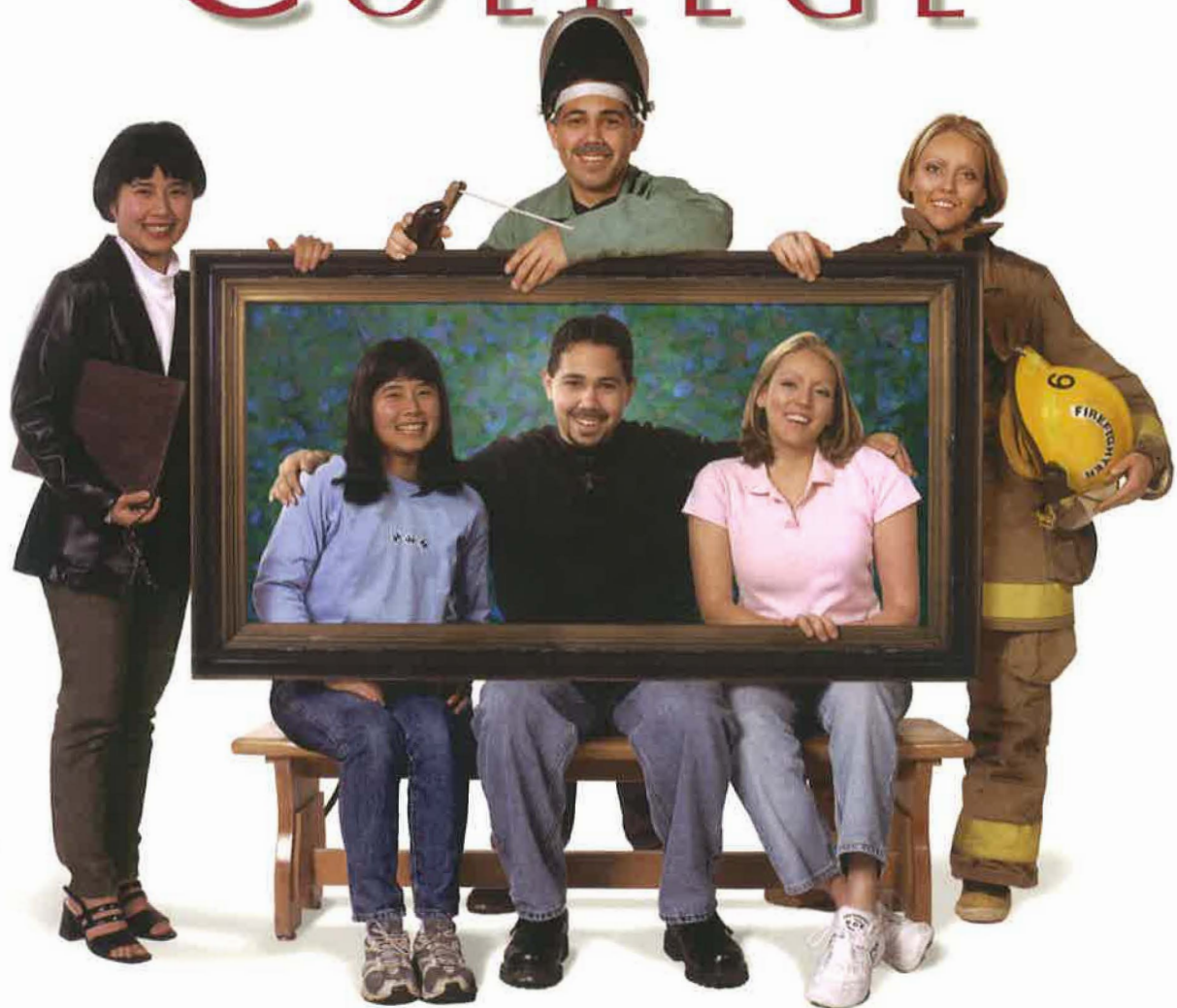


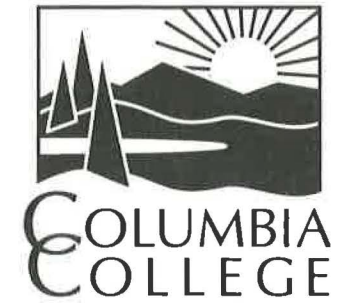
# COLUMBIA COLLEGE



*Educating Today's Students  
For Tomorrow's Careers!*

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2 0 0 2 - 0 3 C A T A L O G



# CATALOG

## 2002-03

11600 Columbia College Drive  
Sonora, California 95370  
209.588.5100

Website: [www.gocolumbia.org](http://www.gocolumbia.org)

Yosemite Community College District

**Disclaimer:** *The Yosemite Community College District and Columbia College have made every reasonable effort to determine that everything 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 Yosemite Community College District or Columbia College for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the District and the College. The District and the College further reserve the right to add, amend, or repeal any of their rules, regulations, policies and procedures.*

**All phone numbers listed are in the 209 area code except as noted.**



# Columbia College Commitment

The staff of Columbia College is committed to providing the highest quality educational programs and services. As part of that commitment, we make the following pledge to the students and community we serve:

We believe that the individual student is the cornerstone of the college and that each has unique talents, interests, needs and strengths. Because individual students learn in different ways and at different rates, we remain flexible in our teaching methods to encourage each student's greatest potential.

We emphasize how to think rather than what to think. Critical inquiry and creative problem-solving are incorporated in all appropriate courses and activities. Creativity, imagination and innovation are encouraged and supported.

We support the process of continuous learning and meaningful change. Our general education program will help students to redefine their goals and aspirations as they change.

We realize that classroom time is only one aspect of the student's education and only one of our responsibilities. We promote support activities, such as counseling, advising, and tutoring which contribute to one's growth.

Because we believe each student grows with participation in the teaching-learning process, we encourage students to be active participants and contributors throughout college life in areas of their own choosing.

We will maintain a balance between individual rights and social responsibilities in our relationships with our students and the community we serve. Respect for the individual will be maintained in all situations. We will not allow personal biases to affect our teaching, grading, or treatment of an individual or group.

We find student government to be best when it is involved in meaningful issues within the college community. Student government is informed of

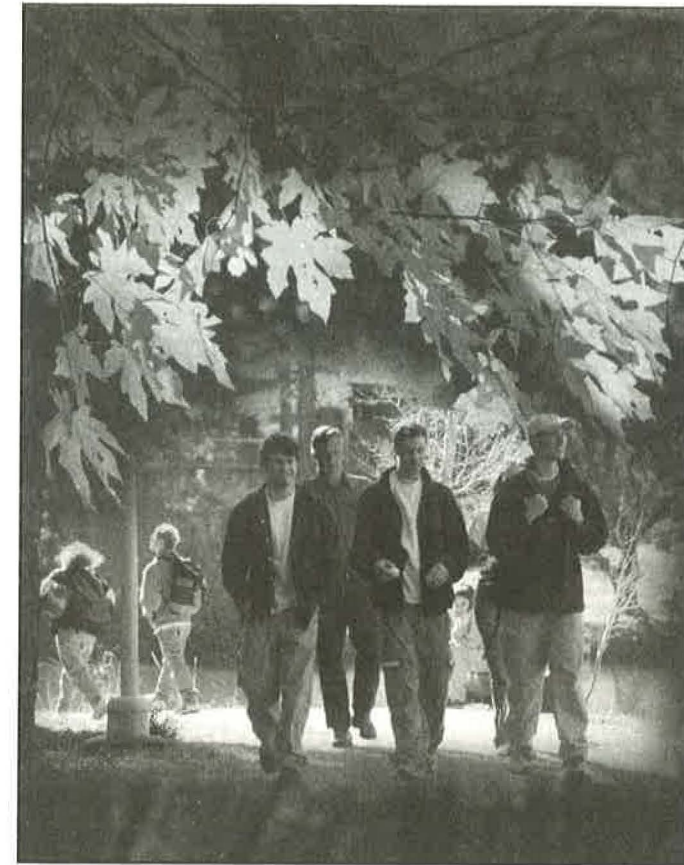
college concerns, activities, and issues. Its involvement is an important part of the decision-making process.

We will maintain the comprehensive nature of the community college. A broad general education and a variety of majors are offered. Academic, vocational, basic skills, and continuing education are offered in response to the needs of the community.

We will be specific in the course content, grading practices and attendance requirements for each course. These expectations are clearly communicated in the orientation to each course. Students are held responsible for meeting college standards and are graded according to their performance. We are available to assist each student's studies beyond the classroom. Posted office hours are maintained, and additional time will be made available by mutual agreement between the student and staff.

We will constantly evaluate the college curriculum for academic, vocational and community needs. Formal agreements with high schools and universities assure transfer students a smooth transition from high school to the state colleges and university system through our institution. Community advisory committees are consulted to make certain our vocational subjects are training for the job market, and our community services and continuing education classes are meeting local needs.

Finally, we believe that if the student recognizes the commitment that Columbia College has made and the student is willing to give to the college in return, the student's education will be positive, enjoyable and provide a lasting foundation for continued growth.



## TABLE of CONTENTS

General Information .....	6
Student Services .....	9
Academic Policies and Procedures .....	17
Certificates of Achievement .....	28
Graduation and Transfer Requirements .....	36
UC/CSU Transfer Information .....	39
Majors .....	43
Course Descriptions .....	65
Two-Year Course Offerings .....	118
College and District Staff .....	122
Index .....	125

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## Columbia College 2002-03 Academic Calendar

### Fall Semester 2002

- July 25 ..... DSP&S/EOP&S Touch-tone Telephone or Online Registration by Appointment Only
- July 29 - Aug. 8 ... Continuing Students, Touch-tone Telephone or Online Registration by Appointment Only
- August 12 & 13 ... Newly Matriculated Students, Touch-tone Telephone or Online Registration or on Campus (By appointment only) Campus closed August 16 and August 23.
- August 14-30 ..... All Students - Open Registration by Touch-tone Telephone or Online or on Campus (No appointment required)
- September 3 ..... Instruction Begins
- \* September 6 ..... Last day to enter a full semester class without instructor's signature
- \* September 13 ..... Last Day to Apply for a Refund
- \* September 27 ..... Last Day to Withdraw Without a "W" Showing on Permanent Record
- October 1 ..... Deadline for Filing for Graduation and Certificates for Spring 2003
- \* October 3 ..... Last Day to Elect for CR/NC Grading
- November 11 ..... Veteran's Day Holiday
- \* November 22 ..... Last Day to Withdraw From Any Course
- November 27 ..... No Evening Classes
- November 28-29 . Thanksgiving Holiday
- December 16-20 . Final Examinations
- December 20 ..... Fall Semester Ends
- Dec. 23 - Jan. 3 ... Winter Recess

### Spring Semester 2003

- Nov. 25 ..... DSP&S/EOP&S Touch-tone Telephone or Online Registration by Appointment Only
- Nov. 26 - 27 ..... Continuing students, Touch-tone Telephone or Online Registration by Appointment Only
- Dec. 2-11 ..... Continuing students, Touch-tone Telephone or Online Registration by Appointment Only
- Dec. 12 & 13 ..... Newly matriculated, Touch-tone Telephone or Online Registration by Appointment Only
- Dec. 16-20 ..... All students - Open registration by Touch-tone Telephone or Online Registration or on campus
- Dec. 21 - Jan. 3 ..... All students - Open registration Touch-tone Telephone or Online Registration
- Jan. 6 ..... Instruction Begins
- \*Jan. 10 ..... Last day to enter a full semester class without instructor approval

\* These dates apply to semester length classes only. Contact Admissions & Records for specific short course deadlines.

- Jan. 20 ..... Martin Luther King holiday
- \*Jan. 17 ..... Last day to apply for refund
- \*Jan. 31 ..... Last day to withdraw without a "W" showing on permanent record
- \*Feb. 4 ..... Last day to elect for CR/NC grading
- Feb. 14 ..... Lincoln Day holiday
- Feb. 17 ..... Washington Day holiday
- Feb. 28 ..... Deadline for filing for graduation and certificates for Fall 2003
- \*March 28 ..... Last day to withdraw from any course
- April 21-25 ..... Final Examinations
- April 25 ..... Spring Semester Ends
- April 25 ..... Graduation

### First Summer Session 2003

- April 1-May 2 ..... Registration Touch-tone Telephone, Online or on campus (touchtone phone and online only on Saturdays, Sundays and Holidays)
- May 5 ..... Instruction Begins
- \*May 7 ..... Last day to apply for refund
- \*May 13 ..... Last day to withdraw without a "W" showing on permanent record
- \*May 13 ..... Last day to Apply for CR/NC grading
- May 26 ..... Memorial Day Holiday
- \*May 28 ..... Last day to withdraw from any course
- June 6 ..... First Summer Session Ends

### Second Summer Session 2003

- Apr. 1-June 6 ..... Registration - Touch-tone Telephone, Online or on campus (phone only on Saturdays, Sundays & Holidays)
- June 9 ..... Instruction Begins
- \*June 11 ..... Last day to apply for refund
- \*June 17 ..... Last day to withdraw without a "W" showing on permanent record
- \*June 17 ..... Last day to elect for CR/NC grading
- \*July 2 ..... Last day to withdraw from any course
- July 4 ..... Independence Day Holiday
- July 11 ..... Second Summer Session Ends

### Third Summer Session 2003

- April 1-July 11 ..... Registration Touch-tone Telephone, Online or on campus (touchtone phone and online only on Saturdays, Sundays and Holidays)
- July 14 ..... Instruction Begins
- \*July 16 ..... Last day to apply for refund
- \*July 22 ..... Last day to withdraw without a "W" showing on permanent record
- \*July 22 ..... Last day to Apply for CR/NC grading
- \*August 5 ..... Last day to withdraw from any course
- August 15 ..... Third Summer Session Ends

Flex Day
In-Service/Flex
Classes Begin
Holiday
Finals
Last Day of Semester
No Classes/Offices Closed
No Classes/Offices Open

- Aug. 29 Inservice/Flex
- Aug. 30 Flex Day

- Sept. 2 Labor Day
- Sept. 3 Fall Classes Begin
- Sept. 6 Last Day to Add a Class without Instructor Approval
- Sept. 27 No Penalty Drop

- Nov. 11 Veteran's Day
- Nov. 22 Last Day to Withdraw
- Nov. 27 No Evening Classes
- Nov. 28-30 Thanksgiving break

- Dec. 16-20 Finals Week
- Dec. 20 Fall Classes End
- Dec. 25 Winter Holiday
- Dec. 21-31 Winter Break

#### May

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

- May 1-2 No Classes/Offices Open
- May 5 Summer Classes Begin
- May 26 Memorial Day Holiday

## Columbia College 2002-03 Academic Calendar

2002

### August

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
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18	19	20	21	22	23	24
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### September

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29	30					

### October

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27	28	29	30	31		

### November

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### December

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22	23	24	25	26	27	28
29	30	31				

### 2003 Summer Session

#### May

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				1	2	3
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11	12	13	14	15	16	17
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#### June

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29	30					

#### July

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27	28	29	30	31		

#### August

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17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

- July 4 Independence Day Holiday
- August 15 Summer Classes End

2003

### January

S	M	T	W	T	F	S
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

### February

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16	17	18	19	20	21	22
23	24	25	26	27	28	

### March

S	M	T	W	T	F	S
						1
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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

### April

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

- Jan. 1-3 Winter Recess
- Jan. 2 Inservice/Flex
- Jan. 3 Flex Day
- Jan. 6 Spring Classes begin
- Jan. 10 Last Day to Add without Instructor Approval
- Jan. 20 Martin Luther King Day
- Jan. 31 No Penalty Drop

- Feb. 14 Lincoln's Birthday
- Feb. 17 Washington's Birthday

- March 28 Last Day to Withdraw

- April 21-25 Finals
- April 25 Spring Classes End/Graduation
- April 28-30 No Classes/Offices open



# GENERAL INFORMATION

## Columbia College

Columbia College is a dynamic institution of learners and creative thinkers dedicated to high standards of student success achieved through a balanced program of academic, vocational and community education, and committed to cultural enrichment and economic development. Columbia College is a public community college located in the foothills of the Sierra Nevada and the heart of California's Gold Country. Over 200 acres of forest land adjacent to Columbia State Historic Park provide an idyllic backdrop for this rural campus, which has often been described as one of the most beautiful in the state. With a variety of natural wonders nearby, the College is ideally situated for outdoor recreational activities through all four seasons of the year. Total enrollments and class sizes are such that faculty can interact with every student on an individual basis in an informal, friendly atmosphere. A wide variety of staff support services is also readily available to serve students. By virtue of its natural setting, small size, and dedicated staff, the College is not only committed to, but capable of, providing an excellent education in an environment that encourages learning.

## Statement of Mission

Columbia College cultivates a balanced of high quality academic, vocational, cultural, and community education programs and is committed to facilitating economic development within our community. Support services assist students and other community members with access and success. We encourage excellence, creative thinking, and a zest for learning.

Students at Columbia College will find a staff that promotes personal growth and transformation. This college furthers the mission of Yosemite Community College District by serving the educational needs of the local community with imagination in a rich, natural environment. We celebrate the diversity of our students as we help dreams come true and encourage new ones.

## Background

Columbia College and Modesto Junior College are the two community colleges located in the Yosemite Community College District. The former Modesto Junior College District was expanded into the larger Yosemite Community College District in 1964 by action of the district electorate, making it one of the largest districts in the state geographically. It covers more than 100 miles of the fertile San Joaquin Valley from the coast range on the west to the Sierra Nevada on the east. Boundaries include nearly 4,000 square miles encompassing all of Tuolumne and Stanislaus Counties and parts of San Joaquin, Merced, Calaveras and Santa Clara Counties.

Due to increasing student enrollment, the need for greater educational opportunities in the mountain counties, and the great distance involved in travel for students to attend Modesto Junior College, the Yosemite Community College District Board of Trustees authorized the formation

of Columbia Junior College. The College opened in September 1968. The word "Junior" was dropped its name in 1978. Originally on the quarter system, Columbia College changed to the semester system on July 1, 1984.

## Main Campus and Facilities

Campus buildings are situated around the San Diego Reservoir and designed to be in harmony with the surrounding forest. In this picturesque setting, the College is committed to a comprehensive program of academic and occupational education which focuses on the worth and dignity of each student.

## Calaveras Center 736.5940

Located at the Glory Hole Shopping Center at 2892 Suite 4 Highway 49 Angels Camp; the Calaveras Center is an extension of Columbia College offering courses and services to the Calaveras community. Course offerings include computer classes in our "state of the arts" computer lab, general education and transfer classes, GED preparation, Community Education, and Workforce and Economic Development training courses.

### Student services available at the Calaveras Center:

- Registration for all Columbia College Classes
- Admissions & Records functions
- Business Services functions
- Counseling Services
- Book sales for Calaveras classes

## Athletics

Columbia College is a member of the Central Valley Conference. At the current time the college sponsors two competitive sports, women's volleyball and men's basketball. Second year eligibility is based on completion of 24 units and a cumulative 2.0 G.P.A. in the first year.

## Child Care Center

The Columbia College Child Development Center opened its doors on campus for Spring 1991, providing child care for preschool and kindergarten children of students and staff. In the Fall of 1998, new toddler classrooms were added to provide care for children 18-36 months. The centers serve as a laboratory for students in the College's Child Development instructional program.

## Library

The Columbia College Library is a center for study, class research, and leisure reading, and welcomes use by students, staff and community residents. The Library's collections include nearly 35,000 books, current subscriptions to 300 magazines and six newspapers, pamphlets, maps and art prints and a variety of electronic databases including

full-text magazines and journals, encyclopedias, statistics and other reference sources. Available in the Audio-Visual Department are nearly 4,000 audio and video tapes of popular, folk, and classical music, local oral history, and a wide variety of other topics as well as calculators and slide-tape kits. A schedule of loan periods and overdue charges is posted in the library. A typing room with typewriters and personal computers is open for use during Library hours. Photocopying can be done on a coin-operated machine in the Library.

The Library can locate and borrow Interlibrary Loan materials not in the College Library. As a member of the Central Association of Libraries, the Library has quick access to the collections of more than 50 libraries. This service is available to students, community residents, and college staff.

The Library is open when the College is in session Monday through Thursday 7:45 a.m. to 8 p.m., and on Friday, 7:45 a.m. to 4:30 p.m. It is closed weekends and school holidays.

## Accreditation

Columbia College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, 3402 Mendocino Avenue, Santa Rosa, CA 95403, 707.569.9177, an institutional accrediting body recognized by the Commission on Recognition of Post-secondary Accreditation and the U.S. Department of Education.

The College is listed in directories of the United States Office of Education, the American Council on Education, and the Western Association of Schools and Colleges.

Appropriate lower division courses completed at Columbia College will be accepted with full credit upon transfer to California State Universities and other four-year educational institutions.

## College Functions

Columbia College is committed to meeting the post-secondary educational needs of the community through the following functions. Students may earn an Associate Degree or Vocational Certificate or both upon completion of specific requirements outlined in this catalog.

### • General Education

To provide programs in the Humanities, Natural Sciences, Social Sciences and Physical Education to satisfy requirements for transfer to upper division institutions; to develop the knowledge and skills, attitudes and values that characterize responsible citizenship; to offer intellectual and cultural enrichment; and to promote mental and physical well-being.

### • Vocational Education

To provide courses and programs to prepare students directly for employment, to update skills and knowledge, to meet the specialized training needs of the local community, and to facilitate transfer to other post-secondary institutions.

### • Remedial Education

To assist the student in acquiring those basic competencies needed for effective participation in other College programs.

### • Student Services

To provide comprehensive support services designed to facilitate student access to the College; to assist students in educational and career planning; and to help ensure successful completion of their personal goals.

### • Community Services

To serve the educational and cultural needs of the community at large by offering non-credit and fee-funded courses and self-supporting cultural activities and events; by making College facilities available to community groups; and by providing information regarding College programs, personnel and activities to the media and general public.

## High School Equivalency Diploma (G.E.D.)

Columbia College serves as an official General Educational Development Testing Center and provides the opportunity to obtain the G.E.D. Diploma. For information call 588.5312.

## Open Class Policy

Unless specifically exempted from statute, every course, course section, or class, the average daily attendance of which is to be reported for State aid, is open to enrollment and participation by any person who has met the eligibility requirements for admission to the College and who meets such prerequisites as may be established. Exception to this policy will be made where health, safety, legal requirements, or the facility is a limiting factor in the conduct of the course. Students denied enrollment by this policy may appeal to the Vice President of Student Services.

## Non-Discrimination

In compliance with Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, Americans with Disabilities Act of 1990 (ADA), and the Age Discrimination Act of 1975, Columbia College does not discriminate on the basis of race, color, national origin, sex, disability, or age in its educational programs or employment. Inquiries concerning the application of the above Federal laws to programs or activities of the College may be directed to the following persons at Columbia College, 11600 Columbia College Drive, Sonoma, CA 95370-8580.

Es la regla del Yosemite Community College District no negar al estudiante acceso a ningún servicio, curso o actividad en base de raza, credo, nacionalidad, edad, sexo o impedimento. La falta del idioma inglés tampoco será un obstáculo para la matriculación.

(It is the policy of the Yosemite Community College District that no student shall be denied access to any course, service or activity on the basis of race, creed, national origin, age, sex, or disability. Lack of English language skills will not be a barrier to enrollment.)



