qualify and pass the general class amateur radio license.
Prerequisites: ELEC 103 or equivalent college course with "C" or better.

ELEC 105 Indust Fabrication \& Design 3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 5.00$
This course offers the student a working knowledge of the tools, techniques, materials, and procedures used in industry to create prototype and production products. The course will include schematic generation, project documentation, chassis layout and finishing, breadboarding, printed wiring board layout and construction, system testing, and design philosophy.
Prerequisites: ELEC 101 or ELEC 110 or equivalent college course with "C" or better.

ELEC 110
Digital Circuits
3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 3.00$
This course offers the student a working knowledge of the theory and application of practical digital circuits. Digital circuits are introduced as combinations of simple circuits such as gates, flip-flops, arithmetic elements and memories. Lab assignments help students understand and troubleshoot standard digital circuit configurations. This course is the beginning offering in a sequence that begins with digital circuits, and continues though Microprocessor Fundamentals, Microprocessor Applications, and PC Troubleshooting/Repair.

ELEC 111 Microprocessor/PLC Fundament
3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 3.00$
This course offers the student a study of basic microprocessor theory. It is an introduction to microprocessor internal architecture and the software techniques used to program proper operation of these devices. Prerequisite may be waived if student is evaluated by departmental assessment to have equivalent skills and knowledge. Prerequisites: ELEC 101 and ELEC 110 or equivalent college courses with "C" or better.

ELEC 112 Microprocessor Applications
4 UNITS
Hours: $\quad 3$ Lecture/Discussion 3 Lab

## Materials Fee: $\$ 4.00$

This course offers the student a study of advanced microcomputer and microprocessor interfacing techniques. Lectures, demonstrations, and laboratory assignments will study Intel 8085A and 8088 microprocessor-based systems. Special emphasis is placed on "hands-on" laboratory experience with various interface technologies. Prerequisites: ELEC 101 and ELEC 110 or equivalent college courses with "C" or better.

ELEC 114 Operational Amplifier Circuits 3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 3.00$
This course offers the student an advanced study of operational amplifiers. These components are used in a multitude of commercial and military products. The course will include theory of operation, circuit configurations, practical uses, and laboratory breadboarding, troubleshooting, and testing.
Prerequisites: ELEC 102 and ELEC 103 or equivalent college courses with "C" or better.

ELEC 151AD Independent Study-Elect 1-4 UNITS
Hours: $\quad 3$ TO 12 Lecture/Discussion
The purpose of Independent Study is to provide an opportunity for the student, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit.This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file and Independent Study form through the Admissions and Records Office to obtain approval to enroll.

ELEC 190AD Supervised Practice 1-3 UNITS
Hours: $\quad 3$ TO 9 Lab
Under the supervision of an instructor, selected students assist and direct other students in less advanced classes. This course provides experience for students interested in teaching, counseling, and other employment or volunteer situations where the student is expected to take a leadership role. This course may be repeated three times. Limitation on Enrollment: Permission of the department.

ELEC 251AD Independent Study-Elect 1-4 UNITS Hours: $\quad 3$ TO 12 Lecture/Discussion
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

## EMERGENCY MEDICALTECHNICIAN

$\begin{array}{lcc}\text { EMT 251 Emergency Medical Tech B } & 0-4 \text { UNITS } \\ \text { Hours: } & 3 \text { Lecture/Discussion } & \end{array}$
4.5 Lab

This course meets the requirements of the California Department of Health and Tulare County Department of Emergency services for certification as an EMT B (formerly EMT 1). Development of skills in recognition of symptoms of illness and/or injury and proper procedures for emergency care are emphasized. This course is recommended for anyone involved in public safety. To receive certification by Tulare county, the student must have a valid CPR card and be 18 years old.

EMERGENCY MEDICAL TECHNICIAN

## ENGINEERING

EMT 400
EMT Refresher
0 UNITS
Hours:
24 Lecture/Discussion
This refresher course is designed to provide the required 24 hours continuing education for recertifying EMT's.
Prerequisites: EMT 251 or equivalent college course with "C" or better.

## ENGINEERING

ENGR 001
Hours: 3 Lecture/Discussion
3 Lab
3 UNITS

A descriptive geometry course with an introduction to CAD as it applies to the solution of engineering problems. Advisory on Recommended Preparation: MATH 70 or equivalent college course with a "C" or better and concurrent enrollment in MATH 75. CAN ENGR 2.

ENGR 002

## Statics

3 UNITS
Hours: 3 Lecture/Discussion
The study of rigid bodies in static equilibrium when acted upon by forces and couples in two and three dimensional space. Included are equilibrium of rigid bodies, trusses, frames and machines, as well as the calculation of centers of mass, centroids, friction and moments of inertia. Additional topics which may be covered include distributed forces in cables and beams, mass moments of inertia, and virtual work. CAN ENGR 8.
Prerequisites: MATH 76 and PHYS 005 or equivalent college courses with "C" or better.
Corequisites: MATH 077.
ENGR 003 Materials
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
2 Lab
The course consists of a fundamental treatment of the principles of materials science in engineering. Topics included are chemical bonding, crystallography, phase diagrams, reaction rates and mechanical and electrical properties of solids. CAN ENGR 4.
Prerequisites: PHYS 005 and CHEM 001 and ENGL 001 and MATH 075 or equivalent college courses with "C" or better.

ENGR 004 Alternating Current Circuits
4 UNITS
Hours: 3 Lecture/Discussion
3 Lab
The course consists of a fundamental treatment of the principles of electrical circuits, both AC and DC steady-state and transient. CAN ENGR 6.
Prerequisites: PHYS 006 and MATH 077 or equivalent college courses with "C" or better.
Corequisites: MATH 081, PHYS 007.

ENGR 007 Surveying
3 UNITS
Hours: 2 Lecture/Discussion
3 Lab
An introduction to the techniques of calculation and instrument use in field measurements involved in the horizontal and vertical control of civil engineering projects. CAN ENGR 10.
Prerequisites: MATH 070 or equivalent college course with "C" or better or eligibility for MATH 061 or MATH 075 as determined by COS
placement procedures.
Corequisites: MATH 075.
ENGR 110 Introduction to Engineering 1 UNIT
Hours: 1 Lecture/Discussion
An exploration of the field of engineering, including major disciplines and career opportunities, ethical and legal aspects of the profession, and case studies of the major phases of engineering work. Development of academic skills needed for the engineering major. Advisory on Recommended Preparation: MATH 230 or higher or equivalent college course with a grade of "C" or better or eligibility for ENGL 1 determined by COS Placement Procedures.

ENGR 151AD Independent Study-Engineer 1-4 UNITS Hours: 3 TO 12 Lab
Independent Study.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition students must file an Independent Study form through the Admissions and Records Office to obtain approval to enroll.

ENGR 251AD Independent Study-Engineer 1-4 UNITS Hours: 3 TO 12 Lab
Independent Study.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition students must file an Independent Study form through the Admissions and Records Office to obtain approval to enroll.

## ENGLISH

ENGL 001 College Reading \& Composition 3 UNITS
Hours: 3 Lecture/Discussion
Refines students' conventional oral and written expression through analysis, discussion and production of various techniques of organization, style, clarity and research. The class also emphasizes close reading of expository writing. Students will be expected to write 6,000 to 8,000 words. CAN ENGL 2.
Prerequisites: ENGL 251 or equivalent college course with "C" or better or eligibility as determined by COS placement procedures.

ENGL $002 \quad$ Logic and Composition 3 UNITS
Hours: 3 Lecture/Discussion
This course gives students the opportunity to study and apply logic and cogent thinking to written and oral communication as well develop advanced writing skills. Students learn to recognize logical fallacies, analyze others' arguments, and produce their own arguments and solutions to problems, using primary and secondary research. Students are required to write 6,000 to 8,000 words.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.

ENGL 004 College Composition \& Lit 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Introduction to literature, including the short story, the novel, poetry, and drama, through close reading and analysis of literature and literary theory, discussion, research and writing. CAN ENGL 4.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.

ENGL $010 \quad 3$ UNITS Hours: $\quad 3$ Lecture/Discussion
The course studies Chicano literature through poetry, short stories, essays, drama, and novels, which are used as a means of providing a panoramic view of the Chicano experience in today's society. Emphasis will be placed on the contemporary Chicano period.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.

ENGL 014AB Creative Writing 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
An introduction to writing short stories, poems and plays. While professional writing will be discussed and correctness of standard English will be required, emphasis will be on class discussion about student writing. This course may be repeated one time. (Approved for Distance Learning 5/15/2002). CAN ENGL 6.
Prerequisites: ENGL 251 or equivalent college course with "C" or better or eligibility for ENGL 001 as determined by COS placement procedures.

ENGL 015 Survey of British Lit 13 UNITS
Hours: $\quad 3$ Lecture/Discussion
A survey of English literary history as revealed through an intensive study of some major authors and their typical masterpieces from Beowulf through the period of the Restoration. Approved for Distance Learning 4/22/04. CAN ENGL 8.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.

ENGL 016 Survey of British Lit 23 UNITS
Hours: 3 Lecture/Discussion
Complementary course to ENGL 15. A survey of English literary history as revealed through an intensive study of some major authors and their typical masterpieces from the Romantic Period to the present. Approved for Distance Learning 4/22/04. CAN ENGL 10.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.

## ENGL 017 Native American Literature 3 UNITS

Hours: $\quad 3$ Lecture/Discussion
This course explores the images of Native Americans in literature, myths, short stories, essays, autobiographies, novels, poems, and "as-told-to" stories. This exploration may examine common stereotypes of Native Americans in various environments and cultures. Students will be encouraged to connect the course material with their own life experiences.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.

ENGL 018 Black American Literature
3 UNITS
Hours: 3 Lecture/Discussion
An interpretive survey of Black American Literature from the Colonial period to the present time. Through specified readings, introspective discussions, and writing, students examine, familiarize themselves with, and critically analyze the works of acclaimed Black American writers. Themes and styles vary from classical 18th century writers to writers dialect, from religious verse to voices of protest.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.

ENGL 019
Hours:
Women in Literature
3 UNITS

This course explores women as authors and/or subjects in literature, myths, short stores, essays, novels, and poems. Students will explore what makes women writers unique and their contribution to literature remarkable. Students will examine selections representing women writers from a variety of cultures and periods with fascinating perspectives on life and the world. Approved for Distance Learning 5/ 5/2004.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.

ENGL 025 Asian-American Literature 3 UNITS Hours: $\quad 3$ Lecture/Discussion
This course explores the images and issues of Asian-Americans in fiction, myths, essays, autobiographies, and poetry. Students are encouraged to connect the course material to their own life experiences through close reading and analysis of texts, and discussion and writing about related cultural ideas.
Prerequisites: ENGL 001 or equivalent college course with " C " or better.

ENGL 030 American Literature 13 UNITS
Hours: $\quad 3$ Lecture/Discussion
This broad study of American literature includes an analysis of literary works through close reading discussion, and writing. Works studied include representative pieces of literature that have been written from the Colonial period through the Civil War. CAN ENGL 14.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.

ENGL 031 American Literature 2
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This broad study of the literature of the United States includes an analysis of literary works through close reading, discussion, and writing. Works studied include representative pieces of literature that have been written from the Civil War to the present. CAN ENGL 16.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.

ENGL 044
Hours: $\quad 3$ Lecture/Discussion
A study of early world masterpieces beginning with classical literature of Mesopotamia, Greece, and Rome, surveying the Middle Ages, and concluding with the literature of the Renaissance. Through close reading, discussion, and writing, works are studied for their enduring aesthetic significance and the richness of the diverse cultural traditions they represent. Approved for Distance Learning: 4/22/04.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.
ENGL 045
World Literature 2
3 UNITS
Hours: $\quad 3$ Lecture/Discussion

A study of world masterpieces from the Enlightenment through the Romantic and Realist periods and into the modern age. Through close reading, discussion, and writing, works are studied for their enduring aesthetic significance and the richness of the diverse cultural traditions they represent. Approved for Distance Learning 4-22-04.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.

ENGL 046 Shakespeare
3 UNITS
Hours: 3 Lecture/Discussion
An introduction to Shakespeare through close reading, films, and lectures; through student reports requiring analysis of his works; through familiarization with the historical period as material for critical essays and discussions; and through presentation of the works as living theater to appeal to the ear and the emotions as well as to the intellect.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.

ENGL 151AD Independent Study-English 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
The purpose of Independent Study is to provide an opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office to obtain approval to enroll.

ENGL 200AD Writing Lab
.5-1 UNITS
Hours: $\quad 1.5$ TO 3 Lab
Taken concurrently with any college course requiring written composition. English Composition Writing Lab provides instruction in use of computers and supervision and tutorial assistance to students working on writing assignments in any discipline. This course can be repeated three times.

ENGL 223AD Writing Center Consulting
2 UNITS
Hours: 1 Lecture/Discussion
2 Lab
Instruction and guided practice in effective peer consulting. Use of reader-based feedback and active learning strategies to assist students to become better writers. Areas for study include theory of composition, writing centers, and writing across the curriculum. Designed to be taken concurrently with hands-on work as a writing consultant. Repeatable three times. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with a "C" or better or eligibility for ENGL 1 as determined by COS Placement Procedures.

## ENGLISH

## ENGLISH

ENGL 251 Fund College Writing 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course emphasizes close reading and writing as processes that result in compositions appropriate for the work world and for transfer level study. Advisory on Recommended Preparation: ENGL 360 or equivalent college course with " $C$ " or better, or eligibility determined by COS Placement Procedures, or recommendation of the department.

ENGL 251AD Independent Study-Englis

## 1-4 UNITS

Hours: $\quad 3$ TO 12 Lab
Independent Study. This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions Office to obtain approval form.

ENGL 253 Reading for Enrichment
3 UNITS
Hours: 3 Lecture/Discussion
This course is designed to improve the student's ability to read effectively, perceptively, and with enjoyment. Intended for those who plan to complete their formal education at the Associate degree or certificate level. Includes study of vocabulary, central themes and main ideas, major and minor details, facts and inferences. Book reports and outside reading required.

ENGL 265AB Fundamentals of Reading

## 3 UNITS

Hours: $\quad 3$ Lecture/Discussion
1 Lab
This course is designed to develop analytical reading skills and reading fluency as preparation for success in college courses. It features the relationship between reading, writing, and critical thinking. It stresses the need to adjust reading strategies to reading purposes. May be taken concurrently with ENGL 251 to provide students will skills for undertaking ENGL 1. May be repeated once. Advisory on Recommended Preparation: Recommendation through COS Placement Procedures, or recommendation of department.

ENGL 270 Reading Instruction for K-12 2 UNITS
Hours: 2 Lecture/Discussion
This course examines current directions of instructional practice in reading and provides practical strategies for classroom aides and teachers of reading. It is designed to help K-12 paraprofessionals and prospective paraprofessionals meet the Title 1 requirements of the National 2001 No Child Left Behind Act. Advisory on Recommended Preparation: COMP 130 or COMP 220 or COMP 221 or COMP 306 or COMP 307 or LS 311 or LIBR 101 or LIBR 102.

ENGL 275
Hours:
Writing Mechanics
2 UNITS
Hours: 32 Lecture/Discussion
ENGL 275 offers instruction in complete sentences, punctuation, grammar and spelling. Intended for Teachers' Aides and other wishing to brush up on writing mechanics. Advisory on Recommended Preparation: COMP 130 or COMP 220 or COMP 221, or COMP 306, or COMP 307, or LS 311 or LIBR 101, or LIBR 102 , or competency evaluation.

ENGL 280 Vocabulary Building for Tests 1 UNIT
Hours: 1 Lecture/Discussion
This vocabulary building course assists students preparing for the State of California Court Interpreter examination and other standardized tests such as the SAT, ACT, GRE, and LSAT. Strategies for discerning the meaning of words through roots, suffixes and prefixes are covered as well as other test taking tips.

ENGL 310AD Vocabulary Enrichment
. 5 UNITS
Hours: 9 Lecture/Discussion
This course provides instruction aimed at supplementing college vocabulary enrichment, which is requisite for success in regular academic and vocational courses as well as enhanced life skills. This course can be repeated three times.

ENGL 360AB Reading \& Writing Skills
Hours: $\quad 6$ Lecture/Discussion 1 Lab
This course is designed to move students toward college level reading and writing. It includes: basic sentence structure, writing, vocabulary improvement, critical reading, thinking and study skills. Students will read varied materials and practice systematic approaches to paragraphs, essays, and other prose writing. This course may be repeated once. Advisory on Recommended Preparation: ENGL 370 or equivalent college course with " $C$ " or better, or eligibility determined by COS Placement Procedures, or recommendation of department, or skilled competencies as determined by departmental assessment.

| ENGL 370 | Basic English Skills | 6 UNITS |
| :--- | :--- | :--- |
| Hours: | 6 Lecture/Discussion |  |
|  | 1 Lab |  |

The first course in a developmental, pre-collegiate sequence designed to review basic grammar, sentence structure, and paragraphs; it also includes improvement in vocabulary, reading comprehension, and study skills. Advisory on Recommended Preparation: Recommendation through COS Placement procedures, or recommendation of department. The placement test requirement may be waived.

## ENGLISH AS A SECONDLANGUAGE

| ESL 300 | ESL Beg Lvl 1 Writing/Grammar |
| :--- | :--- |
| Hours: | 3 Lecture/Discussion |
|  | 3 Lab |

This course is suitable for the true beginner with little or no knowledge of English grammar and writing conventions. Students focus on writing at the sentence level. The course is designed to provide an introduction to English grammar and writing skills to enable students to function minimally in basic English academic and vocational situations. Advisory on Recommended Preparation: Recommendation through COS Placement Procedures or recommendation by the department. Concurrent registration in ESL 301 (or appropriate ESL Reading/Vocabulary course) is strongly recommended.

ESL 301 ESL Beg Lvl 1 Reading/Vocab 3 UNITS
Hours: 3 Lecture/Discussion
This course is suitable for the true beginner with little or no knowledge of English reading and vocabulary skills. The course is designed to develop basic reading techniques, vocabulary and study skills so that the student can comprehend and respond to basic written and spoken English. Advisory on Recommended Preparation: Recommendation through COS Placement Procedures or recommendation of the department. Concurrent registration in ESL 300 (or appropriate ESL Writing/Grammar course) is strongly recommended.
ESL 310
ESL Beg Lvl 2 Writing/Grammar
4 UNITS
Hours: 3 Lecture/Discussion
3 Lab

This course is suitable for the beginning student with a basic foundation in English grammar and writing. Students focus on writing accurate sentences and developing paragraph skills. The course is designed to reinforce and build upon grammar and writing skills to enable the students to function in basic English academic and vocational situations. Advisory on Recommended Preparation: ESL 300 or equivalent college course with a "C" or better, or eligibility determined by COS Placement Procedures, or recommendation by the department. Concurrent registration in ESL 311 (or appropriate ESL Reading/Vocabulary course is strongly recommended).

## ENGLISH AS A SECOND LANGUAGE

ESL 311
Hours
ESL Beg Lvl 2 Reading/Vocab
3 Lecture/Discussion
This course is suitable for the beginning student with basic knowledge of English reading and vocabulary skills. This course is designed to develop and expand reading techniques, vocabulary and study skills so that the student can comprehend and respond to written and spoken English in basic academic and vocational situations. Advisory on Recommended Preparation: ESL 301 or equivalent college course with "C" or better, or eligibility determined by COS Placement Procedures, or recommendation of the department. Concurrent registration in ESL 310 (or appropriate ESL Writing/Grammar course) is strongly recommended.

## ESL 312AB <br> Hours: <br> ESL Beg Pronunciation/Speaking <br> 2 UNITS

This course is suitable for the true beginner with little or no knowledge of English pronunciation and speaking skills. The course is designed to develop basic speaking skills so that the student can comprehend and respond to basic spoken English. This course may be repeated once. Advisory on Recommended Preparation: Recommendation through COS Placement Procedures or recommendation of the department. Concurrent registration in ESL writing and reading classes is strongly recommended.

## ESL 320 ESL Intermed Lvl 1 Writ/Gram 3 Lecture/Discussion 3 Lab

This course is suitable for the lower intermediate student with some foundation in English grammar and writing. Students focus on writing coherent paragraphs and begin writing essays using the process approach. The course is designed to reinforce and build upon grammar and writing skills to enable the student to function in intermediate English academic and vocational situations. Advisory on Recommended Preparation: ESL 310 or equivalent college course with "C" or better, or eligibility determined by COS Placement Procedures, or recommendation of the department. Concurrent registration in ESL 321 (or appropriate ESL Reading/Vocabulary course) is strongly recommended.
ESL 321
ESL Int Lvl 1 Reading/Vocab
3 UNITS
Hours:
3 Lecture/Discussion

This course is suitable for the lower intermediate student with some foundation in English reading and vocabulary skills. This course is designed to develop reading techniques, vocabulary and study skills so that the student can comprehend and respond to written and spoken English in intermediate academic and vocational situations. Advisory on Recommended Preparation: ESL 311 or equivalent college course with "C" or better, or eligibility determined by COS Placement Procedures, or recommendation by the department. Concurrent registration in ESL 320 (or appropriate ESL Writing/Grammar course) is strongly recommended.

| ESL 330 | ESL Int Lvl 2 Writing/Grammar |
| :--- | :--- |
| Hours: | 3 Lecture/Discussion |
|  | 3 Lab |

This course is suitable for the upper intermediate student with a good foundation in English grammar and writing. The process method of writing is used to develop essay writing. The course is designed to reinforce and build upon grammar and writing skills to enable the student to function in intermediate to low advanced English academic and vocational situations. Advisory on Recommended Preparation: ESL 320 or equivalent college course with "C" or better, or eligibility determined by COS Placement Procedures, or recommendation of the department. Concurrent registration in ESL 331 (or appropriate ESL Reading/Vocabulary course) is strongly recommended.

## ESL 331 <br> ESL Int Lvl 2 Reading/Vocab <br> 3 UNITS <br> Hours: $\quad 3$ Lecture/Discussion

This course is suitable for the upper intermediate student with a strong foundation in English reading and vocabulary skills. This course is designed to expand reading techniques, vocabulary and study skills so the student can comprehend and respond to written and spoken English in intermediate to advanced academic and vocational situations. Advisory on Recommended Preparation: ESL 321 or equivalent college course with "C" or better, or eligibility determined by COS Placement Procedures, or recommendation of the department. Concurrent registration in ESL 330 (or appropriate ESL Writing/Grammar) course is strongly recommended.

## ENGLISH AS A SECOND LANGUAGE

## ESL 332AB <br> ESL Intermed Pronunc/Speak <br> 2 UNITS

## Hours:

This course is suitable for the intermediate level student with a basic foundation in English pronunciation and speaking skills. The course is designed to improve speaking skills so that the student can comprehend and respond to spoken English in academic and vocational situations. This course may be repeated once. Advisory on Recommended Preparation: ESL 312B or equivalent college course with "C" or better, or eligibility determined by COS Placement Procedures, or recommendation by the department. Concurrent registration in ESL writing and reading classes is strongly recommended.

| ESL 340 | ESL Adv Lvl 1 Writing/Grammar | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 3 Lab |  |

This course is suitable for the advanced student with a strong foundation in English grammar and writing. Using the process approach, students write essays in response to a variety of prompts. The course is designed to review and build upon grammar and writing skills to enable the student to function in advanced English academic and vocational situations. Advisory on Recommended Preparation: ESL 330 or equivalent college course with "C" or better, or eligibility determined by COS Placement Procedures, or recommendation of the department. Concurrent registration in ESL 341 (or appropriate ESL Reading/Vocabulary course) is strongly recommended.

| ESL 341 | ESL Adv Lvl 1 Reading/Vocab | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

This course is suitable for the advanced student with a strong foundation in English reading and vocabulary skills. The course is designed to expand reading techniques, vocabulary and study skills so the student can comprehend and respond to written and spoken English in advanced academic and vocational situations. Advisory on Recommended Preparation: ESL 331 or equivalent college course with "C" or better, or eligibility determined by COS Placement Procedures, or recommendation of the department. Concurrent registration in ESL 340 (or appropriate ESL Writing/Grammar course) is strongly recommended.

| ESL 350 | ESL Adv Lvl 2 Writing/Grammar | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 3 Lab |  |

This course is suitable for the advanced student with demonstrated knowledge and experience in English grammar and writing. The course is designed to review and refine grammar for application in writing projects to enable the student to successfully transition into mainstream course work. Advisory on Recommended Preparation: ESL 340 or equivalent college course with "C" or better, or eligibility determined by COS Placement Procedures, or recommendation of the department. Concurrent registration in ESL 351 (or appropriate ESL Reading/Vocabulary course) is strongly recommended.

| ESL 351 | ESL Adv Lvl 2 Reading/Vocab | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

This course is suitable for the advanced student with demonstrated ability to comprehend written English at an advanced level. The course is intended to expand reading techniques, vocabulary and study skills so the student can successfully transition into mainstream coursework. Advisory on Recommended Preparation: ESL 341 or equivalent college course with "C" or better, or eligibility determined by COS Placement Procedures, or recommendation of the department. Concurrent registration in ESL 350 (or appropriate ESL Writing/Grammar course) is strongly recommended.

ESL 352AB ESL Adv Pronunciation/Speak 2 UNITS
Hours: 2 Lecture/Discussion
This course is suitable for the advanced level student with a strong foundation in English pronunciation and speaking skills. The course is designed to improve speaking skills so that the student can comprehend and respond to spoken English in advanced academic and vocational situations. This course may be repeated once. Advisory on Recommended Preparation: ESL 332AB or equivalent college course with "C" or better, or eligibility determined by COS Placement Procedures, or recommendation of the department. Concurrent registration in ESL writing and reading classes is strongly recommended.

## ENVIRONMENTALCONTROLTECHNOLOGY

ECT 180
Elect \& Controls for HVAC
4 UNITS
Hours:
4 Lecture/Discussion
2 Lab
ECT 180 is a basic course in electrical theory and applications of controls for the Heating, Ventilating, Air conditioning/Refrigeration controls class. The theories and concepts of OHMS and Kerchoffs laws are studied extensively in this course in addition to the theories and concepts of refrigeration.

## ECT 181

Basic Air Conditioning
10 UNITS
Hours:
10 Lecture/Discussion
4 Lab
Materials Fee: \$20.00
ECT 181 is an introductory lecture and demonstration course in residential air conditioning, refrigeration and heating that covers applied refrigeration theory, including how to evacuate and charge systems, diagnose refrigeration problems and how to properly install an entire duct system in the project house. In addition, proper brazing techniques, tools and safety practices are taught as applied to various other trades.

ECT 182
Adv Air Cond/Refrig Com/Dom
12 UNITS
Hours:
10 Lecture/Discussion
10 Lab
Materials Fee: $\$ 10.00$
An advanced course offered in Environmental Control Technology that covers commercial and domestic air conditioning and refrigeration theory. Topics include the fundamentals of wiring circuits and the concept of electrical problem solving as it relates to both commercial and residential applications. Topics also include using methods to calculate heat load values necessary to sizing equipment in the industry. Advisory on Recommended Preparation: ECT 181 or equivalent college course with " $C$ " or better.

ECT 190AD Supervised Practice 1-3 UNITS
Hours: $\quad 3$ TO 9 Lab
Under the supervision of an instructor, students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling, and other vocational employment and volunteer situations where the student is expected to take a leadership role. This course may be repeated three times. Limitation on Enrollment: Permission of the department.

| ECT 200 Intro Indust Ammonia Refrig |  |
| :--- | :--- |
| Hours: | 3 Lecture/Discussion |

Industrial Ammonia Refrigeration is a practical course for the Industrial Maintenance Mechanic. The basic fundamentals of pressure, temperature, and heat transfer will be covered, as well as the specific uses, methods, components, systems, and safety concerns associated with industrial refrigeration systems utilizing ammonia as the refrigerant. Advisory on Recommended Preparation: ECT 260 or 181 or equivalent college course with "C" or better, or employment (past or current) by an industrial ammonia facility.

ECT 201 Adv Ammonia Refrigeration 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This class is the natural extension of the Introduction to Ammonia Refrigeration (ECT 200). Specific topics of safety, maintenance, installation, trouble shooting, extensive examination of piping design and systems, code compliance, and operation related to the industrial refrigeration systems utilizing ammonia as the refrigerant. Advisory on Recommended Preparation: ECT 200 or equivalent college course with "C" or better, or employment (past or current) by an industrial ammonia facility.

ECT 260 Basic Refrigeration
2 UNITS
Hours: 2 Lecture/Discussion

## 1 Lab

Introductory course in residential air conditioning and refrigeration that covers applied electrical and refrigeration theory. The students will learn how to use electrical meters to troubleshoot and diagnose electrical problems. In addition, proper brazing techniques, tools and safety practices are taught as applied to various other trades.

# ENVIRONMENTAL CONTROLTECHNOLOGY 

ECT 261 Intro to Air Cond/Refrig CID 2 UNITS<br>Hours: 2 Lecture/Discussion<br>1 Lab

An introductory course offered in Environmental Control Technology that covers commercial and domestic air conditioning, and refrigeration theory. The students will study the practical wiring circuits and diagnosing of electrical problems found in both commercial and domestic applications. The student will also become familiar with various types of electrical motors, and their individual characteristics. This course provides essential knowledge for students seeking further advancement in his/her career. Advisory on Recommended Preparation: ECT 260 of equivalent college course with " $C$ " or better or equivalent skills and knowledge as determined by departmental assessment.

ECT 262 Heating Systems \& Controls 2 UNITS
Hours: 2 Lecture/Discussion
1 Lab
ECT 262 is an advanced course offered in residential and light commercial heating that covers theory, design, controls, and operation of modern day space heating systems. The students will study the practical wiring of circuits, and the diagnosing of problems found in both residential and light-commercial applications. In addition, the students will gain an understanding of both L.P. and natural gas fundamentals and applications, controls and safety, with particular emphasis given to safe work habits and practices. This course provides essential knowledge for a student seeking further advancement in his/her career.
$\begin{array}{ll}\text { ECT } 263 & \text { Commercial Refrig Sys Controls } \\ \text { Hours: } & 2 \text { Lecture/Discussion }\end{array}$
An advanced course that introduces commercial refrigeration. The course covers theory, design, controls, and operation of modern day commercial refrigeration systems. The students will study the practical wiring of circuits, various defrosting methods, piping, design, sizing, and controls commonly used in the industry. Advisory on Recommended Preparation: ECT 260 or equivalent college course with " C " or better, or equivalent training/ experience.
ECT 265 Air Cond Control Systems
2 UNITS
Hours: 2 Lecture/Discussion
1 Lab

ECT 265 is a basic controls course designed to introduce the students to a wide variety of HVAC/R control systems. Control applications will be discussed in depth to give the students an understanding of pneumatic, electronic, and digital control systems. Advisory on Recommended Preparation: ECT 260 and ECT 261 with "C" or better; or equivalent college course with "C" or better; or equivalent skills and knowledge as determined by department assessment.

## ETHNICSTUDIES

ETHN $001 \quad$ Black American Studies 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course uses an interdisciplinary approach to Black Studies covering periods of social, cultural and historical development. Topics include African civilization, slavery, the Diaspora, abolition, reconstruction, segregation, Harlem Renaissance, and the Civil Rights Movement. Field trips are part of this course Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS placement procedures.

ETHN 002 American Indian Studies 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Using an interdisciplinary approach, this course will focus on the historical, social, religious, ecological, economic, and artistic characteristics of various Indian Nations, as well as, U.S. Government policy toward Indians. Special attention will be given to San Joaquin Valley Indians. Field trips are part of this course. Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS placement procedures.

## ETHNICSTUDIES

ETHN 003
Hours:
Mexican-American Studies
3 UNITS

This course studies the Mexican-American community and culture in American society. Using an interdisciplinary approach (anthropology, history, sociology, literature, art and music), the course will examine Mexican-American contributions and conflicts in American society. Also studied are the pre-Colombian roots of Chicano-Mexican heritage. Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS placement procedures.

ETHN 004 Asian American Studies 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course studies the Asian immigrant experience in the United States (Southeast Asian, Chinese, Japanese, Korean, and Filipino). Using an interdisciplinary approach (social, historical, religious, geographic, economic, linguistic, and artistic), special attention will be given to major immigrant populations in the San Joaquin Valley (Laotian, Hmong, Mien, and Lahu). Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS Placement Procedures.

ETHN 005 American Ethnic Origins 3 UNITS
Hours: 3 Lecture/Discussion
An examination of the various ethnic groups that came to America from Europe. Topics include: motives for migration, immigration, assimilation, social mobility, social change and the creation of our modern multicultural society. Special attention will be given to the migration of Euro-Americans into the Sa Joaquin Valley. Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS Placement procedures.

## FASHION

FASH 012AB Costuming
Hours: 2 Lecture/Discussion 2 Lab 4 Activity
A study of the principles and practice of costume construction from pattern to completed garments. Construction techniques, fabrics, basic patterns, wardrobe plotting, and historical styles. Additional hours required to work on crews for college productions. This course can be repeated one time.

FASH 017AB Makeup
3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
4 Activity
Equivalent Course: DRAM 17AB
This course is designed to introduce the student to the basic techniques and materials of makeup: theatrical, TV, photos, special occasions, business and evening. Topics include facial shape, hair arrangement, skin care and makeup for various races and skin types. Additional hours required to work on crews for college Theatre Arts and Dance Productions. This course can be repeated one time. CAN DRAM 14.

FASH 076 Introduction to Textiles 2 UNITS
Hours: 2 Lecture/Discussion
An introductory course in basic textiles, designed for fashion design students. It will cover fibers, fabric manufacturing, finishes, care, storage, and appropriate application and selection. Required for fashion certificates.