Title IX: George Railey, Jr.  
Athletic Director  
588.5143

Section 504: Paul Lockman  
Dean of Special Programs  
588.5132

ADA: Larry Steuben  
ADA Coordinator  
588.5120

### Sexual Harassment Policy

It is the policy of the Yosemite Community College District (*Policy 5028*) to provide an environment free of unlawful discrimination in its programs, activities and work environment. Sexual harassment is a form of unlawful sexual discrimination and will not be tolerated by the District. Unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature constitute sexual harassment and includes:

- 1) submission to conduct which is explicitly or implicitly made a term or a condition of an individual's employment, academic status, or progress;
- 2) submission to, or rejection of, conduct by an individual which is used as the basis of an employment or academic decision affecting the individual or has the purpose or effect of having a negative impact upon the individual's work or academic performance, or of creating an intimidating, hostile, or offensive work or educational environment; and
- 3) submission to, or rejection of, conduct by the individual which is used as the basis for any decision affecting the individual regarding benefits and services, honors, programs, or activities available at or through the educational institution. (*Education Code Section 212.5*)



The District strongly forbids any form of sexual harassment, including acts of non-employees. Disciplinary action will be taken promptly against any student or employee, supervisory or otherwise, engaging in sexual harassment.

### Drug and Alcohol Policy

Yosemite Community College District policy 4019 states that the District is committed to maintaining a drug and alcohol free workplace in accordance with the requirements of the U.S. Drug-Free Workplace Act of 1988.

### Confidentiality of Student Records

Responsibility for student records rests with the Admissions & Records Office. However, each college agency which houses student records is charged with maintaining privacy and access according to College policy. In addition, student information is maintained under the Director of Accounting/Administrative Services (student financial responsibility), Vice President of Student Services (financial aid, counseling materials, placement data), and Vice President of Instruction (apprenticeship, community services, work experience).

Student information designated as public directory information may be released at the discretion of the College to anyone at any time unless the College has received a prior written objection from the student. A form is available in the Admissions & Records Office. Columbia College will not release directory information for individual use or to private business or commercial firms for use in advertising or publicity. Directory information includes the student's name, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and student's photograph in relation to campus-sponsored activities. The District's policies and procedures regarding student records are currently under review.

A student's records are open to the student, employees of the College acting in the course of their duties, and State and Federal officials as defined in Sections 54610 and 54522 of the California Administrative Code.

The College may grant access to individual student records for educational or emergency purposes and for court orders as permitted in Sections 54620 and 54622 of the California Administrative Code.

Students may ordinarily review their records at any time during working hours. Under any circumstances, the College will make records available within five to ten working days of a student's written request.

# STUDENT SERVICES

## ADMISSIONS

### Eligibility

Graduates of accredited high schools, persons holding a high school Certificate of Proficiency, or those persons 18 years of age or older who are able to profit from instruction and meet the residence requirement are eligible for admission to Columbia College.

### Admission Procedures 588.5232

Students who seek admission to Columbia College must complete and return application forms to the College Admissions & Records Office. Application forms are available from Columbia College, high school counselors in the Yosemite Community College District or may be obtained by writing to the College. Students may also apply via the Internet. The College website address is: [www.gocolumbia.org](http://www.gocolumbia.org)

Official transcripts for all previous college work must be received by the College during the first semester of attendance. High school transcripts are required **only** if a student has been out of high school five years or less.

It is the student's responsibility to furnish the College with official documentation for previous high school and college work or training to be evaluated for credit. **These documents become the property of Columbia College and cannot be reproduced or released for any purpose.**

Applications should be submitted as early as possible in order to allow for processing. **A local address must be submitted before completion of registration.**

### Re-admission

A student who plans to return to Columbia College after an absence of one academic year or more must file an application for re-admission. Transcripts are required if the student has attended another college since last attending Columbia College.

### Residence Requirements

New and returning students are classified either resident or non-resident for tuition purposes. Residency is determined when a student applies for admission to the college.

Residency is determined by the length of physical presence in the State of California (minimum of one year and one day prior to the first day of the semester or summer session) and the "intent" to make California one's residence. Students who have resided in California fewer than two years must prove "intent." To prove intent, students who have

lived in California fewer than two years should submit with their Admissions Application two proofs of the following:

- Owning or renting residential property in California for personal use
- Registering to vote in California
- Paying California State income taxes
- Possessing a California driver's license or identification card
- Registering a motor vehicle in California
- Having an active checking and/or savings account in a California bank
- Other proofs of intent may be considered by the College

Active duty military students and their dependents residing in California are considered California residents. Credentialed employees and their dependents, migrant agricultural workers and their dependents may also be considered California residents.

Non-citizen students, if their visa does not preclude them from establishing residency in the United States, may be classified as residents if they have resided in California more than one year. INS documents must have been issued or approved more than one year prior to the beginning of the term.

Examples of INS documentation that may be requested include:

- Resident Alien Card
- Permanent Resident Card
- I-94 Form
- Visa
- Passport
- Temporary Resident Card

Students whose INS documents were issued less than one year and one day prior to the start of the semester will be considered non-residents for tuition purposes.

Members of the armed forces who were stationed in California on active duty for more than one year prior to being discharged from the service may be classified as resident for up to one year if they live in California after being discharged.

Intent must also be provided if student has resided in California fewer than two years.

A "non-resident" is a person who has not resided in California for the full one-year period before the residence determination date (first day of classes for each semester). Non-resident students are required to pay \$141 per unit tuition, in addition to their other fees. Non-resident



tuition is refundable upon withdrawal from classes, in accordance with the tuition refund policy.

Any student may appeal his or her residency classification. The appeal should be written and submitted to the Director of Student Services/Matriculation.

### AB 540

AB 540, which became effective on January 1, 2002, provides some non-resident students an exemption from the non-resident tuition. This new law does not grant residency, it only exempts non-resident students from paying non-resident tuition. Students who think that they might qualify will need to complete a Student Affidavit for Exemption From Non-Resident Tuition. This form can be obtained from the College Admissions and Records Office or on the college website at [www.gocolumbia.org](http://www.gocolumbia.org).

### Admission of High School Students 588.5232

Pursuant to Education Code Sections 48200 and 48224, Columbia College may admit high school students. The policy and procedures for admissions are currently under review. Please contact the Admissions & Records Office for admissions guidelines and procedures.

### Admission of International Students

Columbia College is authorized by the Immigration and Naturalization Service of the United States Department of Justice to accept international students who wish to pursue a program of study leading to the Certificate of Achievement, the Associate Degree or preparation for transfer to a four-year university. The following chart shows the application deadlines.

Semester	Begin-End	Deadline
Summer	May - Aug.	Feb. 15th
Fall	Sept. - Dec.	May 1st
Spring	Jan. - May	Nov. 1st

If you are an international student interested in applying for admission to Columbia College you must complete the following steps:

- 1) Submit the International Student Admission Application and personal goal statement. This application is available from:  
**Columbia College**  
 Admissions & Records Office  
 11600 Columbia College Drive  
 Sonora, CA 95370-8582  
 Phone: 209.588.5233  
 Fax: 209.588.5337  
 E-mail: [westr@yosemite.cc.ca.us](mailto:westr@yosemite.cc.ca.us)

2) The following documents, written in English, are required for admission:

- a) Official results of the *Test of English as a Foreign Language (TOEFL)* if your native language is other than English (*Citizens of Canada, Great Britain, Ireland, Australia, the Philippines and New Zealand whose native language is English are exempt from taking the TOEFL*). A minimum score of 480 on the paper-based test or 157 on the computer-based test is required. Institutional TOEFL scores are acceptable;
- b) Evidence of satisfactory financial support by submitting a notarized or official letter from your funding source(s) indicating total income and capability to support you under any and all circumstances while enrolled at Columbia College, and provide a written guarantee from the bank of your funding source(s) stating the current account balance(s) in U.S. dollars;
- c) Two letters of recommendation, one of which must be from a teacher with whom you have studied recently attesting to your ability to do college-level work;
- d) The Columbia college Physician's Certificate of Health (*this form must be completed by a licensed physician and show an immunization clearance examination*). A negative chest X-Ray or a TB test dated within one year of application is also required;
- e) Evidence of a sickness and accident insurance policy (*if proof is not provided, applicant, if accepted, must purchase the Columbia College International Student Medical Insurance Plan within the first month of enrollment*). Medical plans vary in the type and amount of coverage so contact the College Business Office for further information when you arrive;
- f) If available, provide the name of a sponsor who resides in the United States of America. The "Sponsor's Certification" is to be completed by your U.S. sponsor;
- g) Students having completed post-secondary course work at a foreign institution must submit an official, English-translated transcript. Contact the Columbia College Foreign Student Advisor for information concerning evaluation of foreign transcripts.

Upon completion of all application requirements listed above by the deadline date, each applicant for admission will be given equal consideration along with all other qualified applicants. (See page 9 for Admission Procedures.) If admitted, the I-20 form will be mailed. The I-20 form must be presented to the appropriate officials in order to obtain an F1 (*Student*) Visa and enter the United States.

### Student Success Matriculation Program

588.5234

New and non-matriculated returning Columbia College students are provided with a step-by-step approach to a successful educational experience. The Student Success Matriculation Program is designed to give students information and assistance at the time it is most needed: at the threshold of their college careers. All new students with no prior college credit are **required** to participate in the Student Success Matriculation Program. **Exception:** *Persons who qualify for one of the matriculation exempt categories listed below.*

A person participating in the Student Success Program will:

- complete the assessment process including, but not limited to, placement exams in reading, English, and math; an evaluation of educational goals, previous academic history and current skills.
- receive an orientation to Columbia College where services and programs are explained.
- receive an interpretation of test scores and course placements based on the results of the assessment process and other measures.
- receive priority registration.
- receive academic advisement in developing a program of studies based upon the student's major and goals.
- receive a College catalog.
- receive general information about majors, general education requirements, transfer requirements, and certificates of achievement.
- plan a class schedule in accordance with the chosen academic goal, interests, current skills, and time available for study and work.
- begin process of developing an educational plan which is required after completion of 15 units.
- receive individual assistance from a counselor for problem areas identified through student progress monitoring, instructor referral, or student self-referral.

### Exemption Categories

Students meeting one or more of the following criteria are exempt from all or parts of the Student Success Matriculation Program:

- students holding an associate degree or higher (however, assessment testing or transcripts showing course completion may be necessary to meet prerequisite requirements)
- students enrolled only in activity courses for which there is no basic skill prerequisite
- students enrolled in community services, non-credit or personal enrichment courses only
- students enrolled only in contract education, courses for in-service training or employer required training courses.

Although a student may qualify for exemption from matriculation, participation is welcomed and encouraged.

### Challenge Procedures

A student may challenge the required participation in matriculation if they do not meet the exemption categories. The challenge must be submitted, along with any supporting data, to the Vice President for Student Services. Forms are available from the Counseling Office. The Vice President for Student Services may request supporting documentation and/or a conversation with the student prior to making a decision.

### Notice of Acceptance

New and former students will be notified officially of their acceptance and opportunities for assessment, orientation and advisement after all application forms have been received. Complete instructions, along with current exemption criteria and challenge procedures are included in the welcome packet.

### Alternative Matriculation for Disabled Students

Applicants to the College who have a disability and feel they cannot participate in the Student Success Program due to the limitations imposed by their disability are eligible for alternative matriculation services.

These services may include:

- special assessment
- special assessment by the Learning Disability Specialist
- one-on-one orientation and advisement with Disabled Student Services Program staff
- one-on-one development of an Educational Plan with a staff member of Disabled Student Services
- priority registration

To qualify for alternative matriculation the applicant must:

- inform the Admissions & Records Office or the Disabled Student Services Office of the student's disability and ask to be considered for the alternative matriculation program.
- submit written documentation by a professional (*e.g. Physician, Psychologist, LD Specialist etc.*) verifying the disability.

### Assessment

588.5234

Assessment is a process of gathering information about individual students to facilitate student success. Mandated by California Education Code, Section 51006, Assessment is one of five matriculation components and includes testing as a means of determining proficiency in English and Mathematics. Assessment testing assists students with the selection of appropriate courses and may also be used to satisfy certain course prerequisites. For more information please see the Student Success Matriculation Program on page 10.

### CalWORKs Services

588.5148

The Columbia College CalWORKs Office offers support services for students receiving CalWORKs benefits. These services include but are not limited to individualized and coordinated case management, childcare vouchers, career education and job seeking/retention skills, job development, placement and work study opportunities, specialized curriculum advantages and more.



## Counseling Services

588.5109

Columbia College's professional counseling faculty provide essential academic advising, career counseling and planning activities to continuing, new and returning students in order to enhance each student's educational experience at Columbia. Typical areas of assistance to students include choosing a major or career(s) appropriate to their values, interests and abilities, coping with personal issues as they relate to completion of educational goals and completion of the educational planning process to include appropriate course selection to meet certificate, degree and transfer requirements and personal goals. Counselors also teach classes designed to facilitate personal and career exploration and development as well as transfer and academic survival skills. Refer to the *GUIDANCE* section of this catalog for specific course offerings. Counseling services are available during the day and selected evenings, by appointment or drop-in basis.

**Final selection of classes and completion of program requirements are the responsibility of the student.**

## Educational Plan

588.5109

The Student Success Matriculation Program requires that all California Community College students pursuing an educational goal prepare an Educational Plan. At Columbia College, students should prepare this Educational Plan by the time they have completed fifteen (15) units of credit, whether those credits were earned at Columbia College or transferred from another college or both. Students may call the Counseling Office for specific information on assistance with the Educational Plan. After the plan has been reviewed with a counselor, it will be filed in the student's permanent file. The Educational Plan Form is available on the College website. It is important to recognize that the student may be denied priority registration for classes, should the student fail to prepare an Educational Plan. Students may request a waiver from the Educational Plan requirement. (See *Student Success for Matriculation: Exemption Categories.*)

## Schedule of Classes

588.5140

A Schedule of Classes is the official listing of courses. It is published each semester of the academic year.

The Schedule of Classes contains information regarding registration dates and special instructions for registering in classes.

The College reserves the right to make additions or deletions to the Schedule of Classes. Any class in which the enrollment is too small to justify continuance may be cancelled.

## Financial Aid

588.5105

The College Financial Aid Office administers the following Federal and State assistance programs: Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Work Study, Federal Perkins Loan, Cal Grant, Extended Opportunity Programs and Services, and California Board of Governors Fee Waiver.

Students who need help to meet expenses, such as tuition and fees, housing, food, books, supplies, transportation, and personal incidentals may obtain applications in the Financial Aid office from January 7,

2002, through December 20, 2002. Eligibility is based on financial need and satisfactory academic progress. Additionally, students must have a high school diploma, a G.E.D. or have passed an approved placement examination administered by the Testing Center at the College. Awards are made on a first-come, first-served basis, contingent upon availability of funds. If a financial aid recipient who is a first time student at Columbia College withdraws during the first 60% of the term, a pro-rata refund to the Pell Grant program of the enrollment fee waiver will be calculated.

### Financial Aid Withdrawal and Repayment Policy

Per federal regulations, 34 CFR Parts 668, 682 and 685, any student who receives financial aid and **withdraws from all classes prior to completing 60%** of the semester/program and/or course will be **required to repay** a portion of all federal financial aid received. At Columbia College, this includes the Federal Pell Grant and Federal Supplemental Educational Opportunity Grant (FSEOG) programs.

In compliance with Federal regulations, a detailed Financial Aid Consumer Information pamphlet is available in the Financial Aid Office and the Admissions & Records Office.

## Veterans Affairs

588.5105

Disabled veterans, post-Vietnam era veterans who participated in the payroll deduction programs, members of Reserve units and dependents of disabled, deceased or retired veterans may be eligible to receive educational benefits while attending college at least half-time. The applications, which are available in the Veterans Affairs Office, should be completed 30-120 days prior to the beginning of the term if advance pay is being requested, or at the time of registration for normal processing. Information regarding other documents that may be required is also available in the Veterans Affairs Office.

## Scholarships and Awards

588.5105

Columbia College has an extensive number of scholarships and awards provided by organizations and individuals both inside and outside our community. These are publicly announced on the Scholarship Bulletin Board outside the Financial Aid Office and in the *Real People Win Scholarships* brochure available in the Financial Aid Scholarship Office.

A standard application, which may be obtained from the Scholarship Office, is used to determine a student's eligibility for most of the awards. It is available starting September 1; the deadline for applying is December 20, 2002. If a special application is required for a specific scholarship, it will be noted.

Selection is generally based on one or more of the following criteria: grade point average, financial need, major, units completed, participation in extracurricular activities including employment and/or homemaking. Awards are given to students pursuing goals in almost every major, certificate or transfer program offered and they are available for new, continuing, returning, transferring, and part-time students.

## Extended Opportunity Programs and Services

588.5130

The primary function of Extended Opportunity Programs and Services (EOP&S) is to recruit, retain, and transition economically and educationally disadvantaged students.

### Eligibility Criteria - Based On:

Economic - Students must be eligible for the Board of Governors Waiver A or Board of Governors Waiver B to qualify for EOP&S.

Educationally disadvantaged in one of the following ways:

1. On the assessment test does not meet eligibility for degree level Math or English.
2. Did not graduate from high school or obtain a GED.
3. High school GPA was below a 2.5.
4. Previously enrolled in a remedial class in high school or college.
5. First generation college student.

Other requirements:

- Enrolled in 12 units
- Resident of California

### Services Available

- Direct Financial Aid — Grants and book grants
- Priority Registration — Special registration assistance
- Book Service Program — \$200 for books without applying for, or eligible for financial aid
- Child care
- Counseling — Academic, vocational, and personal
- Transfer Assistance — Assistance in applying to four-year institutions
- Computer access - Available for assignments

Apply for EOP&S through the Financial Aid Office or the EOP&S Office.

## Cooperative Agencies Resources for Education

CARE is an extension of EOP&S to serve single parents on TANF

### Eligibility Criteria

1. Must be EOP&S eligible
2. Must be receiving TANF
3. Must have at least one child under the age of 14
4. Must be at least 18 years old and single head of household
5. Be enrolled in 12 units.

In addition to services all EOP&S students receive, the CARE student can receive services in the areas of:

- Child care cost — CARE will provide funds toward child care.
- Transportation cost — CARE will provide parking permits and may contribute funds toward other costs associated with transportation.
- Books and Supplies — CARE will provide funds for books and supplies in addition to what EOP&S provides.

EOP&S students may apply for CARE through the EOP&S Office.

## Student Records Regulations

588.5234

A student's records are open to the student, employees of the College acting in the course of their duties and State and Federal officials as defined in Section 54618 of the California Administrative Code.

The College may grant access to individual student records for educational or emergency purposes and for court orders as permitted in Sections 54620 and 54622 of the California Administrative Code.

### Diploma and Certificate Replacement

Requests for replacements of diplomas and certificates will be assessed the following fee:

CERTIFICATES ..... \$ 5

DIPLOMAS ..... \$10

### Columbia College Transcripts

- Upon **written** request from the student to the Admissions & Records Office, two Columbia College transcripts will be issued without charge. This includes official or unofficial copies.
- Transcript request forms are available in the Admissions & Records Office and on the College website. FAX requests are also accepted. A credit card number, expiration date and signature are required with your FAX if payment is due. Check or credit card information must also be included with your written request, if applicable. FAX number is 209.588.5337.
- Additional transcripts are \$3 each.
- Transcripts will **NOT** be provided for students who have an official hold placed on their record by the College.
- Transcripts **cannot** be sent in response to a **telephone** request (Family Education Rights & Privacy Act of 1974).
- Transcripts will not be released to anyone other than the student unless the person has written authorization from the student.
- A minimum of seven (7) working days is required. **EXCEPTION:** Same day service is provided at a cost of \$10 in addition to the regular fee.

### Other College or High School Transcripts

- New students are required to submit official transcripts for course work taken at other colleges and/or high schools.
- The student should request from the sending college or high school that transcripts be mailed directly to Columbia College. Columbia will only accept a transcript that is official and received in a sealed envelope. *High School transcripts are only required if the student has been out of high school in the last five years.*
- Transcripts sent to Columbia College from other colleges or a high school may **NOT** be released to: a) students, b) other colleges, or c) agencies. They must be obtained from the sending institution.
- Students may obtain additional copies of their assessment scores from the Director of Student Success/Matriculation (588.5234). If the student has an outstanding obligation to the College, the scores will **NOT** be released until the obligation has been cleared. Obligations must be paid at the College Business Office, by touch-tone telephone 209.536.5400 by credit card or on the College website.



### Enrollment and Academic Status Verification

Verifications of enrollment and academic status will be provided upon signed consent from the student for the following purposes:

- Educational verification for employment
- Child care provider enrollment verification
- Enrollment and academic status verification for insurance purposes
- All other verification of enrollment or academic status.

**Note:** There is no charge for verification for Federal loans. Loan Deferment Verification will not be released if the student has an outstanding obligation.

The first two (2) verifications of enrollment and academic status will be provided free of charge. A \$3 fee will be charged for all additional requests.

### Privacy Rights of Students

All student records of Columbia College are kept in accordance with the provisions of the Family Educational Rights and Privacy Act of 1974.

Written student consent is needed for release or review of student records to all parties or officials except for those specifically authorized access under the Family Educational Rights and Privacy Act of 1974.

### Change of Official Records

Students requesting a change of name or social security number on official records must present legal documentation verifying the requested change to the Admissions & Records Office.

### Academic Achievement Center 588.5088

The Academic Achievement Center (AAC) can assist you in improving your critical thinking skills by helping you make connections in your own mind and deepening your understanding of your course material. This tutoring is available free of charge. Tutors work individually with students on coursework for most courses offered each semester including reading and writing assignments. The AAC also offers a computer lab with ten computers loaded with Microsoft Office Suite 2000 and with Internet access which is available for use without an appointment. **Tutoring is available by appointment five days a week seven hours a day.** Appointments can be made by calling 588.5088 or visiting Redbud 9.

### Disabled Student Services 588.5130

The Disabled Student Services Program is designed to provide access to educational programs and activities for students with disabilities. The College has made changes in campus design to allow the disabled students access to the College campus. Accessibility is assured to students through the use of support services, special equipment, specially trained staff and the removal of architectural barriers.

### Programs and services

#### Physical Disabilities

Disabled parking (limited to those students possessing DMV placard or plates), tram service, mobility assistance, specialized tutoring, assistance in locating note takers, readers, and test taking assistance are provided.

#### Learning Disabilities Program

Provides academic support services to students with a professionally verified learning disability. Services include: individual assessment; individualized learning strategies to remediate or compensate for basic skill deficits; test facilitation; other in-class accommodations as necessary. Tutoring may be provided by specially trained staff and students for general education and vocational college course work.

#### High Tech Center

The High Tech Center was established in 1995 to provide disabled students with access to, and training on, adapted computer hardware and software. This hardware and software includes computers adapted for use by visually impaired as well as mobility impaired students. Specifically designed software for the use of learning disabled students to increase their skill levels in reading, writing and math is available.

#### Additional Services

Personal and vocational counseling, academic advising, special equipment loan, liaison with campus and community resources, and assistance with registration are provided.

#### Special Instruction

Special instruction in adaptive physical education, cardiac rehabilitation, pulmonary rehabilitation, and computer access are offered each semester.

#### Alternate Format Media

All Columbia College publications and institutional materials are available in alternate formats upon submitting a request to the DSP&S office.

### Outreach 588.5111

College Outreach brings College information to prospective students and includes contacts with high school students and counselors, business and industry professionals and community members seeking personal growth opportunities to improve job skills. Activities are coordinated throughout the Yosemite Community College District. For more information contact the College Outreach Program Coordinator.

### Health Services 588.5204

A registered nurse is on campus several hours each class day to provide a variety of health services for students who are registered at the College.

Students having chronic health problems are requested to inform the College nurse so that the appropriate aid may be rendered in case of an emergency. Student health records are confidential.

Illness or accidents occurring on campus should be reported immediately to the College nurse or any administrator.

### Student Insurance

Student accident insurance, a secondary insurance, is paid through student health fees. Students who desire additional accident or health insurance information may contact the College Health Services Office at 588.5204.

Health service fees are refundable during the first two weeks of a full semester class. Students eligible for refunds must obtain a **Request for Refund Form** from the Admissions & Records Office.

### Student Identification Cards 588.5231

- There is no charge to students for the initial card. A replacement fee of \$4 will be charged for lost cards and name changes.
- The same Identification Card will be used for each semester attended. Validation stickers for the current semester can be obtained, at the beginning of every semester, from the Admissions & Records Office.
- It is required for use of Student Services, Library, Math and Computer open labs, the Academic Achievement Center and Business Office.
- You should carry your card with you while on campus
- Contact Admissions & Records for processing dates, times and location. Dates are also listed in the Semester Class Schedule.

### Student Activities 588.5111

Social events, club activities, community projects, and cultural events are developed through the College Student Activity program. There is an optional fee of \$5 per semester for a Student Activity card which offers students discounts at local businesses. This fee helps support student activities on campus.

All students are members of the Associated Students of Columbia College and they in turn develop a student government. Student Senate is a representative group of students which addresses issues related to student affairs, coordinates the social activities of campus organizations, and serves as spokesperson for the student body.

### Student Organizations

- Students wishing to form a student organization must contact the Student Senate for procedures, direction and a handbook.
- Only currently enrolled Columbia College students may participate as members of an officially recognized student organization.
- Student organizations must have an advisor present at all meetings and activities.
- Every student organization must request renewal of their official recognition status each semester.

### Posting of Materials on Campus Bulletin Boards

- Bulletin board posting may be done only by students, faculty or staff.
- All materials posted on campus must be approved and stamped in advanced by the Vice President for Student Services.
- **No** posters will be permitted that promote services—including classes—for profit other than those by other accredited institutions of higher education.

- Persons posting materials are responsible for removal of the materials. Removal should occur immediately following the activity.
- All materials approved for posting will automatically be removed within two weeks of the posting date.
- Materials are **not to be adhered to glass, wood or metal surfaces.** They may be posted only on bulletin boards or easels.
- Individuals/organizations not following correct posting procedures will have their material removed.

### Career Center 588.5271

The Career Center, located within the Manzanita building adjacent to the Counseling area, offers materials and services to assist students with career information. The Center maintains a variety of resources including books, occupational publications, newsletters, college catalogs, and Eureka, a computerized vocational/educational information system.

### Transfer Center 588.5271

The Transfer Center staff, counselors and resources help to facilitate the transition from Columbia College to completion of educational goals at other colleges and universities. Many faculty-approved articulation and transfer credit agreements, especially between Columbia College and UC and CSU and area community college campuses are useful when completing student Educational Plans and expediting the transfer process. Students have direct Internet access to articulation agreements through the use of ASSIST, the official repository of California College and University Articulation. Internet access to college and university websites, as well as online applications are also available.

The Transfer Center coordinates regular visits of representatives from regional two- and four-year colleges and universities and has current applications to many schools on hand. These services help students develop more direct contact with personnel, procedures, policies and requirements of specific transfer campuses, thus clarifying questions regarding transferability of credits and opportunities of academic preparation. The Transfer Center provides service to all students. To increase chances of student success in higher education, participation in a guaranteed Transfer Admission Agreement (TAA) program with regional universities is encouraged.

### Job Placement Services 588.5312

The Columbia College Job Placement Office offers free employment assistance to all unit-bearing students. (Exceptions apply to CalWorks students only!) The office serves as a source of information on jobs available in the local community and on campus.

### Manzanita Bookstore 588.5126

Located in the Manzanita Building, the Bookstore carries textbooks, materials and supplies required for classes. The Bookstore also sells paperbacks, greeting cards, sundries, snacks, computer software, and many other items. Student representatives serve on a campus Bookstore Advisory Committee and provide suggestions and ideas to enhance the services provided to the campus community by the Manzanita Bookstore.



Costs of textbooks and educational supplies vary with the type of program the student is pursuing. Costs normally range from \$200 to \$400 each semester depending on the program.

### Child Care Facilities

The Columbia College Child Care Center includes three classrooms offering high quality child care for children ages 18 months to 5 years. The Center provides a family friendly environment that promotes positive relationships. Child care is free or low cost for families who meet income and need eligibility. The Center is open from 7:45 am to 4:30 pm Monday through Thursday and 7:45 am to 2:30 pm on Friday and operates on the College calendar. Child care is available during summer session.

The Child Care Center also serves as a laboratory for adult students enrolled in the Child Development Program. Under the direction of a Master Teacher, students gain hands-on experience in providing high quality child care.

For more information call 588.5278. (Fac #553602594)

### Food Service

Food Service is located on the lower level of the Manzanita Building. The Columbia College Snack Bar is open daily. Foods vary from standard student fare to daily lunch specials.

The Cellar Restaurant is open Monday through Thursday, serving breakfast and lunch. The Cellar is managed and run in conjunction with the College Hospitality Management Program where students in the program plan, prepare, and serve meals as part of their training.

### Security/Parking — Lost & Found 588.5167

Campus Security is available to assist students, staff, and visitors as needed. Security personnel can be contacted through the Campus Fire Department, Business Office, or by calling 588.5167. Contact Campus Security for Lost & Found information.

The College maintains parking areas for students, staff, disabled persons and visitors. Various fines will be levied against the public, staff and students for campus traffic or parking violations. Daily or semester fees are charged for parking on campus. Free visitor parking is available.

The campus shuttle provides continuous service from the campus parking lots to classroom buildings Monday through Thursday evenings from 5:15 to 9:30 p.m.

### Columbia College Student Housing

Columbia College is one of the few community colleges that has on-campus housing. Student Housing at Columbia College consists of two bedroom units designed for three to four people per unit.

Housing fees are:

Shared Occupancy: (shared bedroom)

\$1,350 for an academic semester

\$2,700 for Fall/Spring semester

\* \$3,700 for an academic year (Fall/Spring/Summer)

Single Occupancy: (private bedroom)

\$2,000 for an academic semester

\$4,000 for Fall/Spring semester

\* \$5,600 for an academic year (Fall/Spring/Summer)

\* Discounted for School Year Lease if paid in full

Student Housing offers:

- The convenience of on-campus living and within walking distance of all College buildings
- Furnished rooms, including bed, desk, chair wardrobe, and nightstand
- Kitchenettes include two-burner stove, refrigerator, sink, and dinette set
- Recreation room with satellite big screen TV, pool table, and foose ball
- Reading/study room
- On-site Resident Manager and Resident Assistant
- On-site laundry facilities
- Utilities included in rent (except phone)

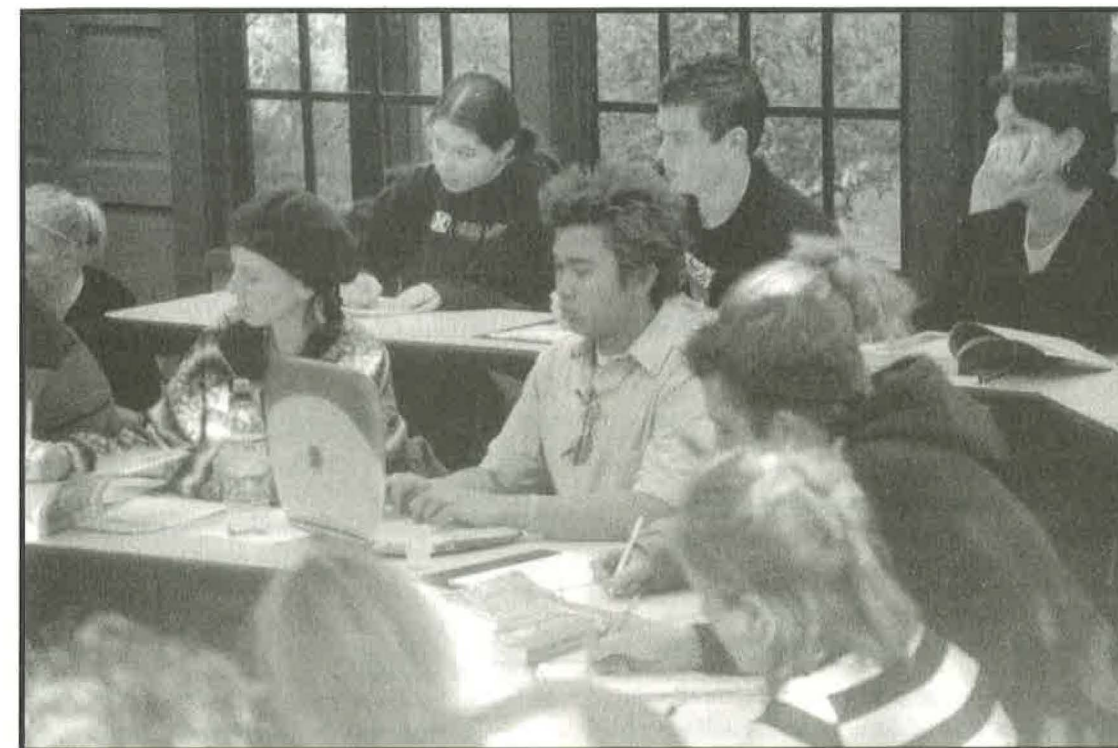
For information:

Phone: 209.533.3039

FAX: 209.533.3464

Email: ccshstaff@mlode.com

# ACADEMIC POLICIES and PROCEDURES



*All phone numbers listed are in the 209 area code except as noted.*



## Catalog Rights

- A student will be held responsible **ONLY** for the policies and requirements designated in the catalog for the academic year in which the student completes the first credit course.
- Student's catalog rights begin with the semester a student completes the first course or courses at Columbia College and are applicable as long as the student remains in continuous attendance. Continuous attendance is defined as completion of at least one credit course per academic year (July 1-June 30) at Columbia College. Attendance at other colleges is not included in determining catalog rights at Columbia College. (*Exception: Attendance at another Yosemite Community College District college may be accepted.*)
- A student has **ONLY** four (4) academic years to complete the requirements for graduation and/or certificate completion as defined in the catalog.
- A student who has not met the educational goal at the end of the four years must select a subsequent catalog and is responsible for any changes in requirements.

## Unit of Credit

A unit of credit is earned on the basis of one hour of lecture-recitation per week or a minimum of three hours of laboratory per week during a semester. It is common to find courses composed of learning activities resulting in combinations of lecture-recitation, independent and tutorial study, or directed and individual laboratory experiences. In all cases, these are to be equated with the unit of credit. Columbia College operates on a semester system.

The following terms are synonymous in expressing a unit of credit: semester unit, semester hour, class hour, credit and credit hour.

## Conversion of Units

To convert quarter and semester units of credit, the following methods of computation are used:

- 1) Quarter units of credit are converted to semester units of credit by multiplying the number of quarter units by two-thirds. (# of quarter units  $\times .667 =$  semester unit credits)
- 2) Semester units of credit are converted to quarter units of credit by multiplying the number of semester units by one and one-half. (# of semester unit credits  $\times 1.5 =$  quarter unit credits)

## Prerequisites/Co-requisites /Recommended for Success

A **prerequisite** is 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. A **co-requisite** is a condition of enrollment consisting of a course that a student is required to take simultaneously in order to enroll in another course. A course **recommended for success** indicates preparation that a student is advised, but not required to take before enrolling in a course or program. Satisfactory completion of a course requires a grade of "C" or better.

The course description identifies the only means by which prerequisite and co-requisite requirements can be met. "Or equivalent" in the course description refers to the prerequisite and co-requisite challenge process (see below).

Columbia College has an approved prerequisite policy that may be found in the Office of Instruction, located in the Manzanita building.

## Course Prerequisite and Co-requisite Challenge Information

A student may challenge a prerequisite or co-requisite on one or more of the criteria listed below:

The prerequisite or co-requisite:

- a. has not been established in accordance with district processes;
  - b. is in violation of Title 5 regulations;
  - c. is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner.
- or
- d. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or co-requisite.
  - e. The student will be subject to undue delay in attaining the goal of his or her educational plan because the prerequisite or co-requisite has not been made reasonably available.

## Prerequisite Challenge Procedure

Contact the Admissions & Records Office to obtain a Petition for Prerequisite/Co-requisite Challenge Form. Submit the completed form with documentation materials to the Admissions & Records Office. The College shall resolve any challenge within five (5) working days from the time it is filed provided that the student initiates the challenge not less than two (2) weeks prior to the beginning of the semester.

Please note that a prerequisite waiver may not exclude that course from the major requirement.

## Grading System

Evaluation of student achievement is made in relation to the attainment of specific course objectives. At the beginning of a course, the instructor will explain the course objectives and basis upon which grades will be determined by one of the following symbols:

- A - Excellent
- B - Good
- C - Satisfactory
- D - Passing, Less Than Satisfactory
- F - Failure
- W - Withdrawal From Course
- I - Incomplete
- CR - Credit (at least satisfactory)  
This grade cannot be changed to a letter grade.
- NC - No Credit (less than satisfactory)  
This grade cannot be changed to a letter grade.
- RD - Report Delayed
- IP - In Progress (see explanation below)

## Challenging Grades

All students, including former students, have the right to review their records and the right to challenge the content of their records if they believe the records contain materials that is incorrect, inaccurate or otherwise inappropriate. **This challenge, in accordance with Board Policy #5032, must occur within two academic years from the time the grade is received.** The Vice President for Instruction is the official to be contacted by any student desiring to exercise the right to access and challenge their academic records.

## IP - In Progress

IP - In progress is a grade symbol for:

1. A class that is scheduled to extend beyond the end of the semester (a "bridge" class) e.g.: course begins November 6, course ends February 1; semester ends December 18.

The student's permanent record will reflect an IP for the semester in which the class began.

Final grade and units for a bridge class will be issued during the semester in which a class ends.

## Adding a Course

Prior to the start of the semester, students may add a class by using the touch-tone telephone system (536-5400) or online at [www.gocolumbia.org](http://www.gocolumbia.org) or at the Calaveras Center. To add a class after the first day of instruction, students must complete an Add Form which may be obtained from Admissions & Records. Contact the Admissions & Records Office for specific course deadlines. All adds processed by the Admissions & Records Office require the student to present a student I.D. card or picture identification e.g.: driver's license. Students who are on a probationary or dismissal status must have a counselor's signature on the add slip and must register at the Admissions Office. Students attempting to register for over 18 units during a fall or spring semester, or 8 units during a summer session, must have a counselor's signature on the add slip and must register for these units at the Admissions & Records Office.

## Dropping a Course

To drop a course the student may use the touch-tone telephone system, go on the College website (see current class schedule for instructions) or submit a Drop Form to the Admissions & Records Office or Calaveras Center. All drops processed at the Admissions & Records Office and Calaveras Center require the student to present a student I.D. card or picture identification, e.g. driver's license. Students who are on a probationary or dismissal status must have a counselor's signature on the drop slip and must drop the course in person on campus or at the Calaveras Center.

Full semester courses:

- Within the first four weeks - no grade or course title will appear on official transcript (*no record of registration*).
- From the first day of the fifth week to 75% of the semester, a symbol of "W" will appear indicating *withdrawn*.

- No student drops are allowed after 75% of the term — a possible grade of "F" will appear on the official transcript.
- Appropriate dates appear in the College Academic Calendar (*see page 4*).
- For less than full semester classes, contact the Admissions & Records Office for deadline dates.

When dropping courses, it is the student's responsibility to complete and submit all necessary forms to the Admissions & Records Office.

## Repetition of Courses

- Only designated courses may be repeated for credit. See course descriptions for limitation on course repeatability. Registration will be disallowed when a student reaches the limit.
- Any course in which a student has earned a "NC" or "W" may be repeated for college credit.
- Special classes for disabled students and adaptive physical education classes for the disabled are subject to additional repetitions in accordance with Title 5 Section 56044.

## Repetition of Courses for Improvement of Grades

In conformance with Title 5, Division 9, Chapter 2, Article 5, Section 58161 of the California Administrative Code:

An individual may repeat a course under any of the following conditions:

1. The student's previous grade is at least in part due to extenuating circumstances beyond the control of the student.
2. A student who has earned a grade of "NC", "D" or "F" in a course may repeat the course **ONE** time for improvement of grade. Only the units and grade earned upon repetition will be computed in the overall GPA and units earned.
3. A considerable lapse of time has occurred since the student completed a class. The student must obtain written permission from the Vice President for Instruction.

- A student must obtain and submit to the Admissions & Records Office the Repetition of Course for Improvement of Grade Form.
- When repeating a course in which a "D" was earned, the grade earned in the repeated course and grade points will be recorded, but no additional units for the course will be allowed.
- When repeating a course in which an "F" grade was earned, the grade, grade points and units earned in the repeated course will be recorded.
- If the course is repeated at another institution, the student must provide the Transcript Evaluator with an official transcript from the transfer institution. If the course is determined equivalent to the Columbia College course, the repetition notation will appear on the Columbia College transcript.

Courses may be repeated **ONE** time for improvement of grade.



### Incomplete Grades

- An incomplete grade "I" may be given for an unforeseeable emergency and justifiable reason if a student does not complete all requirements of a course.
- An incomplete can be issued only when the student is lacking a small amount of work.
- Responsibility for removal of an incomplete grade within the time granted by the instructor rests with the student.
- An incomplete grade must be made up by the date designated by the instructor on the Incomplete Grade form, but in no case later than *one year* from the term in which the "I" was issued. The student will receive a copy of the Incomplete Grade form.
- At the end of the time designated by the instructor, or no longer than one year, if the student has not completed the conditions for removal, the "I" will be changed to the default grade indicated on the Incomplete Grade form.
- Instructors will submit to the Admissions & Records Office a written record of the conditions for removal of the "I" and the default grade to be assigned in lieu of its removal. A copy of this record and related instructions will be provided to the student.
- When the student has completed the course work, the instructor will assign the appropriate grade and notify the Admissions & Records Office. The incomplete grade "I" will be replaced with the appropriate grade and the student will receive notification of the grade.

### Academic Renewal

Subject to the following conditions, up to 24 units of substandard grades (D's and F's) from no more than two semesters or 36 units from three quarters, taken at any accredited college or university, may be alleviated from computation of the grade point average at Columbia College:

1. Since completion of the work to be alleviated, the student must have completed a minimum of fifteen (15) semester units with at least a 3.0 cumulative G.P.A., thirty (30) semester units with at least a 2.5 cumulative G.P.A., or forty-five (45) semester units with at least a 2.0 cumulative G.P.A. at any accredited college or university. Renewal will not be granted if there are any grades of "D" or "F" since the completion of the work to be alleviated.
2. A minimum of 4 semesters or 6 quarters must have elapsed since completion of the work to be alleviated. (Summer session is not counted on the required semesters.)
3. Any student not meeting all the requirements of items number one and number two may petition the Academic Requirements Review Committee.
4. The student's permanent record will be annotated in such a way that all work remains legible ensuring a true and complete academic history.
5. Columbia College will honor similar policies of accredited colleges and universities, but other transfer institutions may reject academic renewal action.

6. The student must submit a request for Academic Renewal Evaluation to the Director of Student Success/Matriculation. Forms are available in the Admissions & Records Office.

### 99/199 Independent Study Courses

Independent Study courses are offered to give students an opportunity to independently research specialized areas not available as regular course offerings of the College.

Independent Study courses do not appear in the catalog since these courses are designed to meet specific student interests. Independent Study courses may be made available in any subject matter area. Consult the Admissions & Records Office for specific procedures.

#### Conditions

To be admitted to Independent Study, a student must:

1. have completed one semester (12 units) in residence and have a Grade Point Average of 2.5 whether cumulative or for the previous semester as a full-time student.
2. have written approval of the instructor directing the student's Independent Study, and written verification by an Admissions & Records staff member that the maximum credit limitation for Independent Study will not be exceeded and that the student qualifies. Maximum unit value for any Independent Study course for any one semester will be 3 units of credit.

#### Limitations

The following limitations apply to Independent Study courses:

1. Registration is restricted to one Independent Study course per semester.
2. An overall maximum of 7 units of credit completed will be allowed for Independent Study.

Students who intend to transfer are advised that Independent Study credit will count for elective credit only at the CSU campuses. Independent Study credit may not fulfill either Major or General Education Breadth Requirements at UC/CSU campuses. UC campuses require pre-approval for an Independent Study for elective credit.

### Credit/No Credit Grading (CR/NC)

- Some transfer institutions will not accept CR/NC grading symbols.
- A student may choose a credit/no credit (CR/NC) option in courses for which letter grades are issued.
- A student has 30% of the length of the course to submit the credit/no credit grading option form. (*California Administrative Code, Title 5, Section 55752*)
- A student has 30% of the length of the course to rescind the written form.
- Student performance equivalent to A, B, or C work will equate to a credit (CR) grade.
- Student performance equivalent to D or F work will equate to a non-credit (NC) grade.
- A CR or NC grade will be recorded on a student's transcript.
- A CR/NC grade may NOT later be converted to a letter grade.

- CR (Credit) units may NOT be applied toward a student's major for the Associate Degree nor toward completion of a certificate program unless the course is offered for *CR/NC GRADING ONLY*.
- CR (Credit) units are accepted toward completion of the general education requirements for the Associate Degree.
- CR/NC units are NOT computed in determining a student's grade point average at Columbia College.
- Units attempted for which NC is recorded are counted in determining progress probation and progress dismissal.
- The maximum number of credit (CR) semester units, earned under the *CR/NC GRADING* option, that may be counted toward the Associate Degree is fourteen (14).
- Courses offered for *CR/NC GRADING ONLY* are EXCLUDED from the maximum of fourteen units counted toward the Associate Degree.
- For courses allowing a letter grade or *CR/NC GRADING* option, the student is limited to enrollment in one course per semester. For courses designated as *CR/NC GRADING ONLY* and no letter grade, there is no limit to the number of courses in which enrollment is allowed each semester.
- A student can obtain the Credit/No Credit grading form from the Admissions Office, the Calaveras Center or on the web at [www.gocolumbia.org](http://www.gocolumbia.org). The form must be returned to the Admissions Office on or prior to the deadline. Mailed forms received after the deadline will not be accepted.
- Exception to the CR/NC standards must be petitioned to the Academic Requirements Review Committee.

### Credit by Examination (Course Challenge)

A student may challenge certain specifically designated courses by examination and obtain credit. Grades and grade points are entered on the student's transcript of record in the same manner as for regular courses of instruction. The intent of this provision is to:

1. enable students to pursue courses of study at an accelerated rate and to encourage independent study, and
2. recognize training or experience for which credit or advanced standing was not previously granted.

#### Conditions and Limitations

Only Columbia College courses may be challenged by examination. A maximum of 12 units may be earned by Credit by Examination. In accordance with Title V, Regulation #55753, units earned through Credit by Examination may not be counted in the 12 units in residence required for a degree. Credit granted by examination at accredited colleges will be accepted; such credit will be included in the maximum allowed by examination. The following are the conditions and limitations:

1. The following courses shall be excluded from credit by examination:
  - a. Pre-collegiate level courses
  - b. Basic Skills courses
  - c. Laboratory courses
  - d. Activity courses.

2. Credit by Examination courses must be awarded a letter grade (A, B, C, D, F) except for courses that have only Credit/No Credit grades (CR/NC).
3. A student may not repeat a course taken by examination.
4. A student may not take a course for examination that has already been taken for a grade.
5. A student may not take a course by examination if that student has already completed a more advanced course in the subject matter unless approved by the Academic Requirements Review Committee.
6. Courses taken through Credit by Examination may not be counted as meeting the residence requirement for a degree.
7. Courses taken through Credit by Examination may not be considered as part of the student's program for enrollment verification purposes.
8. A student taking a course by examination will be charged the regularly established enrollment fee per unit.
9. A student may not take more than one course by examination per semester.
10. A student may not earn more than 12 units of academic credit through Credit by Examination.

#### Eligibility

1. A student must be registered in at least one other Columbia College credit course for a minimum of three units during the semester when another course is being taken by examination.
2. A student must have completed at least 12 units of previous course work at Columbia College with a cumulative grade point average of 2.0.

#### Procedure

Please contact the Admissions & Records Office for the form and procedural information.

### Advanced Placement Examination Credit

Columbia College will award credit for fulfillment of the Associate Degree General Education and Major requirements and/or those for the Certificates of Achievement. Please see a counselor or the Admissions & Records Evaluator for information regarding how credit for Advanced Placement examinations will be awarded.