FASH 151AD Independent Study-Fashion 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
The purpose of Independent Study is to provide and opportunity for students, under the direction of an instructor, to participate in advanced individualized studies to supplement and enhance existing courses. Independent Study requires a minimum of 54 hours of academic work per unit. This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file and Independent Study form through the Admissions and Records Office to obtain approval to enroll.

## FASHION

FASH 160AB Clothing Construction
3 UNITS
Hours: 2 Lecture/Discussion 3 Lab
A study of the principles of clothing construction from pattern to completed garment. Emphasis on fabric performance, garment fit, and various construction techniques for woven and knit fabrics. Designed for both beginning and experienced seamstress. Open to all interested students. One field trip to a local fabric store is required for the course. This course may be repeated one time. CAN FCS 10.

FASH 161AB Tailoring
3 UNITS
Hours: 2 Lecture/Discussion
3 Lab
A study of traditional and contemporary tailoring techniques, including construction of a man's or woman's coat or suit jacket. Emphasis is on garment fit, quality construction and pattern selection. Clothing construction experience is required. A field trip to a local fabric store is required for the course. May be repeated once. Advisory on Recommended Preparation: Previous clothing construction experience.

| FASH 162 | Creative Pattern Design | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 3 Lab |  |

A basic course in apparel design through the use of flat pattern techniques. Includes the design, drafting, and construction of garments. Open to all students in clothing design, i.e., fashion majors, those who are interested in sewing for themselves, or who have fitting problems. Advisory on Recommended Preparation: FASH 160AB, FASH 161AB, or equivalent college course with "C" or better, or equivalent skills and knowledge as determined by departmental assessment.

FASH 164 The World of Fashion
2 UNITS
Hours: 2 Lecture/Discussion
An overview of the ever-changing world of fashion and the multifaceted fashion industry. Topics include the evolution of 20th century fashion, fashion designers and trendsetters, design development, fashion forecasting, consumer demand, the global marketplace, and careers in fashion.

FASH 166 Fashion Collection Development 1 UNIT Hours: 16 Lecture/Discussion
Introduction to the development of a fashion collection from its design inspiration to the creation of the line. Topics will include fashion forecasting, target marketing, elements and principles of design, color, fabric, and style selection.

FASH 171 Fashion Advertising 1 UNIT
Hours: 16 Lecture/Discussion
An introduction to fashion advertising and the various promotional methods used in the fashion industry. Topics include print and broadcast media, publicity, special events, and visual merchandising.

FASH 172 Fashion Buying 1 UNIT
Hours: 16 Lecture/Discussion
This course is an overview of the fashion buying industry and the role of the buyer in the retail environment. Topics will include consumer buying behavior, planning the fashion season, resources for merchandise, and the merchandise planning and buying process.

FASH 175M1 Fashion Image-Design Elements 1.5 UNITS
Hours: 1.5 Lecture/Discussion
This course focuses on helping men and women apply their fashion knowledge and practice their problem solving abilities while completing assignments related to demonstrating their working understanding of art principles and elements used when selecting wardrobe pieces for multiple images of appropriate dress.

FASH 175M2 Fashion Image and Wardrobing 1.5 UNITS Hours: 1.5 Lecture/Discussion Fashion Image M2 focuses on understanding the role of visual image and personal presentation for both men and women. Students apply learned principles of body proportion and color to develop basic wardrobe plans, shopping strategies, and clothing maintenance skills.

## FASHION

FASH 178
Hours:
Visual Merchandising/Promotion
2 Lecture/Discussion
3 Lab

3 UNITS
3 Lab
Materials Fee: $\$ 10.00$
Visual merchandising and promotion is part of a basic two year program designed to provide students with a strong educational background to enter the fashion merchandising field. Required for the Fashion Merchandising Vocational Certificate, the AA Degree in Home Economics with a Fashion Merchandising Major, and the Interior Design Major in Home Economics.

FASH 190AD Supervised Practice

## 1-3 UNITS

Hours: $\quad 3$ TO 9 Lab
Under the supervision of an instructor, select students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling, and other employment or volunteer situations where the students in expected to take a leadership role. This course may be repeated three times. Limitation on Enrollment: Permission of the department.

FASH 250AD The Art of Quilt Making 2 UNITS
Hours: 1 Lecture/Discussion
3 Lab
This course will include quilt design, color, fabric selection, analyzing and drafting patterns, calculating yardage, cutting, piecing, quilting, and finishing the quilt. The importance of quilting as an art from, the cultural aspects of quilting, and computer design of quilts will be explored. This class can be repeated three times.

FASH 261AD Prin of Clothing Construction 1 UNIT
Hours: 3 Lab
Basic clothing construction principles for individuals pursuing careers in the fashion industry, applying for a certificate or AA/AS degree in fashion, and/or wishing to construct clothing. Professional custom, and speed techniques for developing skills in clothing construction are covered as well as fit with an emphasis on developing manipulative skills. This course may be repeated three times.

FASH 265 Retail Career Preparation
1 UNIT
Hours: 1 Lecture/Discussion
Equivalent Course: BUS 265.
This course will help students prepare for employment in retail and sales. Instruction will emphasize job search techniques, resume, application, and correspondence related to job search, interview, and portfolio presentation skills. The course provides the skills and concepts necessary to facilitate successful on-site work experience. Portfolio preparation and interview skills will also be enhanced towards the end of the certificate program. Advisory on Recommended Preparation: It is advised for students to take this course the same semester they take Work Experience 193.

FASH 266AB Advanced Sewing Techniques 1 UNIT
Hours: 3 Lab
This is a skills oriented class in advanced clothing construction techniques, that includes garment fitting, tailoring, and sewing specialty fabrics. It is designed for students pursuing careers in the fashion industry, or for those who wish to construct clothing for themselves and others. This course may be repeated one time. Advisory on Recommended Preparation: FASH 261AD, or previous sewing experience.

FASH 267AB Advanced Serger Techniques 1 UNIT Hours: 3 Lab
Specialized class in serger construction for individuals pursuing careers in fashion. Professional custom and speed techniques for developing skills in clothing construction are emphasized as well as serger stitching techniques that include overlock and coverlock. Course can be repeated one time. Advisory on Recommended Preparation: FASH 261AD or equivalent college course with "C" or better or equivalent skills as determined by departmental assessment.

## FIRETECHNOLOGY

## FIRE 125 Fund Fire Apparatus/Equipment <br> 3 UNITS

Hours: 3 Lecture/Discussion
Student will learn driving laws, driving technique, construction and operation of pumping engines, ladder trucks, aerial platforms, specialized equipment, and apparatus maintenance.

FIRE 155 Fire Behavior \& Combustion 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Theory and fundamentals of how and why fires start, spread, and are controlled; an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents, and fire control techniques. This is one of the first courses a student should take in the sequence of fire technology classes. It covers the basic physical laws of fire combustion and extinguishing processes. It is part of the series of courses recommended by the Chancellor's Office for students in California Community Colleges.
Prerequisites: FIRE 159 or equivalent college course with "C" or better.
FIRE 156 Fire Service Hydraulics
3 UNITS

Hours: 3 Lecture/Discussion
This is a fire suppression class which studies the theory of water at rest; in motion, under pressure and engineering principles of formulas and mental calculations dealing with hydraulic problems as related to the fire service industry. Advisory on Recommended Preparation: MATH 360 or equivalent college course with a "C" or better, OR eligibility for MATH 200 as determined by COS placement procedures.
Prerequisites: FIRE 159 or equivalent college course with "C" or better.
FIRE 157
Fire Prevention Technology
3 UNITS
Hours: $\quad 3$ Lecture/Discussion

Provides information regarding the philosophy of fire prevention, organization and operation of a fire prevention bureau, application of fire codes, identification and correction of fire hazards, and the relationship of fire prevention with fire safety education and detection and suppression systems.
Prerequisites: FIRE 159 or equivalent college course with "C" or better.
FIRE 159
Intro to Fire Protection Org
3 UNITS
Hours: 3 Lecture/Discussion

Provides an introduction to fire protection; career opportunities in fire protection and related fields; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; introduction to fire strategy and tactics; basic fire chemistry and physics; fire systems. One of five fundamental CORE courses for students pursuing a degree in fire technology. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with a "C" or better, OR eligibility for ENGL 1 determined by COS placement procedures; and MATH 360 or equivalent college course with "C" or better, OR eligibility for MATH 200 determined by COS placement procedures.
FIRE 161
S.F.M.-Fire Prevention 1A
2 UNITS
Hours: 40 Lecture/Discussion

Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationship of fire prevention with fire safety education and detection and suppression systems.

| FIRE 162 | S.F.M.-Fire Prevention 1B | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 40 Lecture/Discussion |  |

Provides information regarding fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationship of fire prevention with fire safety education and detection and suppression systems.
Prerequisites: FIRE 161 or equivalent college course with "C" or better.

## FIRETECHNOLOGY

## FIRE TECHNOLOGY

FIRE 163 Fire Protection Equip/System 3 UNITS
Hours: 3 Lecture/Discussion
One of the five fundamental CORE courses for students pursuing a degree in Fire Technology. Provides information relating to the 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.
Prerequisites: FIRE 159 or equivalent college course with "C" or better.

## FIRE 164 Fire Prevention 1C 2 UNITS Hours: 40 Lecture/Discussion

This is the third class in a series of classes designed for the career oriented student or a currently employed fire fighter to develop knowledge and skills in the area of fire prevention. This course has more theory and more difficult research exercises than does Fire Prevention 1 A or 1 B .
Prerequisites: FIRE 161 and FIRE 162 or equivalent college courses with "C" or better.

## FIRE 171 S.F.M. Fire Instructor 1A <br> 2 UNITS <br> Hours: 40 Lecture/Discussion

This course is recommended for Fire Service personnel who have training responsibilities within their fire department. Techniques of Fire Service Instruction 1A deals with such topics as: terms pertaining to instruction; supplementary instruction sheets; concepts of learning; course development; lesson development; planning, organizing and managing instructional activities; teaching methods and teaching aids as they relate to teaching both manipulative skills and technical information in the fire service.

FIRE 172 S.F.M. Fire Instructor 1B
2 UNITS
Hours: 40 Lecture/Discussion
This course is recommended for Fire Service personnel having training responsibilities within their fire department. This course deals with such topics as: terms pertaining to instruction; supplementary instruction sheets; concepts of learning; course development; lesson development; planning, organizing and managing instructional activities; teaching methods and teaching aids as the relate to teaching both manipulative skills and technical information in the fire service.
Prerequisites: FIRE 171 or equivalent college course with "C" or better.
FIRE 173 S.F.M. Fire Command 1A 2 UNITS
Hours: 40 Lecture/Discussion
This course provides the Company Officer with information and experience in command and control techniques at the scene of an emergency. It is part of the performance requirements for a Fire Service Officer and is taught in compliance with regulations and requirements of the California State Fire Marshal's Office. Limitation on Enrollment: Must be presently appointed to a fire service or related agency and is eligible for SFM fire officer or fire prevention officer upon completion of all required curriculum per the California Fire Service Training and Education System Policy Text.

FIRE 174 S.F.M. Fire Command 1B 2 UNITS
Hours: 40 Lecture/Discussion
This course provides the Fire Company Officer with information and experience in command and control techniques at the scene of a Hazardous Materials emergency. The course emphasizes the ability to issue commands and how to respond to a command given by a higher authority during an emergency. It is part of the performance requirements for a Fire Service Officer.
Prerequisites: FIRE 173 or equivalent college course with "C" or better.

FIRE 176
Hours:

Truck Operations Academy
37 Lecture/Discussion
44 Lab
This course focuses on aerial apparatus (truck) operations which includes: aerial physics; ground ladder construction, inspection, repair, and evolutions; high rise building command procedures; elevator construction and rescue techniques; special rescue considerations for aerial apparatus and standard truck equipment. Prerequisite may be waived with a Fire Fighter 1 Certificate. Advisory on Recommended Preparation: Currently employed firefighter or volunteer with a minimum of 1 year experience. Limitation on Enrollment: Students must provide own turnout and safety gear, SCBA and spare bottle. Each participating department must supply one chain saw.
Prerequisites: FIRE 270 or equivalent college course with "C" or better.
FIRE $182 \quad$ Bld Constr for Fire Protectn 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
The study of the components of building construction relating to fire safety. Elements of construction and design of building. Development and evolution of building in relationship to past fires.

## FIRE 241 <br> Fire Command 2A <br> Hours: 28 Lecture/Discussion <br> 12 Lab

2 UNITS

This course prepares the Fire Officer to assume "Incident Commander" responsibilities at major commercial, industrial, and residential fires. It provides the student with information regarding strategy, tactics, safety and other operational and management considerations involved with these types of incidents. This course is limited to current volunteer, paid call, seasonal or full time firefighters. Students must have successfully completed FIRE 173 or its' equivalent. Students must have basic fire command experience at the company officer level.
Prerequisites: FIRE 173 or equivalent college course with " $C$ " or better.

| FIRE 242 | Fire Command 2B | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 34 Lecture/Discussion |  |

This class is one of five "Level 2" Fire Command classes. This course is intended to help prepare the Fire Officer to command a Hazardous Materials incident. Students will learn to recognize the warning signs, clues, risks and potential outcomes associated with Hazardous Material Incidents. Implementing the "Incident Command System", techniques for isolating hazardous materials, decontamination considerations, making the required notifications, protecting the public and recognizing cooperating agencies roles and responsibilities are a few of the key elements of this class. Students must be a volunteer, paid call, seasonal or full time fire fighter in a fire protection agency. Students must have completed FIRE 241 and FIRE 174 or equivalent courses, and have basic fire command experience at the Company Officer level. Limitation on Enrollment: Class is limited to volunteer, paid call, seasonal or full-time fire fighters. Students must have basic fire command experience at the Company Officer level.
Prerequisites: FIRE 241 and FIRE 174 or equivalent college courses with "C" or better.
FIRE 243
Fire Control 4A and 4B
. 5 UNITS
Hours: 8 Lecture/Discussion
8 Lab

This course is designed to instruct fire fighters in the types, characteristics and hazards of flammable liquids. It offers hands on "live fire" training exercises in the correct tactics for controlling these types of emergencies. This course combines Fire Service Training and Education (FSTEP) classes 4A and 4B. Prerequisite may be waived with equivalent skills and knowledge as determined by departmental assessment.
Prerequisites: FIRE 270 or equivalent college course with " $C$ " or better.
FIRE 251AD Independent Study-Fire Tec 1-4 UNITS

Hours: $\quad 3$ TO 12 Lab
Independent Study.This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

## FIRETECHNOLOGY

## FIRETECHNOLOGY

FIRE 252
Hours:
S.F.M. Fire Investigation 1A

2 UNITS

Fire Investigation 1A is designed for students who are currently employed in a fire service area and are interested in advancing their career into the area of investigation. Students will study the techniques of fire scene investigation, fire indicators and fire behavior and expose students to arson laws, writing documentation and insurance reports. This course will apply toward investigator certification by the California State Fire Marshal's Office. Limitation on Enrollment: Must be presently appointed to a fire service or related agency and is eligible for SFM fire officer or fire prevention officer upon completion of all required curriculum. 40 Hour Course.

FIRE 253
Hours:

## S.F.M. Fire Investigation 1B

2 UNITS
Hours: 40 Lecture/Discussion
This is the second class in a series of classes designed for the career oriented student or a currently employed fire fighter to develop knowledge and skills in the area of fire investigation. Students will study legal codes and regulations governing the laws of evidence, interviews, court proceedings, and fire investigation techniques. Laboratory exercises will assist to develop skill and understanding of the legal and investigative procedures. 40 Hour Course.
Prerequisites: FIRE 252 or equivalent college course with "C" or better.

FIRE 265
Fire Control 3
. 5 UNITS
Hours: 2 Lecture/Discussion 14.5 Lab

This is a class in structural fire control. Through the use of "live fire" training scenarios and lecture, this course will provide the student with a basic understanding of fire dynamics and behavior in buildings. Limitations on Enrollment: 1) Currently employed as a full-time fire fighter, or serving as a volunteer fire fighter in an organized fire agency, or currently enrolled in the Fire Fighter 1 Academy; 2) Students must have current fit test and medical clearance for the use of self- contained breathing apparatus. Must have access to NFPA contained breathing apparatus. Must have access to NFPA approved Personal Protective Clothing for structural fire fighters.

FIRE 267 CSFM Fire Control 6 . 5 UNITS
Hours: 16 Lecture/Discussion
One of the fundamental elective courses for personnel pursuing the California State Fire Marshal's (CSFM) Fire Service Training and Education Program (FSTEP). Provides technical knowledge in the specialize subject of wildland fire control. It is part of the package funded by the Chancellor's Office. This class provides the students with the fundamentals of planning, organizing and developing strategies and tactics for mitigating wildland fires. Limitation on Enrollment: Currently employed or volunteer fire fighter of an organized fire department of fire district per the California Fire Service Training and Education System Policy Text.

FIRE 270
Hours: 9 Lecture/Discussion

## 12 Lab

This class includes manipulative and technical training in the basic concepts of fire department equipment and operations. Including; fire department organization, identification, use and maintenance of fire equipment, hazardous materials, structural and wildland fire control, auto extrication, and fire fighter safety. Students must provide evidence of current medical clearance for the use of self-contained breathing apparatus. Students will be required to purchase prescribed uniforms. Students must have current EMT status or be concurrently enrolled in an EMT class. An EMT class must be taken at the same time as FIRE 270 if not already completed. Advisory on Recommended Preparation: Completion of ENGL 251 or equivalent college course with "C" or better or eligibility for ENGL 1 as determined by COS Placement procedures. Limitation on Enrollment: Current medical clearance for the use of self-contained breathing apparatus (SCBA) is required.
Prerequisites: EMT 251 or equivalent college course with "C" or better (EMT 251 may be taken concurrently).

FIRE 277
Hours:
S.F.M. Fire Management 1

2 UNITS
34 Lecture/Discussion
14 Lab
Reviews management styles of leadership and through the use of in-action exercises, simulations, and case studies, allows each student to experience how these basic principles can be effectively applied for on-the-job results. This course is one of the State Fire Marshal training classes needed for Fire Officer certification. Advisory on Recommended Preparation: Completion of nine (9) units in Fire Technology or presently employed as a fire fighter or serving as a volunteer fire fighter.
$\begin{array}{ll}\text { FIRE } 280 & \text { Fire Fighter } 2 \text { Academy } \\ \text { Hours: } & 51 \text { Lecture/Discussion }\end{array}$ 59 Lab
Fire Fighter 2 is the 2nd of two courses in the State Fire Marshal Fire Fighter series. This course expands on areas which were introduced in the Fire Fighter 1 curriculum. The course concentrates on the subjects of rescue and fire prevention and investigation. Successful completion of this course will include certification in "Confined Space Rescue Operations". Students must have current fit test and medical clearance for the use of self-contained breathing apparatus. Students must have access to NFPA approved protective clothing for structural fire fighters. Limitation on Enrollment: Current fit test and medical clearance for using self-contained breathing apparatus, and access to NFPA approved personal protective clothing.
Prerequisites: FIRE 270 or equivalent college course with "C" or better.

| FIRE 290 | Confined Space Rescue Ops | 1.5 UNITS |
| :--- | :--- | :--- |
| Hours: | 24 Lecture/Discussion |  |
|  | 16 Lab |  |

This course is required by CAL-OSHA for confined space training for rescue workers. The course covers laws, codes and standards as they apply to confined spaces. Included are methods of evaluating hazardous atmospheres, hazard mitigation and constructing various mechanical advantage rescue systems. Limitation on Enrollment: Students must have current medical clearance and approved fit test for the use of self-contained breathing apparatus. Students must have access to required personal protective clothing. Students must have completed a recognized CAL OSHA Confined Space Awareness class through their employer. Advisory on Recommended Preparation: Completion of Rescue Systems 1.

## FOSTERCARE

FC $499 \quad$ Foster Care Courses 0 UNITS Hours: $\quad 9$ Lecture/Discussion
Check with Consumer Family Studies Division or the Foster Care Coordinator, for more information.

## FRENCH

FREN 001 Elementary French 14 UNITS
Hours: 4 Lecture/Discussion
FREN 1 is an introductory course in understanding, speaking, reading and writing French. This course can meet the foreign requirement for transfer to many four-year universities. It is also useful for business and travel in French speaking countries. It is the first course in a series of four and introduces basic sentence patterns for every day activities. CAN FREN 2.

## FRENCH

GEOGRAPHY

4 UNITS

Elementary French 2
1 Lab
4 Lecture/Discussion

FREN 002
Hours:

FREN 2 is an elementary course in understanding, speaking, reading and writing French. This course can meet the foreign language requirement for transfer to many four-year universities. It is also useful for business and travel in French speaking countries. It is the second course in a series of four. It strengthens and broadens the student knowledge of basic French. Prerequisite may be waived with one year of high school French with "C" or better, or equivalent skills and knowledge as determined by departmental assessment. CAN FREN 4.
Prerequisites: FREN 001 or equivalent college course with "C" or better.

FREN 003 Intermediate French 3
4 UNITS
Hours: 4 Lecture/Discussion
FREN 3 is the third course in a series of four and addresses understanding, speaking, reading, and writing French. This course can meet the foreign language requirement for transfer to many four-year universities. It is also useful in business and travel in French speaking countries. It expands and refines skills by exposure to literature and media sources. Prerequisite may be waived with two years of high school French with "C" or better, or equivalent skills and knowledge as determined by departmental assessment. CAN FREN 8.
Prerequisites: FREN 002 or equivalent college course with "C" or better.

FREN 004 Advanced French 4
4 UNITS
Hours: 4 Lecture/Discussion
FREN 4, the fourth course in a series of four, addresses understanding, speaking, reading and writing French. This course can meet the foreign language requirement for transfer to many four-year universities. It is also useful for business and travel in French speaking countries. It expands and polishes skills by exposure to literature and cultural aspects of French society. Prerequisite may be waived with three years of high school French with "C" or better, or equivalent skills and knowledge as determined by departmental assessment. CAN FREN 10.
Prerequisites: FREN 003 or equivalent college course with " C " or better.

FREN 151AD Independent Study-French 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
Independent Study.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admission and Records Office to obtain approval to enroll.

## GEOGRAPHY

GEOG 001 Physical Geography

## 3 UNITS

Hours: $\quad 3$ Lecture/Discussion
An investigation and interpretation of weather, climate, vegetation, soils, land forms, oceans, and maps. An emphasis is place on explaining the distribution of physical phenomena on the surface of the earth and the relationship between man and the natural environment. Advisory on Recommended Preparation: MATH 200, MATH 205, or MATH 215 or equivalent college course with "C" or better, or eligibility for MATH 230 determined by COS Placement Procedures; and ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN GEOG 2.

GEOG 001L Physical Geography Lab Class
1 UNIT
Hours: 3 Lab
Observations, computer projects, experiments, and a field trip are designed to familiarize students with techniques used in physical geography. Advisory on Recommended Preparation: MATH 200 or MATH 205 or MATH 215 or equivalent college course with "C" or better, or eligibility for MATH 230 determined by COS Placement Procedures; and ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.
Corequisites: GEOG 001.

GEOG 002 World Regional Geography
Hours: 3 Lecture/Discussion
Aspect of physical and cultural geography such as landforms, climate, vegetation, natural resources, demography, cultural diversity, and political and economic organization are applied to various world regions. Emphasis is placed on man-land relationships, multicultural issues, and understanding world problems from a geographic perspective. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

GEOG $003 \quad 3$ UNITS
Hours: $\quad 3$ Lecture/Discussion
A general background to cultural geography including cultural origins, population, migration, multicultural issues, ethnic diversity, religion, language, economic systems, resources, environmental issues, and map interpretations. Emphasis is placed on key relationships of humankind to the social and physical environment. It is not necessary to take GEOG 1 or 2 to take GEOG 3. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN GEOG 4.

GEOG 151AD Independent Study-Geography 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
Independent Study.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses in the selected subject area. In addition, student must file an Independent Study form through the Admissions Office to obtain approval to enroll.

## GEOLOGY

GEOL 001 Physical Geology
4 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
A study of the dynamic physical processes that operate on Earth. Explore the internal workings of the planet through the study of the structure of Earth, earthquakes, volcanoes, mountain building, and plate tectonics, and the external processes of weathering, rivers, mass movement, glaciers, and climate change. Lab topics include: minerals, rocks, maps, and geologic time. Advisory on Recommended Preparation: MATH 200, 205, or MATH 215, or equivalent college course with a "C" or better, or eligibility for MATH 230 as determined by COS Placement Procedures; and ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 as determined by COS Placement Procedures. CAN GEOL 2.

GEOL 004 Earth History 4 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
This course examines the geologic evidence for the major events in Earth's turbulent history including; the formation of the crust, atmosphere, and oceans; the tectonic history of the continents; mass extinctions and the record of life on Earth. Lab exercises include: fossil and rock identification, basic principles of geologic time and stratigraphy, and geologic map interpretation. Advisory on Recommended Preparation: MATH 200, MATH 205, or MATH 215 or equivalent college course with "C" or better, or eligibility for MATH 230 as determined by COS Placement Procedures; and ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined COS Placement Procedures.

GEOL 012
Environmental Geology
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Geologic hazards, natural resources, and pollution constitute the core themes of this study of man's interactions with earth systems. The consequences of human modification of natural systems and the geological underpinnings of modern society are emphasized. Topics include flooding, earthquakes, volcanic eruptions, energy and water resources, and water pollution. Advisory on Recommended Preparation: MATH 200, 205, or MATH 215, or equivalent college course with a "C" or better, or eligibility for MATH 230 as determined by the COS Placement Procedures; and ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 as determined by COS Placement Procedures.

## GEOLOGY

## GRAPHIC DESIGN

GEOL 251
Geology of the Mojave Desert
1 UNIT
Hours:
6 Lecture/Discussion
18 Lab
6 Activity
A two-day (overnight) field trip introducing the geology of the Mojave Desert. Major themes include tectonics and structure, mineral resources and mining, and energy resources. Some geologic features will be discussed enroute, while extended stops, that include some hiking, allow closer examination of phenomena such as faults, volcanoes, mines, and solar power plants.
Prerequisites: GEOL 001 or GEOL 004 or GEOL 012 or equivalent college course with "C" or better (GEOL 001, GEOL 004 and/or GEOL 012 may be taken concurrently).

GEOL 252
Geology of the Central Coast
1 UNIT
Hours: 6 Lecture/Discussion
18 Lab
6 Activity
A two-day (overnight) field trip introducing the geology of the Central Coast. Major themes include tectonics, geologic hazards, energy and water resources, pollution, and coastine and surficial processes. Some features will be discussed en route, while extended stops, that include some hiking, allow closer examination of phenomena (e.g., San Andreas Fault and Morro Rock).
Prerequisites: GEOL 001 or GEOL 004 or GEOL 012 or equivalent college course with "C" or better (GEOL 001, GEOL 004 and/or GEOL 012 may be taken concurrently).

## GOVERNMENT

## GOVT 005 <br> Federal, State \& Local Govt <br> 3 UNITS <br> Hours: 3 Lecture/Discussion

An introduction to the principles and problems of national, state, and local government, with particular emphasis on the Constitution of the United States and the state and local governments of California. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN GOVT 2.

GOVT 007 Mass Communications
3 UNITS
Hours: 3 Lecture/Discussion
Equivalent Course: JOUR 007.
A media survey course covering newspapers, radio, television, magazines, books, films, the web, public relations/advertising industries, and the recording industry. Students will study strengths and weaknesses of each, as well as the major challenges to a democratic society including censorship, sensationalism, pornography, propaganda, and monopoly. CAN JOUR 4.

GOVT 025
Constitutional Law
Hours: 3 Lecture/Discussion
Equivalent Course: AJ 025, BUS 025.
See BUS 25 for course description.
GOVT 151AD Independent Study-Government

## 1-4 UNITS

Hours: $\quad 3$ TO 9 Lab
Independent Study. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records office to obtain approval to enroll. This course can be repeated three times.

GOVT 251AD Independent Study-Government 1-4 UNITS
Hours: $\quad 3$ TO 9 Lab
Independent Study. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions Office to obtain approval to enroll. This course can be repeated three times.
$\begin{array}{ll}\text { GD 159 } & \text { Adobe Illustrator } \\ \text { Hours: } & 2 \text { Lecture/Discussion } \\ & 2 \text { Lab }\end{array}$
Materials Fee: $\$ 20.00$
This course is designed to provide working knowledge and skills, required for graphic designers and illustrators, in the use of Adobe Illustrator using a PC.

GD 160

## Graphic Design

4 UNITS
Hours: 3 Lecture/Discussion
3 Lab
Materials Fee: $\$ 20.00$
This course will introduce creative problem solving methods and applications of graphic design theory, elements and principles for creating corporate icons and business card designs. This is an invaluable course for those interested in graphic design for they will develop a professional portfolio with extensive practice in computer image generation. Advisory on Recommended Preparation: GD 159 or equivalent college course with a "C" or better or equivalent skills and knowledge as determined by departmental assessment.

| GD 161AD | Graphic Design Applications | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 3 Lab |  |
| Materials Fee: | $\$ 20.00$ |  |

Creative problem solving process as it relates to graphic design utilizing computer image generation skills and knowledge in the conceptualization, refinement, analysis, evaluation, and implementation of graphic design. Practical applications will include a variety of print, packaging and container designs. This course may be repeated three times. Advisory on Recommended Preparation: GD 160 or equivalent college course with a "C" or better or equivalent skills and knowledge as determined by departmental assessment.

| GD 162AD | Integrated Graphics | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 3 Lab |  |

Materials Fee: $\$ 20.00$
Integrating design processes as they relate to graphic design utilizing computer image generation skills and knowledge in the conceptualization, refinement, analysis, evaluation, and implementation of multi-media graphic design. This course may be repeated three times. Advisory on Recommended Preparation: GD 161AD or ART 25AD or equivalent college course with a "C" or better; or equivalent skills and knowledge as determined by departmental assessment.
GD 163AD
Digital Mechanicals
3 UNITS
Hours: 2 Lecture/Discussion
4 Lab
Materials Fee: $\$ 20.00$

This course is designed to provide working knowledge and skills required for graphic designers and pre-press professionals utilizing InDesign software. This course is repeatable three times. Prerequisite may be waived with equivalent skills and knowledge as determined by departmental assessment.
Prerequisites: GD 160 or equivalent college course with " $C$ " or better.

GD 164AD Digital Animation 4 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
Materials Fee: $\mathbf{\$ 2 0 . 0 0}$
This is a course in graphic design application in digital animation for multi-media and interactive content in online graphics. Creative problem solving knowledge and skills for generating 2 D and 3 D images that move are developed. This course is repeatable three times. Advisory on Recommended Preparation: GD 159 or GD 160 or equivalent college course with a "C" or better or equivalent skills and knowledge as determined by departmental assessment.

## GD 190AD <br> Supervised Practice <br> 1-3 UNITS

Hours: $\quad 3$ TO 9 Lab
Under the supervision of an instructor, selected students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling, and other employment volunteer situations where the student is expected to take a leadership role. This course may be repeated three times. Limitation on Enrollment: Permission of Department.

## HEALTH ANDWELLNESS

## HIGHTECHNOLOGY (ENABLER)

HW 001
Personal \& Community Health
3 UNITS
Hours: 3 Lecture/Discussion
A general course including the facts necessary for maintenance of physical and mental health. The subject matter covers holistic health, mental health, stress management, physical health and nutrition, infectious and noninfectious diseases, sexually transmitted diseases, lifestyles, and drugs in our society.

HW 003 Standard First Aid 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course covers the American Red Cross Standard First aid course, including Cardiopulmonary Resuscitation (CPR), Safety Factors in Daily Living, Emergency Treatment for Various Types of Injuries and Emergency Childbirth. Certificates will be issued with a fee paid to the American Red Cross when requirements are met.

HW 007
Sports Health
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This class covers the same basic subject matter as HW 1. The effects of pain and stress on performance are studied. Diet, weight control, fitness and exercise, genetics, and their influence on training are examined. The consequence of using alcohol, tobacco and anabolic steroids and other drugs are explained in terms of their effects of human performance.

| HW 060 | Concepts in Health \& Fitness | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
| Equivalent Course: SMED 060. |  |  |

An examination of recommended health practices and concerns. Emphasis is on basic understanding of critical health and fitness issues and applying these to everyday living.

HW 104 Drugs and Society
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course covers the broad spectrum of drug use in our society. The material is constantly updated to reflect the current interests of students and new information made available by the scientific community. Concomitant learning results in a wide variety of subjects being covered, i.e., Alcohol \& Traffic Safety, Antibiotics and Venereal Disease, Weight Loss and Over-the-Counter diet pills, Anabolic Steroids and Exercise.

HW 119 Nutrition for Fitness

## 3 UNITS

Hours: $\quad 3$ Lecture/Discussion

## Equivalent Course: NUTR 119, PE 119.

This course is designed to acquaint students with nutritional needs of athletes and the relationship between nutrition and fitness. Students are required to use the computer, Internet and basic math skills to calculate nutritional needs. Topics include human energy, nutrient groups, body composition, and supplement use.

## HIGHTECHNOLOGY (ENABLER)

## HT 190AD Supervised Practice <br> 1-3 UNITS <br> Hours: $\quad 3$ TO 9 Lab

Supervised Practice. Under the supervision of an instructor selected students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling, and other employment or volunteer situations where the student is expected to take a leadership role. This course can be repeated three times.