### College Level Examination Program (CLEP)

Credit for College Level Examination Program (CLEP) exams is not awarded at Columbia College.

### College Credit From Other Institutions

Previously earned lower division degree applicable or transfer college or university units will be accepted if the institution is accredited by one of the following Accrediting bodies: MSA-Middle States Association of Colleges and Schools, NASC-The Northwest Association of Schools and Colleges, NCA-North Central Association of Colleges and Schools, NEASC-CIHE-New England Association of Schools and Colleges, Inc./Commission on Institutions of Higher



Education, SACS-CC-Southern Association of Colleges and Schools/ Commission on Colleges, WASC-Jr-Western Association of Schools and Colleges/Accrediting Commission for Community and Junior Colleges, WASC-Sr-Western Association of Schools and Colleges/Accrediting Commission for Senior Colleges and Universities. A maximum of 15 semester units will be allowed for courses taken by correspondence from accredited institutions. No credit will be awarded for developmental or skills classes.

### Credit for Military Service

Armed forces personnel or veterans with a minimum of one year of satisfactory service may receive:

1. Two semester units of elective credit and waive institutional PE requirements for graduation.
2. Credit for military service schools in accordance with credit recommendations published by the American Council on Education.
3. Credit for certain USAFI lower division college level courses. Provisions for granting credit to armed forces personnel and veterans are subject to the following conditions:

At least 12 semester units of work must be completed at Columbia College before a student may receive credit.

Credit will not be granted for military service or military service schools where comparable units have been earned in courses previously taken.

A maximum of 20 units of military course work will be evaluated for acceptance as transfer credit.

Credit granted to armed forces personnel and veterans by another institution is subject to re-evaluation by Columbia College.

### Academic Requirements Review Committee

A petition process is available to a student through the Academic Requirements Review Committee. Should there be a question regarding course waivers, substitution, or exceptions to academic standards, students may petition for review to this committee. Contact the Director of Student Success/Matriculation for procedures.

### Classification of Students

While the minimum full-time program that will qualify a student for graduation in two years is 15 units per semester, the following classifications have been established:

- |           |   |   |
|-----------|---|---|
| Full-time | — | registered for 12 or more units.                  |
| Freshman  | — | fewer than 30 degree or transfer units completed. |
| Sophomore | — | 30 or more degree or transfer units completed.    |

(For the purpose of Financial Aid, 12 units is considered full time Summer - Spring)

Total units required for completion of an Associate in Arts, Associate in Science or Associate in Science (Occupational Education) Degree, is 60 units. Units earned in Skills Development classes (courses numbered 200 and above) are not counted as part of this 60 unit requirement.

### Attendance

Students are responsible for making arrangements with their instructors to complete all course work missed.

An instructor has the prerogative to lower a student's grade because of excessive absence.

Absence from the first class meeting may cancel registration in the course. An instructor may drop a student if the student is not in attendance on the first day of class.

### Continuous Attendance

Students must complete at least one credit course per academic year at Columbia College (July 1 - June 30) or lose the right to their catalog year.

### Student Load

A student who decides to carry more than 18 units must secure written approval from a counselor or the Vice President for Student Services. Students on progress or academic probation will be limited to a unit load established by the Vice President for Student Services.

### Final Examinations

Students are responsible for taking final examinations at the time scheduled unless prior arrangements are made with the instructor.

Final grades are considered permanent. The determination of instructor issued grades are final in the absence of mistake, fraud, bad faith, or incompetency.

### Scholastic Honors

**For Graduation:** Graduating students who have earned a cumulative Grade Point Average of 3.75 or better in all degree and transferable college work are awarded the Associate Degree **With Distinction**. Students whose cumulative Grade Point Average is between 3.50 and 3.74 are awarded the Associate Degree **With Honors**.

**By Term:** The Dean's List acknowledges students who have achieved a cumulative Grade Point Average that is between 3.5 and 4.0 with no grade lower than "C". This notation appears on the student's official academic transcript. Each semester a list of student names is published to recognize scholarship achieved in at least 12 completed units of work in Associate Degree applicable courses (courses numbered 1-199).

### Satisfactory Progress

A student whose cumulative Grade Point Average is 2.0 ("C" average) is scholastically in "good standing." All units and grade points are counted on a cumulative basis. The method of computing the Grade Point Average is illustrated above.

### Grade Reports

Students will not receive a Final Grade Report if they have outstanding obligations to the College. The report is released only to students; grades can also be accessed on the College Website at [www.gocolumbia.org](http://www.gocolumbia.org); or the report will be mailed upon receipt of a signed request and submission of a stamped, self-addressed envelope. Grades are also available in the Admissions & Records Office upon presentation of picture identification.

### Grading Scale

A - 4 grade points per unit	
B - 3 grade points per unit	
C - 2 grade points per unit	
D - 1 grade point per unit	
F - 0 grade points per unit	
W - withdrawal	Not included in computing GPA but may be used in determining progress probation and dismissal.
I - incomplete	
CR - credit	
NC - non-credit	
IP - in progress	

### Grade Point Average

The Grade Point Average (GPA) is determined by the following formula:

$$\text{GPA} = \frac{\text{Total Grade Points}}{\text{Total Units Attempted}}$$

**For example:** a student who earns 5 units of "A", 4 units of "B", 3 units of "C", 2 units of "D", and 2 units of "F" would compute his GPA as follows:

$$\begin{array}{r} 5 \text{ units A} \times 4 = 20 \text{ grade points} \\ 4 \text{ units B} \times 3 = 12 \text{ grade points} \\ 3 \text{ units C} \times 2 = 6 \text{ grade points} \\ 2 \text{ units D} \times 1 = 2 \text{ grade points} \\ 2 \text{ units F} \times 0 = 0 \text{ grade points} \\ \hline 16 \text{ units} \qquad \qquad 40 \text{ grade points} \end{array}$$

$$\text{GPA} = \frac{40 \text{ grade points}}{16 \text{ units attempted}}$$

The result in this example is a GPA of 2.50.

Units for which a grade of "W," "I," "CR," "NC," or "IP" has been assigned are not counted in computing the Grade Point Average but may be used in determining progress probation and dismissal.

### Academic Probation and Dismissal

#### For Academic Deficiencies

The purpose of academic probation and dismissal at Columbia College is to ensure that students who are deficient in scholastic achievement, on the basis of either cumulative or semester Grade Point Average (GPA), will receive special counseling and advisement. Computation of the GPA is based on all units attempted at Columbia College excluding those taken on a Credit/No Credit basis.

#### Academic Probation Status

After having attempted a minimum of 12 semester units at Columbia College, a student shall be placed on Academic Probation status for the semester following any term in which his/her GPA falls below 2.00.

#### Academic Dismissal Status

The second consecutive semester that a student fails to maintain a 2.00 cumulative GPA, the student is placed on Academic Dismissal Status. A student will also be placed on Academic Dismissal if, while on Academic Probation, his/her semester GPA falls below 1.50 or his/her cumulative GPA falls below 1.75.

### For Progress Deficiencies

The purpose of Progress Probation and Dismissal status at Columbia College is to ensure that students who fail to complete a majority of the courses they attempt will receive special counseling and advisement.

#### Progress Probation Status

After having enrolled in a total of at least 12 semester units at Columbia College, a student shall be placed on Progress Probation status for the semester following any term in which grades of "W," "I" and "NC" (No Credit) are recorded for fifty percent (50%) or more of all units enrolled.

#### Progress Dismissal Status

A student will be placed on Progress Dismissal status if that student is on Progress Probation for two consecutive semesters.

**Students who are on Academic or Progress Probation/Dismissal are REQUIRED to do the following:**

1. Obtain written approval from a counselor prior to registration which must be done at the Admissions & Records Office only;
2. Complete an *Academic/Progress Probation/Dismissal Contract* with a counselor of their choice preferably prior to the start of the term, and no later than the first week of the term;
3. Comply with the following unit limitation:

**Probation Status:** enrollment limit of 12 units maximum per term

**Dismissal Status:** enrollment limit of 8 units maximum per term;

4. Enroll in and successfully complete Guidance 7, College and Life Success, or Guidance 100, College Survival, or, if applicable, another guidance course as per counselor recommendation. NOTE: These units are included in the unit limitation above;
5. Request all current instructors complete a monthly Student Academic Performance Report form;
6. Take the completed form to monthly counseling meetings with assigned counselor.

**Academic Probation and Dismissal status will be noted on the student's permanent record.**

The college may disqualify a student on Academic Dismissal or Progress Dismissal from enrolling in courses for a period of one year if, in the judgment of the counselor and the Vice President for Student Services, the student is not making appropriate progress after being placed in either status. A disqualified student may be readmitted by special petition to the Vice President for Student Services. See *Reinstatement After Disqualification* below.

#### Reinstatement After Disqualification

A disqualified student may not be reinstated under the admissions provision until one semester from the date of disqualification. If the GPA of a student readmitted after disqualification falls below 2.0 for the following semester, the student may be permanently disqualified.



In the event of disqualification a student may petition for readmission on the basis of the following circumstances that might warrant an exception:

1. Evidence of consistent improvement in the student's record.
2. A change from one major to a field of study more appropriate to the student.
3. Circumstance in the personal life of the student which the counselor of the student believes may have been of sufficient gravity to adversely affect the performance of the student.
4. The recommendation of the student's physician that the continuance in college would be of sufficient therapeutic benefit to warrant the granting of an additional opportunity

If a student has been disqualified and feels that there are extenuating circumstances worthy of consideration, a request in writing may be made to the Vice President for Student Services that the one semester period of dismissal be waived.

### Withdrawal From College

A student wishing to withdraw from the College is responsible for dropping all classes by touch tone telephone, on the College website or by completing the drop form at the Admissions & Records Office. Failure to do so may result in "F" grades recorded on the student's transcript.

### Educational Expenses

The enrollment fee for California residents attending Columbia College is \$11 per unit. These fees are subject to change. Students may qualify to have the fee waived if their income falls below specified level or if they are receiving TANF, SSI, or GA. Applications for fee waivers are available in the Financial Aid office and should be completed prior to the student's registering for classes.

The following *Cost of Education Budget for 9 Months* is a guide for single students and is based on 12 units per semester:

	In Parents' Home	On- Campus	Off- Campus
Enrollment Fee	\$ 336	\$ 336	\$ 336
Books/Supplies/Fees	800	800	800
Meals/Housing	2,300	4,800	5,000
Personal	1,300	1,500	1,600
Transportation	700	600	800
Totals	\$5,436	\$8,036	\$8,536

The above costs are only approximate and are subject to change.

### Student Representation Fee

The Student Representation fee was amended into the California Education Code by Assembly Bill 2576 in late 1988. The \$1 per term fee is mandatory as a result of a student body election, in which two-thirds of the students voted to approve the implementation of the fee. The fee is collected with all other fees at the time of registration. The funds are deposited in a separate fiduciary account and used to represent student concerns at local, state and federal government

levels. A student who objects to the fee on religious, political, financial or moral reasons, may contact the College Business Office concerning the procedure for a waiver of the \$1.

### Enrollment Fee Refund Policy

A refund will be made, upon request, for any enrollment fees paid by a student in excess of that computed for program changes completed during the first two weeks of the class if the class is a full semester class (Fall and Spring only). After the second week of class, no refunds will be allowed. Students eligible for refunds must obtain a **Request for Refund Form** from the Admissions & Records Office, Business Office or on the College website. Fees paid by credit card will be refunded by check. **REFUNDS ARE NOT AUTOMATIC. Exception: Refunds of fees will automatically be made to students enrolling in classes which are cancelled by the College.** Contact the Admissions Office for refund dates on short-term classes.

Refunds are subject to a \$10 processing fee. No refunds will be made for a credit amount of \$10 or less. If fees or tuition are paid by check, a refund will not be processed until the check has cleared the bank. Refunds normally take six to eight weeks.

### Parking Fee Refund Policy

Parking fees are refundable prior to the first day of instruction. Return parking permit with receipt of payment and complete a **Request for Refund Form** obtained from the Admissions & Records Office. If the College cancels a class and a semester parking permit has been purchased, students must return the parking permit and complete a **Request for Refund Form** obtained from the Admissions & Records Office to receive a refund.

**Exception:** For short-term classes contact the Admissions & Records Office for deadline dates.

### Student Nondiscrimination Policy

It is the policy of Columbia College to provide an environment free of unlawful discrimination. Discrimination on the basis of ethnic group identification, religion, age, sex, color, or physical or mental disability in the College programs, activities, and work environment is unlawful and will not be tolerated by the College (*District Policy — 5027*).

The College strongly forbids any form of discrimination and has enacted the following procedures to recognize and eliminate unlawful discrimination. These regulations provide for the investigation of alleged unlawful discrimination in its programs or activities. The college will seek to resolve the complaints in an expeditious manner.

### Definitions

- A. "Color or Ethnic Group Identification" means possessing the racial, cultural, or linguistic characteristics common to a racial, cultural, or ethnic group or the country or ethnic group from which a person or his or her forebears originated. (*22 California Administrative Code Section 98210(b).*)
- B. The term "religion" includes all aspects of religious observance, practice and belief, including duties of the clergy or elders. A

belief is religious if sincerely held and, in the scheme of the believer, holds a place analogous to that filled by the deity of those people whose religion may be more orthodox or more widely accepted. (*22 California Code Section 98220.*)

- C. "Age" means how old a person is, or the number of elapsed years from the date of a person's birth. (*22 California Administrative Code Section 98230(b).*)
- D. "Sex" discrimination includes:
  1. any rule, policy, or practice concerning actual or potential parental, family, or marital status which differentiates on the basis of sex;
  2. any rule, policy, or practice concerning disability due to pregnancy, childbirth, recovery from childbirth or termination of pregnancy, or other psychological conditions related to the capacity to bear children not applied under the same terms and conditions and in the same manner as any other rule, policy, or practice relating to any other temporary disability except as otherwise provided by the Fair Employment Practice Act;
  3. any rule, policy, or practice which treats men and women differently for purposes of any program or activity on the basis of aggregate statistical characteristics of men or women, whether founded in fact, belief, or statistical probability is a discriminatory practice;
  4. any rule, policy, or practice or incident which conditions the receipt of any benefit upon entering into, or maintaining, a sexual relationship or participation in sexual activity or subjects a person to sexual harassment or intimidation such as unwelcome sexual advances, requests for sexual favors or other verbal or physical conduct of a sexual nature. (*22 California Administrative Code Section 98240, 98242, 98244.*)
- E. "Physical or Mental Disability" means any physical or mental impairment which substantially limits one or more major life activities.
  1. "Disabled person" means any person who has a physical or mental impairment which substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment.

### Student Complaint (Grievance) Procedure

In the pursuit of academic studies and other college sponsored activities that will promote intellectual growth and personal development, the student should be free of unlawful discrimination by any employed member of the academic community. (*Students disturbed by the acts of another student have recourse through the procedure of the Student Code of Conduct.*)

A complaint may be initiated by a student against another student, an instructor, an administrator, or a member of the classified staff. A student complaining of unlawful discrimination shall, within 120 days of occurrence, meet with the Vice President for Student Services or designee.

Students are advised to obtain written instructions for the filing of a complaint from the Vice President for Student Services or designee.

### Student Code of Conduct

Columbia College under the Yosemite Community College District Board Policy (*C5007*) has specified those standards of student behavior which it considers essential to its educational mission and its community life. These regulations are designed to represent reasonable standards of conduct. The Student Code of Conduct governs the behavior of students and guests on campus and at College sponsored activities. Violations of the codes may subject individuals to disciplinary action, which complies with the requirements of due process.

The following violations, for which students are subject to College discipline, include, but are not limited to:

1. Dishonesty, such as cheating, plagiarism, or knowingly furnishing false information to the College.
2. Forgery, alteration, or misuse of College documents, records or identification.
3. Obstruction or disruption of teaching, research, administration, disciplinary proceedings, or other college activities, including its public service functions, or other authorized activities. Pagers, cellular telephones and other similar electronic devices must be turned off in classrooms and at campus sponsored events unless authorized by the appropriate faculty or staff member.
4. Physical or verbal abuse of any person or conduct which threatens or endangers the health or safety of any such person.
5. Theft of or willful damage to property of the College, its officers, employees, students, or visitors.
6. Unauthorized entry to or use of College facilities.
7. Violation of District policies or College regulations including regulations concerning student organizations, the use of College facilities, or the time, place, and manner of public expression.
8. Intoxication from the use of alcohol or being under the influence of unlawful drugs, or unlawfully distributing, selling or possessing same on College property or at events sponsored by the College.
  - a. The Drug-Free Schools & Communities Act Amendments of 1989 require learning institutions to implement drug prevention programs.
  - b. There are physical and psychological health risks associated with drug and alcohol use, including, but not limited to, exhaustion, decreased immunity, depression and decreased coordination. Columbia College Health Services offer education and information on drug abuse and can refer students to community agencies for counseling and rehabilitation.
9. Failure to comply with the directions of College officials acting in performance of their duties.



10. Gambling on College property.
11. Hazing or any act that injures, degrades, or disgraces or tends to injure, degrade, or disgrace any fellow student or person attending the College.
12. Violation of campus parking or traffic regulations.
13. Smoking in non-designated areas.
14. Disorderly conduct or lewd, indecent, or obscene conduct on College owned or controlled property or at College sponsored or College supervised functions.

### Disciplinary Action

Violators of the Student Code of Conduct are subject to the following types of disciplinary action, which will be administered by appropriate College personnel.

1. **Reprimand** — A person receiving a reprimand either oral or written is thereby notified that continued conduct of the type described may result in formal disciplinary action against the student.
2. **Instructor Removal** — The instructor may remove a student from his or her class for the day of the misconduct and the next class meeting.
3. **Disciplinary Probation** — Formal disciplinary action resulting in any one or all of the following:
  - a. Removal from any Associated Student's organization office held.
  - b. Revocation of the privilege of participating in College and/or student sponsored activities.
4. **Disciplinary Suspension** — Formal disciplinary action denying all campus privileges for a specified period of time. A suspended student is not to occupy any portion of the campus and is denied all College privileges including class attendance, and privileges noted under *Disciplinary Probation* for a specified period of time. There shall be two classes of suspensions:
  - a. "*summary suspension*" is to protect the school from the immediate possibility of disorder or threat to the safety of all students.
  - b. "*disciplinary suspension*" serves as a penalty against the student as a result of the failure of his or her conduct to meet the standards expected by the College.
5. **Expulsion** — Formal action taken by Yosemite Community College District terminating a student's privilege to attend the colleges of the District for disciplinary reasons.

### Appeals

1. The student must notify, by phone or in writing, the Vice President of Student Services or designee, within 24 hours of the notification of Findings and Disposition, if he/she plans to appeal the decision.
2. The student shall have five (5) days from the date he/she receives notice of the decision to file an appeal with the Vice President of

Student Services. Appeal forms are available in the office of the Vice President of Student Services.

3. The student must submit a concise statement based on new evidence or procedural error in interpretation of the evidence to the President of the College.
4. The student shall receive notice of the determination of the President of the College within ten (10) days. The decision of the President shall be final.
5. The following are not subject to appeal:
  - a. Short-term suspension of five school days or less, and lesser sanctions.
  - b. Short-term removal by a College instructor.
  - c. Disciplinary probation for a period of one year or less.

### Smoking on Campus

Columbia College has designated specific smoking areas on campus. Designated smoking areas are available in the vicinity of all campus buildings.

Due to the high fire danger during much of the year, College policy restricts smoking activity to limited areas on campus. Smoking is prohibited: in all buildings, on all pathways, within 20 feet of the entrance and exit of any building, and in all eating areas.

### Substance Abuse Policy

College policy prohibits illegal use, possession, manufacture or distribution of controlled substances on the Columbia College campus.

Substance abuse referral assistance is available through Columbia College's health services or counseling department. Students are encouraged to seek assistance.

### Selective Service Registration

Every male citizen of the United States and male immigrant residing in the U.S., ages 18 through 25, must register for the Selective Service. AB 397, recently signed into law, as Chapter 1, Section 69500, Part 42 of the Education Code, requires that men who apply for state-funded post secondary school financial aide must be in compliance with the federal Military Selective Service Act before they can receive such aid.

Informational flyers and mail-back registration cards are available on campus at the Financial Aid Office, Career/Transfer Center and Admissions & Records Office. Additionally, students can obtain further information or initiate a registration on-line by visiting the Selective Service home page at <http://www.sss.gov>.

## STUDENT FEE/REFUND INFORMATION

EFFECTIVE FALL SEMESTER 2002

(Fees subject to change)

FEES	AMOUNT	APPLIES TO:	EXEMPTIONS/WAIVERS
**Enrollment Fee	\$11 per Unit No Maximum	Credit Students	Apprentice Enrollees      BOGW Qualified
**Health Service Fee	\$12 per Semester \$9 Summer  \$12 per Semester 15¢ per class hour (included in class fee)	Credit Students  Comm. participants Non-Credit classes Fully fee-funded classes	BOGW Qualified Depend on Prayer for Healing Out-of-District  Out-of-District Depend on Prayer for Healing
*Parking Fee	\$1 a day \$1 a day or \$20 per Semester	Non-student Drivers Student Drivers	Disabled Persons with Placard from DMV Non-Drivers Enrolled in only Off Campus Classes
**Non-Resident Tuition	\$141 per Unit plus enrollment fee of \$11 per Unit	Non-residents/foreign students	Residents
**Student Center Fee	\$1 per Unit to Maximum \$10 per academic year	Credit Students	BOGW A Recipients Community Education & Professional Non-Credit Students
Student Representation Fee	\$1 per semester	Credit and Non-Credit Students	Community Education & Professional Development
*Community Participant Fee	\$15 per Unit	Specific Activity Classes for Persons Who Have Exhausted Registration in Unit Section	
Community Education Fee (fully fee-funded class)	Class stated fee	Any person who registers	

**Note:** *Materials fees may be assessed for certain classes in order to enhance the learning process and provide convenient access to learning aids.*

*\*Only refundable prior to the first class meeting.*

*\*\*Only refundable during the first two weeks of the class.*



# CERTIFICATES of ACHIEVEMENT

## Certificates Of Achievement

Certificate programs are designed to prepare vocational students for employment. Requirements of each certificate have been determined by the faculty offering the program with the help of their advisory committees.

For students entering Columbia College for the first time in Fall, 2002, the following certificate requirements are valid through the 2005-06 academic year. A student taking more than four (4) years of continuous attendance to complete a certificate may only use certificate requirements in effect up to four (4) years prior to the date of completion.

In order to qualify for a certificate, a student must complete all courses listed in the certificate, with a grade of "C" or better. Credit (CR) grades are not accepted. No more than 30 percent of the courses required for the certificate may be fulfilled with parallel courses completed at other accredited institutions.

Units earned in obtaining a certificate may be applied toward the 60 units required for an Associate degree.

Certificates of Achievement are offered in the following disciplines:

### Automotive Technology

- Automotive Maintenance Technician
- Automotive Service Technician

### Business Administration

- Accounting
- Management
- Retailing

### Child Development

- Associate Child Development Teacher
- Child Development

### Computer Science

- Applied Computer Studies-Business Emphasis
- Computer Science
- Geographic Information Systems (GIS)
- Website Development and Design

### Emergency Health Services (Paramedic)

### Emergency Medical Services

- First Responder

### Emergency Medical Technician Training

### Fire Technology

### Forestry Technology

### Hospitality Management

- Baker
- Bartender
- Chef
- Deli Cook & Baker
- Dining Room Management
- Dining Room Staff
- Dinner Line Cook
- Hotel Management
- Pantry & Dessert Chef
- Restaurant Management
- Safety & Sanitation
- Travel and Tourism (Recreation)

### Human Services

### Natural Resources

- Watershed Management Technology

### Natural Resources Technology

### Office Technology

- Administrative Assistant
- General Office Clerk
- Information Processing
- Legal Office
- Medical Office
- Medical Transcription

### Welding Technology

Following are the specific requirements of the certificate programs listed. Completion of certain certificate programs may necessitate attending classes during evening only or a combination of both day and evening classes.

### Completion Of Certificate

In order to receive a Certificate of Achievement, students must complete a Petition for Certificate of Achievement, available at the Admissions and Records Office or on the college website during the semester prior to completion (i.e. for Fall completion a student should submit the petition during the previous Spring semester). Consult the Academic Calendar for filing deadline dates.

## AUTOMOTIVE TECHNOLOGY AUTOMOTIVE MAINTENANCE TECHNICIAN

REQUIRED COURSES:	UNITS
AT 100 Introduction to Automotive Technology	4
AT 14 Engine Repair	5
AT 111 Engine Performance I	6
AT 40 Automotive Braking Systems I	2
AT 110 Electrical & Electronics I	5
AT 63 Air Conditioning	3
AT 70 Practical Laboratory	0.5
AT 97 Work Experience In Automotive Technology	1
TOTAL REQUIRED UNITS 26.5	

RECOMMENDED OPTIONAL COURSES:	UNITS
WT 1 Introduction to Welding	3

## AUTOMOTIVE TECHNOLOGY AUTOMOTIVE SERVICE TECHNICIAN

REQUIRED COURSES	UNITS
AT 2 Introduction to Automotive Technology	4
AT 14 Engine Repair	5
AT 21 Engine Performance I	6
AT 22 Engine Performance II	2
AT 31 Manual Drive Train and Axles	3
AT 37 Automatic Transmissions and Transaxles	3
or	
AT 72 Special Topics in Automotive Technology	3
AT 40 Automotive Braking Systems I	2
AT 41 Automotive Braking Systems II	2
AT 45 Suspension and Steering	3
AT 55 Electrical & Electronics I	5
AT 56 Electrical & Electronics II	2
AT 63 Air Conditioning	3
AT 70 Practical Laboratory	0.5
AT 97 Work Experience in Automotive Technology	1
TOTAL REQUIRED UNITS 41.5	

RECOMMENDED OPTIONAL COURSES:	UNITS
WT 100 Introduction to Welding	3

## BUSINESS ADMINISTRATION ACCOUNTING

REQUIRED COURSES:	UNITS
Busad 1A Principles of Accounting and	4
Busad 1B Principles of Accounting	4
or	
Busad 161A Small Business Accounting I and	4
Busad 161B Small Business Accounting II	4
Busad 18 Business Law	4
Busad 151 Finance and Investments	3
Busad 158 Payroll Accounting	3
Busad 159 Income Tax	2
Busad 163 Business Mathematics	4
Cmpsc 3 Windows and DOS Operating Systems	3
Cmpsc 30 Financial Worksheets on Computers	3
Four (4) Units Required from Computerized Accounting:	
Busad 131 Computerized Acct. (Peachtree)	2
Busad 132 Computerized Acct. (One Write Plus)	2
Busad 134 Computerized Acct. (Dac Easy)	2
Busad 135 Computerized Acct. (Quick Books)	2
Busad 137 Computerized Acct. (MYOB)	2

TOTAL REQUIRED UNITS 34

RECOMMENDED OPTIONAL COURSES:	UNITS
Busad 97 Work Experience in Business	1-4
Cmpsc 1 Computer Concepts & Information Systems	4

## BUSINESS ADMINISTRATION MANAGEMENT

REQUIRED COURSES:	UNITS
Busad 1A Principles of Accounting and	4
Busad 1B Principles of Accounting	4
or	
Busad 161A Small Business Accounting I and	4
Busad 161B Small Business Accounting II	4
Busad 18 Business Law	4
Busad 20 Principles of Business	3
Busad 24 Human Relations in Organizations	3
Busad 30 Principles of Marketing	3
Busad 40 Principles of Management	3
Busad 150 Small Business Management	3
Busad 163 Business Mathematics	4
Cmpsc 1 Computer Concepts & Information Systems	4
Econ 10 Principles of Economics	4
Econ 11 Principles of Economics	4

TOTAL REQUIRED UNITS 43

RECOMMENDED OPTIONAL COURSE:	UNITS
Busad 97 Work Experience	Minimum 4



**BUSINESS ADMINISTRATION  
RETAILING**

REQUIRED COURSES:	UNITS
Busad 18 Business Law	4
Busad 20 Principles of Business	3
Busad 24 Human Relations in Organizations	3
Busad 30 Principles of Marketing	3
Busad 124 Retail Sales and Advertising	3
Busad 160 Basic Accounting	4
or	
Busad 161A Small Business Accounting I	4
Busad 161B Small Business Accounting II	4
Busad 163 Business Mathematics	4
Cmpsc 1 Computer Concepts & Information Systems	4
Econ 10 Principles of Economics	4
Oftc 25 Business Communications	3
<b>TOTAL REQUIRED UNITS 39</b>	

RECOMMENDED OPTIONAL COURSES:

Busad 40 Principles of Management	3
Busad 97 Work Experience	Minimum 4

**ASSOCIATE CHILD DEVELOPMENT  
TEACHER**

REQUIRED COURSES:	UNITS
Child 1 Principles of Child Development	3
Child 16 Practicum	3
Child 22 Child, Family, Community	3
Child 3 Practices in Child Development	3
or	
Child 10 Creative Activities in the Arts	2
and one of the following:	
Child 12 Creative Activities in Math	2
Child 13 Creative Activities in Science	2
or	
Child 28 Books for Young Children	3
<b>TOTAL REQUIRED UNITS 12-13</b>	

**CHILD DEVELOPMENT**

REQUIRED COURSES:	UNITS
Child 1 Principles of Child Development	3
Child 2 Observing & Recording Behavior	1
Child 3 Practices in Child Development	3
Child 5 Child Nutrition	2
Child 7 Child Health and Safety	1
Child 10 Creative Activities in the Arts	2
Child 12 Creative Activities in Math	2
Child 13 Creative Activities in Science	2
Child 16 Practicum	3
Child 22 Child, Family, Community	3
Child 30 Child Care/Nursery School Administration	3
Child 19 Exceptional Needs Children	3
or	
Child 25 Infant/Toddler Care	3
or	
Child 27 School Age Children	3
or	
Child 28 Books for Young Children	3
Engl 151 Preparation for College Composition	4
or	
Engl 1A Reading & Composition: Beginning	3
<b>TOTAL REQUIRED UNITS 31-32</b>	

**COMPUTER SCIENCE**

REQUIRED COURSES:	UNITS
Cmpsc 3 Windows and DOS Operating Systems	3
Cmpsc 9 UNIX Operations/Communication	3
Cmpsc 22 Programming Concepts & Methodology I	4
Cmpsc 40 Assembly Language Programming	4
Cmpsc 41 Networking Essentials	3
Electives—choose two (6-8 units)	
Cmpsc 7 Novell Network Management	3
Cmpsc 15 Java Programming	3
Cmpsc 24 Programming Concepts & Methodology II	4
Cmpsc 28 Visual Basic Programming	3
Cmpsc 55 Data Base Management	4
General Education (8 units)	
Math 18A Calculus I: Differential	4
Math 18B Calculus II: Integral	4
<b>TOTAL REQUIRED UNITS 32</b>	

**COMPUTER SCIENCE  
APPLIED COMPUTER STUDIES:  
BUSINESS EMPHASIS**

REQUIRED COURSES:	UNITS
Cmpsc 1 Computer Concepts & Information Systems	4
Cmpsc 4 Windows 95 Essentials	2
Cmpsc 9 UNIX Operations/Communication	3
Cmpsc 22 Programming Concepts & Methodology I	4
Cmpsc 30 Financial Worksheets on Computers	3
Cmpsc 55 Data Base Management	3
Busad 1A Principles of Accounting	4
Busad 1B Principles of Accounting	4
Busad 40 Principles of Management	3
Oftc 40 Beginning Word Processing	2
<b>TOTAL REQUIRED UNITS 32</b>	
RECOMMENDED OPTIONAL COURSES:	
Busad 163 Business Mathematics	4
Cmpsc 7 Novell Network Management	3
Cmpsc 24 Programming Concepts & Methodology II	4



**COMPUTER SCIENCE  
GEOGRAPHIC INFORMATION SYSTEMS**

REQUIRED COURSES:	UNITS
Cmpsc 1 Computer Concepts & Information Systems	4
Cmpsc 3 Windows and DOS Operating Systems	3
Cmpsc 60 Introduction to GIS - ArcView	3
Cmpsc 65 GIS Applications	3
Cmpsc 70 Intro to Raster-Based GIS	3
Cmpsc 75 GIS Applications in Resource Management	3
Draft 50A Computer Assisted Drafting I	3
Esc 5 Physical Geology	4
or	
Geogr 15 Physical Geography	3
Engl 1A Reading & Comp: Beginning	3
or	
Engl 151 Preparation for College Composition	4
Fortc 153 Forest Surveying Techniques	3
Math 101 Algebra I: Fundamentals or equivalent	5
or	
Higher level algebra	
Natre 1 Environmental Conservation	3
Nartc 160 Aerial Photography & Map Interpretation	2
<b>TOTAL REQUIRED UNITS 41-43</b>	

RECOMMENDED OPTIONAL COURSES:

Busad 97 Work Experience (AutoCAD or GIS)	minimum 4
Cmpsc 7 Novell Network Management	3
Cmpsc 9 UNIX Operations/Communications	3
Cmpsc 55 Data Base Management	3
Cmpsc 58 GIS-ArcView	1
Cmpsc 59 Geographic Information & Global Positioning Systems	1-3
Math 2 Elements of Statistics	3
Math 8 Trigonometry	3
Spcom 1 Fundamentals of Speech	3

**COMPUTER SCIENCE  
MANAGEMENT INFORMATION SYSTEMS**

REQUIRED COURSES:	UNITS
BusAd 20 Principles of Business	3
Cmpsc 51 Management Information Systems	4
Cmpsc 1 Computer Concepts & Information Systems	4
Cmpsc 52 E-Commerce	3
Cmpsc 53 Project Management	3
Cmpsc 54 Data Mining	3
Cmpsc 30 Financial Spreadsheets	3
Busad 30 Principles of Marketing	3
Cmpsc 17 Advanced Internet Research	1-3
<b>TOTAL REQUIRED UNITS 27-29</b>	

RECOMMENDED OPTIONAL COURSES:

Busad 40 Principles of Management	3
Cmpsc 3 Operating Systems	3
Cmpsc 55 Data Base Management	3

**COMPUTER SCIENCE  
WEBSITE DEVELOPMENT AND DESIGN**

REQUIRED COURSES:	UNITS
Cmpsc 4 Windows Essentials	1
Cmpsc 10 Internet Essentials	1
Cmpsc 10B Advanced Internet Research	1
Cmpsc 11 Presentations Using Computers and Multimedia	1-2

Cmpsc 12 Website Development Applications	3
Cmpsc 13 Intro to HTML	2
Cmpsc 14 Advanced Topics Website Development	2-3
Cmpsc 140 Computer Graphics	3
Cmpsc 149 Photoshop for the Web	2-3
or	
Art 47a Digital Darkroom-Beginner	3
Cmpsc 52 E-Commerce	3
or	
Busad 52 E-Commerce	3
Cmpsc 53 Project Management	3
Cmpsc 55 Database Management	4
Engl 1A Reading and Composition	3
Engl 151 Preparation for College Composition	4

TOTAL REQUIRED UNITS 29-33

**EMERGENCY HEALTH SERVICES  
PARAMEDIC**

REQUIRED COURSES:	UNITS
EMS 20 Basic Cardiology/Cardiac Dysrhythmias	3
EMS 43 Paramedic Training I	14
EMS 44 Paramedic Training II	8
EMS 45 Paramedic Training III	9
<b>TOTAL REQUIRED UNITS 34</b>	

RECOMMENDED OPTIONAL COURSES:

Biol 10 Human Anatomy	4
Biol 60 Human Physiology	4

**EMERGENCY MEDICAL SERVICES**

REQUIRED COURSES:	UNITS
Biol 10 Human Anatomy	4
Biol 60 Human Physiology	4
EMS 4 Emergency Medical Technician Training	6
EMS 13 Adv. First Aid/Emergency Care	3
EMS 20 Basic Cardiology/Cardiac Dysrhythmias	3
<b>TOTAL REQUIRED UNITS 20</b>	

**EMERGENCY MEDICAL SERVICES  
FIRST RESPONDER**

REQUIRED COURSES:	UNITS
EMS 157 First Responder & CPR	3
<b>TOTAL REQUIRED UNITS 3</b>	

**FIRE TECHNOLOGY**

REQUIRED COURSES:	UNITS
EMS 4 Emergency Medical Technician Training	6
Fire 101 Firefighter I Academy	15
Fire 108 Confined Space Awareness	0.5
<b>TOTAL REQUIRED UNITS 21.5</b>	

RECOMMENDED OPTIONAL COURSES:

Busad 25 Job Search & Interviewing Strategies	1.0
Busad 163 Business Mathematics	4
Cmpsc 1 Computer Concepts & Information Systems	4
Cmpsc 58 Introduction to GIS-ArcView	3
H-HP 9 Circuit Cross-Training	5-2
Oftc 100 Computer Keyboarding I	1
Spcom 1 Fundamentals of Speech	3
Skills Development Courses	(based upon individual need)



**FORESTRY TECHNOLOGY**

REQUIRED COURSES:	UNITS
Fores 1 Introduction to Professional Forestry .....	3
Fores 10 Dendrology .....	3
Fortc 153 Forest Surveying Techniques .....	3
Fortc 162 Applied Forest Inventory .....	2
Cmpsc 1 Computer Concepts & Information Systems .....	4
Engl 151 Preparation for College Composition .....	4
or	
Higher level English .....	3
Fire 7 Wildland Fire Control .....	3
Math 101 Algebra I: Fundamentals .....	5
or	
Higher level algebra .....	3-6
Natre 1 Environmental Conservation .....	3
Natre 9 Parks and Forests Law Enforcement .....	2
Natre 30 Introduction to Watershed Management .....	3
Natre 50 Natural History and Ecology .....	2
or	
Biol 24 General Ecology .....	4
Nartc 160 Aerial Photography & Map Interpretation .....	2
Nartc 181 California Wildlife .....	4

TOTAL REQUIRED UNITS 40-45

RECOMMENDED OPTIONAL COURSES:	UNITS
Oftec 100 Computer Keyboarding I .....	1
or	
Oftec 110 Computer Keyboarding II .....	2

**HOSPITALITY MANAGEMENT  
BAKER**

REQUIRED COURSES:	UNITS
Hpmgt 120 Safety and Sanitation .....	1
Hpmgt 122 Restaurant Math .....	0.5
Hpmgt 134 Commercial Baking: Beginning .....	2
Hpmgt 135 Commercial Baking: Advanced .....	2

TOTAL REQUIRED UNITS 5.5

**HOSPITALITY MANAGEMENT  
BARTENDER**

REQUIRED COURSES:	UNITS
Hpmgt 120 Safety and Sanitation .....	1
Hpmgt 147 Beverage Management .....	2

TOTAL REQUIRED UNITS 3

**HOSPITALITY MANAGEMENT  
CHEF**

REQUIRED COURSES:	UNITS
Hpmgt 102 Introduction to Hospitality Careers & Human Relations ...	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 120 Safety and Sanitation .....	1
Hpmgt 122 Restaurant Math .....	0.5
Hpmgt 126 Nutrition for Chefs .....	1
Hpmgt 128 Kitchen Management .....	3
Hpmgt 133A Introduction to Commercial Food Preparation .....	3
Hpmgt 133B Commercial Food Preparation .....	4
Hpmgt 134 Commercial Baking: Beginning .....	2
Hpmgt 136 Dining Room Service and Management .....	2
Hpmgt 140 Contemporary Cuisine .....	3.5
Hpmgt 141 Restaurant Desserts .....	2
Hpmgt 142 Garde Manger .....	1
Hpmgt 146 Dining Room Service and Management .....	2
Hpmgt 148 Introduction to Wines .....	2
Hpmgt 190 Culinary Arts Internship .....	2

TOTAL REQUIRED UNITS 32.5

**HOSPITALITY MANAGEMENT  
DELI COOK & BAKER**

REQUIRED COURSES:	UNITS
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 120 Safety and Sanitation .....	1
Hpmgt 122 Restaurant Math .....	0.5
Hpmgt 133A Introduction to Commercial Food Preparation .....	3
Hpmgt 134 Commercial Baking: Beginning .....	2
Hpmgt 142 Garde Manger .....	1

TOTAL REQUIRED UNITS 9.5

**HOSPITALITY MANAGEMENT  
DINING ROOM MANAGEMENT**

REQUIRED COURSES:	UNITS
Hpmgt 102 Introduction to Hospitality Careers & Human Relations ...	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 120 Safety and Sanitation .....	1
Hpmgt 122 Restaurant Math .....	0.5
Hpmgt 136 Dining Room Service and Management .....	2
Hpmgt 146 Dining Room Service and Management .....	2
Hpmgt 148 Introduction to Wines .....	2

TOTAL REQUIRED UNITS 11

**HOSPITALITY MANAGEMENT  
DINING ROOM STAFF**

REQUIRED COURSES:	UNITS
Hpmgt 120 Safety and Sanitation .....	1
Hpmgt 122 Restaurant Math .....	0.5
Hpmgt 136 Dining Room Service and Management .....	2

TOTAL REQUIRED UNITS 3.5

**HOSPITALITY MANAGEMENT  
DINNER LINE COOK**

REQUIRED COURSES:	UNITS
Hpmgt 102 Introduction to Hospitality Careers & Human Relations ...	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 120 Safety and Sanitation .....	1
Hpmgt 122 Restaurant Math .....	0.5
Hpmgt 126 Nutrition for Chefs .....	1
Hpmgt 128 Kitchen Management .....	3
Hpmgt 133A Introduction to Commercial Food Preparation .....	3
Hpmgt 133B Commercial Food Preparation .....	4
Hpmgt 134 Commercial Baking: Beginning .....	2
Hpmgt 136 Dining Room Service and Management .....	2
Hpmgt 142 Garde Manger .....	1

TOTAL REQUIRED UNITS 21

**HOSPITALITY MANAGEMENT  
HOTEL MANAGEMENT**

REQUIRED COURSES:	UNITS
Hpmgt 20 Intro to Travel-Tourism/Industry Tours .....	3
Hpmgt 102 Introduction to Hospitality Careers & Human Relations ...	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 112 Front Office Mgmt/Hotel Catering .....	2
Hpmgt 114 Intro to Maintenance and Housekeeping .....	1.5
Hpmgt 152 Restaurant Planning .....	3
Hpmgt 97 Work Experience .....	2

Busad 1A Principles of Accounting .....	4
or	
Busad 160 Basic Accounting .....	4
or	
Busad 161A Small Business Accounting I .....	4

TOTAL REQUIRED UNITS 19

RECOMMENDED OPTIONAL COURSES:	UNITS
Oftec 5 Electronic Printing Calculators .....	1

**HOSPITALITY MANAGEMENT  
PANTRY & DESSERT CHEF**

REQUIRED COURSES:	UNITS
Hpmgt 102 Introduction to Hospitality Careers & Human Relations .....	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 120 Safety and Sanitation .....	1
Hpmgt 122 Restaurant Math .....	0.5
Hpmgt 126 Nutrition for Chefs .....	1
Hpmgt 128 Kitchen Management .....	3
Hpmgt 133A Introduction to Commercial Food Preparation .....	3
Hpmgt 133B Commercial Food Preparation .....	4
Hpmgt 134 Commercial Baking: Beginning .....	2
Hpmgt 136 Dining Room Service and Management .....	2
Hpmgt 140 Contemporary Cuisine .....	3.5
Hpmgt 141 Restaurant Desserts .....	2
Hpmgt 142 Garde Manger .....	1
Hpmgt 148 Introduction to Wines .....	2

TOTAL REQUIRED UNITS 28.5

**HOSPITALITY MANAGEMENT  
RESTAURANT MANAGEMENT**

REQUIRED COURSES:	UNITS
Busad 1A Principles of Accounting .....	4
or	
Busad 160 Basic Accounting .....	4
or	
Busad 161A Small Business Accounting I .....	4
Hpmgt 97 Work Experience .....	2
Hpmgt 102 Introduction to Hospitality Careers & Human Relations ...	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 120 Safety and Sanitation .....	1
Hpmgt 122 Restaurant Math .....	0.5
Hpmgt 126 Nutrition for Chefs .....	1
Hpmgt 128 Kitchen Management .....	3
Hpmgt 133A Introduction to Commercial Food Preparation .....	3
Hpmgt 133B Commercial Food Preparation .....	4
Hpmgt 134 Commercial Baking: Beginning .....	2
Hpmgt 136 Dining Room Service and Management .....	2
Hpmgt 147 Beverage Management .....	2
Hpmgt 152 Restaurant Planning .....	3

TOTAL REQUIRED UNITS 31

RECOMMENDED OPTIONAL COURSES:	UNITS
Hpmgt 148 Introduction to Wines .....	2

**HOSPITALITY MANAGEMENT  
SAFETY & SANITATION**

REQUIRED COURSES:	UNITS
Hpmgt 120 Safety and Sanitation .....	1

TOTAL REQUIRED UNITS 1

**HOSPITALITY MANAGEMENT  
TRAVEL AND TOURISM  
(RECREATION)**

REQUIRED COURSES:	UNITS
Hpmgt 10 Introduction to Recreation and Leisure .....	3
Hpmgt 20 Introduction to Leisure Travel and Tourism .....	3
Hpmgt 30 Geography of Travel and Tourism: Western Hemisphere .....	3
Hpmgt 162 Introduction to Tourism Marketing, Sales, And Customer Service .....	3
Hpmgt 164 Tourism Planning and Impacts .....	3
Hpmgt 168 Developing an Hospitality/Tourism/Recreation Career Path and Portfolio .....	2

TOTAL REQUIRED UNITS 17



**HUMAN SERVICES**

REQUIRED COURSES:	UNITS
Cmpsc 1 Computer Concepts & Information Systems	4
Guide 10A Introduction to Helping Skills	1.5
Guide 10B Intermed Helping & Basic Conflict Mgmt Skills	1.5
Oftec 31 Office Procedures & Technology	3
Psych 30 Personal and Social Adjustment	3
Socio 5 Ethnicity & Ethnic Relations in America	3
Socio 12 Sociology of the Family	3
Child 22 Child, Family, Community	3
Socio 97 Work Experience	1
Child 1 Principles of Child Development	3
Guide 1 Career/Life Planning	3
Psych 1 General Psychology	3
Socio 1 Introduction to Sociology	3
<b>TOTAL REQUIRED UNITS 23</b>	

RECOMMENDED OPTIONAL COURSES:

Psych 35 Intro to Drugs & Behavior	3
Spcom 1 Fundamentals of Speech	3

**NATURAL RESOURCES  
WATERSHED MANAGEMENT TECHNOLOGY**

REQUIRED COURSES:	UNITS
Cmpsc 1 Computer Concepts & Information Systems	4
Esc 5 Physical Geology	4
Esc 10 Environmental Geology	3
Geogr 15 Physical Geography	3
Fores 10 Dendrology	3
Fortc 153 Forest Surveying Techniques	3
Natre 3 Natural Resources Law and Policy	3
Natre 9 Parks and Forests Law Enforcement	2
Natre 22 Ecology/Use of Fire	2
Natre 30 Introduction to Watershed Management	3
Natre 50 Natural History and Ecology	2
Biol 24 General Ecology	4
Nartc 160 Aerial Photography & Map Interpretation	2
Nartc 181 California Wildlife	4
<b>Plus OPTION A or OPTION B</b>	
<b>OPTION A</b>	
Cmpsc 60 Introduction to GIS - ArcView	3
Draft 50A Computer Assisted Drafting I	3
<b>OPTION B</b>	
Cmpsc 70 Intro to Raster-Based GIS	3
Cmpsc 75 GIS Applications in Resource Management	3
<b>TOTAL REQUIRED UNITS 34-38</b>	