HT 310AD Adapted Computer Technology 1-3 UNITS
Hours: $\quad 1$ TO 3 Lecture/Discussion 2 TO 6 Lab
Designed for students with acquired brain injuries or visual physical, communication or learning disabilities, this course provides training in the use of adapted computer technology, keyboarding and word processing to enhance students' ability to access and use individualized micro-computer environments. This course is repeatable three times.

HT 311AD Advanced Adapted Computers 1-3 UNITS
Hours: 1 TO 3 Lecture/Discussion 2 TO 6 Lab
Designed for students with acquired brain injuries or visual, physical, communication or learning disabilities, this course provides advanced training in the use of adapted computer technology, keyboarding, word processing, spreadsheets and/or databases to enhance students' ability to access and use individualized microcomputer environments. This course can be repeated three times.
Prerequisites: HT 310AD or equivalent college course with "C" or better.

## HISTORY

## HIST 004 Hist of West Civil to 1648 <br> 3 UNITS

Hours: 3 Lecture/Discussion
Is the first of an optional two-semester course sequence which surveys the development of Western Civilization covering events from approximately 3000 BCE to 1648 CE. Advisory On Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN HIST 2.

HIST $005 \quad 3$ UNITS
Hours: $\quad 3$ Lecture/Discussion
The second of an optional two-semester course sequence which surveys the development of Western Civilization covering events from 1648 to the present. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN HIST 4.

| HIST 017 | People of the US to 1865 | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

A study of the people of the United States from colonial beginnings to 1865 emphasizing the interaction of political, economic, geographic and social factors in the evolution of American culture. Special emphasis is given to the roles of various ethnic minority groups (as well as the role of women) in settling and shaping American History. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with a "C" or better, or eligibility for ENGL 1, determined by COS Placement procedures. CAN HIST 8.

HIST $018 \quad$ People of the US after 18653 UNITS
Hours: $\quad 3$ Lecture/Discussion
A study of the people of the United States from 1865 to the present time emphasizing the Interaction of political, economic and social factors in the evolution of American culture. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN HIST 10.

HIST 023 Mexican American 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
A study of the culture and heritage of the Mexican American people from the Native American period to the present time with an emphasis on the social, political, and economic factors shaping their destiny in American society. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.
$\begin{array}{ll}\text { HIST 024 } & \text { World History } \\ \text { Hours: } & 3 \text { Lecture/Discussion }\end{array}$
Equivalent Course: HIST 122.
A survey of the economic, political and social developments in world history from the emergence of human communities to the present. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with a "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

## HISTORY

HIST 151AD Independent Study-History
1-4 UNITS
Hours: 3 TO 12 Lab
Independent Study.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions Office to obtain approval to enroll.

HIST 251AD Independent Study-History 1-4 UNITS
Hours: 3 TO 12 Lab
Independent Study.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admission and Records office to obtain approval to enroll.

## HUMAN DEVELOPMENT

## HDEV 100 Career Planning 3 UNITS <br> Hours: 3 Lecture/Discussion

An introduction to career/life planning including an exploration of interests, skills, values, personality traits, past experiences and life stages. Students will develop a career/life plan using gathered self-information, decision-making strategies and an awareness of psychological, sociological and physiological factors related to career/life satisfaction.

## HDEV 120AB Student Success

## 2 UNITS

Hours: 2 Lecture/Discussion
This course will provide the student the opportunity to learn and adopt techniques, tools and methods that will enhance his/her success in college. In addition, information on campus resources, regulations and requirements for graduation/ transfer will be discussed. This course may be repeated once.

| HDEV 122AD | Peer Counseling | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |

Focuses on interpersonal communication and interaction skills within the setting of student-to-student advising. This course can be repeated three times. Advisory on Recommended Preparation: PSY 1 or equivalent college course with "C" or better; and ENGL 251 or equivalent college course with " $C$ " or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

HDEV 151AD Independent Study-Hum Dev 1-4 UNITS

## Hours: 54 TO 216 Lab

Independent Study. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admission and Records Office to obtain approval to enroll. This course can be repeated three times.

HDEV 199 Topic Courses
.5-4 UNITS
Hours: 8 TO 70 Lecture/Discussion
Special topics courses in Human Development. (Transferable).

HDEV 230 College Success Skills 1 UNIT
Hours: 1 Lecture/Discussion
This course provides students with an opportunity to learn techniques and adopt attitudes and skills that promote academic success. Course content is taught with the objective of identifying personal obstacles to academic success. The focus will be on time management, procrastination and goal setting, stress management, focusing and concentrating, adjusting to college, and successful relationships. Campus resources providing further support will also be introduced.

HDEV 240
Hours:
A course designed for students who would like assistance with test taking and study skills. Topics include reduction of math anxiety, self-motivation, self-awareness, self-management and accepting personal responsibility.

## HUMAN DEVELOPMENT

HDEV 251AC Career Development
1 UNIT

## Hours: 1 Lecture/Discussion

This course focuses on career, personal and educational awareness as they relate to the process of career choice and academic goal setting. Self-assessment instruments that focus on interests, skills, values, and personality will help identify career options. Decision-making strategies, labor market trends, interviewing skills, resume writing, application completion and job search techniques will be reviewed. This course can be repeated two times.

HDEV 258 Summer College Readiness 3 UNITS
Hours: 54 Lecture/Discussion
The Summer College Readiness Program provides students with the skills and necessary knowledge to become self-directed individuals. Desired outcomes of the program are that students become independent thinkers capable of making intelligent choices, and develop the self-confidence to participate in classroom activities. Limitation Request on Enrollment: Acceptance into the Extended Opportunity Program \& Services Summer Readiness Programs.

HDEV 299 Topic Courses - Human Dev .5-4 UNITS
Hours: 8 TO 70 Lecture/Discussion
Special topic courses in Human Development.

HDEV 307AD Student Success Strategies
. 5 UNITS
Hours: 4 Lecture/Discussion 12 Lab
Equivalent Course: LS 307AD.
This course is designed to provide the student with individualized instruction regarding strategies and accommodations for college study skills including: textbook reading, notetaking, test taking and time management. This course may be repeated three times.

## HUMAN SERVICES

| HSRV 120 Intro to Social Welfare |  |
| :--- | :--- |
| Hours: | 3 UNITS |

Hours: 3 Lecture/Discussion
A general survey of the social, economic, political, historical and philosophic components in the development of social welfare programs. Major contemporary public assistance programs in the United States and California government are evaluated.

| HSRV 121 Interviewing | 4 UNITS |  |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

Methods and techniques of interviewing for social workers. Emphasis is on obtaining social information, presenting social agencies, developing sensitivity and awareness of the needs, feelings and concerns of those being interviewed; developing skills and the use of interpreters. Special programs, problems in interviewing children, the handicapped, and the aged will be included.

HSRV 122 Intro of Human Services 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
A study of the field of social work as it applies to meeting community and individual social problems through social agency intervention. It covers a range of social issues and their solutions in such areas as marital, mental health, crime, drugs, medical care, and education.

HSRV 228 Alcohol Interv Treat \& Recov 2 UNITS
Hours: 2 Lecture/Discussion
This course provides knowledge about alcoholism and chemical dependency from a social clinical perspective. Emphasis is placed on programs for intervention, treatment, and recovery.

HSRV 229 Phys \& Psycho Aspects Drug 2 UNITS
Hours: 2 Lecture/Discussion
This course explores physiological and psychological aspects of drug abuse and addiction; physical and psychological dependencies, psychological effects of commonly used drugs; and various methods of treatment and prevention.

## INDUSTRY ANDTECHNOLOGY

## INDUSTRY ANDTECHNOLOGY

ITEC 100
Hours:
Indust Maint Tech Option A
13 UNITS

## Materials Fee:

ITEC 100 is the first semester of a two semester program in Industrial Maintenance Technology. This class will provide the students with the theories, concepts and skills utilized in the areas of: basic electricity, machine tool operation, acetylene and MIG welding, hydraulics/pneumatics, and mechanics.

ITEC 101 Indust Maint Tech Option A
13 UNITS
Hours: 8 Lecture/Discussion
17 Lab
Materials Fee: $\$ 7.00$
This course will provide the students with theories, concepts, and skills utilized in the areas of: industrial motor controls and instrumentation, stick and TIG welding, refrigeration and programmable logic controllers. It is the second course of a two semester program required to earn a certificate in Industrial Maintenance Technology. Prerequisite may be waived with equivalent skills and knowledge as determined by department assessment.
Prerequisites: ITEC 100 or equivalent college course with "C" or better.

## ITEC 105AD

Indust Maint Tech Option B
4 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab

## Materials Fee: $\quad \$ 7.00$

This employment oriented class will provide the students with knowledge and skills in the areas of: basic electricity, industrial electrical controls, programmable logic controllers, instrumentation, pneumatics and hydraulics, machine tool operation, refrigeration principles, and welding practices. This course parallels the day-time Industrial Maintenance Technology course but is offered in a four-semester night class format. Industrial Maintenance Technology, Option B, requires four semesters of course work and work experience to complete the certification requirements (the course may be taken without work experience, if the student does not desire a certificate), and the four semester sequence may be started any semester. This course is repeatable three times.

ITEC 142 Air Conditioning Sheet Metal
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
General sheet metal theory including design, calculating, bending, shaping soldering, riveting, and spot welding. Principles of fabrication of sheet metal fittings with basic hand tools for the sheet metal air conditioning trade.

ITEC 143 Adv Air Cond Duct Sheet Metl

## 3 UNITS

Hours: 2 Lecture/Discussion
4 Lab
Training in the layout, fabrication, and installation of sheet metal fittings used in heating and air conditioning (cooling-heating) duct systems and kitchen equipment. Development of triangulation, true length line layout and fabrication. Advisory on Recommended Preparation: ITEC 142 or equivalent college course with "C" or better.

ITEC 151AD Independent Study-I \& T 1-4 UNITS
Hours: $\quad 54$ TO 216 Lab
Independent Study requires a minimum of 54 hours or academic work per unit. This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admission and Records Office.
$\begin{array}{ll}\text { ITEC } 160 & \text { Intro Tech Computer Applicat } \\ \text { Hours: } & 2 \text { Lecture/Discussion }\end{array}$
Materials Fee: $\$ 3.00$
An introduction to the application of computer techniques to the problems encountered in industry and technology. Students will learn the basics of computer operating systems, word processing, spreadsheets and databases, and their applications to the building trades, architecture, automotive, electronics, environmental control systems, and industrial maintenance.

ITEC 185 Ethics in Business \& Industr
Hours: $\quad 3$ Lecture/Discussion

## Equivalent Course: BUS 185.

The focus of the class will be primarily on the application of ethics to contemporary issues occurring in today's business and industry. Students will research, discuss, analyze, and reflect on issues such as accountability, loyalty, confidentiality, honesty, justice, education, and discrimination.

| ITEC 190AD | Supervised Practice | $1-3$ UNITS |
| :--- | :--- | :--- |
| Hours: | 3 TO 9 Lab |  |

Under the supervision of an instructor, select students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling, and other employment or volunteer situations where the student takes a leadership role. This course may be repeated three times. Limitation on Enrollment: Permission of the department.

ITEC 220 Water Treatment Fundamentals 3 UNITS
Hours: 3 Lecture/Discussion
Basic methods for providing safe public drinking water are presented. Main underlying concepts of mathematics and science are introduced. Course fulfills specialized training requirements and prepares students for grades 1 and 2 water treatment operator certification exam administered by California Department of Health Services.

ITEC 221 Wastewater Treatment Fundaml 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Basic methods for removing pollutants from sanitary sewage and industrial wastewater are presented. Main underlying concepts of mathematics and science are introduced. Course fulfills educational point requirements which, in conjunction with required experience, qualify students to take the State Water Resources Control Board (SWRCB) grades 1 and 2 wastewater treatment plant operator (WWTPO) exams. Course prepares students for SWRCB WWTPO grades I and II exams.

ITEC 251AD Independent Study-I\&T
1-4 UNITS
Hours: $\quad 54$ TO 216 Lab
Independent Study requires a minimum of 54 hours of academic work per unit. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office. This course may be repeated three times.
ITEC 273 Electric Motor Controls
2 UNITS
Hours: 2 Lecture/Discussion
1 Lab

This course fulfills the necessary education and background in the motor control field for an industrial maintenance electrician. Advisory on Recommended Preparation: Basic electrical and mechanical knowledge; and computer literacy.

ITEC 274 Elec Motor Contrl/Prog Contr 2 UNITS
Hours: 2 Lecture/Discussion
1 Lab
This course fulfills the necessary education and background in the motor control field of programmable controllers for maintenance electricians. The student will learn the coding, numbering, wiring methods and programming of motor controllers. The student will learn how to design ladder diagrams from a hard wired diagram or from a sequence of operations.

ITEC 276 Advanced PLC 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course teaches the student advanced features of electrical motor controls as accomplished through the use of the Programmable Logic Controller and the use of Wonderware software as the Human-Machine-Interface. Prerequisite may be waived with equivalent skills and knowledge as determined by departmental assessment.
Prerequisites: ITEC 274 or equivalent college course with "C" or better.

## INFORMATION TECHNOLOGY

## INFORMATIONTECHNOLOGY

| IT 110 | PC Troubleshooting \& Repair | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |
| Materials Fee: | $\$ 12.00$ |  |

This course will introduce students to methods used to upgrade and repair personal computers. Topics include: how to identify parts of the PC, software and hardware tools for repairing PCs, adding and removing components, loading operating systems and software applications, and PC troubleshooting.

IT 111AC Comp TIA A+ Exam Preparation 4 UNITS
Hours: 3 Lecture/Discussion
3 Lab
Materials Fee: $\$ 19.00$
This is a advanced PC repair course, intended to prepare students to pass the Comp TIA A+ professional exam. Students will be working hands-on with microcomputer components, operating systems, and application software, configuring PCs for optimal performance. This course may be repeated two times.

## IT 120 Computer Networking Fundamtl 3 UNITS <br> Hours: 3 Lecture/Discussion

This course is an introduction to computer networking concepts. Students will be introduced to the technical foundations of networks, topologies, adapters, bindings, protocols and network administration. Students will also be introduced to diagnostic software, troubleshooting, and repair of networks and network hardware, components and peripherals.

IT 121AC Comp TIA Network + Exam Prep 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
Materials Fee: $\$ 18.00$
This advanced course will prepare students for the Comp TIA Network Plus Exam. Topics include: the proper care, maintenance, and use of networking software, tools, and equipment; network terminology and protocols; LANs, WANs, and OSI models; cabling and cabling tools; IP addressing; and network standards. This course may be repeated two times. Advisory on Recommended Preparation: IT 110 and IT 111AC, and COMP 5 or COMP 130 or equivalent college courses with a "C" or better, or equivalent skills and knowledge as determined by departmental assessment.

IT 122AC Network Administration
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
Materials Fee: $\$ 16.00$
This is an advanced computer networking course using Microsoft Windows NT Workstation and Server. Students will load NT Workstation/Server then create and administrate an NT 4.0 network. Students will also be introduced to diagnostic software, and troubleshooting and repair of networks and network hardware, components and peripherals. The course is repeatable two times. Advisory on Recommended Preparation: IT 110 and IT 111 AC, and COMP 5 or COMP 130 or equivalent college courses with a " C " or better, or equivalent skills and knowledge as determined by departmental assessment.

IT 123AC TCP/IP and IP Routing 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
Materials Fee: $\$ 16.00$
This is an advanced course for TCP/IP internet working in the COS Network Academy Certificate program. Instruction includes: OSI and TCP/IP models and protocol stacks; sub netting and super netting; IP packets; routers; IP routing; routed and routing protocols: DHCP; WINS; DNS and application layer protocols and programs. This course may be repeated two times. Prerequisite may be waived with equivalent skills and knowledge as determined by departmental assessment. Prerequisites: IT 121AC or equivalent college course with "C" or better.

IT 130AC<br>Hours:<br>CISCO Academy 1<br>3 UNITS<br>\section*{Mater Lab}

This is the first of four classes in the Information Technology CISCO Academy Certificate Program. Instruction includes: safety; networking; protocols; standards; LANs; WANs; OSI models; cabling; cabling tools; routers; Ethernet; IP addressing and network standards. This course may be repeated two times.

| IT 131AC | CISCO Academy 2 |
| :--- | :--- |
| Hours: | 2 Lecture/Discussion |
|  | 2 Lab |

3 UNITS

Materials Fee: $\$ 12.00$
This is the second of four courses in the Information Technology CISCO Academy Certificate program. Instruction includes, but is not limited to: interfacing routers, networking terminology and protocols; network testing; programming and configuring routers, IP addressing and sub netting; and internetworking router protocols. This course can be repeated two times. Prerequisite may be waived with equivalent skill and knowledge as determined by department assessment. Advisory on Recommended Preparation: Students must have access to the Internet at home, work, or school for viewing the online curriculum supplied by CISCO Systems, and for Internet homework assignments.
Prerequisites: IT 130AC or equivalent college course with " $C$ " or better.

| IT 132AC | CISCO Academy 3 | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |
| Materials Fee: | $\$ 12.00$ |  |

This is the third course in the Information Technology CISCO Academy Certificate program. Instruction includes; switching technologies; routing terminology and protocols; interface standards; programming and configuration of routers; VLANs; IP addressing and network standards. This course can be repeated two times. Prerequisite may be waived with equivalent skills and knowledge as determined by departmental assessment. Advisory on Recommended Preparation: Students must have access to the Internet at home, work, or school for viewing the online curriculum supplied by CISCO Systems, and for Internet homework assignments.
Prerequisites: IT 131AC or equivalent college course with "C" or better.

| IT 133AC | CISCO Academy 4 | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |
| Materials Fee: | $\$ 12.00$ |  |

Materials Fee: $\$ 12.00$
This is the fourth course in the Information Technology CISCO Academy Certificate Program. Instruction includes: LAN switching; WAN encapsulation methods; ISDN routing; programming and configuration of routers; network security; and UNIX intercompatability. This course may be repeated two times. Prerequisite may be waived with equivalent skills and knowledge as determined by departmental assessment. Advisory on Recommended Preparation: Students must have access to the Internet at home; work; or school for viewing the online curriculum supplied by CISCO systems, and for internet homework assignments.
Prerequisites: IT 132AC or equivalent college course with "C" or better.
IT 140AC MCSE Windows 2000 Pro 2 UNITS
Hours: 2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 12.00$
This course will prepare students to pass Microsoft Windows 2000 Professional Exam \#70-210. This course will provide an overview of the Windows 2000 networking family, as well as: installation; file systems; profiles and policies; security; protocols; internetworking; remote access; printing; and troubleshooting. This course is repeatable two times. Prerequisite may be waived with Comp TIA A+ Certificate, or equivalent skills and knowledge as determined by department assessment. Advisory on Recommended Preparation: COMP 140 and COMP 5 or COMP 130, or equivalent college courses with a "C" or better, or equivalent skills and knowledge as determined by departmental assessment. Prerequisites: IT 111AC or equivalent college course with "C" or better.

## INFORMATIONTECHNOLOGY

## INSURANCE

IT 141AC<br>MCSE Windows 2000 Server<br>2 UNITS<br>Hours:<br>\section*{2 Lecture/Discussion}<br>2 Lab

Materials Fee: $\$ 12.00$
This course prepares students to take the Microsoft Windows 2000 Server certification exam 70-215. The course focuses on selecting server and client hardware, installing and configuring a server, printing services, remote access services, interoperating on a network, setting up for the Internet, monitoring and tuning a server, and trouble shooting problems. This course is repeatable two times. Prerequisite may be waived with Comp TIA A+ Certificate, or equivalent skills and knowledge as determined by department assessment. Advisory on Recommended Preparation: COMP 140 and COMP 5 or COMP 130 or equivalent college courses with a "C" better, or equivalent skills and knowledge as determined by departmental assessment.
Prerequisites: IT 111AC or equivalent college course with "C" or better.

## IT 142AC MCSE Network Structure <br> Hours: 2 Lecture/Discussion <br> 2 Lab

Materials Fee: $\$ 12.00$
This course prepares students to take the Microsoft exam \#70-216: implementing and Administering a Microsoft Windows 2000 Network Infrastructure and Microsoft Exam \#70-221: Designing a Microsoft Windows 2000 Network Infrastructure. The course focuses on analyzing business and technical requirements, TCP/IP strategies, DFS strategies, Configuration of IIS, WAN interconnectivity, and troubleshooting. This course can be repeated two times. Advisory on Recommended Preparation: IT 141 or equivalent college course with "C" or better, or equivalent skills and knowledge as determined by departmental assessment.

## IT 143AC MCSE Active Directory <br> Hours: 2 Lecture/Discussion <br> 2 Lab

Materials Fee: $\$ 12.00$
This course prepares students to take the Microsoft Exams \#70-217 and \#70-219. The course focuses on installing and configuring a server, Active Directory services, monitoring and tuning an Active Directory, and troubleshooting. This course can be repeated two times. Advisory on Recommended Preparation: IT 141 or equivalent college course with "C" or better, or equivalent skills and knowledge as determined by departmental assessment.

IT 144AC MCSE Network Security 3 UNITS
Hours: 2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 12.00$
This course prepares students for the Microsoft Exam \#70-220. This course focuses on protecting networks from security risks, installing and configuring a security system, designing a security plan, assessing security risks, internet security, monitoring and auditing secure assets, recovering from security breaks, and troubleshooting. This course may be repeated two times. Advisory on Recommended Preparation: IT 141 or equivalent college course with "C" or better, or equivalent skills and knowledge as determined by departmental assessment.

IT 251AD IT-Independent Study 1-3 UNITS
Hours: 1 TO 4 Lab
Independent Study in Information Technology.

## INSURANCE

| INS 121 | Principles of Insurance | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

This is the first course in a three-semester program leading to the Certificate in General Insurance from the Insurance Institute of America (IIA) which is designed for persons who have a need of insurance contract knowledge. The first semester of study begins with an introduction to the concept of risks, methods of handling risks, and the various operation of insurance companies.

INS $122 \quad$ Personal Insurance 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This is the second course in a three-semester program leading to the Certificate in General insurance from the Insurance Institute of America (IIA), which is designed for persons who have a need for insurance contract knowledge. The second semester of study addresses the personal loss exposures of the individuals; how to identify these exposures, and the various insurance contracts used in the personal insurance field. Advisory on Recommended Preparation: ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS Placement Procedures.
Prerequisites: INS 121 or equivalent college course with "C" or better.

## INTERCOLLEGIATE ATHLETICS

IA 001AD
Intercol Men's Baseball
2 UNITS
Hours: 1 Lecture/Discussion
9 Activity

Designed for the student who excels in athletic ability and wishes to compete at a high level of baseball against other California community colleges. This course can be repeated three times.
IA 002AD
Intercol Men's Basketball
1 UNIT
Hours: 1 Lecture/Discussion
4 Activity

An advanced skill course for male students who want to participate in an intercollegiate basketball program. This course can be repeated three times.
IA 003AD
Hours:
Intercol Women's Basketball
1 UNIT

An advanced skill course for female students who want to participate in an intercollegiate basketball program. This course can be repeated three times.
IA 006AD
Intercol Football
2 UNITS
Hours: 2 Lecture/Discussion
8 Activity

This course is designed for the student/athlete to compete in Intercollegiate varsity football at the community college level. This course can be repeated three times.
IA 007AD
Intercol Golf
2 UNITS
Hours: 1 Lecture/Discussion
9 Activity

Designed for the student/athlete who wishes to play competitive golf on an intercollegiate golf team competing against teammates and other community colleges. This course can be repeated three times.

| IA 008AD | Intercol Women's Softball | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 9 Activity |  |

Designed for the student/athlete who wishes to play competitive women's softball on an intercollegiate softball team competing against teammates and other community colleges. This course can be repeated three times.

## IA 010AD Intercol Women's Golf 2 UNITS <br> Hours: 2 Lecture/Discussion <br> 8 Activity

Women's Intercollegiate Golf is designed for the student/athlete who wishes to play competitive golf on an Intercollegiate golf team competing against teammates and other community colleges. This course may be repeated three times.

| IA 011AD | Intercol Men's Tennis | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 8 Activity |  |

Designed for the student who wishes to play competitive tennis on an intercollegiate tennis team competing against teammates and other community colleges. This course can be repeated three times.

## Course Descriptions

## INTERCOLLEGIATEACTIVITIES

## INTERDISCIPLINARY STUDIES

IA 012AD
Hours:

## Intercol Women's Tennis <br> 1 Lecture/Discussion <br> 9 Activity

2 UNITS

This course is designed for the female student who wishes to play competitive tennis on an intercollegiate tennis team competing against teammates and other community college students. This course can be repeated three times.

| IA 015AD | Intercol Waterpolo |
| :--- | :--- |
| Hours: | 2 Lecture/Discussion |
|  | 8 Activity |

This class is designed for the student/athlete who is interested in competing in Intercollegiate Water Polo. The course consists of daily practices and competition in scheduled games. This course can be repeated three times.

## IA 016AD Intercol Women's Volleyball <br> 2 UNITS <br> Hours: 2 Lecture/Discussion <br> 8 Activity

Designed to introduce advanced skills necessary for playing competitive volleyball. This course may be repeated three times. Advisory on Recommended Preparation: Enrollment by recommendation of the department.

| IA 023AD | Intercol Track and Field | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 9 Activity |  |

This class is designed for the athlete who is interested in competing in intercollegiate track and field. The course involves daily practices as well as participation in track and field meets. Each meet consists of 12 running events and eight field events; therefore, all workouts are geared towards these individual events as well as general physical fitness. Intercollegiate track and field not only allows the student to better herself/himself as an individual athlete, but contributes to a team effort as well. This course can be repeated three times.

| IA 024AD | Intercol Cross Country | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 9 Activity |  |

This class is designed for the student/athlete who is interested in competing in Intercollegiate Cross Country. The course involves daily practices as well as participating in cross-country meets. Each meet consists of a 4-mile run; therefore, all workouts are geared towards running this distance. Intercollegiate Cross Country not only allows the student/athlete to better herself/himself as an individual athlete, but contributes to a team effort, as well. This course can be repeated three times.
IA 029AD
Intercollegiate Swim/Diving
2 UNITS
Hours:
1 Lecture/Discussion
8 Activity

Intercollegiate Swimming/Diving is designed for the student/athlete who is interested in competing in swimming or diving at the community college level. The course consists of daily practices and competition in scheduled meets. This course may be repeated three times.

| IA 030AD | Intercol Women's Soccer | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 8 Activity |  |

Intercollegiate Women's Soccer is designed for the student/athlete (woman) interested in competing in intercollegiate soccer. The course involves daily practices as well as competition at the collegiate level through league games and tournament play. This course can be repeated three times.

| IA 31AD | Intercol Women's Equestrian | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 4 Activity |  |

PE 31AD is a course for female students who want to participate in an intercollegiate equestrian program. Advanced techniques in equestrian, both western and English skills of riding used in intercollegiate competition will be stressed. Off area time will be required for travel. This course may be repeated three times.

IS 102AD Students in Gov't \& Leadrshp 2 UNITS Hours: 2 Lecture/Discussion
A course for members of the Executive Board of ASB for the study of the student body, constitution, parliamentary procedures, organizations, publicity, finance, and the development of leadership qualities through participation in campus governance and administration of the student activities program. This course can be repeated three times. Limitation on Enrollment: Election by the Associated Student Body or appointment by the membership committee of the Executive Board of the Associated Student Body.

| IS 220 | Orientation/College Success | . 5 UNITS |
| :--- | :--- | :--- |
| Hours: | 6 Lecture/Discussion |  |
|  | 3 Lab |  |
|  | 3 Activity |  |

This is a course for all new students designed to orient students to the college environment and educational opportunities. The class includes placement testing and interpretation of results; introduction to academic procedures, policies, goal setting, educational planning, college services, college facilities and exploration of various opportunities for higher education. Students will develop an educational plan to achieve the goals identified in the class.

## IS 241 Math Learning 2 UNITS Hours: 2 Lecture/Discussion

A course designed for educational paraprofessionals and others who need to understand the process of mathematics learning. Topics include reduction of math anxiety, self-motivation, self-awareness, self-management, accepting personal responsibility, and assisting others to reinforce math skills. It is most effective to take this class concurrently with a math class.

| IS 299 | Topics - Interdiscipl Studies | $.5-4$ UNITS |
| :--- | :---: | :---: |
| Hours: | 8 TO 32 Lecture/Discussion |  |
| Special |  |  |
|  | Topic | courses in Interdisciplinary Studies. |

## INTERIOR DESIGN

INTD 121 Interior Design Fundamentals 3 UNITS Hours: $\quad 3$ Lecture/Discussion
Examination and application of color and design principles, interior materials, and furnishing in creating functional and aesthetically pleasing interior environments. Environmental regulations and barrier-free designs are also addressed. Emphasis is placed on the psychological, social, and physical needs of people in relation to their environments. Designed to meet F.I.D.E.R. standards.

INTD 122 Space Planning Fundamentals 2 UNITS
Hours: 1 Lecture/Discussion
3 Lab
This course will cover space planning using CAD drafting and application. Electrical lighting and architectural systems will be developed to create functional and aesthetically pleasing environments.

| INTD 124 | History of Furnishings | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

This course is a survey of historical period style furniture design. It includes the analysis of historical events and the relationship of such cultural factors as art, social class economics, government and religion to furniture styles

## J OURNALISM

## LEARNING SKILLS

JOUR 001 Writing for the Media
Hours: $\quad 3$ Lecture/Discussion
2 Lab
A comprehensive approach to learning the fundamentals of all phases of production of news and feature stories including source development; interviewing techniques; writing, organizing, and editing a story for publication; and development of news judgment. CAN JOUR 2.
Prerequisites: ENGL 251 or equivalent college course with "C" or better or eligibility for ENGL 001 as determined by COS placement procedures.

JOUR 007 Mass Communication 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Equivalent Course: GOVT 007.
A media survey course covering newspapers, radio, television, magazines, books, films, the web, public relations/advertising industries, and the recording industry. Students will study strengths and weaknesses of each, as well as the major challenges to a democratic society including censorship, sensationalism, pornography, propaganda, and monopoly. CAN JOUR 4.

JOUR 020 Society \& Culture in Film/TV
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
The study of how the mass medium of film and television treats, ethnic, gender, political, and other social and cultural issues.

JOUR 103AD Newspaper Production
4 UNITS
Hours: 2 Lecture/Discussion
7 Lab
This course provides practical experience in all aspects of producing a newspaper through work on The Campus. Course content includes writing, editing, page layout, headline writing and general editorial development. This course may be repeated three times. Advisory on Recommended Preparation: ENGL 251 and JOUR 1 or equivalent college courses with a "C" or better.

JOUR 104AD Editorial Board
2 UNITS
Hours: 2 Lecture/Discussion
3 Lab
JOUR 104 is a course for the advanced journalism student. Course content includes leadership skills, writing, editing, page layout, headline writing, and general editorial development. This course may be repeated three times. Advisory on Recommended Preparation: JOUR 1 or JOUR 103AD or equivalent college course with "C" or better.

JOUR 110AD Photo Journalism
3 UNITS
Hours: 2 Lecture/Discussion
3 Lab
Materials Fee: $\$ 20.00$
Equivalent Course: PHOT 110AD.
A course designed for students who would like practical publication experience and an opportunity to publish their photographs in the school newspaper. This course may be repeated three times. Advisory on Recommended Preparation: PHOT 1 or equivalent college course with "C" or better.

JOUR 151AD Independent Study-Journalism 1-3 UNITS Hours: 1 TO 3 Lab
Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered by COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form with the Admissions and Records Office.

JOUR 251AD Independent Study-Journalism 1-4 UNITS Hours: 1 TO 4 Lab
Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered by COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

LS 301AD Computation 1-3 UNITS
Hours: $\quad 3$ TO 9 Lab
Designed for the student with learning deficits in computation. Remediation plans will be based on assessment of individual need and learning style. This course may be repeated three times. Advisory on Recommended Preparation: Individual assessment must be conducted to professionally verify the nature and extent of the disability and the student must meet state-wide LD eligibility criteria.

LS 302AD Expression 1-3 UNITS
Hours: $\quad 3$ TO 9 Lab
Designed for the student with learning deficits in written expression of ideas, including difficulties with organization of ideas, clarity, grammar, punctuation and word usage. This course may be repeated three times. Advisory on Recommended Preparation: Individual assessment must be conducted to professionally verify the nature and extent of the disability and the student must meet statewide LD eligibility criteria.

LS 303AD Decoding/Language 1-3 UNITS
Hours: $\quad 3$ TO 9 Lab
Designed for the student with learning deficits in reading/language skills. Remediation plans will be based on assessment of individual needs and learning style. This course may be repeated three times. Advisory on Recommended Preparation: Individual assessment must be conducted to professionally verify the nature and extent of the disability and the student must meet statewide LD eligibility criteria.

| LS 304AD | Organization | $1-3$ UNITS |
| :--- | :--- | :--- |
| Hours: | 3 TO 9 Lab |  |

Designed for the student with study skills needs and/or tutoring needs for mainstream classes. A structured study skills program covering outlining, organization, note taking skills and application of these skills, along with a secluded, quiet study area, including instruction in word processing, will be provided. This course may be repeated three times. Advisory on Recommended Preparation: Individual assessment must be conducted to professionally verify the nature and extent of the disability and the student must meet statewide LD eligibility criteria.
LS 305AD Sequencing 1-3 UNITS

Designed for the student with deficits in sequential memory affecting spelling. This course may be repeated three times. Advisory on Recommended Preparation: Individual assessment must be conducted to professionally verify the nature and extent of the disability and the student must meet statewide LD eligibility criteria.

| LS 306 | Learning Skills/Assessment |
| :--- | :--- |
| Hours: | 9 Lecture/Discussion |

This course introduces students to individualized strategies that will assist them with achieving academic success in college. Assessments administered will provide students with information regarding learning styles, academic strengths and weaknesses, and determine eligibility for disabilities services. Limitation Request on Enrollment: Students must obtain approval from the Disability Resource Center (DRC) to enroll in this course.

| LS 307AD | Student Success Strategies | . 5 UNITS |
| :--- | :--- | :--- |
| Hours: | 4 Lecture/Discussion |  |
|  | 12 Lab |  |

Equivalent Course: HDEV 307AD.
This course is for students who have a verifiable disability. It is designed to provide the student with individualized instruction regarding strategies and accommodations for textbook reading, vocabulary development, note taking, test taking, organization, time management, conducting research and writing papers, which are requisite skills for success in regular academic and vocational courses. This course may be repeated three times. Limitation Request on Enrollment: Students must receive services from the DRC office or obtain approval from a DRC counselor to enroll in this course.