**NATURAL RESOURCES TECHNOLOGY**

REQUIRED COURSES:	UNITS
Natre 1 Environmental Conservation	3
Natre 9 Parks and Forests Law Enforcement	2
Natre 30 Introduction to Watershed Management	3
Natre 50 Natural History and Ecology	2
Biol 24 General Ecology	4
Nartc 155 Interpretive Guided Tours	2
Nartc 160 Aerial Photography & Map Interpretation	2
Nartc 181 California Wildlife	4
Biol 179 Fishing and Fisheries	1
Esc 10 Environmental Geology	3
Esc 25 Geology of National Parks	3
Engl 151 Preparation for College Composition	4
Higher level English	3
Fire 7 Wildland Fire Control	3
Fores 1 Introduction to Professional Forestry	3
Fores 10 Dendrology	3
Fortc 153 Forest Surveying Techniques	3
Math 101 Algebra I: Fundamentals or equivalent	5
Higher level math course	3-6
<b>TOTAL REQUIRED UNITS 40-45</b>	

RECOMMENDED OPTIONAL COURSES:

Oftec 100 Computer Keyboarding I	1
Oftec 110 Computer Keyboarding II	2

**OFFICE TECHNOLOGY  
CORE COURSES REQUIRED**

CORE REQUIREMENTS:	UNITS
Oftec 5 Electronic Printing Calculators	1
Oftec 20 Machine Transcription	2
Oftec 25 Business Communications	3
Oftec 31 Office Procedures & Technology	3
Oftec 40 Beginning Word Processing	2
Oftec 120 Computer Keyboarding III	3
Oftec 130 Business English	3
Busad 20 Principles of Business	3
Busad 163 Business Mathematics	4
Cmpsc 1 Computer Concepts & Information Systems	4
<b>TOTAL REQUIRED UNITS 28</b>	

**OFFICE TECHNOLOGY  
ADMINISTRATIVE ASSISTANT**

REQUIRED COURSES:	UNITS
Oftec Core Courses (above)	27
Oftec 41 Intermediate Word Processing	3
Oftec 42 Desktop Publishing	3
Cmpsc 11 Presentations Using Computers/Multimedia	1-2
Oftec 97 Work Experience	1
Cmpsc 30 Financial Worksheets on Computers	3
<b>TOTAL REQUIRED UNITS 35-37</b>	

**OFFICE TECHNOLOGY  
GENERAL OFFICE CLERK**

REQUIRED COURSES:	UNITS
Oftec Core Courses (above)	27
Oftec 41 Intermediate Word Processing	3
Busad 1A Principles of Accounting	4
Busad 160 Basic Accounting	4
Busad 161A Small Business Accounting I	4
Busad 158 Payroll Accounting	3
Cmpsc 30 Financial Worksheets on Computers	3
<b>TOTAL REQUIRED UNITS 40</b>	

**OFFICE TECHNOLOGY  
INFORMATION PROCESSING**

REQUIRED COURSES:	UNITS
Oftec 20 Machine Transcription	2
Oftec 25 Business Communications	3
Oftec 40 Beginning Word Processing	2
Oftec 41 Intermediate Word Processing	3
Oftec 42 Desktop Publishing	3
Cmpsc 11 Presentations Using Computers/Multimedia	1-2
Oftec 120 Computer Keyboarding III	3
Oftec 130 Business English	3
Busad 20 Principles of Business	3
Busad 160 Basic Accounting	4
Busad 161A Small Business Accounting I	4
Cmpsc 1 Computer Concepts & Information Systems	4
Cmpsc 3 Windows and DOS Operating Systems	3
Cmpsc 30 Financial Worksheets on Computers	3
Cmpsc 55 Data Base Management	3
<b>TOTAL REQUIRED UNITS 37-39</b>	

**OFFICE TECHNOLOGY  
LEGAL OFFICE**

REQUIRED COURSES:	UNITS
Oftec Core Courses (above)	27
Oftec 41 Intermediate Word Processing	3
Oftec 60 Legal Transcription/Terminology	2
Oftec 97 Work Experience	1
Busad 18 Business Law	4
<b>TOTAL REQUIRED UNITS 37</b>	

**OFFICE TECHNOLOGY  
MEDICAL OFFICE**

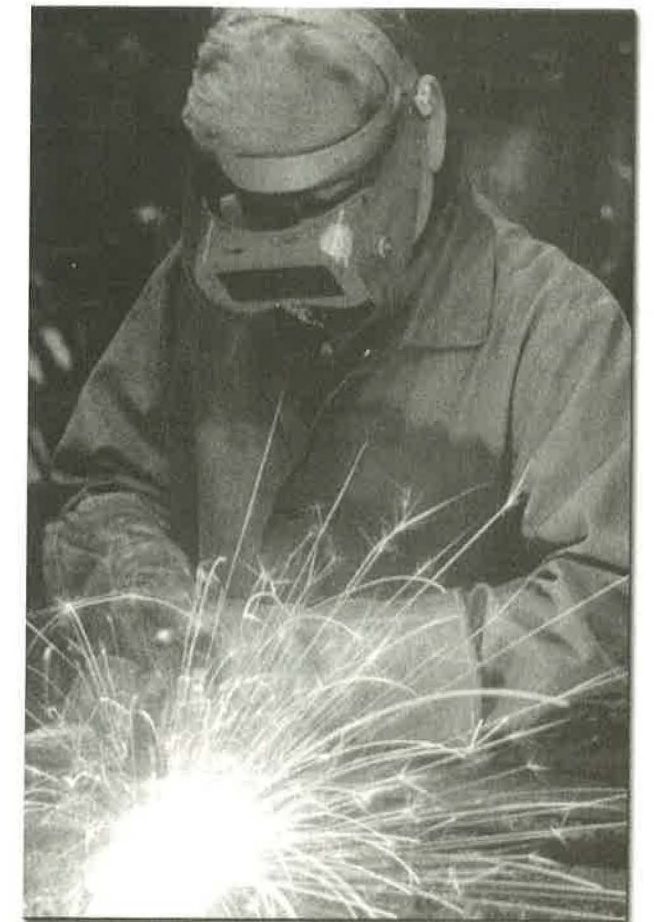
REQUIRED COURSES:	UNITS
Oftec Core Courses (above)	27
Oftec 50 Medical Terminology	3
Oftec 52 Medical Insurance	3
Oftec 53A Beginning Medical Transcription	2
<b>TOTAL REQUIRED UNITS 35</b>	

**OFFICE TECHNOLOGY  
MEDICAL TRANSCRIPTION**

REQUIRED COURSES:	UNITS
Oftec 40 Beginning Word Processing	2
Oftec 41 Intermediate Word Processing	3
Oftec 50 Medical Terminology	3
Oftec 53A Beginning Medical Transcription	2
Oftec 53B Beginning Medical Transcription	2
Oftec 54 Radiology Transcription	1
Oftec 55 Cardiology Transcription	1
Oftec 56 Orthopedic Transcription	1
Oftec 57 Gastroenterology Transcription	1
Oftec 58 Pathology Transcription	1
Oftec 120 Computer Keyboarding III	3
Oftec 130 Business English	3
Cmpsc 1 Computer Concepts & Information Systems	4
<b>TOTAL REQUIRED UNITS 27</b>	

**WELDING TECHNOLOGY**

REQUIRED COURSES:	UNITS
WT 100 Intro to Welding	3
WT 110 M.I.G./T.I.G. Welding	3
WT 111 Advanced Arc Welding Techniques	3
WT 101 Practical Laboratory	1
Wldtc 97 Work Experience in Welding	2
<b>TOTAL REQUIRED UNITS 12</b>	





# GRADUATION & TRANSFER REQUIREMENTS

## Graduation Requirements

Columbia College will confer the Associate in Arts, Associate in Science, or Associate in Science (Occupational Education) Degree upon completion of the following requirements. The **Associate in Arts Degree** is earned in areas such as Fine Arts, Humanities, Social and Behavioral Science, and is often awarded to students who plan to transfer to a four-year institution. The **Associate in Science Degree** is awarded in Science and Technical fields, and is specifically designed for students who intend to transfer to a four-year institution. The **Associate in Science (Occupational Education) Degree** is earned in occupational programs that provide students with skills and training for immediate entry into the workforce.

- TOTAL UNITS:** Satisfactory completion of 60 degree applicable semester units from courses numbered 1-199, of which 12 must be taken in residence at Columbia College. Units earned in remedial and Skills Development unit courses do not count in the 60 unit requirement.
- SCHOLARSHIP:** A cumulative Grade Point Average of not less than 2.0 ("C" average) and no grade lower than "C" in major classes and General Education areas A.1, A.2, A.3 and B.4.
- MAJOR:** Satisfactory completion of any AA/AS/AS(OE) Major listed on pages 44-56. All courses in the major must be completed with a "C" or better. Credit (CR) grades are not accepted. More than one Associate Degree may be awarded to a student who completes all applicable requirements as listed above plus 12 extra units (72 or more total semester units). A course may only be used to meet the requirements for two different majors when no other course selections are available.
- GENERAL EDUCATION BREADTH REQUIREMENTS:** Satisfactory completion of each Area of General Education "A" through "E", by choosing suitable courses from those listed under each Area on pages 39 and 40. Courses in areas A.1, A.2, A.3 and B.4 must be completed with a grade of "C" or better. Students wishing to transfer to a California State University may follow the requirements listed in the right-hand column. Students who do not expect to transfer, but wish to graduate from Columbia College with the AA, AS, or AS (OE) Degree should follow the requirements

listed in the appropriate left-hand column. The courses suitable to satisfy **BOTH** patterns are listed in the center column. Transfer students are encouraged to satisfy both patterns at the same time by careful selection of courses, in order to graduate with the AA, AS, or AS (OE) Degree as well as transfer to a CSU campus. CSU/UC transfer students should refer to pages 57-64 for an alternative method of completing transferable General Education Requirements.

- COMPETENCY REQUIREMENTS:** State Law mandates that students earning the Associate degree must meet competency requirements in reading, composition, and mathematics. These requirements may be met by completing the following courses with a grade of "C" or better:

Engl 1A, Reading and Composition: Beginning  
Busad 163, Business Mathematics,  
Math 100B, Algebra I: Second Half, or  
Math 101, Algebra I: Fundamentals, or any mathematics course of a higher level than Algebra I.

They may also be met through completion of a challenge examination with a grade of "C" or better.

- INSTITUTIONAL REQUIREMENT:** Two physical activity courses under Health & Human Performance are required. These courses are in addition to Area E of the General Education Breadth pattern.

### Supplementary Notes

- These requirements for graduation and General Education apply to Associate Degree and CSU transfer students entering Columbia College for the first time in Fall Semester 1999, and are valid through the 2002-03 academic year. Students continuously enrolled may continue to follow their older catalog, but those taking more than four years of continuous attendance to graduate must use graduation requirements not older than four years.
- Request for Waiver or Substitution:** Request for waiver or substitution of any graduation requirement must be petitioned to the Academic Requirements Review Committee.
- Double-counting units:** Courses used to satisfy General Education Breadth Requirements may also be used to satisfy major requirements for the Associate Degree.

- California law includes a requirement in U.S. History and Government for the CSU transfer student pursuing the BA/BS Degree. Completion of the two specified courses from D.3 will meet the requirement, but only three units will be credited toward the 39 CSU certified General Education units. (*Units above 39 will count instead for elective credit.*) Some California State University campuses place the U.S. History and Government requirement outside the General Education requirement, while others include it within. Some CSU campuses require one U.S. History course *and* one Government course while others accept *two* courses in U.S. History. Consult the catalog of the California State University campus to which you will transfer, or see your counselor for clarification. (*See pages 39 and 40 for specific Associate Degree General Education Requirements.*)

- Students should consult the appropriate catalog of the college to which they intend to transfer and seek assistance from a counselor to ensure that all possible required lower division general education courses and prerequisites for the major are included in their Columbia College program of study.

- Columbia College will automatically send a Lower Division General Education Certification when a student requests his/her transcript to be sent to a CSU campus.

### Notice Of Intent To Graduate

The student must file a Notice of Intent to Graduate form with the Admissions and Records Office the semester prior to the semester in which completion of the graduation requirements is expected. The Notice of Intent to Graduate form may be obtained from the Admissions and Records Office. Graduation requirements may be completed during any college term, but diplomas are conferred only at graduation exercises at the close of the Spring Semester. It is strongly recommended that students see a counselor the semester prior to the term they graduate to review their progress toward fulfilling all requirements.

### Transfer Requirements To A California State University

Columbia College will send certification of General Education Breadth Requirements to the California State University campus to which the student transfers. Full certification consists of not less than 39 semester units from Areas "A" through "E". In addition, the following transfer requirements and information apply (*see pages 42-43, 59-67, in the current catalog*):

- TOTAL UNITS:** Satisfactory completion of 56 to 70 transferable semester units from courses numbered 1-99. If you wish to transfer with less than 56 transferable

units, you must submit satisfactory test scores from either the Scholastic Aptitude Test (SAT) or American College Testing Program (ACT). For possible exemption from ACT and SAT tests, see the catalog of the college to which student plans to transfer. Transfer requirements vary from campus to campus within both CSU and UC systems. You are required to complete 60 transferable units in order to attain full junior status upon transfer. Contact a counselor for specific requirements relative to your transfer choice.

- SCHOLARSHIP:** A cumulative Grade Point Average of not less than 2.0 ("C" average).
- MAJOR:** Satisfactory completion of lower division prerequisites for the BA/BS Major listed in an articulation agreement or the catalog of the California State University transfer campus.

### GENERAL EDUCATION BREADTH

**REQUIREMENTS:** Satisfactory completion of each Area of General Education "A" through "E", by choosing suitable courses from those listed under each Area on pages 42 and 43. Students wishing to transfer to a California State University may follow the requirements listed in the right-hand column. Students who do not expect to transfer, but wish to graduate from Columbia College with the AA, AS, or AS (OE) Degree, should follow the requirements listed in the left-hand column. The courses suitable to satisfy **BOTH** patterns are listed in the center column. Transfer students are encouraged to satisfy both patterns at the same time by careful selection of courses, in order to graduate with the AA, AS, or AS (OE) Degree as well as transfer to a CSU campus. CSU/UC transfer students should refer to pages 59-67 for further information.

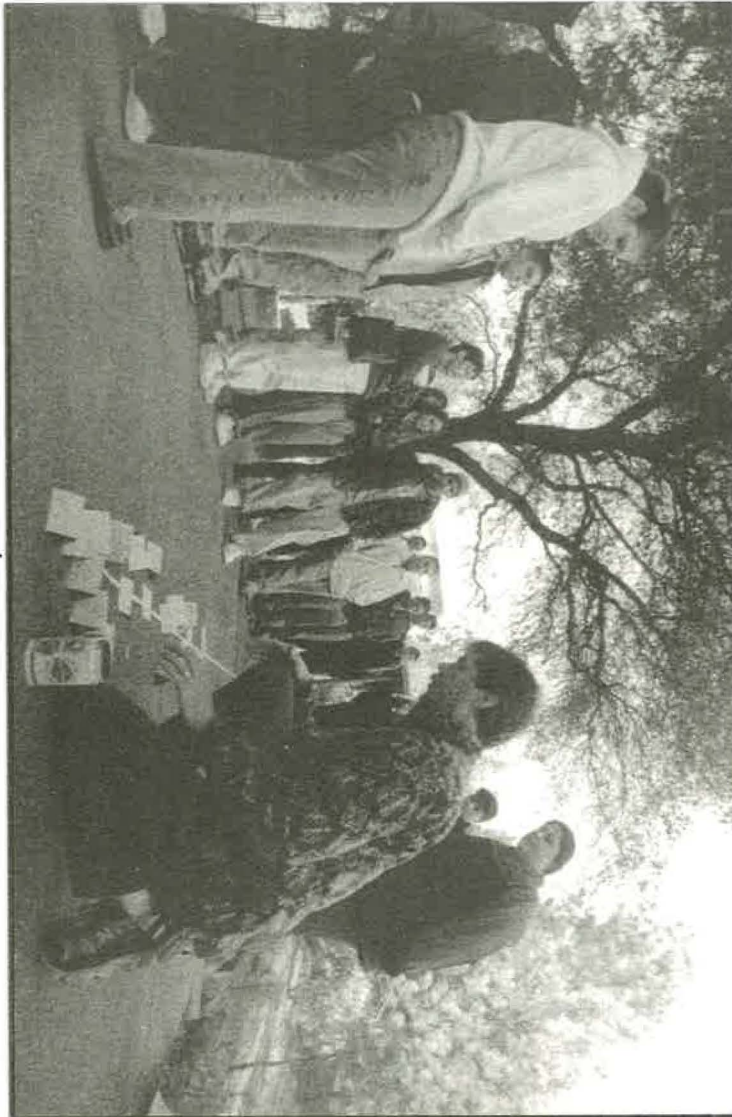
### Supplementary Notes

- Transfer students also have the option of completing the **INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC)** instead of the General Education requirements listed here. Completion of IGETC will permit a student to transfer to either a CSU or UC campus without the need, after transfer, to take additional lower-division general education university requirements. See the current catalog (*page 66-67*) and a counselor for assistance.
- At least nine (9) upper division General Education units or more must be taken at CSU to graduate. Additional upper division English courses may be required for graduation at some campuses, and/or a foreign language may be required.



3. California law includes a requirement in U. S. History and Federal, State and Local Government for the CSU transfer pursuing the BA/BS Degree. Completion of History 16 or 17 and Political Science 10 from Area D will meet this requirement, but only three units will be credited toward the 39 units required for CSU General Education Certification (units in excess of 39 will count instead for elective credit). Some CSU campuses place the U.S. History and government requirement outside the 39 unit GE Certification while others include it within the 39 units. Some CSU campuses accept one U.S. History and/or one government course while others accept two courses in U.S. History. Consult the catalog of the CSU campus to which you intend to transfer or see your counselor for clarification.

4. Columbia College will automatically send a fully or partially completed Lower Division General Certification when a student requests his/her transcript be sent to any CSU campus. The alternate General Education pattern, Intersegmental General Education Transfer Curriculum (IGETC), (see page 66-67) may be used in lieu of the CSU GE Pattern for students in most majors who are unsure of whether they want to transfer to a CSU or a UC. The IGETC must be fully completed and a written request to the Admissions and Records Office must be made before an IGETC Certification will be completed and sent to your transfer UC or CSU campus.



### GENERAL EDUCATION BREADTH REQUIREMENTS FOR COLUMBIA COLLEGE ASSOCIATE OF ARTS (AA) and SCIENCE (AS) DEGREES & TRANSFER TO C.S.U.

See the current catalog for additional information on AA/AS Degree and CSU Transfer Requirements.

FOR AA/AS * DEGREE: Three courses required: one each from A.1, A.2, A.3 (must have a grade of "C" or higher in each area of A). Also acceptable in A.1.:SPCOM 4	FOR AS (OCCUPATIONAL EDUCATION**) DEGREE: Two courses required: one course from A.2. and one course from A.1. or A.3. (must have a grade of "C" or higher). Also acceptable in A.1.:SPCOM 4	Courses for Each Area of General Education  <b>AREA A. COMMUNICATION &amp; CRITICAL THINKING:</b> A.1. Oral Communication SPCOM 1 A.2. Written Communication ENGL 1A, AP A.3. Critical Thinking <sup>1</sup> ENGL 1B, 1C, SPCOM 2, AP <sup>1</sup> English 1B may be used to satisfy either Area A.3 or C.2 but not both.	<sup>2</sup> May use Human 4 or Philo 4 to satisfy C.2., but not both. <b>FOR CSU TRANSFER***:</b> Three courses required: one each from A.1, A.2, A.3 (must have a grade of "C" or higher in each area of A).
<b>FOR AA/AS* DEGREE:</b> Three courses required: one each from B.1, B.2, and B.4, including one laboratory course from B.3. Also acceptable in B.4: BUSAD 163, MATH 100B, MATH 101, and MATH 165 or any higher mathematics course (must have a grade of "C" or higher in area B4).	<b>FOR AS (OCCUPATIONAL EDUCATION**) DEGREE:</b> Two courses required: One course from B.1 or B.2; and one course from B.4. Also acceptable in B.4: BUSAD 163, MATH 100B, MATH 101 and MATH 165 or any higher mathematics course (must have a grade of "C" or higher in area B4).	<b>AREA B. THE PHYSICAL UNIVERSE, ITS LIFE FORMS AND MATHEMATICAL CONCEPTS:</b> B.1. Physical Sciences CHEM 1A (L), 1B (L), 10 (L), 20, AP, ESC 5 (L), 10, 30, 40, 60 GEOGR 15, PHYCS 1, 4A(L), 4B(L), 5A(L), 5B (L), AP B.2. Biological Sciences BIOL 2 (L), 4 (L), 6 (L), 10 (L), 17 (L), 24 (L), 60 (L), 65 (L), AP B.3. Lab/Activity BIOL 2 (L), 4 (L), 6 (L), 10 (L), 17 (L), 24 (L), 60 (L), 65 (L), AP, CHEM 1A (L), 1B (L), 10 (L), AP, ESC 5 (L), ESC 60, 45 (L), PHYCS 4A(L), 4B(L), 5A (L), 5B (L), AP B.4. Mathematical Concepts, Quantitative Reasoning and Applications MATH 2, 4A, 4B, 6, 8, 10, 12, 16, 18A, 18B, 18C, AP <b>(L) Includes a laboratory</b>	<b>FOR CSU TRANSFER***:</b> Three courses required: one each from B.1, B.2, and B.4, including one laboratory (L) course from B.3; and no fewer than nine units total from Area B (must have a grade of "C" or higher in area B4).
<b>FOR AA/AS* DEGREE:</b> Two courses required: one from C.1; and one from C.2.  *The GE requirements in this column do not apply to the AS (OCCUPATIONAL EDUCATION) Degree. See column at right for AS (OCCUPATIONAL EDUCATION) GE Degree requirements.	<b>FOR AS (OCCUPATIONAL EDUCATION**) DEGREE:</b> One course required from C.1 or C.2.  **The GE requirements in this column only apply to the AS (OCCUPATIONAL EDUCATION) Degree.	<b>AREA C. ARTS, LITERATURE, PHILOSOPHY, AND FOREIGN LANGUAGE:</b> C.1. Arts (Art, Dance, Drama, Music): ART 11, 12, 13, AP, DRAMA 10, 20, 42, 43, HHP 20, 27, MUSIC 2, 10, 11, 12, AP C.2. Literature, Philosophy and Foreign Language: <sup>1</sup> ENGL 1B, 11, 17, 18, 46, 47, 49, 50, AP HUMAN 1, 2, 3, 4 <sup>2</sup> INDIS 1 PHILO 1, 4 <sup>2</sup> , 25 SPAN 1A, 1B, 2A, 2B, AP  <sup>1</sup> English 1B may be used to satisfy either Area A.3 or C.2 but not both.	<b>FOR CSU TRANSFER***:</b> Three courses required: one from C.1, one from C.2, and one from either C.1 or C.2; and no fewer than nine units from Area C.  ***A student may opt to follow the Intersegmental General Education Transfer Curriculum (IGETC) for CSU General Breadth requirements (See pages 66-67).



<p><b>FOR AA/AS * DEGREE:</b> Two courses required: one from HIST 16, 17 or POLSC 10; and one course from D1-D0. Also acceptable in D: JRNAL 1 and HIST 55.</p>	<p><b>FOR AS (OCCUPATIONAL EDUCATION**) DEGREE:</b> Two courses required: One course from HIST 16, 17 or POLSC 10; and one course from D1-D0. Also acceptable in D: JRNAL 1 and HIST 55.</p>	<p><b>AREA D. SOCIAL, POLITICAL AND ECONOMIC INSTITUTIONS AND BEHAVIOR:</b> Area D.1. Anthropology, Archaeology ANTHR 1, 2, 3, 10, 15<sup>4</sup> Area D.2. Economics ECON 10, 11, AP Area D.3. Ethnic Studies ANTHR 15<sup>4</sup>, HIST 20<sup>4</sup>, SOCIO 5<sup>4</sup> Area D.4. Gender Studies Under development Area D.5. Geography GEOGR 12, 18 Area D.6. History HIST 11, 13, 14, 16<sup>3</sup>, 17<sup>3</sup>, 20<sup>4</sup>, AP Area D.7. Interdisciplinary, Social or Behavioral Science CHILD 22, NATRE 1 Area D.8. Political Science, Government and Legal Institutions POLSC 10<sup>3</sup>, 12, 14, AP Area D.9. Psychology CHILD 1, PSYCH 1, 35<sup>3</sup>, AP<sup>1</sup> Area D.0. Sociology and Criminology SOCIO 1, 2, 5<sup>3</sup></p> <p><sup>3</sup> Psych 35 may be used to satisfy either Area D.9. or E., but not both. <sup>4</sup> Designed to meet an Ethnic Studies Requirement. <sup>5</sup> History 16 or 17 and Political Science 10 meet the US History, Constitution and American Ideals Requirement.</p>	<p><b>FOR CSU TRANSFER:**</b> Four courses required: POLSC 10 and HIST 16 or 17; and two courses from Areas D1-D0 from at least two different disciplines.</p>
<p><b>FOR AA/AS* DEGREE:</b> One course in E. Also acceptable in E: GUIDE 7.  *The GE requirements in this column do not apply to the AS (OCCUPATIONAL EDUCATION) Degree. See column at right for AS (Occupational Education) GE Degree requirements.</p>	<p><b>FOR AS (OCCUPATIONAL EDUCATION**) DEGREE:</b> No course required in E.  **The GE requirements in this column only apply to the AS (OCCUPATIONAL EDUCATION) Degree.</p>	<p><b>AREA E. LIFE-LONG UNDERSTANDING AND SELF-DEVELOPMENT:</b>  BIOL 50 GUIDE 1 H-HP 6A, 6B, 60, 65 PSYCH 5, 10, 30, 35<sup>3</sup> SOCIO 12</p> <p><sup>3</sup> Psych 35 may be used to satisfy either Area D.9. or E., but not both.</p>	<p><b>FOR CSU TRANSFER***:</b> One course in E. Three units minimum required.  ***A student may opt to follow the Intersegmental General Education Transfer Curriculum (IGETC) for CSU General Breadth requirements (See pages 64-65).</p>

See pages 39-40 for additional information on Graduation Requirements and page 40 for additional CSU graduation requirements. Two physical activity courses under Health & Human Performance are required for graduation. (See Institutional Requirements under Graduation Requirements.) See page 62 for specific information on Advanced Placement (AP) credit.

**INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM  
FOR TRANSFER TO THE UNIVERSITY OF CALIFORNIA AND  
THE CALIFORNIA STATE UNIVERSITY**

Full completion of the **Intersegmental General Education Transfer Curriculum - IGETC** will permit a student to transfer from a community college to a campus in either the California State University or the University of California system without the need, after transfer, to satisfy specific campus lower-division general education requirements. *It should be noted that completion of the IGETC is not a requirement for transfer to CSU or UC, nor is it the only way to fulfill the lower-division general education requirements of these systems prior to transfer. The IGETC is an alternative General Education Pattern for transfer to the CSU and UC systems.* Depending upon the major and/or the campus of choice, some students may be better served by taking courses which fulfill the CSU General Education Breadth Requirements listed on pages 42-43 of this catalog or those listed in the CSU or UC campus of choice catalog. Students pursuing majors that require extensive lower-division major preparation may not find the IGETC option to be advantageous. The IGETC will probably be most useful for students who want to keep their options open before making a final decision about transferring to a particular CSU or UC campus.

*The course requirements for all areas must be fully completed with a grade of "C" or better before the IGETC can be certified. A student must request an IGETC Certification from the Admissions and Records Office. Certification will be sent after the last semester is completed at Columbia College.* Courses taken from the IGETC List at another community college will be used in the final certification. Advanced Placement Examination credit may be used in some, but not all areas.

**AREA 1: ENGLISH COMMUNICATION:** One course each from Area 1A, Area 1B, and Area 1C. (*Area 1C is for CSU students only.*)

**AREA 1A: ENGLISH COMPOSITION:** (One course, three semester units.)

**ENGL 1A**

(or course from other college or AP)

**AREA 1B: CRITICAL THINKING/ENGLISH COMPOSITION:** (One course, three semester units.)

**ENGL 1C**

(or course from other college)

**AREA 1C: ORAL COMMUNICATION:** CSU students only. (One course, three semester units.)

**SPCH 1**

(or course from other college)

**AREA 2A: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING:** (One course, three semester units.)

**MATH 2, 6, 10, 12, 16, 18A, 18B, 18C**

(or course from other college or AP)

**AREA 3: ARTS AND HUMANITIES:** (Completion of at least three courses totaling nine units. One course must be in the Arts and one course must be in the Humanities. The third course may come from either Arts or Humanities.)

**AREA 3A: ARTS:**

**ART 11, 12, 13; DRAMA 10; MUSIC 2, 10 11, 12**

(or course from another college or AP)

**AREA 3B: HUMANITIES**

**ENGL 11, 17, 18, 46, 47, 49, 50; HUMAN 1, 2, 3, 4; PHILO 1, 4, 25; SPAN 2A, 2B**

(or course from other college or AP)

**AREA 4: SOCIAL AND BEHAVIORAL SCIENCES:** (From at least two disciplines, complete at least three courses totaling at least nine units.)



**AREA 4A: ANTHROPOLOGY AND ARCHAEOLOGY:**  
ANTHR 1, 2, 10, 15\*

**AREA 4B: ECONOMICS:**  
ECON 10, 11

**AREA 4C: ETHNIC STUDIES:**  
ANTHR 15\*; HIST 20\*; SOCIO 5\*

**AREA 4D: GENDER STUDIES:**  
HIST 21

**AREA 4E: GEOGRAPHY:**  
GEOGR 12, 18

(or courses from other colleges or AP for all of AREA 4)

**AREA 5: PHYSICAL AND BIOLOGICAL SCIENCES:** Completion of at least two courses totaling seven units or more. One Physical Science and one Biological Science course with at least one of these courses to include a Laboratory (L).

**AREA 5A: PHYSICAL SCIENCES:**

CHEM 1A(L), 1B(L), 10(L)\*\*; ESC 5(L), 10, 30, 40; GEOGR 15; PHYCS 1\*\*, 4A(L), 4B(L), 5A(L), 5B(L)  
(or courses from other colleges or AP)

**AREA 5B: BIOLOGICAL SCIENCES**

BIOL 2(L)\*\*; 4(L), 6(L), 10(L), 17(L)\*\*; 24 (L), 60(L), 65(L)  
(or courses from other college or AP)

**AREA 6: LANGUAGE OTHER THAN ENGLISH - UC Only.** Proficiency equivalent to two years of high school study ("C" or better) \_\_\_\_\_  
in the same language.

**SPAN 1B**

(or courses from other colleges and/or high schools)

Competency: Test Name \_\_\_\_\_ Score \_\_\_\_\_ Date \_\_\_\_\_

**AREA 7: CSU GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION AND AMERICAN IDEALS: NOT PART OF IGETC;** (may be completed prior to transfer to CSU; 6 units: one course from Area 7A and one from Area 7B.)

**AREA 7A:**

POLSC 10\* AND

**AREA 7B:**

HIST 16\* OR 17\*

\* Courses designated with an asterisk (\*) may be counted in one area only.

\*\* Indicates that transfer credit may be limited by either UC or CSU or both.

(L) Designates a Laboratory course or a course that includes a Laboratory.

# AA/AS DEGREE MAJORS

## AA/AS Degree Majors

Students are required to complete an academic major to fulfill the Associate Degree requirements of Columbia College. All courses in the major must be completed with a grade of "C" or better. Credit (CR) grades are not accepted. (Students transferring to a four-year college or university should consult the catalog of the transfer school for lower division requirements for the transfer major.) Following are the course requirements for each major currently offered at Columbia College.

### ASSOCIATE IN ARTS DEGREE (pages 44-46)

Fine Arts  
  Emphasis in Art  
  Emphasis in Photography  
Health and Human Performance  
Language Arts  
  Emphasis in English  
  Emphasis in Speech Communication  
Liberal Studies  
Mathematics  
Music  
Philosophy  
Transfer Major

### ASSOCIATE IN SCIENCE DEGREE (pages 47-50)

Allied Health  
Business  
  Business Administration (Occupational)  
  Business Administration (Professional)  
Child Development  
Computer Science  
Fire Technology  
Forestry  
Hospitality Management  
  Emphasis in Culinary Arts  
  Emphasis in Hotel Management  
  Emphasis in Restaurant Management  
Natural Resources  
Science  
  Emphasis in Biology  
  Emphasis in Earth Science  
  Emphasis in Environmental Science  
  Emphasis in General Science  
  Emphasis in Physical Science  
Transfer Major

### ASSOCIATE IN SCIENCE (OCCUPATIONAL EDUCATION) DEGREE (pages 51-56)

Automotive Technology  
  Automotive Maintenance Technician  
  Automotive Service Technician  
Business Administration  
  Accounting  
  Management  
  Retailing  
Computer Science  
  Applied Computer Studies-Business Emphasis  
  Computer Science  
  Geographic Information Systems (GIS)  
Emergency Health Services (Paramedic)  
Emergency Medical Services  
Fire Technology  
Forestry Technology  
Hospitality Management  
  Chef  
  Dinner Line Cook  
  Hotel Management  
  Pantry & Dessert Chef  
  Restaurant Management  
Human Services  
Natural Resources  
  Watershed Management Technology  
Natural Resources Technology  
Office Technology  
  Administrative Assistant  
  General Office Clerk  
  Information Processing  
  Legal Office  
  Medical Office  
  Medical Transcription



**ASSOCIATE IN ARTS DEGREE**

An Associate in Arts Degree is earned in areas such as Fine Arts, Humanities, Social and Behavioral Science, and is often awarded to students who plan to transfer to a four-year institution. To earn this degree, a student must complete the requirements listed in Column 1 of the G.E. Breadth Requirements on page 42-43.

**FINE ARTS  
EMPHASIS IN ART**

ACCEPTABLE COURSES WITHIN MAJOR:	REQUIRED UNITS
A. Twelve (12) units required from this section	12
Art 1 Basic Freehand Drawing (2-3)	
Art 2 Basic Color and Design (2-3)	
Art 9A Life Drawing: Beginning (2-3)	
Art 11 History of Art: Ancient and Medieval (3)	
Art 12 History of Art: Ren., Baroque and Modern (3)	
Art 21A Painting: Beginning (2-3)	
Art 23A Watercolor: Beginning (2-3)	
Art 31 Ceramics: Introductory (2-3)	
Art 71 Introduction to Ceramic Sculpture (2-3)	
B. Three (3) units required from this section	3
Art 40 Photography: Beginning (4)	
Art 48 Special Topics in Photography (1-4)	
H-HP 20 Dance Survey (3)	
H-HP 21 Ballet I (.5-1.5)	
H-HP 23A Dance, Contemporary I (.5-1.5)	
H-HP 25A Dance, Jazz I (.5-1.5)	
H-HP 29 Theatre Production: Dance Emphasis (1-2)	
C. Three (3) units required from this section	3
English 10 Creative Writing (3)	
English 11 Film Appreciation (3)	
Music 1 Music Fundamentals (2)	
Music 2 Introduction to Music (3)	
Music 10 Survey of Music History and Literature (3)	
Music 20A Music Theory (5)	
Any Music 30-78 Course (1-1.5)	
<b>TOTAL REQUIRED UNITS</b>	<b>18</b>

**FINE ARTS  
EMPHASIS IN PHOTOGRAPHY**

ACCEPTABLE COURSES WITHIN MAJOR:	REQUIRED UNITS
A. Art 40 Photography: Beginning	4
plus six (6) units from this section	6
Art 2 Basic Color and Design (2-3)	
Art 41 Intermediate Photography (3)	
Art 42 Color Photography (3)	
B. Six (6) units required from this section	6
Art 1 Basic Freehand Drawing (2-3)	
Art 9A Life Drawing: Beg. (2-3)	
Art 21A Painting: Beginning (2-3)	
Art 23A Watercolor: Beginning (2-3)	
C. Three (3) units required from this section	3
Art 11 History of Art (3)	
Art 12 History of Art (3)	
Art 45 Field Photography (1-2)	
Art 48 Special Topics in Photography (1-4)	
Eng 11 Film Appreciation (3)	
<b>TOTAL REQUIRED UNITS</b>	<b>19</b>

**HEALTH AND HUMAN PERFORMANCE**

ACCEPTABLE COURSES WITHIN MAJOR:	REQUIRED UNITS
A. Nine (9) units required from this section	9
H-HP 6A Lifetime Fitness (3)	
H-HP 60 Health and Fitness Education (3)	
H-HP 62 Safety and First Aid Education (2)	
Biol 50 Nutrition (3)	
B. Eight (8) units required from this section	8
Biol 10 Human Anatomy (4)	
Biol 60 Human Physiology (4)	
C. Three (3) units required from this section	3
Biol 65 Microbiology (4)	
Psych 1 General Psychology (3)	
<b>TOTAL REQUIRED UNITS</b>	<b>20</b>

**LANGUAGE ARTS  
EMPHASIS IN ENGLISH**

ACCEPTABLE COURSES WITHIN MAJOR:	REQUIRED UNITS
<i>Eighteen (18) units from any combination of the courses listed under Section A below, or A through D as follows:</i>	
A. Engl 1B Reading and Composition Advanced	3
plus six (6) units required from this section	6
Engl 1C Critical Reasoning/Writing (3)	
Engl 10 Creative Writing (3)	
Engl 11 Film Appreciation (3)	
Engl 17 American Literature (3)	
Engl 18 American Literature (3)	
Engl 46 Survey of English Literature (3)	
Engl 47 Survey of English Literature (3)	
Engl 49 California Literature (3)	
Engl 50 Introduction to Shakespeare (3)	
Jrnal 1 Introduction to Journalism (3)	
B. Three (3) units required from this section	3
Drama 20 Oral Expression and Interpretation (3)	
Spcom 1 Fundamentals of Speech (3)	
Spcom 2 Argumentation (3)	
C. Three (3) units required from this section	3
Anthr 2 Cultural Anthropology (3)	
Human 1 Old World Culture (3)	
Human 2 Modern Culture (3)	
Human 3 World Culture (3)	
Psych 1 General Psychology (3)	
Span 1A Spanish: Beginning (5)	
Span 1B Spanish: Beginning (5)	
Span 2A Spanish: Intermediate (5)	
Span 2B Spanish: Intermediate (5)	
D. Three units required from this section	3
Hist 13 World Civilization: to 1650 (3)	
Hist 14 World Civilization: 1650 to Present (3)	
Hist 16 United States History: to 1877 (3)	
Hist 17 United States History: 1877 to Present (3)	
Philo 1 Introduction to Philosophy (3)	
Philo 25 Twentieth Century Philosophy (3)	
<b>TOTAL REQUIRED UNITS</b>	<b>18</b>

**LANGUAGE ARTS  
EMPHASIS IN SPEECH COMMUNICATION**

ACCEPTABLE COURSES WITHIN MAJOR:	REQUIRED UNITS
A. Nine (9) units required from this section	9
Drama 20 Oral Expression and Interpretation (3)	
Spcom 1 Fundamentals of Speech (3)	
Spcom 2 Argumentation (3)	
B. Engl 1B, Reading and Composition: Advanced	3
plus three (3) units required from this section	3
Engl 17 American Literature (3)	
Engl 18 American Literature (3)	
Engl 46 Survey of English Literature (3)	
Engl 47 Survey of English Literature (3)	
C. Three (3) units required from this section	3
Philo 1 Introduction to Philosophy (3)	
Philo 25 Twentieth Century Philosophy (3)	
<b>TOTAL REQUIRED UNITS</b>	<b>18</b>

**LIBERAL STUDIES**

ACCEPTABLE COURSES WITHIN MAJOR:	REQUIRED UNITS
A. ARTS AND HUMANITIES six (6) units required	6
A1. ARTS three (3) units required from this section	
Art 9A Life Drawing: Beginning (2-3)	
Art 9B Life Drawing: Intermediate (2-3)	
Art 11 History of Art: Ancient and Medieval (3)	
Art 12 History of Art: Renaissance, Baroque, Modern (3)	
Art 21A Painting: Beginning (2-3)	
Art 21B Painting: Intermediate (2-3)	
Art 31 Ceramics: Introductory (2-3)	
Art 32 Ceramics: Advanced (2-3)	
Drama 10 Introduction to the Theatre (3)	
Drama 20 Oral Expression and Interpretation (3)	
Drama 22 Introduction to Reader's Theatre (3)	
Drama 42 Acting Fundamentals (3)	
Drama 44 Advanced Acting Projects (1-3)	
Drama 45 Improvisation (3)	
H-HP 20 Dance Survey (3)	
H-HP 27 Choreography (3)	
Music 2 Introduction to Music (3)	
Music 10 Survey of Music History and Literature (3)	
Music 11 Survey of Music History and Literature (3)	
Music 12 Survey of Jazz and Popular Music (3)	
Music 31A Elementary Piano (1.5)	
Music 36 Elementary Voice (1.5)	
Music 49 Beginning Guitar (1.5)	
Music 60 Choir (1)	
Music 65 Theatre Production: Music Emphasis (1)	
Music 69 Madrigal Ensemble (1)	
Music 70 College Band (1)	
Music 76 Community Orchestra (1)	
A2. HUMANITIES three (3) units required from this section	
Engl 11 Film Appreciation (3)	
Engl 17 American Literature (3)	
Engl 18 American Literature (3)	
Engl 46 Survey of English Literature (3)	
Engl 47 Survey of English Literature (3)	
Engl 49 California Literature (3)	
Engl 50 Introduction to Shakespeare (3)	
Human 1 Old World Culture (3)	
Human 2 Modern Culture (3)	
Human 3 World Culture (3)	
Jrnal 1 Introduction to Journalism (3)	
Philo 1 Introduction to Philosophy (3)	
Philo 25 Twentieth Century Philosophy (3)	

Span 1A Spanish: Beginning (5) or higher	
Spcom 50A Sign Language (2) & Spcom 50B Sign Language (2)	
B. NATURAL SCIENCES AND MATHEMATICS six (6) units required	6
Biol 2 Principles of Biology (4)	
Biol 4 Principles of Animal Biology (4)	
Biol 6 Principles of Plant Biology (4)	
Biol 10 Human Anatomy (4)	
Biol 17 Fundamentals of Biology (4)	
Biol 24 General Ecology (3)	
Biol 60 Human Physiology (4)	
Biol 65 Microbiology (4)	
Chem 1A General Chemistry (5)	
Chem 10 Fundamentals of Chemistry (4)	
Chem 20 Conceptual Chemistry (3)	
Cmpsc 1 Computer Concepts & Information Systems (4)	
Cmpsc 3 Windows and DOS Operating Systems (3)	
Cmpsc Any Programming Class (3)	
Esc 5 Physical Geology (4)	
Esc 10 Environmental Geology (3)	
Esc 30 Global Tectonic Geology (3)	
Esc 40 Descriptive Astronomy (3)	
Geogr 15 Physical Geography (3)	
Math 100B Algebra I: Second Half (3)	
Math 101 Algebra I: Fundamentals (5) or higher	
Natre 1 Environmental Conservation (3)	
Physc 1 Conceptual Physics (3)	
Physc 5A Introductory Physics I: Calculus Level (5)	
C. SOCIAL SCIENCES six (6) units required	6
Anthr 1 Physical Anthropology (3)	
Anthr 2 Cultural Anthropology (3)	
Anthr 3 Current Issues in Anthropology (3)	
Anthr 15 Native People of North America (3)	
Busad 20 Principles of Business (3)	
Child 1 Principles of Child Development (3)	
Econ 10 Principles of Economics (4)	
Econ 11 Principles of Economics (4)	
Geogr 12 Cultural Geography (3)	
Geogr 18 World Regional Geography (3)	
Hist 11 History of California (3)	
Hist 13 World Civilization: to 1650 (3)	
Hist 14 World Civilization: 1650 to Present (3)	
Hist 16 United States History: to 1877 (3)	
Hist 17 United States History: 1877 to Present (3)	
Hist 20 African-American History (3)	
Hist 55 The American Frontier (3)	
Polsc 10 Constitutional Government (3)	
Polsc 12 American Political Thought (3)	
Polsc 14 International Relations (3)	
Psych 1 General Psychology (3)	
Psych 5 Human Sexual Behavior (3)	
Psych 30 Personal and Social Adjustment (3)	
Socio 1 Introduction to Sociology (3)	
Socio 2 American Society: Social Problems and Deviance (3)	
Socio 5 Ethnicity & Ethnic Relations in America (3)	
Socio 12 Sociology of the Family (3)	
<b>TOTAL REQUIRED UNITS</b>	<b>18</b>

*Courses used to fulfill the Liberal Studies Major Requirements may be used to fulfill the General Education requirements for the AA or AS Degree.*



MATHEMATICS

- REQUIRED UNITS
- ACCEPTABLE COURSES WITHIN MAJOR: ..... UNITS
- A. Eleven (11) units required from this section ..... 11  
 Math 2 Elements of Statistics (3)  
 Math 18A Calculus I (4)  
 Math 18B Calculus II (4)
- B. Three to Four (3-4) units required from this section ..... 3-4  
 Math 6 Mathematics for Liberal Arts Students (3)  
 Math 8 Trigonometry (3)  
 Math 10 College Algebra (3)  
 Math 12 Finite Mathematics (3)  
 Math 16 Precalculus (4)  
 Math 18C Calculus III (4)
- C. Four to Five (4-5) units required from this section ..... 4-5  
 Physc 5A Introductory Physics I: Calculus Level (5)  
 Cmpsc 22 Programming Concepts & Methodology I (4)  
 Cmpsc 24 Programming Concepts & Methodology II (4)
- TOTAL REQUIRED UNITS 18

MUSIC

- REQUIRED UNITS
- ACCEPTABLE COURSES WITHIN MAJOR: ..... UNITS
- A. Twenty (20) units required from this section ..... 10  
 Theory/Musicianship  
 Music 4A Elementary Musicianship (2)  
 Music 4B Elementary Musicianship (2)  
 Music 20A Elementary Music Theory (3)  
 Music 20B Elementary Music Theory (3)
- B. Four (4) units required from this section ..... 4  
 Music 50 Applied Music: Guitar (1)  
 Music 51 Applied Music: Keyboard (1)  
 Music 52 Applied Music: Woodwinds (1)  
 Music 53 Applied Music: Brass (1)  
 Music 54 Applied Music: Strings (1)  
 Music 55 Applied Music: Percussion (1)  
 Music 56 Applied Music: Voice (1)
- It is suggested students take private instruction every semester at Columbia College although only 4 units are required for transfer.
- C. Four (4) units required from this section ..... 4  
 Music 60 Choir (1)  
 Music 64 Jazz Choir (1)  
 Music 66 Columbia College Community Chorus (1)  
 Music 69 Madrigal Ensemble (1)  
 Music 70 College Band (1)  
 Music 72 Jazz Ensemble (1)  
 Music 76 Community Orchestra (1)
- Music majors need to be enrolled in an ensemble appropriate to their major instrument each semester at Columbia. Four units are required for transfer.*
- D. Proficiency Required  
 Voice Proficiency (for non-voice majors; may be achieved independently through credit by examination or through the following course)  
 Music 37 Elementary Voice (1.5)
- E. Proficiency Required  
 Piano Proficiency (for non-piano majors; may be achieved independently through credit by examination or through the following course)  
 Music 41B Intermediate Piano (1.5)

TOTAL REQUIRED UNITS 21

RECOMMENDED OPTIONAL COURSES:

- Music 10 Survey of Music History/Literature: Ancient to 1750 (3)  
 Music 11 Survey of Music History/Literature: 1750 to Present (3)  
*The Music Major is designed to prepare the student to be a well-rounded musician and enables the student to transfer to a four-year institution at the junior level*

SOCIAL SCIENCE

- REQUIRED UNITS
- ACCEPTABLE COURSES WITHIN MAJOR: ..... UNITS
- A. Six (6) units required from this section ..... 6  
 Anthr 1 Physical Anthropology (3)  
 Anthr 2 Cultural Anthropology (3)  
 or  
 Econ 10 Principles of Economics (4)  
 Econ 11 Principles of Economics (4)  
 or  
 Geogr 12 Cultural Geography (3)  
 Geogr 15 Physical Geography (3)  
 or  
 Hist 13 World Civilizations: to 1650 (3)  
 Hist 14 World Civilizations: 1650 to present (3)  
 or  
 Polsc 10 Constitutional Government (3) and either  
 Polsc 12 American Political Thought (3)  
 or  
 Polsc 14 International Relations (3)  
 or  
 Psych 1 General Psychology (3)  
 Psych 10 Lifespan Human Development (3)  
 or  
 Socio 1 Introduction to Sociology (3)  
 Socio 2 American Society: Social Problems/Deviance (3)
- B. Twelve (12) units required from this section ..... 12  
 Three (3) units in either Anthropology or Geography 12, 15, or 18.  
 and  
 Three (3) units in either Economics or History  
 and  
 Three (3) units in Political Science, Psychology or Sociology  
 and  
 Three (3) units from any of the Social Science disciplines not previously selected in B.