LEARNING SKILLS
LIBRARY

## LS 308AD

Hours:
This is a course designed for students with verified disabilities. Individual programs will be structured for each student by the instructor to assist students with their academic courses and/or improve academic skills affected by their disability. This course is offered through the fifth week of each semester. This course is offered for the CR/NC grade option only. This course may be repeated three times.

LS 309AD
Independent Living Skills
1 UNIT
Hours:

## 2 Lab

This course is designed for students who are developmentally delayed learners; skills necessary for living independently will be introduced. The students will have the opportunity to learn the skills necessary for decision-making, budgeting, acquiring housing, preparing for a vocation, accessing community resources, planning for proper nutrition, becoming educated consumers and utilizing appropriate social skills, which are requisite skills for vocational courses. This course may be repeated three times. Limitation Request on Enrollment: Students must receive services from the DRC office or obtain approval from a DRC counselor to enroll in this course.

## LS 310AD <br> Vocabulary Enrichment <br> . 5 UNITS

Hours: $\quad 9$ Lecture/Discussion
This course provides instruction aimed at supplementing college vocabulary skills. Students will learn a variety of strategies for vocabulary enrichment, which is requisite for success in regular academic and vocational courses. This course may be repeated three times.

LS 311AD Beginning Computer Use
. 5 UNITS
Hours: 18 Lab
This course is designed for students who are new to computer use. Skills necessary for formatting and creating documents will be introduced, as well as basic Internet navigation. This course may be repeated three times.
$\begin{array}{lll}\text { LS } 410 & \text { Occupational Work Skills } & 0 \text { UNITS } \\ \text { Hours: } & 30 \text { Activity } & \end{array}$
This course is intended for those individuals who lack competitive job skills at the time of enrollment due to a disability, but who are capable both vocationally and socially of performing work with work crews and enclaves. These crews receive job coaching and follow along support. Limitation on Enrollment: Designed for individuals with developmental disabilities.

## LIBRARY

LIBR 101 Library Research Strategies 1 UNIT
Hours: 18 Lecture/Discussion
The course teaches the tools needed for college level research through the use of electronic databases, print resources and the web.

LIBR 102 Internet Inform Resources 1 UNIT
Hours: 18 Lecture/Discussion
Internet Information Resources is an introductory course teaching students how to browse and locate and evaluate Internet information especially the World Wide Web for personal use as well as for research papers.

LIBR 103 Eval Information Sources 1 UNIT
Hours: 16 Lecture/Discussion
LIBR 103 teaches students how to determine the information requirements for the research question, problem, or issue at hand, and how to analyze and evaluate printed and electronic information sources, with special attention to evaluation and critical treatment of information received from the Internet and the mass media.

LIBR 190AD Supervised Practice
1-3 UNITS
Hours: 3 TO 9 Lab
Under the supervision of an instructor, select students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling, and other employment or volunteer situations where the student is expected to take a leadership role. This course may be repeated three times. Limitation on Enrollment: Permission of the department.

LIBR 201 Introduction to Libraries 2 UNITS
Hours: 32 Lecture/Discussion
LIBR 201 will cover an introduction to the exciting field of library science, including the philosophy of library service, the history and types of libraries, organization and operation of libraries, and the role of the Library Media Technician. Basic skills necessary for employment in any type of library will be covered.

## LIBR 202 <br> Collection Development <br> 2 UNITS

Hours: 32 Lecture/Discussion
LIBR 202 will cover an introduction to the publishing industry, principles of collection development, bibliographic searching, accounting and budgeting principles, an overview of ordering, receiving and claiming procedures, and weeding the library collection. Advisory on Recommended Preparation: LIBR 201 or equivalent college course with a grade of "C" or better.

LIBR 203 Technical Services 3 UNITS
Hours: 48 Lecture/Discussion
LIBR 203 will cover current practices in cataloging and processing of library materials, the Dewey Decimal, Library of Congress, and Sears systems of classification, and filing rules for library materials. The use of electronic and on-line bibliographic resources, the repair and care of resources, and serials management will also be included. Advisory on Recommended Preparation: LIBR 201 or equivalent college course with a grade of "C" or better.

LIBR 204 School/Children's Services 3 UNITS
Hours: 48 Lecture/Discussion
LIBR 204 will cover Children's and School library services. Emphasis will be on the practical use of books and media in library media centers, book talking, storytelling techniques, reading incentive programs, and children's literature. Students will learn about connecting library resources to the curriculum and collaborating with teachers to create resource rich lessons. Advisory on Recommended Preparation: LIBR 201 or equivalent college course with a grade of "C" or better.
LIBR 205 Library Media Services 2 UNITS

Hours: 32 Lecture/Discussion
2 UNITS
LIBR 205 provides in-depth study of a wide variety of media services and materials within a library setting including the Internet, compact disk, laser disk, telecommunications, video, and hypermedia. Students will learn programming using media and processing and circulating methods. Intellectual freedom, censorship, privacy, and copyright issues will also be presented. Advisory on Recommended Preparation: LIBR 201 and LIBR 203 or equivalent college course with a grade of "C" or better.

## LIBR 206 Public Service/Reference <br> 3 UNITS

Hours: 48 Lecture/Discussion
LIBR 206 covers library circulation systems, bibliographies, standard print and computer based reference, patron service skills, volunteer recruiting and supervising, library promotion, and handling of problem patrons. Advisory on Recommended Preparation: LIBR 201 or equivalent college course with a grade of "C" or better.

LIBR 223AB College Level Tutor Training 1 UNIT
Hours: 18 Lecture/Discussion
This short term course exposes students to and gives them practice in effective individual and group tutorial methods which may be applied to a variety of subject areas. This course was designed to be taken concurrently with hands-on work as a college tutor. Advisory on Recommended Preparation: Skill competencies as determined by departmental assessment.
LIBR 423 Tutor Training
0 UNITS

Hours: 1 Lab
Students who have demonstrated mastery of content in one or more college courses are eligible to serve as tutors. This course is designed to develop basic skills needed to function successfully as a tutor.

LIBRARY

## MATHEMATICS

| LIBR 424 Supervised Tutoring | 0 UNITS |  |
| :--- | :--- | :--- |
| Hours: | 2 Lab |  |

This course is designed to provide students with tutorial assistance. Tutees may work either individually or in small groups. They may work with computer programs developed specifically to meet their needs or they may work with tutors who have been recommended by faculty as having achieved a degree of proficiency in the area they are tutoring.

## LINGUISTICS

| LING 010 | Introduction to Language | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

The systematic study of language, including its nature, history, structure, acquisition, and use. Goals of course: to impart an understanding of the importance of language in humans' social and cultural affairs to develop an appreciation for its diversity and complexity. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" better, or eligibility for ENGL 1 determined by COS Placement Procedures.

## MATHEMATICS

MATH $010 \quad$ Structure and Concepts 14 UNITS
Hours: 4 Lecture/Discussion
Equivalent Course: MATH 110.
This is a four-unit course intended for liberal studies majors, covering critical thinking, sets and functions, numeration and computation, number theory, rational numbers, and real numbers. The emphasis of this course is in mathematical foundations of arithmetic relevant to future elementary school teachers. CAN MATH 4.
Prerequisites: MATH 230 or MATH 235 or equivalent college course with "C" or better or eligibility as determined by COS placement procedures.

## MATH 011 Structure and Concepts 24 UNITS

Hours: 4 Lecture/Discussion
This is a four-unit course continuing the topics from MATH 110. Topics include statistics, probability, geometry, measurement, transformations, congruence, and coordinate geometry. The emphasis of this course is in mathematical topics relevant to future elementary school teachers. This course is designed to meet only the math requirements of the liberal studies programs at specific CSU campuses.
Prerequisites: MATH 010 or equivalent college course with "C" or better.

MATH 015 Computer Science 1
Hours: $\quad 3$ Lecture/Discussion
Materials Fee: $\$ 2.00$
Introduction to structured programming and algorithm design using the FORTRAN language, including data types, program design, conditional control structures, looping, subroutines, and functions. CAN CSCI 4.
Prerequisites: MATH 070 or equivalent college course with "C" or better or eligibility for MATH 061 or MATH 075 as determined by COS placement procedures.
MATH $016 \quad$ Computer Science 1
Hours: $\quad 3$ Lecture/Discussion
Materials Fee: $\quad \$ 2.00$
Introduction to structured programming and algorithm design using the language of
"C", including data types, program design, conditional control structures, looping,
and subprograms. The emphasis will be on using the computer as a problem-solving
tool. Advisory on Recommended Preparation: MATH 70 or equivalent
college course with "C" or better, or eligibility for MATH 61 or 75 determined
by COS Placement Procedures.

MATH $016 \quad$ Computer Science 1 UNITS
Hours: 3 Lecture/Discussion

Introduction to structured programming and algorithm design using the language of "C", including data types, program design, conditional control structures, looping, and subprograms. The emphasis will be on using the computer as a problem-solving college course with "C" by COS Placement Procedures.

MATH 018 Computer Science 2
Hours:
3 Lecture/Discussion
Materials Fee: \$2.00
Introduction to structured programming and algorithm design using the C language, including discrete and dynamic data structures, program design, efficiency and testing, recursion, and search/sort algorithms. The emphasis will be on using the computer as a problem-solving tool.
Prerequisites: MATH 015 or MATH 016 or equivalent college course with "C" or better.

MATH $021 \quad$ Introduction to Statistics 4 UNITS
Hours: 4 Lecture/Discussion
Materials Fee: $\$ 2.00$
An introductory course in probability and statistics for social and physical science majors, also appropriate for those who wish to learn statistical data analysis. Extensive use of computers will be made throughout the course. (Approved for Distance Learning 12/3/1997). CAN STAT 2.
Prerequisites: MATH 230 or MATH 235 or equivalent college course with "C" or better or eligibility as determined by COS placement
procedures.
$\begin{array}{ll}\text { MATH } 045 & \text { Modern Applications of Math } \\ \text { Hours: } & 3 \text { Lecture/Discussion }\end{array}$
This course is designed to fulfill the CSU quantitative reasoning GE requirement. The emphasis is on providing an overview of the practical applications of mathematics, and is designed primarily for non-science majors. Topics vary by instructor. CAN MATH 2.
Prerequisites: MATH 230 or MATH 235 or equivalent college course with "C" or better or eligibility as determined by COS placement procedures.

MATH 061 Survey of Calculus 13 UNITS
Hours: $\quad 3$ Lecture/Discussion
A first semester course in a two semester sequence of differential and integral calculus for the business, industrial technology, biology, or social science majors. CAN MATH 30.
Prerequisites: MATH 070 or equivalent college course with "C" or better or eligibility as determined by COS placement procedures.

MATH 062 Survey of Calculus 23 UNITS
Hours: $\quad 3$ Lecture/Discussion
A second semester course in a two-semester sequence in differential and integral calculus for the business, industrial technology, biology, or social science major. CAN MATH 32.
Prerequisites: MATH 061 or equivalent college course with "C" or better.
MATH $070 \quad 5$ Unecalculus 5

Hours: $\quad 5$ Lecture/Discussion
This is a college algebra and advanced trigonometry course which proceeds at an intense pace. Topics include: functions and graphs, applications of functions exponential and logarithmic functions, trigonometric functions and analytic trigonometry, right triangle trigonometry, analytic geometry, and roots of polynomial equations. This course is intended for students planning to take calculus.
CAN MATH 16.
Prerequisites: MATH 154 or equivalent college course with " C " or better or eligibility as determined by COS placement procedures.

MATH $075 \quad$ Calculus WIAnalytic Geom $1 \quad 5$ UNITS
Hours: $\quad 5$ Lecture/Discussion
This is the first calculus course of a three semester sequence. Topics include limits, differentiation, integration and continuity of algebraic, trigonometric, inverse trigonometric, and hyperbolic functions. Applications include exponential growth, related rates, graphing, extrema, area, volume, work, and average value. CAN MATH 18.
Prerequisites: MATH 070 or equivalent college course with " C " or better or eligibility as determined by COS placement procedures.

## MATHEMATICS

## MATHEMATICS

## Hours:

Calculus WIAnalytic Geom 2
5 UNITS
This is the second calculus course of a three semester sequence. Topics include techniques of integration, improper integrals, infinite series, analytic geometry, polar coordinates and parametric equations, vectors, and three-dimensional space. Numerous applications will be covered. CAN MATH 20.
Prerequisites: MATH 075 or equivalent college course with "C" or better.

MATH 077 Calculus 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course is the third semester of the introductory calculus sequence. Topics covered include differentiation and integration of vector-valued functions, partial differentiation, directional derivatives, Lagrange Multipliers, multiple integration, centroids and centers of gravity, and Green's, Stokes,' and Divergence Theorem. CAN MATH 22.
Prerequisites: MATH 076 or equivalent college course with "C" or better.

| MATH 080 | Linear Algebra | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

Hours: 3 Lecture/Discussion
Introduction to linear algebra including systems of linear equations, vectors, matrices and determinants, two- and three-dimensional vectors, vector spaces, linear transformations, eigenvalues and eigenvectors, and canonical forms.
CAN MATH 26.
Prerequisites: MATH 076 or MATH 062 or equivalent college course with "C" or better.

MATH $081 \quad 5$ Differential Equations
Hours: 5 Lecture/Discussion
An introduction to the methods of solving of ordinary and partial differential equations including matrix solutions of linear systems, Laplace transforms, series solutions, difference equations, separation of variables in partial differential equations, boundary value problems and Fourier series. CAN MATH 24.
Prerequisites: MATH 077 or equivalent college course with "C" or better.

MATH 151AD Independent Study-Math 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
Independent Study requires a minimum of 54 hours of academic work per unit. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college classes in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office. This course may be repeated three times.

## MATH 154 Trigonometry 5 UNITS <br> Hours: $\quad 5$ Lecture/Discussion

An intensive one-semester course in the elements of trigonometry. CAN MATH 8. Prerequisites: MATH 230 or MATH 235 or equivalent college course with "C" or better or eligibility as determined by COS placement procedures.
$\begin{array}{ll}\text { MATH 200 Elementary Algebra } \\ \text { Hours: } & 4 \text { Lecture/Discussion }\end{array}$
4 UNITS
Hours: $\quad 4$ Lecture/Discus
Equivalent Course: MATH 205.
This is a four-day-a-week intensive one-semester course in elementary algebra covering: fundamental operations, linear equations and inequalities, word problems, factoring, rational expressions, graphing, and exponents. (Approved for Distance Learning 11/15/2001). Advisory on Recommended Preparation: MATH 360 or MATH 365 or MATH 361 or equivalent college course with "C" or better, or eligibility determined by COS Placement Procedures.

MATH 201 Interm Algebra Prep Lab
Hours: 56 Lecture/Discussion
24 Lab
This is a four-week intensive summer course designed for incoming students to prepare for intermediate algebra. Course is appropriate for students who have an understanding of elementary algebra, but need a refresher before taking intermediate algebra. Advisory on Recommended Preparation: Eligibility determined by COS Placement Procedures. Limitation on Enrollment: Students must participate in the SMART Program.

MATH 205 Beginning Algebra 4 UNITS

## Hours: 5 Lecture/Discussion

Equivalent Course: MATH 200.
This is a five-day-a-week one-semester course in beginning algebra covering: fundamental operations, linear equations and inequalities, word problems, factoring, rational expressions, graphing, and exponents. This course will benefit students who need more time on task, student-to-teacher contact, and a slower paced environment. Advisory on Recommended Preparation: MATH 360 or MATH 361 or MATH 365 or equivalent college course with "C" or better; or eligibility determined by the COS Placement Procedure.
$\begin{array}{lll}\text { MATH } 210 & \text { Elementary Algebra } 1 & 2 \text { UNITS } \\ \text { Hours: } & 40 \text { Lab } & \end{array}$
This is an intensive course in elementary algebra covering fundamental operations, linear equations and inequalities, systems of equations, graphing, and word problems. Advisory on Recommended Preparation: MATH 360, 361 or 365 or equivalent college course with a "C" or better, or eligibility determined by COS Placement Procedures.

## MATH 215 Elementary Algebra 2 UNITS

Hours: $\quad 40$ Lab
This is the second class in the elementary algebra series. This course covers factoring, rational expressions, exponents, radicals, and word problems. Prerequisites: MATH 210 or equivalent college course with "C" or better.

MATH 230 Intermediate Algebra 4 UNITS
Hours: 4 Lecture/Discussion
Equivalent Course: MATH 235.
An intensive one-semester course in intermediate algebra covering: linear and quadratic equations and inequalities in one and two variables, operations with polynomials, rational expressions, exponents, radicals, logarithms, word problems, and graphing. (Approved for Distance Learning 2/27/2002).
Prerequisites: MATH 200 or MATH 201 or MATH 205 or equivalent college course with "C" or better or eligibility as determined by COS placement procedures.

## MATH 235 Math for Math Related Majors <br> 4 UNITS <br> \section*{Hours: 5 Lecture/Discussion}

Equivalent Course: MATH 230.
An intensive one-semester course in college algebra and elementary functions covering: linear and quadratic equations and inequalities in one and two variables; polynomial, rational, exponential, radical, and logarithmic functions; problemsolving, and graphing. This course is intended for students planning on a mathematics, engineering, or science major.
Prerequisites: MATH 200 or MATH 201 or MATH 205 or equivalent college course with "C" or better or eligibility for MATH 230 as determined by COS placement procedures.

MATH 251AD Independent Study-Math 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

## MATHEMATICS

MUSIC

MATH 299 Topics - Math .5-4 UNITS
Hours: 8 TO 70 Lecture/Discussion
Special topic courses in Math.
MATH 351
Hours:

## Pre-Algebra Prep <br> 24 Lab

4 UNITS

MATH 351 is a non-degree applicable, arithmetic course designed for incoming students. It is a four-week course offered only in summer. This course is appropriate for students who need more emphasis on the fundamental arithmetic topics than is allowed for in MATH 360. Topics include whole numbers, decimals, and fractions. Advisory on Recommended Preparation: Eligibility determined by COS Placement Procedures. Limitation on Enrollment: Students must participate in SMART Program.

## MATH 360 Pre-Algebra <br> Hours: 4 Lecture/Discussion

4 UNITS
Equivalent Course: MATH 365.
A study of the fundamental operations with whole numbers, fractions, mixed numbers, decimals, and their use in applied problems. Other topics include factors and multiples, divisibility, ratio, proportion, introductory algebra, percent metric units, geometric measurements, and signed numbers. All arithmetic topics will be taught with a pre-algebra perspective. Math 360 is a non-degree applicable arithmetic course to benefit students who need a firmer grasp of arithmetic concepts and skills.

MATH 361

## Elementary Algebra Prep 24 Lab

4 UNITS
Hours: 56 Lecture/Discussion
MATH 361 is a non-degree applicable, pre-algebra course designed for incoming students. It is a rigorous four-week course offered only in summer. This course is appropriate for students who are familiar with arithmetic and possibly some basic algebra, but who have not mastered the topics well enough to succeed in elementary algebra. Content covers all necessary pre-algebra skills but emphasizes rational numbers and linear expressions and equations. Advisory on Recommended Preparation: Eligibility determined by COS Placement Procedures. Limitation Request on Enrollment: Students must participate in the SMART Program.

| MATH 365 | Arithmetic and Pre-Algebra | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 5 Lecture/Discussion |  |
| Equivalent Course: MATH 360 . |  |  |

This is a non-degree applicable pre-algebra course designed to help students who need a firmer grasp of arithmetic concepts and skills. This course will benefit students who need more time on task, student to teacher contact, and a slower paced environment. It requires a minimum of 10 hours of study per week outside of class.

## METEOROLOGY

MET $001 \quad 3$ UNITS
Hours: $\quad 3$ Lecture/Discussion
An introductory course designed to provide insights into physical processes and laws that underlie the phenomena of weather and climate. An emphasis is placed on understanding the methodologies of scientific inquiry and understanding current meteorological environmental problems. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures; and MATH 200 or 205 or equivalent college course with "C" or better, or eligibility for MATH 230 determined by COS Placement Procedures.
$\begin{array}{ll}\text { MUS } 001 & \text { Music Fundamentals } \\ \text { Hours: } & 3 \text { Lecture/Discussion }\end{array}$
The basic elements of music are studied: pitch and rhythm notation, scales, major and minor keys and key signatures, transportation, intervals, chords, elementary acoustics, and an introduction to the keyboard.

| MUS 004 | Theory and Musicianship 1 | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 4 Lecture/Discussion |  |
|  | 1 Lab |  |

This is the first in a series of four courses, intended primarily for music majors, dealing with theoretical and practical matters necessary for musicians. This first semester includes a review of fundamentals, and an introduction to 4-part writing, including voice leading, cadences, triad inversions, and figured bass. The "musicianship" component includes ear training, sight singing, and rhythm performance. The student will use computer software for music notation and ear training. (CAN MUS SEQ A includes MUS 4 and MUS 5). Advisory on Recommended Preparation: MUS 1 or equivalent college course with "C" or better; an instrumental or vocal performance class and/or class piano.
MUS 005
Theory and Musicianship 2
4 UNITS
Hours: 4 Lecture/Discussion
1 Lab

This is the second in a series of four courses, intended primarily for music majors, dealing with theoretical and practical matters necessary for musicians. This second semester includes a review of secondary triads, root relationships, harmonization of melodies, nonchord tones, diatonic seventh chords, and Bach Chorale analysis. The "musicianship" component includes ear training, sight singing, and rhythm performance. The student will use computer software for music notation and ear training. (CAN MUS SEQ A includes MUS 4 and MUS 5). Advisory on Recommended Preparation: Instrumental or vocal performance class and/ or class piano.
Prerequisites: MUS 004 or equivalent college course with "C" or better.

| MUS 006 | Theory and Musicianship 3 | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 4 Lecture/Discussion |  |
|  | 1 Lab |  |

This is the third in a series of four courses, intended primarily for music majors, dealing with theoretical and practical matters necessary for musicians. This third semester includes the study of chromatic harmony, pedal point, modulation of all types, 9th, 11th, and 13th chords, and extensive practice in score reading. The "musicianship" component includes ear training, sight singing, and rhythm performance. The student will use computer software for music notation and ear training. Advisory on Recommended Preparation: Instrumental or vocal performance class and/or class piano.
Prerequisites: MUS 005 or equivalent college course with "C" or better.
MUS 007
Theory and Musicianship 4
4 UNITS
Hours: 4 Lecture/Discussion
1 Lab

This is the forth in a series of four courses, intended primarily for music majors, dealing with theoretical and practical matters necessary for musicians. This fourth semester includes the study of pre and post-common practice period music. Topics include chord symbols, modes and chant notation, nonfunctional harmony, nontertian harmony, atonal analysis, Schenker analysis, twelve-tone analysis, and extensive practice in score reading. The "musicianship" component includes ear training, sight singing, and rhythm performance. The student will use computer software for music notation and ear training. Advisory on Recommended Preparation: Instrumental or vocal performance class and/or class piano. Prerequisites: MUS 006 or equivalent college course with "C" or better.

## MUS 010 <br> Music Appreciation <br> 3 UNITS <br> Hours: 3 Lecture/Discussion

Designed to aid the average student in developing a better understanding and an enjoyment of music. This course includes (1) the elements of music, and (2) a chronological survey of music and composers from the Middle Ages to the present. No previous musical training is necessary.

## MUSIC

## MUSIC


#### Abstract

MUS 011 Appreciation of Jazz 3 UNITS Hours: 3 Lecture/Discussion Designed to aid the average student in developing a better understanding and enjoyment of jazz and music in general. Includes (1) the elements of music, and (2) a chronological survey of jazz performers and composers from the 1890's to the present (3) an introduction to the beginnings of rock and country music.


MUS 013 Music of the World 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
MUS 13 includes (1) a study of the elements of music as they pertain to the world's musical traditions and styles, and (2) a regional survey of selected genres of music from the Americas, Sub-Saharan Africa, Northern Africa and the Middle East, Europe, Asia, and Pacific Islands. (Approved for Distance Learning 5/1/2002).

MUS 020
Piano 1
1 UNIT
Hours:
1 Lecture/Discussion
1 Lab
A course designed for the student who has had no previous piano training. Students will learn specific skills enabling them to read music and identify musical symbols on sight while performing repertoire by various composers in all periods of music.

MUS 021
Piano 2
1 UNIT
Hours:
1 Lecture/Discussion
1 Lab
A course designed for the student who has had one semester previous piano training. Students will learn specific skills enabling them to read music and identify musical symbols on sight while performing repertoire by various composers in all periods of music. Advisory on Recommended Preparation: MUS 20 or equivalent college course with "C" or better, or one year of private piano instruction.

| MUS 022AD | Intermediate \& Adv Piano | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |

A course designed for the intermediate pianist, who has had prior instruction, either privately or in the classroom. This course can be repeated three times. Advisory On Recommended Preparation: MUS 21 or equivalent college course with "C" or better, or more than one year of private piano instruction.

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MUS 023AD Organ 1,2,3, \& 4
Hours:
2 Lecture/Discussion
1 Lab
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1 UNIT

Students will learn specific musical symbols on sight while performing repertoire by various composers in the areas of theatre, classical or liturgical organ music. This course may be repeated three times. Limitation on Enrollment: Audition by department; intended for students with one year keyboard in either piano, organ, or accordion.

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MUS 030AD Beginning Voice 1 UNIT
Hours: 1 Lecture/Discussion
    2 Lab
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Studies in the technical, stylistic, and aesthetic components of singing, designed to help the individual student improve his/her voice and develop solo vocal repertoire. This course may be repeated three times.

| MUS 031AD | Intermediate Voice | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 2 Lab |  |

Studies in the technical, stylistic, and aesthetic components of singing, designed to help the individual repertoire. Intermediate Voice is a continuation of Voice (MUS 30) and will require that the student have good singing and musical skills already established. Emphasis will be placed upon singing in Italian, German, and English. This course may be repeated three times. Advisory on Recommended Preparation: MUS 30AD, or equivalent college course with "C" or better.

MUS 032AD Women's Chorus
Hours: 1 Lecture/Discussion
1 Lab
Women's chorus offers a study and performance of choral literature for treble voices from the Renaissance to Contemporary with emphasis on vocal production and tone quality, balance and blend, and musical precision and accuracy. Participation in public performance is required. This course may be repeated three times. Limitation on Enrollment: Audition by department.

| MUS 034AD | Concert Choir | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 3 Lab |  |

Materials Fee: $\quad \$ 5.00$
MUS 34AD offers a study in the performance of choral literature from the Renaissance to Contemporary with emphasis on vocal production and tone quality, balance and blend, and musical precision and accuracy. Participation in public performance is required. The course may be repeated three times.
Limitation on Enrollment: Audition by Department.

| MUS 036AD | Chamber Singers | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 3 Lab |  |

MUSIC 36AD is designed to provide an environment for study of choral literature, techniques and performance with experienced vocal students. The students will develop through lecture, field trips, and outside performances, a concept and definition of proper choral practices and performance techniques through observation of professional musicians and by using these concepts in rehearsal and in their own public performances. This course may be repeated three times.
Advisory on Recommended Preparation: Concurrent enrollment in MUS
34AD. Limitation on Enrollment: Audition by department.

## MUS 040AD Performance Music <br> 1 UNIT <br> Hours: 2 Lab

Performance in music activities such as recitals, rallies, musicals, concerts, or in group ensembles such as band, chorus, orchestra, and jazz ensemble. Hours are arranged for those wishing to participate, but are unable to meet the regular schedule. Course may be repeated three times. Limitation on Enrollment: Audition by department.

| MUS 041AD | Applied Music Lessons | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 3 Lab |  |

Hours: 3 Lab
This course is intended to give individual instruction to advanced music students on their respective instrument or voice. Students will be expected to pass playing exams and perform in student recitals. This course may be repeated three times. Prerequisites: MUS 034AD or MUS 054AD or MUS 074AD or MUS 175AD or equivalent college course with "C" or better (MUS 034AD, MUS 054AD, MUS 074AD and/or MUS 175AD may be taken concurrently).

## MUS 050AD String Instruments <br> 1 UNIT <br> Hours: 1 Lecture/Discussion <br> 1 Lab

This course provides beginning instruction on instruments of the string family. These include, violin, viola, cello and bass. Emphasis will be on care of instruments, tone production, bowing, technique and playing position. This course may be repeated three times.

MUS 053AD Youth Symphony of Sequoias
2 UNITS
Hours: 1 Lecture/Discussion
2 Lab
The study and performance of full symphonic music. Representative works of orchestral literature from many cultures and historical periods are analyzed in context. Orchestral works are chosen to enhance and develop the knowledge and performing abilities of younger, less experienced orchestral musicians. This class may be repeated three times. Limitation on Enrollment: Audition by Department.

## MUSIC

MUSIC

MUS 054AD Symphony Orchestra
Hours: 1 Lecture/Discussion
2 Lab
The study and performance of symphonic music. Representative works from orchestral literature from many cultures and historical periods are analyzed in context. This course may be repeated three times. Limitation on Enrollment: Audition by department; intended for advanced students of orchestral instruments.

## MUS 055AB Beginning Classical Guitar

1 UNIT
Hours: 2 Lab
Beginning Classical Guitar is designed to familiarize students with the fundamentals of solo classical guitar playing and specifically to develop note reading ability and technique for both hands. This course may be repeated once.

MUS 056AB Intermed Classical Guitar 1 UNIT
Hours: 2 Lab
Intermediate Classical Guitar is designed to further familiarize students with the fundamentals of solo classical guitar playing and specifically, to develop notereading ability up to the fifth position and more complex technique for both hands. The course is repeatable one time. Advisory on Recommended Preparation: MUS 55AB or equivalent college course with " $C$ " or better.

## MUS 057AD Adv Classical Guitar <br> 2 UNITS

Hours:
6 Lab
Advanced Classical Guitar is designed to familiarize students with more complex solo and ensemble classical guitar literature and specifically, to develop note-reading ability up to the ninth position and more advanced technique for both hands. This course may be repeated three times. Advisory on Recommended Preparation: MUS 56AB, or equivalent college course with "C" or better, or equivalent skills as determined by departmental assessment.

| MUS 060AD | Brass Instruments | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 1 Lab |  |

This course provides beginning instruction on instruments of the brass family. These include: trumpet, trombone, French horn and tuba. Emphasis will be on care of instruments, tone production breathing, technique and playing position. This course may be repeated three times. Advisory on Recommended Preparation: Knowledge of one or more instruments.

MUS 061AD Percussion Instruments
1 UNIT
Hours: 1 Lecture/Discussion
1 Lab
This course provides beginning instruction on instruments of the percussion family. These include, Snare Drum, Timpani and Keyboard instruments. Emphasis will be on care of instruments, tone production, proper grips, technique and playing position. This course can be repeated three times. Advisory on Recommended Preparation: Knowledge of one or more instruments.

MUS 062AD Woodwind Instruments
1 UNIT
Hours: 1 Lecture/Discussion
1 Lab
This course provides beginning instruction on instruments of the woodwind family, including: Clarinet, Saxophone, flute and bassoon. Emphasis is placed on tone production, fingering technique and care of instrument. This course can be repeated three times. Advisory on Recommended Preparation: Knowledge of one or more instruments.

MUS 063AD Percussion Ensemble
1 UNIT
Hours: 1 Lecture/Discussion
1 Lab
A study and performance of percussion ensemble repertory with special attention paid to tone, technique, musicianship, and overall musical effect. This course may be repeated three times. Limitation on Enrollment: Audition by Department; intended for advanced students of percussion instruments.

MUS 065AD Guitar Ensemble
1 UNIT
Hours: 3 Lab
Guitar ensemble is designed to familiarize students with group classical guitar playing in general, and specifically to develop steady rhythm and improved sight reading. This course may be repeated three times. Limitation on Enrollment: Audition by department.

MUS 066AD Community Symphonic Band 1 UNIT
Hours: 2 Lab
A study and performance of advanced symphonic band repertory with special attention to interpretation, tone, technique, and general effect. Planned for those interested in improving their musicianship. Some outside or public performances are required. This course may be repeated three times. Advisory on Recommended Preparation: Intended for all advanced musicians of concert band instruments.
MUS 072AD
Jazz Ensemble 1
2 UNITS

Hours: 2 Lecture/Discussion
3 Lab
A study and performance of jazz ensemble repertory with special attention to interpretation, tone, technique, and general effect. Planned for those interested in improving their musicianship and improvisational skills. Some outside travel and public performances are required. This course may be repeated three times.

MUS 073AD

## Jazz Ensemble 2

2 UNITS
Hours: 2 Lecture/Discussion
3 Lab
A study and performance of advanced jazz ensemble repertory with special attention to soloistic interpretation, tone, technique and general effect. Planned for those interested in improving their musicianship and improvisational skills. Some outside travel and public performances are required. This course may be repeated three times. Advisory on Recommended Preparation: MUS 72AD or equivalent college course or equivalent performance experience.

MUS 074AD Concert Band $1 \quad 2$ UNITS
Hours: 2 Lecture/Discussion
3 Lab
A study and performance of standard concert band repertory with special attention to interpretation, tone, technique, and general effect. All basic concepts of musicianship will be stressed through lecture, discussion, and rehearsals with the final goal of performing in public concerts. The music that is rehearsed, read and performed is rarely repeated from semester to semester. Some outside travel, field trips and public performances are required. This course may be repeated three times. Advisory on Recommended Preparation: Intended for students with high school band experience or equivalent type of experience.

| MUS 075AD | Concert Band 2 | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 3 Lab |  |

This course is open to all students who demonstrate ability to play a band instrument. The marching band represents the college in public functions which may include the performance of band literature at concerts, parades, rallies and athletic events. Emphasis is placed on the development of music performance and marching skills. This course may be repeated three times.

MUS 076AD Pep Band 1 UNIT
Hours: 2 Lab
This course is designed for students who are interested in performing in smaller groups at athletic functions (basketball, football, volleyball, etc.). This course may be repeated three times. Advisory on Recommended Preparation: Intended for advanced musicians of band instruments.

| MUS 090AD | College Community Chorus | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 1 Lab |  |

The chorus offers a study and performance of choral literature from the Renaissance to the Contemporary with particular emphasis on the major choral works of the Baroque, Classical, Romantic, and Contemporary Periods. Evening rehearsals required. This course may be repeated three times. Limitation on Enrollment: Audition by department.

MUSIC

## MUS 091AD Rehearsal \& Performance Lab Hours: 120 Activity

The College of the Sequoias Musical Theatre Orchestra will emphasize the rehearsal and performance techniques necessary to accompany the production of a musical. This course my be repeated three times. Limitation on Enrollment: Audition by department; intended for advanced musicians of orchestral instruments. This is a short term activity course meeting a total of 120 hours for 8 weeks, 15 hours per week.

MUS 092AD Night Jazz Ensemble
1 UNIT
Hours: 3 Lab
A study and performance of jazz ensemble repertory with special attention to interpretation, tone, technique, and general effect. Planned for those interested in improving their musicianship and improvisational skills. Some outside travel and public performances are required. This course can be repeated three times. Limitation on Enrollment: Audition by department; intended for advanced musicians of jazz band instruments.
$\begin{array}{ll}\text { MUS 093AD } & \text { College Festival Choir } \\ \text { Hours: } & 1 \text { Lecture/Discussion }\end{array}$
1 Lab
An advanced large vocal group dedicated to the further study, rehearsal and public performance of complex choral repertoire from the Middle Ages to the 21st century, including major works with orchestra. This course can be repeated three times.
Advisory on Recommended Preparation: MUS 90AD or equivalent college choral experience.

## MUS 094AD Community Dance Band

1 UNIT
Hours: 3 Lab
A study and performance of dance band repertory with special attention to interpretation, tone, technique, and general effect. Some outside travel and public performances are required. This course can be repeated three times. Limitation on Enrollment: Audition by department; intended for advanced musicians of jazz band instruments.

MUS 097AD Musical Theatre Performance
2 UNITS
Hours: 120 Activity
Equivalent Course: DANC 041AD, DRAM 020AD.
Experience in drama and theatre through active participation in major musical and dramatic productions. Includes training and experience in all facets of the theatre. This course can be repeated three times. This is a short term course which meets a total of 120 Activity hours, 8 weeks for 15 hours per week.

MUS 111AB Sight/Singing \& Fundamentals
1 UNIT
Hours: 1 Lecture/Discussion
1 Lab
A practical course in sight singing, aural perception, and rhythmic analysis including the study of notes/rests, scales, triads, key and meter signatures, intervals and musical terminology. This course can be repeated once.

MUS 125AD Field Studies in Music
2 UNITS
Hours: $\quad 36$ Lecture/Discussion 108 Lab
A critical analysis of the Performing Arts (Musical concerts, plays, etc.) from an audience's perspective. Elements of Early Instrumentation, Musical Styles and form in various periods as they relate to Music History will be explored. Students will travel to England, Scotland, and Wales, or other sites to attend concerts, plays, museums, musicals, and new cathedral organ installations, and castle artifacts. Fee will cover round trip airfare, transfers to and from airport, hotel room, and concert entrance fees. Course can be repeated three times. Short term class which meets 17 days.

MUS 126AD Computerized Audio 1: Midi 2 UNITS
Hours: 2 Lecture/Discussion
2 Lab
This course explores the use of MIDI capable devices (including keyboard, effects professor, MIDI converters, samplers and personal computers) and associated production techniques for music composition, performance, and recording. This course may be repeated three times.

## MUSIC

## MUS 127 Computerized Audio Prod 2 <br> Hours: $\quad 3$ Lecture/Discussion <br> 3 Lab

Intermediate course in electronic music, covering in depth computer generated and controlled studio devices in acoustics, sound synthesis and digital sampling. Course will include integrated MIDI sequencing software and digital recording systems. Prerequisites: MUS 126 or equivalent college course with " $C$ " or better.

MUS 151AD Independent Study 1-4 UNITS
Hours: 3 TO 12 Lab
Independent Study. This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.
$\begin{array}{lll}\text { MUS 174AD Jazz Combo } & 2 \text { UNITS } \\ \text { Hours: } & 1 \text { Lecture/Discussion } & \end{array}$
2 Lab
A study and performance of Small Jazz Ensemble repertory with special attention paid to tone, technique, musicianship, and overall musical effect. Planned for musicians interested in improving their musicianship, improvisational, and performance skills. Some outside travel, field trips, and public performances are required. This course may be repeated three times. Limitation on Enrollment: Intended for advanced musicians of jazz instruments. Enrollment by audition by department.

| MUS 180 | The Music Business | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |

This course deals with the workings of the music industry, particularly the business end, career opportunities, and employability enhancement. Guest speakers will be an integral part of the course.

MUS 181 Recording Arts 1
2 UNITS
Hours: 2 Lecture/Discussion
3 Lab
Hands-on instruction for beginners in the use of multi-track recording systems, with emphasis on the development of critical listening/thinking skills in sound, recording, reproduction and technology.

| MUS 182 | Recording Arts 2 | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

Intermediate students will acquire hands-on multi-track recording techniques. Students will explore techniques used by producers, students, musicians, and recording engineers. Course will cover advanced signal processing, recording production and management procedures.
Prerequisites: MUS 181 or equivalent college course with " $C$ " or better.
$\begin{array}{lll}\text { MUS 183AD } & \text { Night Studio Band } & 1 \text { UNIT } \\ \text { Hours: } & 3 \text { Lab } & \end{array}$
A terminal course which rehearses all types of music performed in the recording studio, recording on tapes and making a professional quality record will be a major project. This course can be repeated three times. Limitation on Enrollment: Audition by department; intended for advanced musicians of jazz band instruments.

MUS 199 Topic Courses - Music .5-4 UNITS
Special topic courses.

MUS 224AD Keyboard Accompaniment 1 UNIT
Hours: 2 Lecture/Discussion
1 Lab
Involves keyboard accompaniment for small groups, such as soloist and ensembles in vocal, string, brass and the larger groups such as a symphony and chorus. This course can be repeated three times. Limitation on Enrollment: Audition by department.

MUSIC
MUSIC

MUS 242AD Madrigal Dinner 1 UNIT
Hours: 60 Activity
The Madrigal Dinner is an Elizabethan/Renaissance Feast performed by singers, instrumentalists, actors, court jesters, mimes, tumblers and others structured around a formal meal served in several courses announced by brass fanfares. A Christmas theme serves as the central focus of the dinner, which is traditionally presented several evenings in late November and/or early December. This course can be repeated three times. This is a short term course which meets a total of 60 Activity hours, for 4 weeks, 15 hours per week.

## MUS 251AD Independent Study - Music <br> 1-4 UNITS <br> Hours: 54 TO 216 Lab

Independent Study. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office. This course can be repeated three times.

MUS 270AD Dixieland Band 1 UNIT
Hours: 2 Lab
A study and performance of Dixieland band repertory with special attention to interpretation, tone, technique, and general effect. Limitation on Enrollment: Audition by department; intended for advanced musicians of Dixieland band instruments. This course can be repeated three times.

MUS 277 Marching Band Outreach 1 UNIT
Hours: 48 Activity
This course is designed to develop performance skills through instruction and rehearsal of marching techniques, marching maneuvers and music performance and interpretive dance skills (color guard). This course may be repeated three times.

| MUS 293AD Jazz Ensemble 3 | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 3 Lab |

Hours: 3 Lab
Advanced study and performance of jazz ensemble repertory for musicians aspiring to a professional level of jazz ensemble playing. Some outside travel and public performances are required. This course may be repeated three times. Limitation Request on Enrollment: Audition by department; intended for advanced musicians of jazz band instruments.

## MUS 294AD Jazz Improvisation 1 UNIT <br> Hours: 3 Lab

This is a course in developing the ability to spontaneously improvise music on an instrument to a musical background provided by a large jazz ensemble. The course will cover the application of improvisational techniques found in jazz music. This course may be repeated three times. Limitation on Enrollment: Students must have a basic knowledge of music theory (Theory 1) and the ability to perform on an instrument used in the large jazz ensemble. Enrollment by audition, or by permission of the music department only. Demonstrated performance of major and minor scale and chords.

## MUS 295AD Sequoia Winds <br> 1 UNIT <br> Hours: 2 Lab

A study and performance of standard symphonic band repertory with special attention to interpretation, tone, technique, and general effect. Open to all interested instrumental band musicians. This course may be repeated three times. Advisory on Recommended Preparation: Intended for all interested instrumental band musicians.

MUS 297AD Contemporary Jazz Ensemble
1 UNIT
Hours: 1 Lecture/Discussion
1 Lab
This class is a music ensemble that rehearses and performs contemporary big band and jazz music. Music from the libraries of leading contemporary writers of jazz, such as Bill Hollman, Oliver Nelson, Bob Florence, Bob Mintzer and Tom Kubis will be included in our study. Some outside travel and public performance are required. This course may be repeated three times. Limitation on Enrollment: Audition by Department; intended for advanced musicians only.

MUS 301 Introduction to Music
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
It is an introductory course with a broad focus. Topics will be covered in media presentation, primarily videos, and in discussions. Selected composers, performers, and styles (including classical, popular, and international) will be explored as reflections of their cultural contexts.

MUS 396AD Swing Style Big Band 1 UNIT
Hours: 3 Lab
A course which rehearses all types of music performed by the Big Bands of the 1930's, 40's, and 50's. Some outside travel and public performances are required. This course may be repeated three times. Limitation on Enrollment: Audition by department; intended for advanced musicians of jazz band instruments.

MUS 398AD Jazz Reading-Interpretation 1 UNIT
Hours: 3 Lab
This course is designed to develop music reading and sight reading skills. Some new music will be presented at each meeting. After some discussion the students will read (play) the music with consideration for not only the proper interpretation of note values in time, but also paying attention to dynamics, style, articulation, balance, and blend. This course may be repeated three times. Limitation on Enrollment: Enrollment by audition or permission of department. For advanced musicians of jazz band instruments.

## NATURALSCIENCES

NSCI $131 \quad$ Chem \& Physics for Educators
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
2 Lab
A general principles science course for students transferring to become Liberal Studies majors. Basic principles of chemistry and physics relevant to elementary education are stressed. Applying these topics to everyday experience is emphasized. The course is designed to meet only the science requirements of Liberal Studies programs at CSU, Fresno.
Prerequisites: MATH 200 or MATH 205 or MATH 215 or equivalent college course with "C" or better or eligibility for MATH 230 as determined by COS placement procedures.

| NSCI 132 | Biol/Earth Sci for Educators | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

A general principles science course for students transferring to become Liberal Studies majors. Basic principles of earth science and biology relevant to elementary education are stressed. Applying these topics to everyday experience is emphasized. The course is designed to meet only the science requirements of Liberal Studies programs at specific CSU campuses. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

## NURSING

## NURS 106 Cultural Diversity/Healthcare 3 UNITS

## Hours: 3 Lecture/Discussion

This course is designed to introduce basic concepts of culture, language and communication, biological variation, social organization, and social interaction and change as they relate to health care. Focused on the client (individual, family, or social group), the course investigates values, beliefs, and customs as they affect health and illness behaviors. Advisory on Recommended Preparation: ENGL 1 or equivalent college course with a "C" or better.

NURSING

NURS 111 Clinical Apps Pharmacology 1 UNIT Hours: $\quad 36$ Lab
This is a short term lab class that will allow the student to apply concepts of pharmacology through drug research, administration, and evaluation of the patients response to the medication. The student will experience a dramatic increase in the volume, variety, and routes of drug administration, and will experience an increased level of responsibility/accountability with this process.
Prerequisites: NURS 161 or equivalent college course with "C" or better.

NURS 120 Perioperative Nursing
4 UNITS
Hours:
36 Lecture/Discussion 108 Lab
This is an elective course in perioperative nursing. This course is designed to prepare a competent and knowledgeable practitioner to administer optimum care to select surgical patients during pre-operative, intra-operative, and post-operative phases of surgical intervention.
Prerequisites: NURS 161 or equivalent college course with "C" or better.

| NURS 125 | Critical Care Nursing |
| :--- | :--- |
| Hours: | 35 Lecture/Discussion |
|  | 105 Lab |

## 4 UNITS

This course presents a study of nursing intervention focused on the needs of the critically ill client in an intensive care unit. Concepts of cardiac, respiratory, renal, neurological, endocrine, and emotional care are stressed. Students will actively care for critically ill clients with these problems during clinical lab. Prerequisite may be waived with verified LVN licensure and IV Therapy certification.
Prerequisites: NURS 163 or equivalent college course with " C " or better.

NURS 126 Supervised Clinical Practice 4 UNITS
Hours: 96 Lab
This clinical practice course provides additional practice to RN students who desire additional opportunities for clinical lab practice. The student will utilize the nursing process to plan and implement nursing care for a variety of clients, utilizing knowledge and skills at the student's current level of achievement. Prerequisite may be waived with LVN licensure and permission of the department.
Prerequisites: NURS 161 or equivalent college course with "C" or better.

NURS 151AD Independent Study-Nursing 1-4 UNITS Hours: $\quad 3$ TO 12 Lab
Independent Study requires a minimum of 54 hours of academic work per unit. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office. This course may be repeated three times.

NURS 152 Promoting Perinatal Wellness
4 UNITS
Hours:
34 Lecture/Discussion
102 Lab
Materials Fee: $\$ 25.00$
This course is for the LVN to RN or other advanced placement student. It consists of study and application of theory to clinical care of the childbearing family, including maintaining and promoting optimal wellness. It includes concepts of perinatal care. The progressive themes of the Nursing program are applied through the nursing process to attain the client's optimal well-being.
Prerequisites: NURS 160 or equivalent college course with "C" or better.

NURS 153
Hours:
Promoting Pediatric Wellness
4 UNITS

Materials Fee: $\$ 25.00$
This course is for the LVN to RN or other advanced placement student. It consists of study and application of theory to clinical care of the pediatric patient and family, including maintaining and promoting optimal wellness.
Prerequisites: NURS 160 or equivalent college course with " C " or better.

NURSING

| NURS 160 | Transition Course |
| :--- | :--- |
| Hours: | 25.5 Lecture/Discussion |
|  | 25.5 Lab |

2 UNITS

This course is intended for the student accepted into the Registered Nursing Program with advanced placement status such as LVN to RN tract of transfer student. It consists of theoretical study and clinical application of the nursing process for the adult medical/surgical client and the mental health client. Overriding concepts are maintaining and promoting wellness. Limitation on Enrollment: Permission of the Program Director.

| NURS 161 | Maintaining Optimal Wellness | 11 UNITS |
| :--- | :--- | :--- |
| Hours: | 7 Lecture/Discussion |  |
|  | 12 Lab |  |
| Materials Fee: | $\$ 36.00$ |  |

Materials Fee: $\$ 36.00$
An introduction to the elements of patient centered care based on the nursing process, emphasizing assessment and the older adult. Introduces nursing program threads: caring, safety, psychomotor skills, critical thinking, communication, teaching, growth, development, adaptation, and legal, ethical, and professional nursing. The progressive themes of the nursing program are applied through the nursing process to attain the client's optimal well-being. Limitation Request on Enrollment: Acceptance into the Registered Nursing Program.
Prerequisites: (BIOL 030 and BIOL 031 and BIOL 040 and CHEM 020 or
CHEM 030 and NUTR 018 and ENGL 001 and PSY 001) and (SPCH 001 or SPCH 004 or SPCH 008) and (SOC 001 or ANTH 010 or NURS 106) or equivalent college courses with "C" or better.

| NURS 162 | Promoting Optimal Wellness | 10.5 UNITS |
| :--- | :--- | :--- |
| Hours: | 5 Lecture/Discussion |  |
|  | 16.5 Lab |  |

## Materials Fee: $\$ 63.00$

This course is completed during the second semester of the Registered Nursing Program. It consists of study and application of theory to clinical care of the childbearing family, including maintaining and promoting optimal wellness. It includes concepts of perinatal and pediatric care and contemporary stressors on families. The progressive themes of the nursing program are applied through the nursing process to attain the client's optimal well-being.
Prerequisites: NURS 161 or equivalent college course with "C" or better.

| NURS 163 | Promote and Restore Wellness 1 | 9 UNITS |
| :--- | :--- | :--- |
| Hours: | 5 Lecture/Discussion |  |
|  | 12 Lab |  |
| Materials Fee: | $\$ 39.00$ |  |

This third semester nursing course is a study of intermediate medical-surgical nursing principles and clinical skills which assist adult clients in promoting and restoring optimal wellness. Client care occurs in a variety of acute and community settings. The progressive themes of the nursing program are applied through the nursing.
Prerequisites: NURS 162 or equivalent college course with "C" or better.
Corequisites: NURS 165.

| NURS 164 | Promote and Restore Wellness 2 | 8 UNITS |
| :--- | :--- | :--- |
| Hours: | 4 Lecture/Discussion |  |
|  | 12 Lab |  |

## Materials Fee: $\$ 30.00$

This fourth semester nursing course is a study of complex medical-surgical nursing concepts to promote and restore wellness in complex clients. In the clinical laboratory, students will increase skills to promote and restore optimal wellness. The progressive themes of the nursing program are applied through the nursing process to attain the client's optimal well-being.
Prerequisites: NURS 163 or equivalent college course with "C" or better.

NURSING

NURS 165
Hours:
Promote and Restore Wellness 3
2 UNITS

This course is completed during the third semester of the Registered Nursing Program. It consists of the study and the application of theory to the clinical care of the psychiatric client, including promoting and restoring optimal wellness. The progressive themes of the nursing program are applied through the nursing process to attain the client's optimal well-being.
Prerequisites: NURS 162 or equivalent college course with "C" or better.
Corequisites: NURS 163.

NURS 166 Nursing Leadership
3 UNITS
Hours: 9 Lecture/Discussion 120 Lab
This is a study of the leadership role of the Registered Nurse in providing integrated, cost-effective nursing care to clients by coordinating, supervising, and collaborating with members of the health care team. This course includes theory concepts and laboratory experience.
Prerequisites: NURS 163 or equivalent college course with "C" or better.

NURS 170AD Diagnostic Data Analysis . 5 UNITS
Hours: 9 Lecture/Discussion
Students will expand their knowledge and ability to analyze diagnostic data commonly encountered in the clinical laboratory. The course emphasizes application of previously learned anatomy, physiology, pathophysiology, and nursing management of the client with an altered health status. This course can be repeated three times. Limitation on Enrollment: Acceptance into the COS RN program, or Licensure as an LVN or RN.

## NURS 171AB Analyzing EKG Rhythms <br> . 5 UNITS <br> Hours: 9 Lecture/Discussion

Students will expand their knowledge and ability to analyze cardiac rhythms commonly encountered in the clinical laboratory. Emphasis on the application of previously learned; anatomy, physiology, pathophysiology, and nursing management of the client with an altered health status. This course can be repeated one time. Limitation Request on Enrollment: Acceptance into the COS RN program, of Licensure as an LVN or RN.

## NURS 190AD Supervised Practice 1-3 UNITS

Hours: $\quad 3$ TO 9 Lab
Under the supervision of an instructor, selected students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling, and other employment or volunteer situations where the student is expected to take a leadership role. This course may be repeated three times. Limitation on Enrollment: Permission of the department.

NURS 199 Topics - Nursing .5-4 UNITS
Hours: 8 TO 70 Lecture/Discussion
Special topic courses in Nursing.
NURS 200 Basic Phlebotomy

## 1 UNIT

Hours: 20 Lecture/Discussion
An introduction to blood sample collection by venipuncture and capillary blood techniques. Medical terminology, anatomy emphasizing the circulatory system, safety and basic infection control are covered. Students will perform capillary (finger stick) procedures on student partners.

NURS 201 Advanced Phlebotomy

### 1.5 UNITS

Hours: 28 Lecture/Discussion
Advanced study into blood sample collection techniques by venipuncture, arterial puncture and capillary blood techniques. Anti-coagulation theory, sources of errors, transport and storage of specimens is covered along with ethics and patient communication. Students will perform venipunctures on student partners as part of the class experience. This course completes the State's didactic requirement for becoming a Certified Phlebotomist I.
Prerequisites: NURS 200 or equivalent college course with "C" or better.

NURS 202 Phlebotomy Practicum 1 UNIT
Hours: 56 Lab
This is the clinical aspect of the Phlebotomy course of study for students seeking certification to become a Certified Phlebotomist 1 in California. Students will perform venipunctures and capillary sticks on actual patients under the supervision of current Laboratory staff. This course meets the State of California requirements for Certified Phlebotomist 1 after passing a national certification examination.
Prerequisites: NURS 201 or equivalent college course with "C" or better.
NURS 203
Adv Theory of Phlebotomy
1.5 UNITS
Hours: 24 Lecture/Discussion

Advanced study into blood sample collection techniques by venipuncture, arterial puncture and capillary blood techniques. Anti-coagulation theory, sources of errors, transport and storage of specimens is covered along with ethics and patient communication. Students will perform venipunctures on student partners as part of the class experience. This course completes the State's didactic requirement for becoming a Certified Phlebotomist 1. Course open to students who have a minimum of six months full time experience as a Phlebotomist within the past five years as verified by a letter signed by a licensed physician and surgeon or licensed clinical bioanalyst directing the laboratory employing the person. Limitation on Enrollment: Course open to students who have a minimum of six months full-time experience as a Phlebotomist within the past five years as verified by a letter signed by a licensed physician and surgeon or licensed clinical bioanalyst directing the laboratory employing the person.

| NURS 233 | IV Certification - LVN | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 9 Lecture/Discussion |  |
|  | 27 Lab |  |

Materials Fee: \$20.00
This 36 hour course prepares Licensed Vocational Nurses to initiate and maintain IV therapy and draw blood in a clinical agency. Theory and practice are provided to enable the student to assess the client, review the physician's order, plan the appropriate infusion technique, implement and evaluate the treatment and the effect upon the client. Limitation on Enrollment: Must be a Licensed Vocational Nurse.

NURS 251AD Independent Study-Nursing 1-4 UNITS
Hours: 54 TO 216 Lab
Independent Study requires a minimum of 54 hours of academic work per unit. Limitation on Enrollment: Completion of all beginning level courses offered by COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office. This course may be repeated three times.

NURS 260 Nursing Assistant
6 UNITS
Hours: 4 Lecture/Discussion 6.5 Lab

This course is designed to prepare the student as an entry level worker, providing basic nursing care to patients in acute care and long-term care settings. The curriculum is structured to provide theory and application in skills needed to function as a Nursing Assistant. Upon completion, students will be eligible to take the state certification examination. Limitation: Current CPR card from either the American Red Cross or the American Heart Association. (Formerly NURS 351).

NURS 310 Prepare/Health Care Careers 2 UNITS Hours: $\quad 35$ Lecture/Discussion
This course assists any new or returning college student to be successful. Assessment and application of individual learning styles are done. Learning skills such as note-taking, testing, and writing are reviewed. Basic arithmetic, problemsolving skills, library and computer resources, means to manage money, and stay healthy are discussed.

NURS 311 Pre-Nursing Success 1 UNIT
Hours: 18 Lecture/Discussion
This course will prepare the pre-nursing student to be successful in the Nursing program. The student will refine critical thinking and problem solving skills. Arithmetic skills will be reviewed. Community resources for the non-traditional student will be identified.

## NURSING

NURS 315AD Nursing Support Program 2 UNITS
Hours: 2 Lecture/Discussion
This course is designed to support students who are having difficulty in the Registered Nursing program. The course provides assessment of learning styles, tutoring services, group support, and content review to assist students who are having difficulty meeting increasingly complex course objectives. May be repeated three times. Limitation on Enrollment: Enrollment in this course is by departmental assessment. Admission to the RN Program.

NURS 321 General Nursing Math 2 UNITS
Hours: 2 Lecture/Discussion
This course focuses on the development of mathematical and analytical skills related to the delivery of drugs and solutions by registered nurses. Emphasis is placed on calculations of medication problems which have clinical application. This course will prepare the student for entry into nursing school.

NURS 400AD Nursing Skills Lab
0 UNITS
Hours: 3 Lab
This course provides the student an opportunity for additional directed learning and supervised laboratory time to develop and refine nursing clinical skills necessary to the safe clinical practice of professional nursing. The student will gain knowledge from instructor demonstration, video tapes and computers. This course can be repeated three times. Limitation on Enrollment: Must be enrolled in the COS Registered Nursing Program.

## NUTRITION

NUTR 018 Nutrition
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
A scientific study of the basic chemical, biological and physiological principles and concepts of human nutrition. Current scientific theories and research are reviewed, clarified and discussed as these trends apply to the development of sound and preventive nutrition practices. The study includes the adapting of these principles to the individual's uniqueness and the translation of this knowledge into food choices throughout life. (Approved for Distance Learning 5/6/1998) Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better or eligibility for ENGL 1 determined by COS placement procedures. CAN FSC 2.

| NUTR 020 | Cultural Foods | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 3 Lab |  |
| Materials Fee: | $\$ 30.00$ |  |

## Materials Fee: \$30.00

Examination of the cultural and social meanings of food, food behaviors and food systems. Emphasis on the regional, ethnic and religious influences on food habits. This is a general course designed for transfer students. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with a " $C$ " or better, or eligibility for ENGL 1 determined by COS Placement test. Formerly NUTR 120.

Prerequisites: NUTR 101 or NUTR 105 or equivalent college course with "C" or better.

| NUTR 101 | Foods | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 3 Lab |  |
| Materials Fee: | $\$ 25.00$ |  |

NUTR 101 is an overview of the principles and practices of food science and technology including food safety, sanitation, ingredient properties, nutritive values, preservation methods, product evaluation and meal management. CAN FSC 8.

Hours: 2 Lecture/Discussion
3 Lab
Materials Fee: $\$ 30.00$
This class is an introduction to the art of professional cooking. Topics covered include preparation of basic sauces and stocks, salads, soups, grains, and breakfast items. The curriculum includes lecture, demonstration, and hands-on experience.

NUTR 106 Professional Cooking 2 UNITS
Hours: 2 Lecture/Discussion
3 Lab
Materials Fee: $\$ 30.00$
This class is designed so that performance standards meet employer expectations and enhance students' job market value. Students will demonstrate proficiency in food service skills, i.e., food presentation, sauces, meat cookery, baking and specialty cuisine.
Prerequisites: NUTR 105 or equivalent college course with "C" or better.
NUTR 107
Sanitation and Safety
2 UNITS

Hours: 32 Lecture/Discussion
This course provides accurate, up-to-date information for all levels of employees in all aspects of food handling. It includes laws and regulations for food safety within the rapidly growing restaurant and food service industry.

NUTR 108 Intro to Food Service Mgmt 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course is designed to introduce the student to institutional food service management principles. Topics include purchasing, receiving, and storage of food, personnel management, equipment usage, physical facilities, financial management and administrative leadership. Advisory on Recommended Preparation: NUTR 18,105 , and 107 or equivalent college courses with "C" or better.

NUTR 109 Food Service Experience 1-4 UNITS Hours: 5 TO 20 Activity
This course is designed to give the student learning experiences in a functioning non-medical food service operation. The student site manager and course instructor will design objectives for that site. Direct supervision at each site will be carried out by the site manager. The course instructor will visit the student at the site during the semester. Verification of your last Tuberculin Skin Test must be on file with instructor before site visit occurs. Advisory on Recommended Preparation: NUTR 101 or 105, or equivalent college courses with "C" or better. Prerequisites: NUTR 107 or equivalent college course with "C" or better.
NUTR 111 Dietetic Service Supv Wrk Exp 2 UNITS

Hours: 10 Activity
This course is designed to give the student learning experiences in a health care facility. Students will be assigned to a health care facility by the instructor. The assigned facility may be outside the City of Visalia. The course instructor is a Registered Dietitian. Limitation on Enrollment: Verification of your last Tuberculin Skin Test must be on file with instructor before site visit occurs. Prerequisites may be waived with equivalent college courses with "C" or better or three years professional cooking experience. Advisory on Recommended Preparation: NUTR 113 or equivalent college course with a grade of "C" or better.
Prerequisites: (NUTR 301 and NUTR 302 and NUTR 107 and NUTR 018) and (NUTR 101 or NUTR 105) or equivalent college courses with "C" or better.

| NUTR 112 | Children's Nutrition | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

Hours: $\quad 3$ Lecture/Discussion
Equivalent Course: CHLD 112.
A survey course of children's nutritional requirements. This course focuses on children's nutrition prior to conception through adolescence. Study centers on nutrition basics, feeding principles and current topics. An appropriate course for students in education, social services, and human development. CHLD 112.

## NUTRITION

## NUTRITION

NUTR 113 Dietetics 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course is designed primarily for students planning careers in nutrition or food service for medical institutions. Nutritional care for the patient, resident or client is emphasized. Advisory on Recommended Preparation: NUTR 105, 107 or equivalent college courses with "C" or better
Prerequisites: NUTR 018 and NUTR 301 and NUTR 302 or equivalent college courses with "C" or better.

NUTR 119 Nutrition for Fitness
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Equivalent Course: HW 119, PE 119.
This course is designed to acquaint students with the nutritional needs of athletes and the relationship between nutrition and fitness. Students are required to use the computer, Internet and basic math skills to calculate nutritional needs. Topics include human energy, nutrient groups, body composition, and supplement use.

NUTR 151AD Independent Study - Nutrition 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
Independent Study.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions Office to obtain approval to enroll.

NUTR 190AD Supervised Pract - Nutrition 1-3 UNITS
Hours: $\quad 3$ TO 9 Lab
Supervised Practice. This course may be repeated three times. Limitation on Enrollment: Permission of the department.

## NUTR 201 Intro to Food Serv \& Nutriti 1 UNIT <br> Hours: $\quad 17.5$ Lecture/Discussion

This course includes coverage of careers in the food service and nutrition areas, specific nutrients information and introduction to computers. The student will be required to observe a food service or nutrition professional at work outside of scheduled class meeting times. Advisory on Recommended Preparation: NUTR 18 or equivalent college course with "C" or better taken previously or concurrently.

NUTR 202 Professionalism in Workplace 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course covers employment skills in the food service and nutrition area such as professional behavior, resumes and interviewing. Also covered are workplace issues, including sexual harassment, stress reduction and workplace violence. Advisory on Recommended Preparation: NUTR 105, 201 or equivalent college course with "C" or better.
Prerequisites: NUTR 302 or equivalent college course with "C" or
better.
NUTR 207 Sanitation for Food Handlers 1 UNIT
Hours: 17 Lecture/Discussion
Basic concepts of food service sanitation are covered. This course prepares students to take the ServSafe examination, which is given at the end of the course. Passing the ServSafe examination meets California and Tulare/Kings counties requirements for food safety certification.

NUTR 212
Hours:
Menu Design
3 UNITS

This course is an overview of menu planning for child nutrition programs. Topics will include 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, and meeting federal, state and local standards are covered.

NUTR $215 \quad$ Child Nutrition Program Mgt 3 UNITS Hours: 3 Lecture/Discussion
Overview of the components of model child nutrition programs including the application of current child health and nutrition principles, nutrition education practices, marketing procedures, communication strategies and operation management skills. Management of nutritionally and fiscally sound child nutrition programs. Effective use of community and school partnerships.

NUTR 251AD Independent Study - Nutrition 1-4 UNITS
Hours: 54 TO 216 Lab
Independent Study. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college in the selected subject area. In addition, student must file an Independent Study form through the Admissions Office to obtain approval to enroll. The course can be repeated three times.

| NUTR 301 | Food Service \& Nutr Skill 1 | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 17.5 Lecture/Discussion |  |

This course provides a foundation in computation skills necessary for success in nutrition and food service courses and employment. Topics covered include recipe adjustment, measurement, costing, percent body weight and caloric need calculations.

NUTR 302 Food Service \& Nutr Skill $2 \quad 1$ UNIT
Hours: 17.5 Lecture/Discussion
This course provides an introduction to verbal and written communication skills necessary for success in nutrition and food service courses and employment. Topics covered include recipe and term comprehension, verbal directions and memo and report writing.

NUTR 320 Healthy Cooking On A Budget 1 UNIT Hours: 17 Lecture/Discussion
Cooking Styles, techniques and strategies designed to promote optimal health and nutrition will be presented in several different ways.