TOTAL REQUIRED UNITS 18

*Note for UC/CSU Transfer Students: HIST 16 or HIST 17 and POLSC 10 may not be double counted to meet both the US Hstory, Constitutional and American Ideals requirement and Area D requirements for CSU GE Breadth or IGETC.*



ASSOCIATE IN SCIENCE DEGREE

The Associate in Science Degree is awarded in Science and Technical fields. It is specifically designed for students who intend to transfer to a four-year institution. To earn this degree, a student must complete the requirements listed in Column 1 of the G.E. Breadth Requirements on page 42-43.

ALLIED HEALTH

- REQUIRED UNITS
- ACCEPTABLE COURSES WITHIN MAJOR: ..... UNITS
- A. Eight (8) units required from this section ..... 8  
 Biol 10 Human Anatomy (4)  
 Biol 60 Human Physiology (4)
- B. Four (4) units required from this section ..... 4  
 Chem 1A General Chemistry (5)  
 Chem 10 Fundamentals of Chemistry (4)
- C. Seven (7) units required from this section ..... 7  
 Biol 50 Nutrition (3)  
 Biol 65 Microbiology (4)  
 EMS 4 Emergency Medical Technician Training (6)  
 EMS 13 Advanced First Aid and Emergency Care (3)  
 H-HP 60 Health and Fitness Education (3)  
 H-HP 62 Safety and First Aid Education (2)
- TOTAL REQUIRED UNITS 19

BUSINESS EMPHASIS IN BUSINESS ADMINISTRATION (OCCUPATIONAL)

- REQUIRED UNITS
- ACCEPTABLE COURSES WITHIN MAJOR: ..... UNITS
- A. Fifteen (15) units required from this section ..... 15  
 Busad 20 Principles of Business (3)  
 Busad 24 Human Relations in Organizations (3)  
 Busad 163 Business Mathematics (4)  
 Cmpsc 3 Windows and DOS Operating Systems (3)  
 Oftec 25 Business Communications (3)
- B. Eight (8) units required from B1 or B2 ..... 8  
 B1. Eight (8) units required  
 Busad 1A Principles of Accounting (4)  
 Busad 1B Principles of Accounting (4)  
 B2. Eight (8) units required  
 Busad 161A Small Business Accounting I (4)  
 Busad 161B Small Business Accounting II (4)
- C. Six (6) units required from this section ..... 6  
 Busad 18 Business Law (4)  
 Busad 30 Principles of Marketing (3)  
 Busad 40 Principles of Management (3)  
 Busad 150 Small Business Management (3)  
 Busad 151 Finance and Investments (3)  
 Busad 158 Payroll Accounting (3)
- TOTAL REQUIRED UNITS 29

TRANSFER DEGREE

Degree Requirements

- A. Completion of a minimum of 60 units; 12 units must be completed in residence.
- B. Overall grade point average of 2.0 or better (C average) based on all work attempted in college.
- C. Filing an application for graduation.
- D. Competence in reading, in written expression and in mathematics demonstrated by completing the following classes with a "C" or better.
- Engl 1A, Reading and Composition: Beginning
  - Busad 163, Business Mathematics, **OR** Math 100B, Algebra 1: Second Half, **OR** Math 101, Algebra 1: Fundamentals, **OR** Any mathematics course of a higher level than Algebra 1. These courses may also be met through completion of a challenge examination with a grade of "C" or better.
- E. Completion of Associate Degree course requirements as outlined below.

**Major:**  
 Complete a minimum of eighteen (18) units that meet the lower division prerequisites for any major at the institution to which the student plans to transfer.  
 Complete one of the following General Education Breadth patterns:

- a. California State University transfers: (30 units)
- Complete the Columbia College Pattern of General Education for CSU Transfer listed in Column IV on page 42 of the Catalog. **OR**
  - Complete the Columbia College IGETC (Intersegmental General Education Transfer Curriculum) pattern listed on page 66 of the Catalog.
- b. University of California transfers: (30 units total)
- Complete the Columbia College IGETC (Intersegmental General Education Transfer Curriculum) pattern listed on page 76 of the Catalog or see your counselor for the individual breadth pattern for the campus of your choice.
- c. Customized program: (30 units total)
- With the guidance of your counselor and the development of your "Education Plan," identify a general education plan for the college or university campus of your choice.

Activity Courses:

Select two physical activity courses under the Health and Human Performance listings.

Electives:

Select additional elective courses to bring the total to 60 units.



**BUSINESS  
EMPHASIS IN BUSINESS ADMINISTRATION  
(PROFESSIONAL)**

REQUIRED COURSES WITHIN MAJOR:	REQUIRED UNITS
Busad 1A Principles of Accounting .....	4
Busad 1B Principles of Accounting .....	4
Busad 18 Business Law .....	4
Busad 20 Principles of Business .....	3
Busad 24 Human Relations in Organizations .....	3
Cmpsc 3 Windows and DOS Operating Systems .....	3
Cmpsc 30 Financial Worksheets on Computers .....	3
Econ 10 Principles of Economics .....	4
Econ 11 Principles of Economics .....	4
<b>TOTAL REQUIRED UNITS 32</b>	

**CHILD DEVELOPMENT**

REQUIRED COURSES:	UNITS
Child 1 Principles of Child Development .....	3
Child 2 Observing & Recording Behavior .....	1
Child 3 Practices in Child Development .....	3
Child 5 Child Nutrition .....	2
Child 7 Child Health and Safety .....	1
Child 10 Creative Activities in the Arts .....	2
Child 12 Creative Activities in Math .....	2
Child 13 Creative Activities in Science .....	2
Child 16 Practicum .....	3
Child 22 Child, Family, Community .....	3
Child 30 Child Care/Nursery School Administration .....	3
Child 19 Exceptional Needs Children .....	3
or	
Child 25 Infant/Toddler Care .....	3
or	
Child 27 School Age Children .....	3
or	
Child 28 Books for Young Children .....	3
Engl 151 Preparation for College Composition .....	4
or	
Engl 1A Reading & Composition: Beginning .....	3
<b>TOTAL REQUIRED UNITS 31-32</b>	

**COMPUTER SCIENCE**

REQUIRED COURSES WITHIN MAJOR:	REQUIRED UNITS
Cmpsc 9 UNIX Operations/Communications .....	3
Cmpsc 22 Programming Concepts & Methodology I .....	4
Cmpsc 24 Programming Concepts & Methodology II .....	4
Cmpsc 40 Assembly Language Programming .....	4
Cmpsc 55 Data Base Management .....	3
Math 12 Finite Mathematics .....	3
Math 18A Calculus I .....	4
Math 18B Calculus II .....	4
<b>TOTAL REQUIRED UNITS 29</b>	

**FIRE TECHNOLOGY**

ACCEPTABLE COURSES WITHIN MAJOR:	REQUIRED UNITS
A. The following courses are required .....	15
Fire 1 Fire Protection Organization (3)	
Fire 2 Fire Prevention Technology (3)	
Fire 3 Fire Protection Equipment/Systems (3)	
Fire 4 Building Construction for Fire Protection(3)	
Fire 5 Fire Behavior and Combustion (3)	
B. Ten (10) units required from this section .....	10
EMS 4 Emergency Medical Technician Training (6)	
EMS 20 Basic Cardiology/Cardiac Dysrhythmias (3)	
*EMS 97 Work Experience (1-4)	
Fire 7 Wildland Fire Control (3)	
Fire 29A Driver/Operator 1A (1)	
Fire 29B Driver/Operator 1B (1)	
Fire 70 Special Topics (.5-3)	
*Fire 97 Work Experience (1-4)	
SAR 50 Low Angle Rope Rescue (1.5)	
<b>TOTAL REQUIRED UNITS 25</b>	

\*Credit may be applied for either EMS 97 or Fire 97 but not both.

**FORESTRY**

ACCEPTABLE COURSES WITHIN MAJOR:	REQUIRED UNITS
A. Eleven (11) units required from this section .....	11
Fores 1 Introduction to Professional Forestry (3)	
Fores 10 Dendrology (3)	
Fortc 153 Forest Surveying Techniques (3)	
Nartc 160 Aerial Photography & Map Interpretation (2)	
B. Eleven (11) units required from this section .....	11
Biol 24 General Ecology (4)	
Biol 39 Field Biology (1-2)	
Esc 5 Physical Geology (4)	
Esc 30 Global Tectonic Geology (3)	
Fire 7 Wildland Fire Control (3)	
Fortc 162 Applied Forest Inventory and Management (2)	
Geogr 15 Physical Geography (3)	
Natre 1 Environmental Conservation (3)	
Natre 9 Parks and Forests Law Enforcement (2)	
Natre 22 Ecology and Use of Fire in Forest Ecosystems (2)	
Natre 30 Introduction to Watershed Management (3)	
Natre 50 Natural History and Ecology (2)	
Nartc 181 California Wildlife (4)	
<b>TOTAL REQUIRED UNITS 22</b>	

Transfer oriented students should see a counselor for additional required coursework in Anthro, Biol, Calculus, Chem, Cmpsc, ESC, Econ, Geogr, Physcs, and Statistics.



**HOSPITALITY MANAGEMENT  
EMPHASIS IN RESTAURANT MANAGEMENT**

REQUIRED COURSES WITHIN MAJOR:	REQUIRED UNITS
Hpmgt 102 Introduction to Hospitality Careers & Human Relations .....	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 120 Safety & Sanitation .....	1
Hpmgt 128 Kitchen Management .....	3
Hpmgt 133A Introduction to Commercial Food Preparation .....	3
Hpmgt 133B Commercial Food Preparation .....	4
Hpmgt 136 Dining Room Service and Management .....	2
Hpmgt 147 Beverage Management .....	2
Hpmgt 152 Restaurant Planning .....	3
Busad 161A Small Business Accounting I .....	4
Busad 161B Small Business Accounting II .....	4
Cmpsc 1 Computer Concepts and Information Systems .....	4
Oftec 31 Office Procedures and Technology .....	3
<b>TOTAL REQUIRED UNITS 36.5</b>	

**NATURAL RESOURCES**

ACCEPTABLE COURSES WITHIN MAJOR:	REQUIRED UNITS
A. Twelve-Fourteen (12-14) units required from this section . 12-14	
Biol 24 General Ecology (4)	
Natre 1 Environmental Conservation (3)	
Natre 30 Introduction to Watershed Management (3)	
Natre 50 Natural History and Ecology (2)	
Nartc 155 Interpretive Guided Tours (2)	
Nartc 160 Aerial Photography & Map Interpretation (2)	
B. Eight (8) units required from this section .....	8
Biol 39 Field Biology (1-2)	
Biol 179 Fishing and Fisheries (1)	
Esc 5 Physical Geology (4)	
Esc 10 Environmental Geology (3)	
Esc 30 Global Tectonic Geology (3)	
Fire 7 Wildland Fire Control (3)	
Fores 1 Introduction to Professional Forestry (3)	
Fores 10 Dendrology (3)	
Fortc 153 Forest Surveying Techniques (3)	
Fortc 162 Applied Forest Inventory/Management (2)	
Geogr 15 Physical Geography (3)	
Natre 9 Parks and Forests Law Enforcement (2)	
Natre 22 Ecology and Use of Fire in Forest Ecosystems (2)	
Nartc 181 California Wildlife (4)	
<b>TOTAL REQUIRED UNITS 20-22</b>	

Transfer oriented students should see a counselor for additional required coursework in Anthro, Biol, Calculus, Chem, Cmpsc, ESC, Econ, Geogr, Physcs, and Statistics.



**HOSPITALITY MANAGEMENT  
EMPHASIS IN CULINARY ARTS**

REQUIRED COURSES WITHIN MAJOR:	REQUIRED UNITS
Hpmgt 102 Introduction to Hospitality Careers & Human Relations .....	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 120 Safety & Sanitation .....	1
Hpmgt 122 Restaurant Math .....	0.5
Hpmgt 126 Nutrition for Chefs .....	1
Hpmgt 128 Kitchen Management .....	3
Hpmgt 133A Introduction to Commercial Food Preparation .....	3
Hpmgt 133B Commercial Food Preparation .....	4
Hpmgt 134 Commercial Baking: Beginning .....	2
Hpmgt 136 Dining Room Service and Management .....	2
Hpmgt 140 Contemporary Cuisine .....	3.5
Hpmgt 141 Restaurant Desserts .....	2
Hpmgt 142 Garde Manger .....	1
Hpmgt 146 Dining Room Service and Management .....	2
Hpmgt 147 Beverage Management .....	2
Hpmgt 148 Introduction to Wines .....	2
Hpmgt 190 Culinary Arts Internship .....	2
<b>TOTAL REQUIRED UNITS 34.5</b>	

**HOSPITALITY MANAGEMENT  
EMPHASIS IN HOTEL MANAGEMENT**

REQUIRED COURSES WITHIN MAJOR:	REQUIRED UNITS
Hpmgt 20 Intro to Travel-Tourism Industry/Tours .....	3
Hpmgt 102 Introduction to Hospitality Careers & Human Relations .....	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 112 Front Office Mgmt./Hotel Catering .....	2
Hpmgt 114 Intro to Maintenance and Housekeeping .....	1.5
Hpmgt 152 Restaurant Planning .....	3
Hpmgt 97 Work Experience .....	2
Busad 1A Principles of Accounting .....	4
or	
Busad 160 Basic Accounting .....	4
or	
Busad 161A Small Business Accounting .....	4
<b>TOTAL REQUIRED UNITS 19</b>	

RECOMMENDED OPTIONAL COURSES:	REQUIRED UNITS
Busad 163 Business Mathematics .....	4
Oftec 5 Electronic Printing Calculators .....	1
Oftec 31 Office Procedures and Technology .....	3



SCIENCE  
EMPHASIS IN BIOLOGY

ACCEPTABLE COURSES WITHIN MAJOR:	REQUIRED UNITS
A. Sixteen (16) units required from this section	16
Biol 2 Principles of Biology (4)	
Biol 4 Principles of Animal Biology (4)	
Biol 6 Principles of Plant Biology (4)	
Biol 10 Human Anatomy (4)	
Biol 17 Fundamentals of Biology (4)	
B. Three (3) units required from this section	3
Biol 24 General Ecology (4)	
Chem 1A General Chemistry (5) or higher	
Esc any transferable Earth Science course	
Math 2 Elements of Statistics (3)	
Math 16 Precalculus (4)	
Math 18A Calculus I (4)	
Phycs 1 Conceptual Physics (3) or higher	
C. Three (3) units required from this section	3
Biol 97 Work Experience in Biology (1-4)	
Biol any transferable Biology course	
Chem any Chemistry course	
Cmpsc 1 Computer Concepts & Information Systems (4)	
Cmpsc 3 Windows and DOS Operating Systems (3)	
Esc any transferable Earth Science course	
Natre 1 Environmental Conservation (3)	
Phycs any Physics course	

TOTAL REQUIRED UNITS 22

*Students planning to become Biology majors upon transfer to a four-year school should take Chem 1A and 1B, Math 2, and prerequisites for Math 18A while at Columbia College.*

SCIENCE  
EMPHASIS IN EARTH SCIENCE

ACCEPTABLE COURSES WITHIN MAJOR:	REQUIRED UNITS
A. Ten (10) units required from this section	10
Esc 5 Physical Geology (4)	
Esc 10 Environmental Geology (3)	
Esc 30 Global Tectonic Geology (3)	
Esc 35 Field Geology (1-3)	
Esc 40 Descriptive Astronomy (3)	
B. Four (4) units required from this section	4
Biol 24 General Ecology (4)	
Biol 2 Principles of Biology (4)	
Biol 17 Fundamentals of Biology (4)	
C. Four (4) units required from this section	4
Chem 1A General Chemistry (5)	
Chem 10 Fundamentals of Chemistry (4)	
D. Three (3) units required from this section	3
Phycs 1 Conceptual Physics (3)	
Phycs 4A Introductory Physics I: Trigonometry Level (4)	
Phycs 5A Introductory Physics I: Calculus Level (5)	

TOTAL REQUIRED UNITS 21

*Students planning to become Earth Science majors upon transfer to a four-year school should take Chem 1A and 1B, Math 18A, and Phycs 5A and 5B while at Columbia College.*

SCIENCE  
EMPHASIS IN ENVIRONMENTAL SCIENCE

ACCEPTABLE COURSES WITHIN MAJOR:	REQUIRED UNITS
A. Ten (10) units required from this section	10
Biol 24 General Ecology (4)	
Esc 5 Physical Geology (4)	
Esc 10 Environmental Geology (3)	
Natre 1 Environmental Conservation (3)	
Phycs 1 Conceptual Physics (3)	
B. Four (4) units required from this section	4
Biol 2 Principles of Biology (4)	
Biol 4 Principles of Animal Biology (4)	
Biol 6 Principles of Plant Biology (4)	
Biol 17 Fundamentals of Biology (4)	
C. Four (4) units required from this section	4
Chem 1A General Chemistry (5)	
Chem 10 Fundamentals of Chemistry (4)	
D. Two (2) units required from this section	2
Biol 39 Field Biology (1-2)	
Esc 35 Field Geology (1-3)	
Fores 10 Dendrology (3)	

TOTAL REQUIRED UNITS 20

SCIENCE  
EMPHASIS IN GENERAL SCIENCE

ACCEPTABLE COURSES WITHIN MAJOR:	REQUIRED UNITS
A. Four (4) units required from this section	4
Biol 2 Principles of Biology (4)	
Biol 4 Principles of Animal Biology (4)	
Biol 6 Principles of Plant Biology (4)	
Biol 17 Fundamentals of Biology (4)	
Biol 24 General Ecology (3)	
B. Four (4) units required from this section	4
Chem 1A General Chemistry (5)	
Chem 10 Fundamentals of Chemistry (4)	
C. Three (3) units required from this section	3
Cmpsc Any 3 unit course in Computer Science (3)	
D. Four (4) units required from this section	4
Esc 5 Physical Geology (4)	
Esc 40 Descriptive Astronomy (3)	
E. Three (3) units required from this section	3
Phycs 1 Conceptual Physics (3)	
Phycs 4A Introductory Physics I: Trigonometry Level (4)	
Phycs 5A Introductory Physics I: Calculus Level (5)	

TOTAL REQUIRED UNITS 18

SCIENCE  
EMPHASIS IN PHYSICAL SCIENCE

REQUIRED COURSES WITHIN MAJOR:	REQUIRED UNITS
Chem 1A General Chemistry	5
Chem 1B General Chemistry	5
Phycs 5A General Physics I	5
Phycs 5B General Physics II	5

TOTAL REQUIRED UNITS 20

ASSOCIATE IN SCIENCE  
(OCCUPATIONAL EDUCATION) DEGREE

The Associate in Science (Occupational Education) Degree is earned in occupational programs that provide students with skills and training for immediate entry into the workforce. These programs are **not** designed for students planning to transfer to a four-year institution, even though some courses in the AS(OE) degree may meet transfer requirements. To earn this degree, a student must complete the requirements listed in Column 2 of the G.E. Breadth Requirements on page 42-43.

AUTOMOTIVE TECHNOLOGY  
AUTOMOTIVE MAINTENANCE TECHNICIAN

REQUIRED COURSES:	UNITS
AT 97 Work Experience In Automotive Technology	1
AT 100 Introduction to Automotive Technology	4
AT 101 Automotive Braking Systems I	2
AT 102 Engine Repair	5
AT 103 Practical Laboratory	0.5
AT 110 Electrical & Electronics I	5
AT 111 Engine Performance I	6
AT 112 Air Conditioning	3

TOTAL REQUIRED UNITS 26.5

RECOMMENDED OPTIONAL COURSES:

WT 100 Introduction to Welding	3
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AUTOMOTIVE TECHNOLOGY  
AUTOMOTIVE SERVICE TECHNICIAN

REQUIRED COURSE:	UNITS
AT 97 Work Experience in Automotive Technology	1
AT 100 Introduction to Automotive Technology	4
AT 101 Automotive Braking Systems I	2
AT 102 Engine Repair	5
AT 103 Practical Laboratory	0.5
AT 110 Electrical & Electronics I	5
AT 111 Engine Performance I	6
AT 112 Air Conditioning	3
AT 120 Suspension and Steering	3
AT 121 Automotive Braking Systems II	2
AT 130 Electrical & Electronics II	2
AT 131 Engine Performance II	2
AT 122 Manual Drive Train and Axles	3
AT 132 Automatic Transmissions and Transaxles	3
or	
AT 165 Special Topics in Automotive Technology	3

TOTAL REQUIRED UNITS 41.5

RECOMMENDED OPTIONAL COURSES:

WT 100 Introduction to Welding	3
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TRANSFER DEGREE

Degree Requirements

- Completion of a minimum of 60 units; 12 units must be completed in residence.
- Overall grade point average of 2.0 or better (C average) based on all work attempted in college.
- Filing an application for graduation.
- Competence in reading, in written expression and in mathematics demonstrated by completing the following classes with a "C" or better.
  - Engl 1A, Reading and Composition: Beginning
  - Busad 163, Business Mathematics, **OR**
  - Math 100B, Algebra 1: Second Half, **OR**
  - Math 101, Algebra 1: Fundamentals, **OR**
 Any mathematics course of a higher level than Algebra I. These courses may also be met through completion of a challenge examination with a grade of "C" or better.
- Completion of Associate Degree course requirements as outlined below.

Major:

Complete a minimum of eighteen (18) units that meet the lower division prerequisites for any major at the institution to which the student plans to transfer. Complete one of the following General Education Breadth patterns:

- California State University transfers: (30 units)
  - Complete the Columbia College Pattern of General Education for CSU Transfer listed in Column IV on page 42 of the Catalog. **OR**
  - Complete the Columbia College IGETC (Intersegmental General Education Transfer Curriculum) pattern listed on page 66 of the Catalog.
- University of California transfers: (30 units total)
  - Complete the Columbia College IGETC (Intersegmental General Education Transfer Curriculum) pattern listed on page 76 of the Catalog or see your counselor for the individual breadth pattern for the campus of your choice.
- Customized program: (30 units total)
  - With the guidance of your counselor and the development of your "Education Plan," identify a general education plan for the college or university campus of your choice.

Activity