## NUTR 321 Providing Good Food/Nutrition <br> 1 UNIT

Hours: 17 Lecture/Discussion
This course explores and develops food experiences that can be incorporated into the learning environment for parents (or care-providers) and children. It includes safety, sanitation, basic recipe development, simple preparation techniques and general nutrition information.

| NUTR 351 | Hospitality: Wait Staff | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 17 Lecture/Discussion |  |
|  | 17 Lab |  |

This course is intended to provide the student with basic skills necessary for an entry-level job as "front-of-the-house" staff in the hospitality field. "Front-of-thehouse" refers to areas of a restaurant open to the public or within public view.

## ORNAMENTAL HORTICULTURE

OH 002 Plant Identification 13 UNITS
Hours: 2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 10.00$
This course presents botanical nomenclature Latin and Greek terminology, how Summer and Fall plants are used in the landscape, forms of plants, and soil and nutritional requirements.

## ORNAMENTAL HORTICULTURE

## ORNAMENTAL HORTICULTURE

| OH 003 | Plant Identification 2 | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |
| Materials Fee: | $\$ 10.00$ |  |

This course presents botanical nomenclature, Latin and Greek terminology, how summer and fall plants are used in the landscape, forms of plants, as well as soil and nutritional requirements. It is recommended that students take OH 2 first.

OH 007
Landscape Design
3 UNITS
Hours:
2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 5.00$
This course is designed to teach students the fundamentals of landscape design. An appreciation for and the ability to produce quality designs and blueprints is stressed, as well as proper techniques and design methods.

OH 101
Basic Ornamental Horticultur
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
Materials Fee: $\quad \$ 5.00$
OH 101 is a general principle course in ornamental plant biology. The principle topics included are general characteristics of plants, ornamental plant survey methods of classification, ornamental plant nomenclature, plant structure, functions, growth, reproduction, and genetics. Students shall learn how the ornamental horticulture industry applies and utilizes this knowledge.

OH 104
Nursery Practices
3 UNITS
Hours: 3 Lecture/Discussion
1 Lab
Materials Fee: $\$ 5.00$
This is a course for ornamental horticulture, plant science and agriculture majors. This course studies operations and practices of commercial nurseries. It is designed to be an integral part of the COS OH degree and vocational certificate programs. This course is also appropriate for continuing education in the nursery and landscape management fields.

OH 105
Plant Propagation
3 UNITS
Hours:

## 3 Lecture/Discussion

1 Lab
Materials Fee: $\$ 5.00$
An agricultural plant science course that studies the principles of plant propagation by seed, cutting, layering, division, grafting, and budding. The primary focus of this course is the propagation of fruit and ornamental plants.

OH 106
Hours: 3 Lecture/Discussion
3 UNITS

1 Lab
Materials Fee: $\$ 5.00$
This course teaches the basic drafting techniques and standards used in creating landscape designs. Students learn landscape symbols, letters styles and techniques as well as methods of designing landscape plans using section and detail drawings. Sketching and the use of drafting equipment from landscape and architectural fields are also stressed. This basic course is designed for both two year and transfer students with little or no drafting knowledge.

OH 107

## Landscape Structures

3 UNITS
Hours: 2 Lecture/Discussion
3 Lab
This is a transferable course for horticulture majors. This course emphasizes the fundamentals of construction as they relate to building garden structures (decks, fences, gazebos, planters, etc.), garden lighting, soil preparation, planting a landscape and plant protection. Also included is cost estimation and analysis.

OH 108 Landscape Construction 3 UNITS<br>Hours: 2 Lecture/Discussion<br>3 Lab<br>Materials Fee: $\quad \$ 5.00$

A course for transfer and two-year horticulture majors that teaches the fundamentals of construction as they relate to landscape design and maintenance. This course emphasizes construction with concrete, bricks, blocks, and form building along with installation of sprinkler systems.

OH 109
Landscape Maintenance
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
Materials Fee: $\quad \$ 5.00$
Addresses the maintenance of landscaped homes, parks, schools, golf courses, plus street and highway plantings. The students study pruning, fertilization, irrigation, pest control and landscape management.

| OH 110 | Turfgrass Management | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 1 Lab |  |

## Materials Fee: $\$ 5.00$

An introduction to the field of turf grass management that includes selection and use of turf grass varieties for use in parks, recreation areas, golf courses, and home lawns.
OH 111
Floral Design
3 UNITS
Hours: 3 Lecture/Discussion
1 Lab
Materials Fee: $\$ 75.00$

OH 111 is an introductory course in commercial floristry that covers the various phases of floral design. Through floral design, students shall develop an awareness of ways in which people throughout the ages and in different cultures have used floral arrangements to enhance their lives through artistic expression. Material and design as they relate to cultural practices will be integral to this course.

OH 112
Sympathy Flowers
3 UNITS
Hours: 3 Lecture/Discussion
1 Lab
Materials Fee: $\$ 50.00$
A course for two year and certificate students. It is a requirement for the floral industries certificate. It teaches the advanced styling and design of flowers specifically for sympathy work, casket sprays, wreaths, hospital arrangements and solid work.

| OH 113 | Wedding Flowers | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |
| Materials | Fee: | $\$ 50.00$ |

This is a course for two-year and certificate students. It is a requirement for the Floral Industries Certificate. It teaches advanced styling of floral designs to wear and carry, as practiced specifically in wedding bouquets, corsages, church decorations, balloons and bouquet decor.

OH 114 Horticulture Indust/So Calif 1 UNIT
Hours: 40 Activity
OH 114 is a field trip to Southern California ornamental horticulture outlets and the industries that supply them. Garden centers, flower shops, botanical and display gardens, flower and nursery growers, and public educational facilities are studied. Visit to wholesales, jobbers, display houses, advertising agencies and others working with retailers are included.

OH 115 Horticulture Indust/N. Calif 1 UNIT Hours: 40 Activity
This is a field trip/tour class visiting Horticulture industries from Monterey to San Francisco counties. Included are garden centers, flower shops, botanical and display gardens, flower and nursery growers, and public educational facilities are studied. Visits to wholesalers, jobbers, display houses, advertising agencies and others working with retailers are included.

## ORNAMENTAL HORTICULTURE

## ORNAMENTAL HORTICULTURE

OH 116
Horticulture Industries/C.Ca
1 UNIT
Hours: 40 Lab

A field trip to Central California ornamental horticulture outlets and the industries that supply them. Garden centers, flower shops, botanical and display gardens, flower and nursery growers, and public educational facilities are studied. Visits to wholesalers, jobbers, display houses, advertising agencies and others working with retailers are included.

OH 117
Sprinkler Irrigation
3 UNITS
Hours: 3 Lecture/Discussion
1 Lab
This class teaches the identification and recognition of components installation, and assembly of various irrigation systems. It is a highly recommended course for two year and transfer students. It is also a requirement for the Landscape Management Certification program.

OH 118
Hours: $\quad 3$ Lecture/Discussion
1 Lab
Materials Fee: $\quad \$ 5.00$
A study and application of the principles and theories of landscape planning, designing, installation and maintenance of wise use water management in large and small scale landscapes.

OH 119 Interiorscapes 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
Materials Fee: $\$ 5.00$
A study of the principles of residential and commercial interior design relating to plant materials for aesthetic purposes is the main focus of this class.

OH 120
Hours: 3 :
3 UNITS
ours:
1 Lab
A course on the diagnosis, analysis and management of plant diseases. Principles of controlling diseases including biological, cultural, physical, mechanical, and chemical. Pesticide safety, formulation, and methods of application are presented. This course is an integral part of the Ornamental Horticulture program intended for two-year or transfer students and preparing for Pest Control Advisor's license.

OH 121 Plant Combination Theory
3 UNITS
Hours: 3 Lecture/Discussion
1 Lab
A study and application of the theory and principles of combining plant materials for use in the landscape according to their cultural, aesthetic and special environmental and micro-climate requirements.

OH 122

## Pests of Ornamentals <br> 3 Lecture/Discussion <br> 1 Lab

3 UNITS
Hours:

OH 122 is a lecture and lab course on the diagnosis, analysis and management of plant pests. Principles of controlling pests including biological, cultural, physical, mechanical, and chemical. Pesticide safety, formulation, and methods of application are presented. This course is an integral part of the Ornamental Horticulture program intended for two-year or transfer students and those preparing for Pest Control Advisor's license.

OH 123
Hours: 2 Lectur
3 UNITS
3 Lab
This course is required for the Floral Design certificate that includes designs with non-living, semi-permanent materials. Tools, materials, care, basic techniques, and design styles and techniques in both dried and silk arrangements are studied. Growing, drying, and preserving cultivated and wild flowers, pods, and grasses are also included.

OH 124 Arboriculture: Study of Trees 3 UNITS
Hours: 2 Lecture/Discussion
3 Lab
Students will learn basic tree anatomy and how a tree functions as a living system. With this knowledge, students will be taught to learn and understand proper tree care including pruning situations, watering techniques, fertilizers and when to fertilize, preand post-planting care, environmental/ climatic conditions, disease and pests, etc. Students will learn the multiple interactions and associations between plants and other plants, insects, animals, and micro-organisms. Students will learn basic forensics (dissecting) of trees to determine age, injuries, rot, etc.

OH 128 Advanced Floral Design 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
2 Lab
This course is an advanced lecture/lab in floral design, commercial flower shop operations and advanced skills in floral design. Advisory on Recommended Preparation: OH 111 or equivalent college course with a " $C$ " or better.

OH 129 Horticulture/Floral Bus Mgt 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab
2 Activity
This course covers skills necessary to successfully manage horticulture and floriculture related businesses. Management topics include going into business, location, pricing, finance planning, advertising, personnel management, as well as merchandising strategy.
Prerequisites: OH 101 or equivalent college course with "C" or better.

| OH 201AD | Vegetable Gardening | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 3 Lab |  |

An introductory course in small scale vegetable production. The students study plant selection, soils, fertilizers, and care, as well as methods of planting irrigation and harvesting. This course is of great value to anyone who desires to learn proper techniques of vegetable gardening. This course can be repeated three times.

OH 271
Introduction to Horticulture
3 UNITS
Hours:

## 3 Lecture/Discussion

1 Lab
Introduction to Horticulture is designed to give students the basic concepts of the careers and opportunities in the Ornamental Horticulture Industry. This introductory course is designed for students seeking to make career choices in the field of agriculture.

## PARALEGAL

$\begin{array}{lll}\text { PARA } 101 & \text { Intro to Paralegalism } & 3 \text { UNITS } \\ \text { Hours: } & 3 \text { Lecture/Discussion } & \end{array}$
This required survey course is the initial course in a program designed to train the student for employment as a paralegal. The student is given basic knowledge of the role of a paralegal in the community, career opportunities, legal ethics, legal analysis including case briefing, introduction to the law library and exposure to various substantive and procedural areas of the law. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures; and concurrent enrollment in Paralegal 102.

PARA $102 \quad 2$ UNITS
Hours: 2 Lecture/Discussion
This course, required for the paralegal major and other legal careers, provides an overview of general legal theories of the law and legal terminology. Advisory On Recommended Preparation: Concurrent enrollment in PARA 101.

## PARALEGAL

## PARALEGAL

PARA 103

## Civil Procedures 1

4 UNITS
Hours:
4 Lecture/Discussion
This course, required for the paralegal major, familiarizes the student with both California and Federal concepts of Civil Procedure. Students learn to analyze hypothetical fact patterns and complete legal documents necessary for a civil lawsuit using computerized Judicial Council forms and other legal software. Prerequisite may be waived with equivalent skills and knowledge as determined by departmental assessment. Advisory on Recommended Preparation: COMP 130 or COMP 5 or equivalent college course with a " $C$ " or better.
Prerequisites: PARA 101 or equivalent college course with "C" or better (PARA 101 may be taken concurrently).

PARA 104 Civil Procedures 2

## 3 UNITS

Hours: 3 Lecture/Discussion
This course expands upon the basic concepts learned in PARA 103 and is required for the paralegal major. Students draft complicated civil pleadings, discovery devices, writs and the legal documents necessary to enforce a money judgment. Prerequisites: PARA 103 or equivalent college course with "C" or better.

PARA 105 Legal Research and Writing
4 UNITS
Hours: $\quad 4$ Lecture/Discussion
This required course for the paralegal major covers the basic tools of researching both Federal and California law. Students analyze hypothetical cases, locate relevant legal authority, and evaluate arguments in support of specific positions. Students utilize both print and computerized sources to write legal memoranda and points and authorities. Prerequisite may be waived with equivalent skills and knowledge as determined by departmental assessment. Advisory on Recommended Preparation: ENGL 1 or equivalent college course with a "C" or better.
Prerequisites: PARA 101 or equivalent college course with "C" or better (PARA 101 may be taken concurrently).

PARA 110
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course, required for the paralegal major and other law office career certificates, is designed to assist the student in making the transition from the classroom to the law office. The course covers ethical principles, job search skills, client interviewing and law office management skills.

PARA 151AD Independent Study-Paralegal 1-4 UNITS Hours: $\quad 3$ TO 12 Lab
Independent Study requires a minimum of 54 hours of academic work per unit. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office. This course may be repeated three times.

PARA 206 Advances in Legal Research

## 3 UNITS

Hours: $\quad 3$ Lecture/Discussion
This elective course in the paralegal major emphasizes advanced computerized legal research methods and the writing of complex legal documents. It is designed for both the paralegal student with advanced skills as well as the paralegal professional seeking continuing education. Prerequisite may be waived with equivalent skills and knowledge as determined by departmental assessment. Prerequisites: PARA 105 or equivalent college course with "C" or better.
PARA 232
Wills, Trust and Elder Law
2 UNITS
Hours:

## 2 Lecture/Discussion

This is an elective course in the paralegal major designed to familiarize the student with the legal aspects of wills, trusts, conservatorships, and elderlaw. Included is the effect of death upon property ownership, community property and the drafting of forms associated with estate planning.
Advisory on Recommended Preparation: PARA 103 or equivalent college course with a "C" or better.
Prerequisites: PARA 101 or equivalent college course with " $C$ " or better (PARA 101 may be taken concurrently).

PARA 233 Probate Procedures
2 UNITS
Hours: 2 Lecture/Discussion
This is an elective course in the paralegal major designed to familiarize the student with the procedures for probating an estate and settling non-probate estates. Advisory on Recommended Preparation: PARA 103 or equivalent college course with a "C" or better.
Prerequisites: PARA 101 or equivalent college course with "C" or better (PARA 101 may be taken concurrently).

PARA 236 Administrative Law 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This elective course in the paralegal major provides an overview of federal and state substantive and procedural administrative law. Students may elect to focus on immigration law, social security law, worker's compensation law or other specific government agencies.
Advisory on Recommended Preparation: PARA 103 or equivalent college course with a "C" or better.
Prerequisites: PARA 101 or equivalent college course with "C" or better (PARA 101 may be taken concurrently).

PARA 237 Family Law 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This is a required course in the paralegal major designed to familiarize the student with California law relating to adoption, annulment, dissolutions of marriage, paternity, and community property. Students will assemble a notebook of sample documents based on a hypothetical family law case.
Advisory on Recommended Preparation: PARA 103 or equivalent college course with a "C" or better.
Prerequisites: PARA 101 or equivalent college course with "C" or better (PARA 101 may be taken concurrently).

PARA 251AD Independent Study-Paralegal 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times.
Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

PARA 299 Topics - Paralegal .5-4 UNITS
Hours: 8 TO 70 Lecture/Discussion
Special topic courses in Paralegal.
PARA 360 Applied Math/Legal Careers 3 UNITS
Hours: 3 Lecture/Discussion
Equivalent Course: AJ 360.
This is a non-degree applicable math course designed to improve students' math skills in a legal career contextual setting. Students will improve their practical problem-solving skills covering topics covered by the COS Math Competency Test.

## PHARMACY TECHNOLOGY

PT 210 Intro to Health Systems 1 UNIT
Hours: 1 Lecture/Discussion
This course is to introduce the Pharmacy Technician student to the health care system as it relates to pharmacy practice. It includes technician job responsibilities and ethics. Limitation on Enrollment: High school diploma or equivalent.

## PHARMACY TECHNOLOGY

## PHILOSOPHY

PT 211 Pharmacy Technician Theory $1 \quad 3$ UNITS
Hours: $\quad 3$ Lecture/Discussion
The student will learn the use and side effect of drugs commonly used to treat diseases affecting the major body systems. This is a first semester course for the Pharmacy Technician Program. Limitation on Enrollment: High school diploma or equivalent.

PT 212 Pharmacy Technician Pract 1
1 UNIT
Hours: 3 Lab
Materials Fee: $\$ 10.00$
In a laboratory setting, the student will apply principles of legal standards and quality assurance in preparation of noncompounded products. Additional lab activity will demonstrate concepts from lecture related to drug preparations and routes of administration. Limitation on Enrollment: High school diploma or equivalent.

PT 220
Hours
Pharmacy Technician Pract 2
2 UNITS
16 Lecture/Discussion
48 Lab
Materials Fee: $\$ 30.00$
This is a short term Pharmacy technician class taken the first half of the second semester of the program. The student will compound nonsterile and sterile products, hazardous products, learn database maintenance of drug distribution, and learn billing of pharmacy goods and services.
Prerequisites: PT 210 and PT 211 and PT 212 or equivalent college courses with "C" or better.

PT 221 Pharmacy Technician Theory 21 UNIT
Hours: 1 Lecture/Discussion
In this second semester Pharmacy Technician class, the students will learn about the role of protocols, development of new drug products, and investigational drug products. They will learn about pharmacy ethics, professionalism, and organizations. Prerequisites: PT 210 and PT 211 and PT 212 or equivalent college courses with "C" or better.

PT 222 Pharmacy Tech Clinical Practic 2 UNITS
Hours: 96 Lab
Setting following policies and procedures that apply to acute, long-term, and ambulatory care practice under the supervision of a licensed pharmacist.
Prerequisites: PT 210 and PT 211 and PT 212 or equivalent college courses with "C" or better.
Corequisites: PT 220, PT 221.

## PHILOSOPHY

PHIL $001 \quad$ Introductory Philosophy 3 UNITS
Hours: 3 Lecture/Discussion
Students study the ideas of philosophers by discussing essays and writing argument papers. Areas of study can be political theory, ethics, metaphysics and epistemology through the ideas of philosophers such as Plato, Aristotle, Hobbes, Marx and Kant. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN PHIL 2.

PHIL 0053 UNITS
Hours: $\quad 3$ Lecture/Discussion
A study of modern day individual and societal moral choices. Issues such as lying, abortion, charity, animal rights, and business practices will be examined through traditional and contemporary philosophical theory. Theories studied include egoism, relativism, character, ethics, gender ethics, contract theory, utilitarianism, and deontology. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN PHIL 4.

PHIL 012 Comparative Religion
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
A general survey of the major religions of the world (e.g., Hinduism, Islam, Judaism, Christianity, Native American, Confucianism, Taoism). The emphasis is on a comparison of themes common to all or most religions. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

## PHIL 013 <br> Intro to the Old Testament <br> 3 UNITS <br> Hours: 3 Lecture/Discussion

A general survey of the religion of the Hebrews with particular emphasis on the thought, theology and writings of the Old Testament. These are examined within the historical context of Israel including myth and common themes in ancient religion. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

PHIL 014 Intro to the New Testament 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
An introduction to the early Christian community in the period following the death of Christ. Utilizing an historical approach, the course traces the thought and theology reflected in the New Testament writings. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.
PHIL 020 Introductory Logic
3 UNITS
Hours: 3 Lecture/Discussion

A study of logical reasoning by translating ordinary language into symbols for ease of analysis. Students will learn how to identify arguments, to distinguish between inductive and deductive arguments, to derive logical and sound conclusions, and to detect common fallacies of thinking. Advisory on Recommended Preparation: ENGL 1 or Math 230 or equivalent college course with "C" or better, or eligibility for Math 21, 45, 61, 70, 75, or 154 as determined by COS Placement Procedures. CAN PHIL 6.

PHIL $025 \quad$ Critical Thinking 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Principles and methods of good reasoning. Topics include: argument structure, writing of argument papers, use of deductive and inductive reasoning, reasoning errors, and complications of language. Students are required to write 6,000 to 8,000 words demonstrating critical thinking in a series of increasingly sophisticated argument papers.
Prerequisites: ENGL 001 or equivalent college course with "C" or better.

PHIL 028 Classroom Critical Thinking 3 UNITS Hours: $\quad 3$ Lecture/Discussion
Principles and methods of good reasoning, including identifying arguments, developing deductive/inductive reasoning skills, assessing observation/testimony reports, common fallacies and application to K-12 teaching. IS 150 prerequisite may be waived with equivalent skills and knowledge as determined by departmental assessment. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better or eligibility for ENGL 1 determined by COS Placement Procedures.
Prerequisites: IS 150 or equivalent college course with "C" or better.

## PHOTOGRAPHY

PHOT 001 Beginning Photography
3 UNITS
Hours:
2 Lecture/Discussion 3 Lab
Materials Fee: $\$ 20.00$
Basic principles and practices of photography. This course is designed to provide a foundation of basic knowledge for those planning a professional career in photography and who plan further advanced photographic study, or for those in other fields where an understanding of photography may be beneficial. CAN ART 18.

## Course Descriptions

PHOTOGRAPHY

## PHYSICALEDUCATION

| PHOT 002AD | Advanced Photo Laboratory |  |
| :--- | :--- | :--- |
| Hours: | 3 Lab | 1 UNIT |

Materials Fee: $\$ 20.00$
This course is designed for those who have more than a casual interest in the subject and wish to expand their knowledge and advance their skills in the field of photography. This course may be repeated three times. Advisory on Recommended Preparation: PHOT 1 or equivalent college course with "C" or better.

| PHOT 110AD | Photo Journalism | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 3 Lab |  |
| Materials Fee: | $\$ 20.00$ |  |
| Equivalent Course: JOUR 110AD. |  |  |

Equivalent Course: JOUR 110AD.
A course designed for students who would like practical publication experience and an opportunity to publish their photographs in the school newspaper. Also offered as JOUR 110AD. This course can be repeated three times. Advisory on Recommended Preparation: PHOT 1 or equivalent college course with a "C" or better.

| PHOT 370AD | Color Photography |
| :--- | :--- |
| Hours: | 2 Lecture/Discussion |
|  | 2 Lab |

Materials Fee: $\$ 15.00$
Color photography is designed for those interested in color photography with a basic understanding of black and white photography. This course can be repeated three times. Advisory on Recommended Preparation: PHOTO 1 or equivalent college course with "C" or better.

PHOT 371AD Portrait Photography
2 UNITS
Hours: 2 Lecture/Discussion
2 Lab
Materials Fee: $\$ 15.00$
An introduction course in the area of portrait photography. The students will have the opportunity to study the various types of equipment used in portraiture and the various types of lighting used in portrait photography. This course can be repeated three times. Advisory on Recommended Preparation: PHOTO 1 or PHOTO 370 A or equivalent college course with a "C" or better.

## PHYSICALEDUCATION

PE 001AD
Aerobic Conditioning
1 UNIT
Hours:

## . 5 Lecture/Discussion <br> 1.5 Activity

PE001AD is a course designed for the student who seeks knowledge and participation in aerobic fitness. Exercises are done to music with an emphasis on cardiovascular conditioning, strength and flexibility. This course may be repeated three times.

PE 002AD
Non-Impact Aerobics
1 UNIT
Hours:

## 5 Lecture/Discussion

1.5 Activity

Non-impact aerobics is designed specifically for the student who is overweight or just beginning a fitness program. Routines incorporate movements where no jumping or bouncing takes place. The non-impact aerobic phase is then followed by a series of muscle toning exercises. This course may be repeated three times.

## PE 003AD <br> Hours: <br> Walk/Jog for Aerobic Fitness <br> 1 UNIT <br> 1.5 Activity

Walking/Jogging for Aerobic Fitness is designed for students who desire to improve their aerobic fitness and strength. Each student will demonstrate through walking or jogging how to develop fitness by exercise in the following: flexibility, cardiovascular fitness, proper walking/jogging techniques and strength training. This course may be repeated three times.

## PE 004AD Weight Training Hours: . 5 Lecture/Discussion 1.5 Activity

This course is designed as a general introduction to the concepts of strength and body building. The course will focus on machine, barbells and dumbbells as the vehicle for development of the major muscle groups. This course may be repeated three times

## PE 005AB Adv Strength/Body Bldg Princ 2 UNITS <br> Hours: 1 Lecture/Discussion <br> 3 Activity

Designed for the student who seeks further knowledge in the scientific and theoretical components of resistance training. Inclusive of basic principles of strength development, body building, diet, nutrition and weight control. Based on the foundation of resistance prescriptions. Course will focus on barbells, dumbbells, and machines as the vehicle for development of the major muscle groups. Proper mechanics of exercise and safety factors are stressed. This course may be repeated one time.

| PE 006AD | Stretch and Tone | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | .5 Lecture/Discussion |  |
|  | 1.5 Activity |  |
| Equivalent Course: PE 116AD. |  |  |

Stretch and Tone is a class designed for all fitness levels. Students will learn how to safely and effectively strengthen and stretch the body's major muscle groups with correct form and alignment. This course may be repeated three times. Formerly PE 116AD.
PE 009AD Condition for Track \& Field 1 UNIT

Hours: . 5 Lecture/Discussion 1.5 Activity

Conditioning for Track and Field is a one unit activity course designed to improve the individuals overall fitness through an understanding and application of the basic principles and techniques of track and field. This course may be repeated three times.

PE 010AD Fundamentals of Baseball 1 UNIT
Hours: . 5 Lecture/Discussion
1.5 Activity

This course is designed for the students who wish to learn the fundamental skills of baseball. It will enable the student to communicate the proper fundamentals involved with throwing, fielding, pitching, and batting associated with baseball. This course may be repeated three times.
PE 011AD
Circuit/Step Aerobics
1 UNIT
Hours: . 5 Lecture/Discussion
1.5 Activity
Circuit/Step Aerobics is designed for students desiring to improve their cardiovascular strength as well as muscular strength in a low impact exercise. Each student will demonstrate, through Circuit/Step Aerobics, a working knowledge of correct form and alignment, cardiovascular strength, flexibility, and muscular strength. This course may be repeated three times.
PE 012AD
Advanced Basebal
1 UNIT
Hours:

> .5 Lecture/Discussion
> 1 Lab
> 1.5 Activity

This course is designed for the advanced baseball player. It will prepare the student for baseball competition with physical fitness training and intra-class play. Advanced skills in throwing, fielding, batting, and pitching a baseball will be taught and practiced. This course may be repeated three times.

## PE 014AD Basketball 1 UNIT <br> Hours: . 5 Lecture/Discussion <br> 1.5 Activity

Designed for any student interested in the sport of basketball; both experienced players and those not familiar with the game are encouraged to take this class. This course may be repeated three times.

## PHYSICALEDUCATION

## PHYSICAL EDUCATION

PE 015AD Fundamentals of Football 1 UNIT
Hours: . 5 Lecture/Discussion

### 1.5 Activity

Designed for the student/athlete competing in football at the community college level. This course may be repeated three times. Advisory on Recommended Preparation: Referral from Department.

PE 016AD Conditioning for Football
1 UNIT
Hours: .5 Lecture/Discussion
1.5 Activity

The use of plyometric exercises and jump ropes to blend speed and strength training. This is a fitness program for students wishing to prepare for high-level competitive Intercollegiate Football. This course may be repeated three times. Advisory on Recommended Preparation: Referral from Department.

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PE 017 Theory of Football 2 UNITS
Hours: 2 Lecture/Discussion
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This course is designed for the student with an interest in coaching football. Philosophy fundamentals, strategies and rules will be emphasized.

PE 018AB
Beginning Golf
1 UNIT
Hours:
. 5 Lecture/Discussion
1.5 Activity

Focus is on understanding the basic fundamentals of playing golf, learning rules and terms of the game. This course may be repeated one time.

PE 019AB

## Advanced Golf

1 UNIT
Hours:
. 5 Lecture/Discussion
1.5 Activity

For students who wish to gain advanced golf skills. This course may be repeated one time.

PE 021AD
Soccer
1 UNIT
Hours: 5 Lecture/Discussion
1.5 Activity

This course is designed for any student interested in the sport of soccer; both experienced players and those not familiar with the game are encouraged to take this class. This course may be repeated three times.

PE 022AD Advanced Softball 1 UNIT
Hours: 5 Lecture/Discussion

### 1.5 Activity

A physical education activity class for students to gain advanced softball skills. Advanced skills in throwing, fielding, batting and pitching a softball will be taught and practiced. This course may be repeated three times.

PE 023AD Fund of Fast Pitch Softball
1 UNIT
Hours: 5 Lecture/Discussion

### 1.5 Activity

This class is designed for the student who wants to learn the necessary skills required to play the game of fast-pitch softball. Elementary skills of throwing, fielding, batting and pitching will be taught and practiced. This course may be repeated three times.

| PE 024AD | Conditioning for Softball | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | .5 Lecture/Discussion |  |
|  | 1 Activity |  |

Conditioning for Softball is a one unit course designed to help entering student/athletes make the transition from high school athletic competition to collegiate athletic competition. This course addresses fitness, nutritional and conditioning concepts and rules. Students may repeat this course three times. Formerly PE 124AD.

## PE 025AD Basic Swimming <br> Hours: . 5 Lecture/Discussion 1.5 Activity

Basic swimming is a general introduction to swimming and aquatics. It is an appropriate class for the beginning swimmer who wants to learn aquatic fundamentals and receive swimming stroke instruction in front crawl, back crawl, elementary backstroke, sidestroke, breaststroke and butterfly. This course may be repeated three times.

PE 026AD Swimming for Fitness 1 UNIT
Hours: .5 Lecture/Discussion
1.5 Activity

Designed for the student who wishes to participate in the sport of swimming to increase/improve cardiovascular stress and muscular endurance. This course is directed to the student who is interested in lap swimming as a means of exercise. This course may be repeated three times.
PE 027
Basic Lifeguarding
1 UNIT

Hours: 2 Lecture/Discussion
2 Activity
The Basic Lifeguarding course provides the minimum basic knowledge and skills necessary for a person to qualify as an entry level lifeguard. This course also helps meet the prerequisite for the Water Safety Instructor (WSI) course.
$\begin{array}{ll}\text { PE } 028 & \text { Water Safety Instructor } \\ \text { Hours: } & 2 \text { Lecture/Discussion }\end{array}$
2 Activity
The purpose of the Water Safety Instructor course is to train instructor candidates to teach the American Red Cross Water Safety courses.

PE 029AD Conditioning for Baseball 1 UNIT
Hours: . 5 Lecture/Discussion

### 1.5 Activity

Conditioning for Baseball is a one-unit course designed to help entering student athletes make the transition from high school athletic competition to collegiate athletic competition. This course can be repeated three times. Formerly PE 113AD.

PE 030AB Beginning Tennis 1 UNIT
Hours: .5 Lecture/Discussion
1.5 Activity

An activity course designed for the student who wishes to develop an understanding and appreciation for the game of tennis. Basic skills, strategies and rules will be covered. This course may be repeated one time.

| PE 031AB | Advanced Tennis | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 1 Lecture/Discussion |  |
|  | 3 Activity |  |

This course is designed for the student who is advanced at tennis and desires detail in strategy and knowledge of the game of tennis. This course may be repeated one time.

PE 032AB Intermediate Tennis 1 UNIT
Hours: . 5 Lecture/Discussion
1.5 Activity

This course is designed for the intermediate tennis player. It will prepare the participant for tennis competition with intra-class play and specific sport related drills to increase skills level. This course may be repeated once. Formerly PE 132AD.

| PE 033AD | Conditioning for Tennis | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | .5 Lecture/Discussion |  |
|  | 1.5 Activity |  |

This course is designed for improvement of a tennis player's skill through dynamic resistance exercises and an aerobic training. This course may be repeated three times.

## PHYSICALEDUCATION

## PHYSICALEDUCATION

PE 034AB Beginning Volleyball 1 UNIT
Hours: 5 Lecture/Discussion

### 1.5 Activity

Development of basic fundamental skills in volleyball through drills and play. This course may be repeated one time.

## PE 035AB

Advanced Volleyball
1 UNIT
Hours: . 5 Lecture/Discussion

### 1.5 Activity

This course is designed to introduce advanced skills necessary for playing competitive volleyball. Skills covered include basic skills, fast offense, court positioning, rolls, dives and team strategy, both offensive and defensive. This course may be repeated one time.

PE 036 Introduction to Physical Ed
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course is designed to introduce the student to Physical Education. The course includes professional foundations of Physical Education, history, philosophy, concepts, careers, and the future of the discipline. It is presented in a format that will make it valuable to anyone thinking about entering the teaching profession.

## PE 037 Intro to Theory of Coaching 2 UNITS Hours: 2 Lecture/Discussion

Designed for the student wishing to gain knowledge of coaching individual and team sports. Common problems and solutions will also be covered. Advisory on Recommended Preparation: ENGL 251 or an equivalent college course with "C" or better or eligibility for ENGL 1 as determined by COS Placement Procedures.

PE 052AD
Adapted Weight Training
1 UNIT
Hours: . 5 Lecture/Discussion
2.5 Activity

This is a one-unit course for the disabled, designed to assist students in body development, maintenance and/or conditioning. Individual programming for each student's needs is provided. Trained assistants are available. This course may be repeated three times. Limitation on Enrollment: Any physical limitation.

PE 055AD
Seasonal Sports for Disabled
1 UNIT
Hours: . 5 Lecture/Discussion 2.5 Activity

Each semester disabled students will have the opportunity to acquire the skills that are fundamental to swimming, tennis, track and bowling. The basic skills, rules, strategies, etiquette, safety procedures, use of equipment and terminology needed are covered each semester. Trained assistants are available. This course may be repeated three times. Limitation on Enrollment: Any physical limitation.

PE 057AD
Physical Fitness \& Flexibility
1 UNIT
Hours: . 5 Lecture/Discussion
2.5 Activity

Assists disabled students in developing and maintaining basic physical skills, knowledge, and attitudes necessary for enjoyable and satisfactory participation in lifetime fitness, flexibility and sports activities. This course may be repeated three times. Limitation on Enrollment: Any physical limitation.

PE 063AD Balance,Rhythm,Aerobic Dance 1 UNIT
Hours: .5 Lecture/Discussion

### 2.5 Activity

This is a one-unit course designed to help develop balance, rhythm and aerobic dance movement skills in the disabled student. Students will participate in various forms of dance, including social, folk and aerobic dance forms. Trained assistants are available. This course may be repeated three times. Limitation on Enrollment: Any physical limitation.

PE 064AD Perceptual Motor Skill/Gait Ex 1 UNIT
Hours: . 5 Lecture/Discussion 2.5 Activity

Designed to assist students in the development of ambulation, balance, gross motor, and perceptual motor skills. Individual programming for each student's needs is provided. Trained assistants are available. This course may be repeated three times. Limitation on Enrollment: Any physical limitation.

PE 066AD
Hours: . 5 Lecture/Discussion
Arthritis Self Mgt Exercise
1 UNIT 2.5 Activity

This course is a tested self-management and exercise program designed to help individuals cope with the various challenges caused by arthritis. Trained assistants are available. This course may be repeated three times. Limitation on Enrollment: Any physical limitation.
PE 067AD
Prin/Tech of Back Care
1 UNIT
Hours:
. 5 Lecture/Discussion
2.5 Activity

Designed for individuals with back disorders in developing an exercise program and better body mechanics to help better care for their backs. This course may be repeated three times. Limitation on Enrollment: Any physical limitation.

| PE 068AD | Swim \& Water Aerobics | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | .5 Lecture/Discussion |  |
|  | 2.5 Activity |  |

This course is designed to assist disabled students in developing basic swim skills and water survival skills, body development, and maintenance and/or conditioning through water exercises. Individual programming for each student's needs is provided. Trained assistants are available. This course may be repeated three times. Limitation on Enrollment: Any physical limitation.

| PE 070AD | Intro to Sports/Disabled Stu | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | .5 Lecture/Discussion |  |
|  | 2.5 Activity |  |

This one unit course is designed to assist disabled students to participate in and learn about various indoor/outdoor sports adaptable to the disabled. This class will include open lab/practice, sports drills, and participation in various sports. Individual programming for each student's needs is provided. Trained assistants are available. The course can be repeated three times. Limitation on Enrollment: Any physical limitation.

PE 071AD Gen Cond for Disabled Students 1 UNIT Hours: . 5 Lecture/Discussion 2.5 Activity

This one unit course is designed to provide the disabled with the opportunity to participate in a general conditioning program to develop fitness. Individual programming for each student's needs is provided. Training assistants are available. This course can be repeated three times. Limitation on Enrollment: Course is designed for individuals with physical limitations.

| PE 072AD | Aqua-cise/Disabled Students | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | .5 Lecture/Discussion |  |
|  | 2.5 Activity |  |

This one unit course is designed to assist disabled students experience physical fitness through a comprehensive exercise program in the water. Designed for the disabled with no swimming skills. Individual programming for each student's needs is provided. Trained assistants are available. Course may be repeated three times. Limitation on Enrollment: Any physical limitation.

| PE 073AD | Modified Sports/Games Disabled | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | .5 Lecture/Discussion |  |
|  | 2.5 Activity |  |

This course is designed for disabled students to participate and learn about various indoor/outdoor sports and games. The class will include open lab/practice, team sportsmanship, sports drills, team practice, individual skills and participation in various games. Trained assistants are available. This course may be repeated three times. Limitation on Enrollment: Course is designed for individuals with physical limitations.

## PHYSICALEDUCATION

## PHYSICALEDUCATION

PE 074AD
Hours:

## Cardio/Resist Trn for Disabled

. 5 Lecture/Discussion
2.5 Activity

This course is designed to assist disabled students in developing and maintaining basic fine motor skills, gross motor skills, knowledge, body mechanics, flexibility, and attitudes necessary to participate in a lifetime fitness program. Individualized programming is available for each student's needs. Trained assistants are available. This course may be repeated three times. Limitation on Enrollment: Course is designed for individuals with physical limitations.

PE 075AD Adapted Fitness/Stretching
1 UNIT
Hours: . 5 Lecture/Discussion

### 2.5 Activity

Designed to help disabled students develop basic fitness skills and stretching techniques. Students will gain knowledge in this area and participate in many various forms of movement. Trained assistants are available. This course may be repeated three times. Limitation on Enrollment: Course is designed for individuals with physical and/or mental limitations.

| PE 076AD | Adapted Cross Training | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | .5 Lecture/Discussion |  |
|  | 2.5 Activity |  |

This course will help assist disabled students in structuring, developing, and maintaining body development. Students will gain knowledge in cross training and participate in various activities. Trained assistants are available. This course may be repeated three (3) times. Limitation Request on Enrollment: Course is designed for individuals with physical and/or mental limitations.
$\begin{array}{ll}\text { PE 093AD } & \text { PE for the Equestrian } \\ \text { Hours: } & .5 \text { Lecture/Discussion }\end{array}$

### 1.5 Activity

A one unit activity course designed to improve the individuals' overall fitness through an understanding and application of the basic principles and techniques of equitation. This course is repeatable three times. Formerly PE 121AD.

PE 119

## Nutrition for Fitness

Hours: $\quad 3$ Lecture/Discussion

## Equivalent Course: HW 119, NUTR 119.

This course is designed to acquaint students with the nutritional needs of athletes and the relationship between nutrition and fitness. Students are required to use the computer, Internet and basic math skills to calculate nutritional needs. Topics include human energy, nutrient groups, body composition, and supplement use.

PE 142AD
Varsity Perfor/Pep Sqd/Flag
2 UNITS
Hours:
2 Lecture/Discussion
4 Activity
Designed to enhance the performing skills of the Pep Squad and provide opportunity to prepare for support of all athletic teams. This course can be repeated three times. Limitation on Enrollment: The member is chosen by election (judges) in order to become a part of the COS Pep Squad.

## PE 151AD Independent Study-PE <br> 1-4 UNITS

Hours: $\quad 54$ TO 216 Lab
Independent Study.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, student must file an Independent Study form through the Admissions Office to obtain approval to enroll.

## PE 178AD

Modified Fitness
1 UNIT
Hours:

## . 5 Lecture/Discussion

2.5 Activity

This course is designed for all students with disabilities to learn and develop basic physical fitness skills. Students will learn basic fitness, resistance, conditioning, and stretching techniques. Trained assistants will be available to assist students. This course may be repeated three (3) times. Limitation on Enrollment: Any physical limitation.

## PE 179AD Modified Self Defense <br> Hours: .5 Lecture/Discussion 2.5 Activity

This course is designed for all students with disabilities to learn and develop a combination of fighting techniques from several of the martial arts. Students will learn basic self defense tactics and uses. Trained assistants will be available to assist students. This course may be repeated three times. Limitation on Enrollment: Any physical limitation.
$\begin{array}{lll}\text { PE } 188 & \text { Peak Performance } & 3 \text { UNITS } \\ \text { Hours: } & 3 \text { Lecture/Discussion } & \end{array}$
Hours: $\quad 3$ Lecture/Discussion
A course to examine the psychology of sports as it relates to a variety of sport situations including, how to improve athletic performance, effects of coaching styles on athletes-self-efficacy, how to attain compliance of athletes to their rehabilitation regiment, and how to prevent injuries from a psychological perspective.

| PE 243AD | Conditioning for Pep Squad | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 3 Activity |  |

This course is designed to introduce and implement aerobic training and conditioning to help in the development of the upper body, trunk and lower body. Exercises will be performed by the student to increase flexibility, strength and cardiovascular fitness levels which pertain to the sport of cheerleading, i.e., jumps, leaps, kicks and stunts. This course can be repeated three times.

PE 251AD Independent Study-PE 1-4 UNITS
Hours: $\quad 54$ TO 216 Lab
Independent Study. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college course in the selected subject area. In addition, students must file an Independent Study form through the Admissions Office to obtain approval to enroll. This course can be repeated three times.
PE 301AD
Aqua Calisthenics
1 UNIT
Hours: . 5 Lecture/Discussion
1.5 Activity

Designed for students who wish to develop, maintain or improve their cardiovascular fitness level in an aquatic environment. No swimming skills are necessary. This course can be repeated three times.

## PE 495AD Fitness for Senior Citizens <br> 0 UNITS <br> Hours: 3 Activity

This course is considered mild exercise and is basically designed for older people. The course is geared to the needs of old people, taking into consideration the limitations of all or certain individuals within a class. The course consists of various stretching, bending, twisting and leaning from different positions while sitting in a chair. This course can be repeated three times.

## PHYSICALSCIENCE

PSCI 020
Physical Science
3 UNITS
Hours: 3 Lecture/Discussion
2 Lab
A laboratory course in physical science designed to meet the laboratory science requirement for transfer students who are not science majors. Topics include concepts, theories and principles of physics, chemistry, astronomy and earth science. The course provides opportunities for students to learn reasoning skills and a new way of thinking about their environment. Course will present applications of concepts and theories to topics of current interest. Advisory on Recommended Preparation: MATH 200 or MATH 205 or MATH 215 or equivalent college course with a "C" or better, or eligibility for MATH 230 or 235 as determined by COS Placement Procedures; and ENGL 360 or equivalent college course with "C" or better, or eligibility for ENGL 251 determined by COS Placement Procedures.

## PHYSICS

$\begin{array}{ll}\text { PHYS } 005 & \text { Physics for Engineers } 1 \\ \text { Hours: } & 4 \text { Lecture/Discussion }\end{array}$ 2 Lab
This is the first semester of a three semester introductory calculus-based physics course. It is a fundamental treatment of the general principles of physics for the engineering and physics majors. Topics included are statics, kinematics, dynamics of particles and rigid bodies, simple harmonic motion and mechanical properties of solids. (CAN PHYS Seq B includes PHYS 5,6,7). CAN PHYS 8.
Prerequisites: MATH 075 or equivalent college course with "C" or better.
Corequisites: MATH 076.
PHYS 006 Physics for Engineers 24 UNITS
Hours: 4 Lecture/Discussion
2 Lab
This is the second semester of a three-semester introductory calculus-based physics course. It is a fundamental treatment of the general principles of physics for the engineering and physics major. Topics included are mechanical properties of matter, fluid mechanics, wave motion, thermodynamics, and electrostatics. (CAN PHYS Seq B includes PHYS 5,6,7).
Prerequisites: PHYS 005 or equivalent college course with "C" or better.
PHYS 007 Physics for Engineers 3
4 UNITS
Hours: 4 Lecture/Discussion
2 Lab

This is the third semester of a three semester introductory calculus-based physics course. It is a fundamental treatment of the general principles of physics for the engineering and physics major. Topics included are electricity, magnetism, and optics, and selected topics in modern physics. (CAN PHYS Seq B includes PHYS $5,6,7$ ).
Prerequisites: PHYS 006 or equivalent college course with "C" or better.

| PHYS 020 | General Physics 1 | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 4 Lecture/Discussion |  |

This is the first semester of a two-semester introductory non-calculus based physics course. This course includes laboratory experiments in addition to lectures. It is required for premedical, predental, prepharmacy, and occasionally science and math students. Topics included are statics; kinematics, dynamics of particles and rigid bodies, simple harmonic motion and thermal physics. CAN PHYS 2.
Prerequisites: MATH 154 or equivalent college course with "C" or better or eligibility for MATH 070 as determined by COS placement procedures.

PHYS 021 General Physics 2
4 UNITS
Hours: 4 Lecture/Discussion
2 Lab
This is the second semester of a two-semester introductory non-calculus based physics course. This course includes laboratory experiments in addition to lectures. It is required for premedical, predental, prepharmacy, and occasionally science and math students. Topics included are: electricity and magnetism, optics, modern and nuclear physics. CAN PHYS 4.
Prerequisites: PHYS 020 or equivalent college course with "C" or better.
PHYS 151AD Independent Study-Physics 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
Independent Study.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office to obtain approval to enroll.

PHYS 251AD Independent Study-Physics

## 1-4 UNITS

Hours: $\quad 3$ TO 12 Lab
Independent Study.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office to obtain approval to enroll.

## PLANT SCIENCE

PLSI 001
Intro to Plant Science
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
1 Lab

This course is designed to provide the students with a working knowledge of the fundamental structures and processes of plants. Principles to be applied cover plant structures, physiology, heredity, environmental relationship to growth, adaptation, and management of crops. Techniques of research, exploration of plant growth, and identification of economical crops will be included. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with a " C " or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN AG 8.

| PLSI 012 | Fruit \& Nut Tree Production | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 1 Lab |  |

An introductory course in California fruit and nut tree production. Advisory on Recommended Preparation: PLSI 1 or equivalent college course with "C" or better.

| PLSI 102 | Row Crops | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

This is an optional course that can be applied toward the Crop Science Certificate. The current plant program features a wide variety of crop production courses. This course provides an introduction for gaining job entry skills into the agricultural industry which continues to grow and expand in and around Tulare County.
Advisory on Recommended Preparation: PLSI 1 or equivalent college course with "C" or better.

| PLSI 103 | Cereals and Oil Crops | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 1 Lab |  |

The production principles for small grains including sorghums and oil crops in the San Joaquin Valley. Fundamental taxonomy, botany and cultural practices including tillage, planting, irrigation, pest control, and harvesting.

| PLSI 104 | Forage Crops | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 1 Lab |  |

A study of the common forage crops: alfalfa, silages, permanent pastures, and natural ranges. Cultural practices to be studied will include: land preparation, irrigation needs, fertilization, seeding rates, methods of utilization, grazing silage or dry hay, and harvesting.

| PLSI 105 | Weeds and Weed Control | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |

This course covers identification, cultural, chemical, and biological control or prevention of the major weeds affecting crops and livestock in the Tulare-Kings counties area.
PLSI $110 \quad$ Integrated Pest Management
Hours: $\quad 3$ Lecture/Discussion
A study of various pest management practices used in specific agricultural crops
produced in the San Joaquin Valley. Emphasis on biological, cultural, reproductive,
chemical, and legal methods of control.

| PLSI 111 | Citrus Production | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 2 Lecture/Discussion |  |
|  | 2 Lab |  |

Economic importance of the citrus industry. Topics include: historical development, areas of production, environmental requirements and citrus climatology, citrus botany, commercial varieties and rootstocks.

## PLANT SCIENCE

## PSYCHOLOGY

PLSI 113<br>Grape and Vine Production<br>3 UNITS<br>Hours: 3 Lecture/Discussion<br>1 Lab

The students will learn about the grape and entomology industry in Tulare, Kings, and Fresno counties, the economic impact, career opportunities, and job entry skills. The opportunities are numerous for students who complete the course. Advisory on Recommended Preparation: PLSI 1 or equivalent college course with "C" or better.

## PORTUGUESE

PORT $001 \quad$ Elementary Portuguese 4 UNITS
Hours: 4 Lecture/Discussion
PORT 1 is an introductory course in understanding, speaking, reading, and writing Portuguese. This course is designed for students who are transferring to four-year universities with foreign language requirements. It is also useful for students interested in bilingual education or any field which involves Portuguese.

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PORT 002 Elementary Portuguese
4 UNITS
Hours: 4 Lecture/Discussion
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PORT 2 is the second course in this series. It reviews the vocabulary and concepts of PORT 1 as a starting point. The students will engage with each other and the instructor in a variety of communication-based activities, such as songs, games, role playing, and guided response, as well as writing and grammar exercises. Cultural and societal aspects of the Portuguese world are stressed throughout the class.
Prerequisites: PORT 001 or equivalent college course with " $C$ " or better.

## PSYCHOLOGY

## PSY 001 General Psychology <br> 3 UNITS <br> Hours: <br> 3 Lecture/Discussion

This course involves an introduction to the field of psychology through a study of the facts and principles involved in learning, development, motivation, personality, adjustment, and the physiological basis of behavior. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN PSY 2.

PSY 005
Social Psychology
3 UNITS
Hours: 3 Lecture/Discussion
A scientific exploration and application of the psychological basis of people's interactions with one another and the way thoughts, feelings, and action are influenced by others, i.e., perception, roles, conformity, prejudice, aggression, altruism and group dynamics. Course is interdisciplinary and draws on the fields of Anthropology, Psychology and Sociology. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.
Prerequisites: PSY 001 or equivalent college course with "C" or better.

## PSY 010 Human Sexuality

3 UNITS
Hours: 3 Lecture/Discussion
A comprehensive introduction to the biological, psychological and sociocultural aspects of human sexual behavior. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.
Prerequisites: PSY 001 or equivalent college course with "C" or better.
PSY 034
Abnormal Psychology
3 UNITS
Hours: 3 Lecture/Discussion
This course is designed to present a broad general survey of the field of Abnormal Psychology. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.
Prerequisites: PSY 001 or equivalent college course with "C" or better.

| PSY 039 | Child Development - DS1 | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
| Equivalent Course: CHLD 039. |  |  |

Equivalent Course: CHLD 039.
This course studies the development of humans from conception to adolescence in the areas of cognition, physical growth and development, language, and social development. The course includes, theory, history, and systems, application and practice of pertinent concepts in developmental psychology. CAN FSC 14.

| PSY 130 | Intro to Behavior Modificatn | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

Designed for teachers, para-professionals, and those pursuing a career in psychology. Students will develop skills in assessing behavior, developing target behaviors and implementing a behavior change program. This course will combine both the theoretical and practical models for understanding human behavior.
Prerequisites: PSY 001 or equivalent college course with "C" or better.
PSY 133 Personal and Social Growth 3 UNITS
Hours: 3 Lecture/Discussion
A practical survey of psychological principles which contribute to the individual's well being and his/her relationships with others.

PSY 151AD Independent Study-Psych 1-4 UNITS
Hours: 54 TO 216 Lab
Independent Study.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level college courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.
PSY 251AD Independent Study-Psych 1-4 UNITS

Hours: $\quad 3$ TO 12 Lab
Independent Study.This course can be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

## REALESTATE

REAL 140 Real Estate Principles 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
A general survey emphasizing basic real estate principles which traces a typical real property transaction from beginning to completion. Real property ownership and investments are explored. This course will aid those planning to take the California State Real Estate Brokers or Salesman Examination.

REAL 141 Real Estate Finance 3 UNITS
Hours: 3 Lecture/Discussion
This course presents the specific types of real estate loans and types of lending institutions and it explores many of the external forces which affect the real estate loan markets. This course is part of the course work necessary for the California Real Estate Broker's Examination.

| REAL 142 | Real Estate Law | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

This course covers the practical applications of real estate law, utilizing illustrative cases and examples and designed to help avoid legal difficulties arising from real estate transactions, instruments, zoning, and planning. This course is required for the California Real Estate Brokers examination. Advisory on Recommended Preparation: REAL 140 or equivalent college course with "C" or better.

| REAL 143 | Real Estate Economics | 3 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |

Real Estate Economics takes a broad look at the economic atmosphere encompassing all real estate activities. The major focus of the course is to help real estate students become aware of future trends and what these trends will have on local real estate values.

## REALESTATE

## SOCIOLOGY

REAL 144

## Real Estate Practice

3 UNITS
Hours:
3 Lecture/Discussion
This course is designed to acquaint students with every day real estate practice: to familiarize them with forms; on-the-job problems; and to inform them of current successful selling practices and techniques. (Required by law for applicants for broker's license. Advisory on Recommended Preparation: REAL 140 or equivalent college course with "C" or better.

REAL 145 Real Estate Appraisal
3 UNITS
Hours: 3 Lecture/Discussion
Real Estate 145 is an introductory course in basic residential appraisal techniques emphasizing the cost, market and income approach of appraisal. This course is part of the course work necessary for the California Real Estate Broker's Examination. Advisory on Recommended Preparation: REAL 140 or equivalent college course with "C" or better.

REAL 146 Property Management 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This class is a study of the various aspects of property management as well as marketing strategies and legal issues involved in managing real property. This course is designed to fill the requirement for Real Estate Broker qualification and covers material specific to the State of California. Advisory on Recommended Preparation: REAL 140 or equivalent college course with a "C" or better.

## SOCIALSCIENCE

## SSCI 010 Intro to Women's Studies

3 UNITS
Hours: 3 Lecture/Discussion
Interdisciplinary course which introduces men and women to womens' studies and the womens' movement, including the biopsychosocial, cultural, economic and political forces which define sex and gender roles in society. Emphasis is on comparing sex and gender role socialization factors among people of different ethnicities (Asian, Afro-American, Hispanic, Latin, Caucasian, Native American, etc.).

SSCI 136 Introduction to Aging
3 UNITS
Hours: 3 Lecture/Discussion
Equivalent Course: CFS 136.
An introductory course covering topics in gerontology/aging; demographics, theories, concepts, perspectives, and research, including biophysical, psychosocial, cultural, political, and ethnic topics which impact individuals, families, and society.

## SSCI 276

America
3 UNITS
Hours: 3 Lecture/Discussion
A course in which films and discussions emphasize the interrelationship in the students' life of social, cultural, political, and economic forces in an evolutionary setting.

## SOCIOLOGY

## SOC 001 Introduction to Sociology <br> 3 UNITS <br> Hours: 3 Lecture/Discussion

An introductory course covering basic principles and concepts, including culture, personality, social inequality, institutions, population and ecology, and social change. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN SOC 2.
$\begin{array}{ll}\text { SOC } 002 & \text { Social Problems } \\ \text { Hours: } & 3 \text { UNITS }\end{array}$
Hours: 3 Lecture/Discussion
This course analyzes and explains the dynamics of many different social problems such as quality of education, the modern family, gender inequality, sexual behavior, drug use and addiction, crime and violence, ethnic relations, and the environment. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with a "C" or better or eligibility for ENGL 1 determined by COS placement procedures. CAN SOC 4.

SOC 026
Hours:
Marriage and Family Life
3 UNITS
Equivalent Course: CFS 026.
This course covers the following topics in marriage and family: dating and mateselection, communication and conflict resolution, dual career families, human sexuality, family planning, parenthood, divorce, remarriage, changing gender roles, and family economics. CAN FSC 12.

SOC 151AD Independent Study-Sociology 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

SOC 251AD Independent Study-Sociology 1-4 UNITS
Hours: 3 TO 12 Lab
Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

## SPANISH

SPAN 001 Elementary Spanish 14 UNITS
Hours: 4 Lecture/Discussion
An introductory course in understanding, speaking, reading and writing Spanish. Designed for students who are transferring to four year universities with foreign language requirements. CAN SPAN 2.
SPAN $002 \quad 4$ UNITS

Hours: 4 Lecture/Discussion
The second course in a four-course series which teaches students to communicate at a basic level in Spanish. Prerequisite may be waived with one year of high school Spanish with a "C" or better, or equivalent skills as determined by department assessment. CAN SPAN 4.
Prerequisites: SPAN 001 or equivalent college course with "C" or better.

SPAN 003 Intermediate Spanish 4 UNITS
Hours: 4 Lecture/Discussion
An intermediate course in a four-course series. It teaches students to communicate at a sophisticated level, both orally and in writing. Prerequisite may be waived with two years of high school Spanish with "C" or better, or equivalent skills as determined by departmental assessment. CAN SPAN 8.
Prerequisites: SPAN 002 or SPAN 022 or equivalent college course with "C" or better.
SPAN 004 Advanced Spanish 4 UNITS

Hours: 4 Lecture/Discussion
The most advanced course in a four-course series which teaches students to communicate fluently in Spanish. Prerequisite may be waived with three years of high school Spanish with a grade of " $C$ " or better, or equivalent skills as determined by departmental assessment. CAN SPAN 10.
Prerequisites: SPAN 003 or SPAN 023 or equivalent college course with "C" or better.

SPAN $012 \quad 3$ UNITS
Hours: 3 Lecture/Discussion
A study of Hispanic literature from the beginning of the 20th Century to the present. Prerequisite may be waived with equivalent skills determined by departmental assessment.
Prerequisites: SPAN 004 or equivalent college course with "C" or better.

## SPANISH

SPEECH

SPAN 022
Hours:
Span 2 for Bilingual Student
4 UNITS

This course is designed to improve the written and oral communication skills of Spanish-speaking students. It is equivalent to SPAN 2, although more emphasis is placed on reading and writing for the native speaker. To waive prerequisite student should have a bilingual background and one year of high school Spanish with a "C" or better.
Prerequisites: SPAN 001 or equivalent college course with "C" or better.

SPAN 023
Hours:
Span 3 for Spanish Speakers
4 UNITS
Hours: 4 Lecture/Discussion
This course is a continuation of SPAN 22. The course is for the native speakers who wish to improve their written and oral communication skills. It is equivalent to SPAN 3. Prerequisite may be waived with two years of high school Spanish with a "C" or better, or equivalent skills as determined by department assessment. Prerequisites: SPAN 022 or SPAN 002 or equivalent college course with "C" or better.

SPAN 024 Span 4 for Bilingual Student 4 UNITS
Hours: 4 Lecture/Discussion
A continuation of SPAN 23. This course is for native speakers who wish to improve their written and oral communication skills. Equivalent to SPAN 4. Advisory on Recommended Preparation: SPAN 23 or equivalent college course with "C" or better, or recommendation of the department.

SPAN 151AD Independent Study-Spanish 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

## SPAN 180 <br> Spanish Legal/Medical Terms <br> 3 UNITS

Hours: $\quad 3$ Lecture/Discussion
This course provides a foundation for translating medical and legal terminology from English to Spanish. Emphasis is placed on translating non-technical explanations of medical and legal terminology, including the fundamentals of dividing terms into their structural elements. Advisory on Recommended Preparation: SPAN 3 or SPAN 23 or equivalent college course with "C" or better, or recommendation of the department.

SPAN 251AD Independent Study-Spanish 1-4 UNITS Hours: 3 TO 12 Lab
Independent Study requires a minimum of 54 hours of academic work per unit. This course may be repeated three times. Limitation on Enrollment: Completion of all beginning level classes offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office.

| SPAN 280 | Interpreter Written Exam Prep | 1 UNIT |
| :--- | :--- | :--- |
| Hours: | 17 Lecture/Discussion |  |

This course, taught in English, assists students preparing for the written portion of the State of California Court/ Administrative/Medical Interpreter examinations for all languages. Ethics and professional requirements are covered as well as strategies for preparing for the exam.

SPAN 281AD Spanish Interpreting Skills 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This Spanish course prepares students for the State of California Exam for Court Interpreters. Instruction and practice in consecutive interpreting, sight translation, and simultaneous interpreting from Spanish to English and English to Spanish is included. This course may be repeated three times. Advisory on Recommended Preparation: SPAN 280 or equivalent college course with "C" or better, and fluency in Spanish as determined by department assessment.

SPCH 001 Fund of Public Speaking
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
SPCH 1 is an introductory course in Public Speaking. This course covers a variety of formal public address and styles and formats. This course offers students an opportunity to learn and practice specific skills needed for effective public speaking. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN SPCH 4.

SPCH $003 \quad 3$ UNITS
Hours: 3 Lecture/Discussion
Designed to introduce students to the techniques of understanding and interpreting prose, poetry and dramatic selections, as well as criticism and appreciation of oral literature. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

SPCH 004 Interpersonal Communication 3 UNITS
Hours: 3 Lecture/Discussion
Interpersonal Communication provides students with insights into their own effectiveness as a communicator and to deal with the application of effective interpersonal communication behavior in personal and professional life. Specific skills in active listening, conflict resolution perceptions, non-verbal Communications, and self-concept will be addressed. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN SPCH 8.

SPCH 005 Argumentation and Debate
3 UNITS
Hours: 3 Lecture/Discussion
An introductory course in argumentation and debate. This course covers research into, and critical analysis of, major public issues. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures; and SPCH 1 or equivalent college course with "C" or better. CAN SPCH 6.

SPCH 007 Persuasion 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course was designed to create an understanding of the constant persuasive messages that permeate modern life. While based deeply in persuasive theory, this course will also allow students to apply the material to personal and professional endeavors by direct application of the theory in the classroom and life. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures.

SPCH $008 \quad 3$ UNITS
Hours: $\quad 3$ Lecture/Discussion
SPCH 8 is an introductory course in Group Communication. The student will learn group dynamics, structures, the importance of maintaining structured agendas to complete task-oriented group discussions, and how to use substantive conflict to meet both the needs of the group and the individual group members. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with "C" or better, or eligibility for ENGL 1 determined by COS Placement Procedures. CAN SPCH 10.

SPCH $009 \quad$ Intercultural Communication 3 UNITS Hours: 3 Lecture/Discussion
This course will provide the student with an understanding of the different cultures in our country by providing an insight into the communicative behaviors each culture possesses. A variety of cultures will be studied, with specific emphasis placed on the different skills in verbal and nonverbal communication, communication climates and language interpretation of those cultures. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with " $C$ " or better, or eligibility for ENGL 1 as determined by COS placement procedures.

## SPEECH

## SPORTS MEDICINE

SPCH 112
Hours:
Public Speaking for Business
4 Lecture/Discussion
Materials Fee: $\$ 5.00$
Equivalent Course: BUS 112.
An introductory course in public speaking and presentation software. This course covers a variety of formal public speaking styles and formats. Students will also learn how to create a computerized slide show, as well as speaker outlines/notes and audience handouts to assist in their presentations. Advisory on Recommended Preparation: ENGL 251 or equivalent college course with " $C$ " or better, or eligibility for ENGL 1 determined by COS Placement Procedures. Keyboarding speed of 20 cwpm .

## SPCH 151AD Independent Study-Speech <br> 1-4 UNITS

Hours: $\quad 3$ TO 12 Lab
Independent Study. Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office to obtain approval to enroll. This course may be repeated three times.

SPCH 251AD Independent Study-Speech 1-4 UNITS
Hours: $\quad 3$ TO 12 Lab
Independent Study. Completion of all beginning level courses offered at COS or equivalent college courses in the selected subject area. In addition, students must file an Independent Study form through the Admissions and Records Office to obtain approval to enroll. This course may be repeated three times.

## SPORTS MEDICINE

$\begin{array}{ll}\text { SMED 040 } & \text { Intro to Sports Injuries } \\ \text { Hours: } & 3 \text { Lecture/Discussion }\end{array}$
1 Lab
This course partially fulfills the regulations and requirements of the National Athletic Trainers Association Certificate. The course is open and recommended for all students who have an interest in learning about sport(s) injuries and their prevention and management.

SMED 060 Concepts in Health \& Fitness 3 UNITS
Hours: $\quad 3$ Lecture/Discussion
Equivalent Course: HW 060.
An examination of recommended health practices and concerns. Emphasis is on basic understanding of critical health and fitness issues and applying these to everyday living.

SMED 150AD Practicum in Sports Medicine
2 UNITS
Hours: 1 Lecture/Discussion
4 Lab
This course partially fulfills the regulations and requirements of the National Athletic Trainers Association Certification. The course is open and recommended for all students who have an interest in learning about sport(s) injuries with emphasis on muscle testing, special tests as they relate to a given body area, as well as general body fitness testing. This course may be repeated three times. Advisory on Recommended Preparation: SMED 40 or equivalent college course with "C" or better.

## SMED 180AD Application of Rehabilitation 2 UNITS

Hours: 8 Lab
This course partially fulfills the regulations and requirements of the National Athletic Trainers Association Certification. The course is open and recommended for all students who have an interest in learning about the rehabilitation of sports injuries. Emphasis will be on the components of rehabilitation which include range of motion of a joint(s), flexibility, muscular strength, muscular endurance and proprioceptive neuromuscular techniques. This course may be repeated three times. Advisory on Recommended Preparation: SMED 40 or equivalent college course with "C" or better.

SMED 280AD Policies/Proced of Sprts Med

## 2 UNITS

Hours: 32 Lecture/Discussion
This course will cover: policies and procedures, emergency protocols, vital signs, and daily functions that are necessary for the student to work in the athletic training room. Students will develop a plan using decision-making strategies, analysis, and an awareness of the factors related to medical protocols. Students may repeat this course three times. Advisory on Recommended Preparation: SMED 40 or equivalent college course with "C" or better.

## SUPERVISEDPRACTICE

| ALL | Supervised Practice | 1-3 UNITS |
| :--- | :--- | :--- |
| SUBJECTS |  |  |
| 190AD |  |  |
| Hours: | $3-9$ Lab |  |

Under the supervision of an instruct, selected students assist and direct students in less advanced classes. This course provides experience for students interested in teaching, counseling, and other employment of volunteer situations where the student is expected to take a leadership role. Students may repeat this course three times. Limitation on Enrollment: Permission of the department.

## VETERINARY TECHNICIAN

VT 109 Intro to Veterinary Technology

3 UNITS
Hours:

## 3 Lecture/Discussion

1 Lab
An introductory course for students interested in the field of Veterinary Technology, which reviews training and career opportunities. Animal behavior, handling, training, and restraint will be thoroughly presented. Labs will provide opportunities for students to gain hands-on experience with domestic, farm and laboratory species. Formerly ASCI 109.

VT 115
Infectious Disease/Sml Animals
3 UNITS
Hours:
3 Lecture/Discussion
1 Lab
This course is designed to acquaint the student with clinical recognition, treatment, control and prevention of diseases in small animals. Common domestic animals will be the main focus with some discussion of exotic and laboratory animal species. Interpretation of and implementation of effective therapies will be stressed.

VT 116 Veterinary Office Practices 2 UNITS
Hours: $\quad 3$ Lecture/Discussion
This course is designed to teach the skills that are necessary to operate the Veterinary business office: client communications, routine vaccinations, preventative medicine procedures.

VT 117 Veterinary Terminology 3 UNITS
Hours: 3 Lecture/Discussion
A course designed to acquaint the student with veterinary medical terminology. Emphasis on anatomical, diagnostic, symptomatology, and operative terms relating to individual body systems.

| VT 118 | Comparative Anatomy/Physio | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 3 Lab |  |

This course is designed to emphasize animal structures and functions that apply to procedures commonly employed in the practice of veterinary medicine. Students will perform dissections on a variety of animal preparations.
Prerequisites: BIOL 022 and BIOL 040 and CHEM 030 and VT 109 and VT
115 and VT 116 and VT 117 or equivalent college courses with "C" or better.
Corequisites: VT 119, VT 120.

## VETERINARY TECHNICIAN

VT 119
Clinical Procedures 1
Hours:

## 3 Lecture/Discussion

3 Lab
A course designed to help the student develop the knowledge and skills required of animal health technicians in small animal veterinary practice. Lecture and laboratory sessions provide opportunities to develop skills in dispensing and administering pharmaceutical and biological products; dentistry procedures, and anesthetic monitoring. Limitation on Enrollment: Acceptance into the Veterinary Technology Program.
Prerequisites: BIOL 022 and BIOL 040 and CHEM 030 and VT 109 and VT 115 and VT 116 and VT 117 or equivalent college courses with "C" or better.
Corequisites: VT 118, VT 120.

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VT 120 Parasitology
3 UNITS
Hours: 3 Lecture/Discussion
    1 Lab
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This course will cover the types, life cycles, diagnosis and control of parasites that infect and infest domestic animals. Both internal and external parasites will be covered. Limitation on Enrollment: Acceptance into the Veterinary Technology Program.
Prerequisites: BIOL 022 and BIOL 040 and CHEM 030 and VT 109 and VT 115 and VT 116 and VT 117 or equivalent college courses with " C " or better.
Corequisites: VT 118, VT 119.

VT 121 Clinical Pathology \& Diseases
4 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
This course will cover the role of the Veterinary Technician as an aid to the Veterinarian in the diagnosis and treatment of infectious and non-infectious disease of companion animals.
Prerequisites: VT 120 or equivalent college course with "C" or better. Corequisites: VT 122, VT 123.

VT $122 \quad$ Clinical Diagnostic Imaging 3 UNITS
Hours: 3 Lecture/Discussion
2 Lab
A course designed to cover basic concepts of x-ray generation, positioning and processing techniques. Radiation safety will be emphasized throughout the course. All laboratory exercises will utilize live animal patients to demonstrate specific anatomic regions for diagnostic evaluation.
Prerequisites: VT 120 or equivalent college course with " $C$ " or better. Corequisites: VT 121, VT 123.

VT 123 Exotic Animal Care
1.5 UNITS

Hours: 1.5 Lecture/Discussion
2.5 Lab

A foundation course designed to introduce the student to basic concepts of exotic animal health care. Topics include breed identification, nutrition, principles of sanitation and disinfection, social and reproductive patterns, and common disease problems of selected species.
Prerequisites: VT 120 or equivalent college course with "C" or better. Corequisites: VT 121, VT 122.

VT 125 Clinical Procedures 2
4 UNITS
Hours: 3 Lecture/Discussion
3 Lab
A course designed to build upon the knowledge and skills developed in Clinical Procedures 1. Lecture and Laboratory sessions provide opportunities to develop more advanced skills in animal nursing. Small animal topics include electrocardiography, application of coalition casts and veterinary emergency medicine.
Prerequisites: VT 123 or equivalent college course with " $C$ " or better. Corequisites: VT 126, VT 127.

## VETERINARYTECHNICIAN

VT 126
Hours:

$$
\begin{aligned}
& \text { Large Animal Care } \\
& \text { 1.5 Lecture/Discussion } \\
& \text { 2.5 Lab }
\end{aligned}
$$

1.5 UNITS

An advanced course with emphasis on the proper care and management of the horse, cow, sheep, goat, and pig. Topics include breed identification, nutrition, husbandry, breeding, equipment identification, and treatment techniques.
Prerequisites: VT 123 or equivalent college course with " C " or better.
Corequisites: VT 125, VT 127.

VT 127 Anesthesiology \& Pharmacology
4 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
This course will provide instruction and practice in patient preparation, surgical assistance, post-operative care, administration and monitoring of various anesthetic agents and the application of various pharmacological agents used in veterinary medicine.
Prerequisites: VT 123 or equivalent college course with "C" or better. Corequisites: VT 125, VT 126.

## WELDING

WELD 105AC Basic Metalcraft Weld/Forgng
3 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
Materials Fee: $\$ 15.00$
Equivalent Course: ART 105AC.
Instruction for women and men in Metalcraft welding and forging techniques, basic tools for welded craft projects and sculpture, and construction of abstract shapes and finished sculptures. WELD 105AC can be repeated two times.

WELD 106AD Forging and Wrought Iron
2 UNITS
Hours: 2 Lecture/Discussion
1 Lab
Materials Fee: $\$ 15.00$
This course offers the student study and laboratory practices in the artistic working of metals. working hot metal from the forge and wrought iron sculpture will be covered. This course may be repeated three times. Formerly WELD 106.

WELD 161 Oxy-Acetylene Welding 4 UNITS
Hours: $\quad 3$ Lecture/Discussion

## 3 Lab

Introduction in oxy-acetylene welding, braze welding, brazing, soldering, flame spraying, and flame cutting of common ferrous and non-ferrous sheet, plate, and pipe. The safe use of apparatus and personal safety in the welding environment is taught. Properties of ferrous materials and destructive testing of welded materials complete the program.

WELD 162 Shielded Metal Arc Welding
4 UNITS
Hours: $\quad 3$ Lecture/Discussion
3 Lab
Instruction in machine flame cutting, shielded metal arc welding using E6010, E6011, E6013, E7014, and E7024 electrodes, air carbon arc cutting, weld testing, properties and identification of ferrous metals.

| WELD 171 | Advanced Welding | 4 UNITS |
| :--- | :--- | :--- |
| Hours: | 3 Lecture/Discussion |  |
|  | 3 Lab |  |

This course is a continuation for the basic concepts of science as applied to welding and non-destructive testing. Theory of electricity, magnetism, atomic structure, and thermodynamics as used by technicians.

WELD 172 Advanced Welding 4 UNITS
Hours: 3 Lecture/Discussion
3 Lab
Instruction in advanced gas tungsten arc welding, flux cored arc welding (gas shielded and self-shielded wires), modern shielding gas technology, non-ferrous filler metals, submerged arc welding, resistance spot welding, introduction to ferrous metallurgy and destructive testing of welded materials.

WELDING

WELD 173 Stainless Steel Weld/Repair 2 UNITS
Hours: 16 Lecture/Discussion
32 Lab
This course is designed to give advanced welding students training in the practice, theory, and skill of welding stainless steel. Both repair and fabrication, as well as application to sanitary tube welding and fabrication will be covered. Advisory on Recommended Preparation: WELD 172 or equivalent college course with "C" or better.

WELD 175AB Metal Working for Engineers
1.5 UNITS

Hours: 24 Lecture/Discussion
8 Lab
This course is designed to offer the engineering student the opportunity to learn the basic skills of the welder. Oxyfuel, shielded Metal Arc and Gas Metal Arc Welding basics will be covered. This course may be repeated one time.

WELD 181 Blue Print Read/Ferrous Metal 3 UNITS Hours: $\quad 3$ Lecture/Discussion
The fundamentals of blueprint reading relating to welded components and assemblies utilizing the American Welding Society weld symbol designations. Shop drawings and free hand sketches are interpreted.

## WELD 190AD Supervised Practice <br> 1-3 UNITS <br> Hours: 3 TO 9 Lab

Selected welding technology or industrial education majors to assist a certificated instructor with less advanced students. Limitation on Enrollment: Permission of Department. This course may be repeated three times.

| WELD 274 | Aluminum Welding | 2 UNITS |
| :--- | :--- | :--- |
| Hours: | 36 Lecture/Discussion |  |
|  | 18 Lab |  |

This course is designed to give advanced welding students training in the practice, theory and skill in the welding of aluminum, both repair and fabrication, as well as application to all structural shapes and levels of alloys.

## WELD 364AD Welding Upgrade Topics <br> Hours: 8 TO 24 Lecture/Discussion 16 TO 48 Lab

1-3 UNITS

Open Laboratory Experience. Welding Upgrade for Experienced Welders is an openentry and open-exit course in metals joining processes. Requires basic welding skills test to qualify student in safety procedures and shop rules. Students should contact department prior to registration. This course may be repeated three times. Limitation on Enrollment: Basic welding skills test will be administered by the department in accordance with the topics covered to qualify students in both safety procedures and shop rules.

## WORK EXPERIENCE

WEXP 191 General Work Exp - 1st Sem 1-3 UNITS Hours: $\quad 5$ TO 15 Lab
Students employed on a job that is not directly related to their college major can earn up to three units each semester for two semesters, or a maximum of six units. The students must have the approval of the Coordinator of Cooperative Education or his/ her designee and the employer must agree to evaluate the student's performance. A minimum of three Measurable Learning Objectives must be established to ensure that the student will gain worthwhile job skills/knowledge.

WEXP 192 General Work Exp - 2nd Sem 1-3 UNITS
Hours: $\quad 5$ TO 15 Lab
Students employed on a job that is not directly related to their college major may earn up to three units each semester for two semesters, or a maximum of six units. The student must have the approval of the Coordinator of Education or his/her designee and the employer must provide expanded learning opportunities which add to the student's job skills/knowledge.
Prerequisites: WEXP 191 or equivalent college course with " C " or better.

## WORK EXPERIENCE

| WEXP 193 | Work Experience - 1st Semester | 1-4 UNITS |
| :--- | :--- | :--- |
| Hours: | 5 TO 20 Lab |  |

This course is conducted to give the student occupational learning opportunities and career awareness. This is accomplished through employment (paid or volunteer) providing learning related to the student's educational or occupational goal. Limitation on Enrollment: Students must receive permission from the Coordinator of Cooperative Education or his/her designee to register.

| WEXP 194 | Work Experience -2nd Sem | 1-4 UNITS |
| :--- | :--- | :--- |
| Hours: | 5 TO 20 Lab |  |

This course is conducted to give the student occupational learning opportunities and career awareness. This is accomplished through employment (paid or volunteer) providing learning related to the student's educational or occupational goal. Limitation on Enrollment: Students must receive permission from the Coordinator of Cooperative Education of his/her designee to register.

| WEXP 195 | Work Experience - 3rd Sem | 1-4 UNITS |
| :--- | :--- | :--- |
| Hours: | 5 TO 20 Lab |  |

Hours: 5 TO 20 Lab
This third semester offering is designed for students who have opportunities to gain expanded learning beyond that experienced in Occupational Cooperative Education WEXP 193, 194. The learning opportunities must be directly related to their college major or career goal. Limitation on Enrollment: Students must receive permission of the Coordinator of Cooperative Education or a designated instructor/coordinator to enroll.

WEXP 196 Work Experience - 4th Sem 1-4 UNITS Hours: $\quad 5$ TO 20 Lab
The fourth semester of Occupational Cooperative Work Experience is limited to those who are able to establish new/expanded Measurable Learning Objectives beyond those experienced in WEXP 193, 194, 195, and on a job related to their major or career goal. Limitation on Enrollment: Student must receive permission of the Coordinator of Cooperative Education or designated instructorl coordinator.

"A leader takes people where they want to go.
A great leader takes people where they don't necessarily
want to go, but ought to be."
Rosalynn Carter

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B.A., CSU, Sacramento;
M.A., California Polytechnic University,

San Luis Obispo
GREENING, JOHN
BIOLOGICAL SCIENCES
B.A., Pomona College;
M.A., CSU, San Jose State

GREER, LISA
WORK EXPERIENCE
A.A., College of the Sequoias;
M.S.W., B.A., CSU, Fresno

GUADIANA, TERESA
COUNSELING
B.A., M.Ed., University of Arizona

HANSEN, DEBRA
PSYCHOLOGY
B.A., M.A., CSU, Fresno

HANSEN, ROBERT
BIOLOGICAL SCIENCES
B.A., M.A., CSU, Fresno

HARPER, VINETA
MATHEMATICS
M.S., CSU, Fresno

HARRIS, RICHARD
AGRICULTURE
B.S., M.S., CSU, Fresno

HART, TIM
PARALEGAL/ADMINISTRATION OF

## JUSTICE

B.A., CSU, San Jose;
M.A., Washington State University;
J.D., San Joaquin College of Law

HAYCOCK, GINA
LIBRARIAN
B.A., UC, Davis;
M.L.S., CSU, San Jose

## HESTER-REYES, MICHELE

## SPANISH

B.A., CSU, Fresno;
M.A., New York University

HETHERINGTON, ERIC

## GEOLOGY

B.A., Franklin and Marshall College; Ph.D., University of Minnesota,
Minneapolis
HOBSON, REBECCA
NUTRITION
B.A., M.A., University of Wisconsin

HODGES, SANDEE
CONSUMER/FAMILY STUDIES
A.A., College of the Sequoias;
B.A., Century University;
B.A., M.A., Pacific Oaks College

HOUK, STEPHEN
PHYSICALSCIENCE/
ENGINEERING/MATHEMATICS
B.S., University of Colorado;
M.A., Stanford University;
M.S., UC, Davis

HOUSE, JUDY
JOURNALISM
B.A., M.A., CSU, Fresno

HOWELL, DAVID
GEOGRAPHY
A.A., Long Beach City College;
B.A., CSU, Dominguez Hills;
M.A., CSU, San Diego

HOWLAND, STEVEN
ENGLISH
B.A., CSU, Fresno;
M.A., Ohio University

HURTADO, ALEC
ENVIRONMENTAL CONTROL
TECHNOLOGY
A.A., College of the Sequoias

## Faculty

INOUE, YOSHINOBU
MATHEMATICS
B.A., M.A., CSU, Fresno

## JOHNSON, CYNTHIA

## SPEECH

B.A., M.A., CSU, Fresno

JORDAN, JONI
ENGLISH
B.A., CSU, Fresno;
M.A., UC, Irvine

KEEN, CHRISTINE
MATHEMATICS
B.S., M.S. University of Pittsburgh

## KELLY, ROGER

PHYSICALEDUCATION
B.A., M.A., California Polytechnic

University, San Luis Obispo

## KING, SHERIDAN

## COUNSELING

B.A., Bennigton College;
M.A., UC, Santa Barbara

KNOX, CHRISTINA
PSYCHOLOGY
B.A., University of the Pacific;
M.S., CSU, Hayward

LAKE, CONNIE

## ENGLISH

B.A., M.A., East Tennessee

State University
LAWTON, JACQUELINE ENGLISH
A.A., College of the Sequoias;
B.A., M.A., UC, Santa Barbara

LEWIS, KATHIE
LIBRARIAN
B.A., Arizona State University;
M.A., Bringham Young University

## LILE, JANET

## NURSING

A.S.N., B.S.N., University of Tennessee; M.S.N., Vanderbilt University; Ph.D., Columbia Pacific University

LOVELESS, JAN
ENGLISH
Ph.D., Michigan State University;
M.S., Ohio State University

## LUKEHART, DENNIS

NURSING
B.S.N., CSU, Dominguez Hills;
B.S.N., Graceland College;
B.A., Fresno Pacific;
M.A., Chapman College

## LYNCH, TIMOTHY

## MUSIC

B.A., M.A., CSU, Hayward; Ph.D., University of Iowa

## MC CLURE, DARLEAN

## BUSINESS

B.A., Arizona State University;
M.A., CSU, Bakersfield

MC DONNELL, JAMES
THEATRE ARTS
B.A., DeSales University; M.F.A., University of Missouri, Kansas City

## MC GEHEE, ROBIN

SPEECH
B.A., William Carey College;
M.A., CSU, Fresno

MC GRIFF, RON
POLITICAL SCIENCE
A.A., Los Angeles Trade Technical

College; B.S., University of the State of
New York; M.A., CSU, Dominguez Hills;
Ph.D., Columbia Pacific University
MACHUCA, WAYNE
COMPUTERSCIENCE
A.S., B.S., Purdue University
M.B.A., Golden Gate University

MANCINI, JAMES
SIGN LANGUAGE
B.A., M.A., CSU, Fresno

MANGNALL, RICHARD
ENGLISH/HISTORY
B.A., M.A., CSU, Northridge;
M.A., CSU, Fresno

MARINELLI, RENEE L. MIGUEL

## BUSINESS

A.A., College of the Sequoias;
B.S., M.S., CSU, Fresno

## MARYANOW, JEFFREY

ESL/ENGLISH
B.A., Auburn University;
M.A., University of Memphis

MAUDET, MONICA
ENGLISH
A.A., College of the Sequoias;
B.A., M.A., CSU, Fresno

MAZZOLA, SUSAN
BUSINESS
B.S., California Polytechnic University, San Luis Obispo; M.S., CSU, Fresno

## MENDONCA, DAVID <br> AGRICULTURE

A.S., College of the Sequoias; B.A.,M.S., California Polytechnic University, San Luis Obispo

MORRIS, CAROL NURSING
B.S.N., CSU, Long Beach;
M.S., CSU, Dominguez Hills

MYERS, TRACY
PHYSICALEDUCATION
B.A., CSU, Fresno;
M.A., International University

NATOLI, STEVEN
HISTORY
B.S., Claremont McKenna College
M.A., Claremont Graduate School
M.A., CSU, Fullerton

NELSON, PAUL
ELECTRONICS
B.S., CSU, Fresno;
M.S., University of Wyoming

OWENS, LAWRENCE
ENGINEERING/PHYSICS
A.S., College of the Sequoias;
B.S., M.S., CSU, Fresno;

Ph.D., University of Texas, Austin
OWENS, MILLICENT
NUTRITION
B.S., CSU, Fresno;
M.A., University of Texas, Austin

PALOS, LETICIA
SPANISH
A.A., Kings River Community College;
B.A., M.A., CSU, Fresno

PANKEY, II, IRVIN
PHYSICALEDUCATION
B.S., Penn State University

PARKER, CHARLES
ENGLISH
B.A., M.A.T., Jackson State University

PETERSON, RICHARD L.
ART
B.F.A., Kansas City Art Institute;
M.F.A., Instituto Allende

PICCIUTO, KEVIN
BUSINESS
B.S., California State University, Chico; M.B.A., CSU, Fresno

Faculty

## PORTERFIELD-PYATT, CHAUMONDE

## MUSIC

A.A., College of the Sequoias;
B.S., M.A., CSU, San Francisco

PRESTON, WAYNE
BIOLOGICALSCIENCES
B.A., M.A., CSU, Fresno

RECORD, LINDA
ENGLISH
B.A., M.A., CSU, Chico

RECTOR, JOHN
BUILDING TRADES
B.A., M.S., CSU, Fresno

REDDEN,JOHN
MATHEMATICS
B.A., M.S., CSU, Northridge

REDDEN, TRACY
MATHEMATICS
B.A., M.S., CSU, Northridge

REYNOLDS, BARBARA
CONSUMER/FAMILY STUDIES
A.A., Kings River College;
B.S., Brigham Young University;
M.Ed., Idaho State University

REYNOSO, SALLY A.
PARALEGAL
A.S., College of the Sequoias;
J.D., San Joaquin College of Law, Fresno

RICO, DIANNA
COUNSELING
B.S., CSU, Fresno;
M.A., CSU, Bakersfield

ROBINSON, DAVID
ENGLISH
A.A., Grossmont College;
B.A., CSU, San Diego;
M.A., UC, Los Angeles

ROCHA, CAROLYN
NURSING
A.A., College of the Sequoias;
B.S.N., CSU, Fresno;
M.S.N., University of Phoenix

RODARTE, CATHERINE COUNSELOR
B.A., M.A, Counseling, CSU, Fresno

ROLLINGER, JEANETTE
BIOLOGICALSCIENCES
B.A., UC, Santa Barbara;

Ph.D., UC, Santa Cruz
ROSE, DON
MATHEMATICS
B.S., M.S., CSU, Hayward

RUEGER,ROSS
MATHEMATICS
B.S., UC, Riverside;
M.A., UC, Los Angeles

RUIZ, RON
HISTORY
B.A., CSU, Fresno; M.A., CSU, San Diego

RUSH, ELAINE
ENGLISH
B.A., M.A., CSU, Fresno

## SADEH, SHIRIN

PHYSICS/MATHEMATICS
B.S., State University of New York;
M.S., Syracuse University

SCHNEIDER,NANCY
NURSING
B.S., University of Colorado;
M.A., Boston University

SEAWARD, JEFFERY
VOCAL MUSIC
B.A., M.A., CSU, Fresno

SELLERS, JAMES
BIOLOGICALSCIENCES
B.A., M.A., CSU, Fresno;

Ph.D., University of Southern California
SENSE, ED
ENGLISH
B.A., CSU, Bakersfield;
M.A., CSU, Fresno

SHELLY, DANIEL
CHEMISTRY
B.A., M.A., CSU, Fresno

SHUMAN, MICHAEL
COUNSELING
B.A., M.S., CSU, Fresno

SILVA, DIANE
SOCIOLOGY
B.A., College of St. Benedict;
M.A., CSU, Sacramento;
M.S.W., CSU, Fresno

SKAFF, MICHAEL
BUSINESS
B.A., M.B.A., California Polytechnic

University, San Luis Obispo
SMITH, RUSSELL
PHYSICALEDUCATION
B.A., M.A., CSU, Northridge

SPENCER, JANELL
ACCOUNTING/BUSINESS
MANAGEMENT
A.A., College of the Sequoias; B.A., Fresno Pacific University; M.B.A., National University

STAVA, SHERRY
NURSING
B.S., CSU, Fresno

STRAW, MARIE

## CHEMISTRY

B.A., San Francisco College for Women; M.S., St. Louis University

SWISEGOOD, GAILERD
HUMANSERVICES
B.A., CSU, Stanislaus; M.A., CSU, Fresno

TEBEAU,FRANK
AGRICULTURE/WELDING
TECHNOLOGY
A.S., College of the Sequoias;
B.S., CSU, Fresno

TIDWELL, PAUL
ENGLISH
B.S., Humboldt State University

TOM, MARK
MATHEMATICS
B.A., CSU, Fresno;
M.A., UC, Santa Barbara

TRIMBLE, DOROTHEA
BIOLOGICALSCIENCES
B.S., M.A., UC, Davis;

Ph.D., University of Iowa
TURK, MARVIN
COUNSELING
A.A., American River College;
B.A., University of Montana;
M.S., CSU, Sacramento

TURNER, GREG
ENGLISH
A.A., College of the Sequoias;
B.A., M.A., CSU, Fresno

VASQUEZ, ROBERT
ENGLISH
B.A., CSU, Fresno;
M.F.A., UC, Irvine

VIDALES, VERONICA
SPANISH
B.A., M.A., CSU, Fresno

WATTE, MARY
ENGLISH/FRENCH
B.A., UC, Santa Barbara;
M.A., CSU, Fresno

WEISE, THOMAS

## SPEECH

A.A., Fresno City College;
B.A., M.A., CSU, Fresno;

Ed.D., UC, Davis

## Faculty

WHEELER, NORA
MATHEMATICS
B.S., M.S., CSU, San Luis Obispo

WILLIAMS, ANNA
COUNSELING
B.S., UC, San Francisco;
M.A., CSU, Fresno

WILLIAMS, SCOTT
INDUSTRIALENGINEERING
B.S., CSU, Fresno

WINTERTON, JOHN
ELECTRONICS
A.S., College of the Sequoias;
B.S., M.A., CSU, Fresno

WOODALL, JANET
NURSING
M.S.N., Consortium of the California State

University at Long Beach
WOODBURY,GEORGE
MATHEMATICS
B.S., U.C. Santa Barbara;
M.S., CSU, Northridge

WREN, HOWARD
COUNSELING
A.A., Sacramento City College;
B.A., UC, Davis;
M.S., CSU, Sacramento

YAMAKAWA, LINDA
LIBRARIAN
A.A., Kings River College;
B.A., M.A., CSU, San Jose State

ADAMS, DAVID
Dean, Facilites \& Operations
1975-2001
ANDERSON, VERNON
Sociology, 1957-1992
ANTHONY, BETTY
Home Economics, 1964-1989
AUDINO, SUSAN
Home Economics, 1971-2002
BADVAGANIAN, DENNIS
Business, 1990-2003
BARBA, JOSEPH
English, 1962-1993
BARRANGER, JOHN
English, 1990-2003
BARTON, JAMES
Mathematics, 1969-1992
BEARDEN, ALIA
Physical Education, 1957-1981
BECK, FRANK
Social Sciences, 1975-2002
BENNETT, LES
Metals Technology, 1967-1988
BERG LEROY
Vice President, Evening College, 1962-1984

BETTENCOURT, BILL
Vice President, Academic Services; Dean, Student Services
1967-1999
BIVONA, MIKE
Social Sciences, 1970-2004
BLACK, CHERYL
Nursing, 1975-2003
BLACK, ELLSWORTH
Nursing, 1980-2002
BLACK, SHARON
Counseling, 1984-2003
BOCKMAN, DAVID
Academic Dean
1977-2002
BRANCO, ALLEN
Athletics Director
1969-2001
BRICKER, JOHN
History, 1956-1981

## Emeritus Faculty

BRUNNER, ILA JUNE
Nursing
1975-1997
BROYLES, KEN
Automotive Technology,
1974-1993
BUYUKLIAN, HARRY
Fine Arts, 1977-1989
CABRERA, TONY
French, 1962-1977
CHILDS, WOODROW
English, 1972-2001
COLE, JAMES
Psychology, 1968-1996
CONLEY, RICHARD
Work Experience/Business
1968-1996
COTTRELL, RICHARD
Architecture, 1960-1990
CRAIN, JOHN
Geology/Mathematics
1970-1997
DECKER, IRVING
Social Sciences, 1972-2002
DECKER, WILLIAM
English, 1965-1996
DOWNES, WILLIARD
Agriculture, 1976-2003
DUNN, GENE
Building Trades,
ENSIGN, PAT
Nursing, 1975-1983 and
1987-1991
ERICKSON, DAVID
Vice President, Administrative Services 1990-2001

ESSEX, WILFRID
Chemistry, 1955-1984
FERGUSON, ELIZABETH
English, 1949-1983
FINNEY, NANCY
Librarian, 1980-2002
FIRSTMAN, ARANGA
Biological Sciences,
1974-2003
FISCHER, CURT
History/Anthropology, 1955-1984

FLAHERTY, MICHAEL
Vice President, Administrative Services; Business, 1966-1990

FLATTLEY, MERLE
Physical Education, 1973-1991
FLY, JOHN
Building Trades, 1961-1984
FOTIAS, CRISTOS
Spanish, 1949-1983
FREEBORN, NORMA
Nursing, 1981-2002
FRIEDBERG, MARY NORA
Consumer/Family Studies, 1960-1993

GILCREST, THOMAS
Athletics/PE/Counseling, 1963-1996

GIVAN, CAROLYN
English/Counseling, 1959-1978
GLASS, JENNY
Dean, Human Resources
Business
1974-2004
GODDARD, DON
Music
1990-1997
GRUMBLING, BETTY
English, 1970-1988
GRUMBLING, HENRY
Photography, 1962-1988
HALL, GERRY
Business, 1959-1982
HALL, LINCOLN
Superintendent/President; Vice President, Instruction, 1957-1981
and 1984-1991
HALL, MARCY
Consumer/Family Studies,
1969-1993
HALL, ROBERT
English, 1963-1991
HAMILTON, DONNA
Early Childhood Education, 1977-1996

HAMILTON, RICHARD
English/Journalism, 1963-1990
HAMILTON, WILLIAM
Psychology, 1969-1996

## Emeritus Faculty

HARNER, RUTH
Business, 1967-1992
HAYS, RONALD
Dean, Financial Aid, 1979-2004
HEATER, MARGARET ANN
Librarian, 1975-1993
HETTICK, LARRIMORE
English, 1965-1996
HOFER, EUGENE
Physical Education, 1967-2001
HOFER, FAYRENE
Business, 1980-1996
HOMAN, RALPH
Art1964-1997
HOLT, BERT
Physical Education, 1965-1988
HOWLAND, GARY
Mathematics, 1967-2003
HUDDLESTON, LAUNA
Business, 1966-1992
ISBELL, NORM
Agriculture
1984-1997
JACKSON, SARAH
Nursing, 1981-1996
JACOBSEN, RICHARD
Vice President, Business Services, 1957-1984

JENSEN, BRUCE
Agriculture, 1949-1984
JOHNSON, NANCY
Nursing, 1973-1996
JOHNSON, NOBLE
Theater Arts, 1962-2000
JONES, PAUL
Theater Arts, 1977-2004
JUSTUS, LOIS
Nursing, 1970-1993
KENNEDY, LINDA
Business, 1993-2003
KENNEDY, ROY
Business, 1981-2003
KENT, CONSTANCE
English, 1988-2003

KILER, FRANK
Metals Technology, 1948-1974
KITCHEL, PAULETTE
Child Development, 1988-2004
KLEINFELTER, DALE
Chemistry, 1963-1990
KRUMDICK, VICTOR
Health/P.E./Athletics,1963-1996
LANG, ANNIE
Mathematics, 1969-1977
LAWHORN, FRANK
Agriculture, 1957-1983
LEWIS, REX
Business, 1960-1993

## LOYD, RAY

Architecture/Drafting Technology, 1979-2004

MC CORMICK-MIRANDA, ANNE Home Economics, 1966-1984

MADDOX, GENE
Art, 1969-2004
MALDONADO-ARROYO, CELIA
Associate Dean, Student Services (EOPS)

MANNON, KIRBY
Physical Education, 1973-2003

MARCELLUS, ROBERT
Fine Arts, 1966-1984
MARTIN, FRED
Biological Sciences, 1965-1992
MARTIN, NOEL
History, 1959-1984
MIRVISS, LYNN
Nursing/Administration
1971-1998
MORRISON, MILT
English, 1990-2004
MORSE, GEORGE
English, 1965-1984
NEELEY, DOROTHY
Business, 1981-1993
PAPPAS, GEORGE
Speech/Drama, 1955-1984
PARKER, ALLEN
Chemistry, 1957-1989

PARKER, GEORGELLEN
Counseling, 1983-2003
PARLIER, JASPER
Automotive Technology, 1968-1993

PETERSON, WAINO
Political Science, 1965-1996
PIETROFORE, AL
Fine Arts, 1957-1984
POWELL, GEORGE
Building Trades/Math
1984-1997
ROBERTSON, GLEN
English, 1957-1983
RYAN-STARMER, BEA
Business, 1977-1996
SARTAIN, ROBERT
Engineering, 1966-1999
SEASTROM, GREG
English, 1968-1996
SCOFIELD, JAMES
Geography/Meteorology, 1967-1988

SHARPLES, DIANNE
Academic Dean,1970-2003
SHEWEY, JEAN
Physical Education, 1959-1984
SHIRK, RICHARD
Building Trades, 1975-2004
SILVA, VERNON
Dean, Student Services, 1957-1983

SINDLINGER, AL
Metals Technology, 1961-1990
SMITH, ELAINE
Chemistry, 1979-2002
STRONG, BARBARA
Art, 1973-2003
SWANSON, BETTY
Nursing, 1971-1978
SWEENEY, ALBERT
English, 1963-1984
SWISHER, JAMES
Mathematics, 1959-1984

## Faculty and Administrators

## Emeritus Faculty

TAYLOR, ROY
Physical Education, 1950-1984

THEIGE, JACK
Information Services, 1960-1989

TOMASEVICH, ROBERT
Agriculture, 1971-1984
VANE, R.L.
Social Sciences, 1965-1980
VIEIRA, DONALD
Agriculture, 1965-1996
WALKER, LEWIS
Librarian, 1965-1984
WEAVER, ARLENE
Nursing, 1979-1988
WEST, VERNON
Welding/English, 1976-1990
WESTON, DUANE
Music, 1975-1990
WICKMAN, GAYLE
Nursing, 1974-1993

"Well done is better than well said."
Benjamin Franklin

## A

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Law Enforcement(Advanced Officer) ..... 150
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[^1]:    * For students transferring to UC in Fall 1998 and later ALL college courses used to clear Subject Requirement deficiencies must be transferable and must be completed with a grade of "C" or better.

[^2]:    *Note: This certificate/major is going through curriculum changes. Please contact the Vocational Education Office before enrolling in classes for this certificate/major. Vocational Education Office: (559) 730-3710.

[^3]:    Please note: Most fire agencies in California require completion of a Fire fighter 1 Academy and completion of EMT training as minimum qualifications to compete infire departmententrance examinations. Additional education, such as a Vocational Education Certificate or Associates degree is recommended.

[^4]:    ** ART 25A, and COMP 135 or COMP 229 can be used for General Education.

[^5]:    * Fluency in Spanish as determined by departmental assessment.
    ** Recommended introductory class taught in English for all languages

[^6]:    ** MATH 200 requirement may be waived if student is eligible for MATH 230 as determined by COS placement procedures.

[^7]:    Legal Career Ladder at College of the Sequoias
    One Semester: Law Office Clerk/Receptionist
    Two Semesters: Legal Secretary
    Three or four Semesters: Paralegal Degree/Certificate - Approved by the American Bar Association.

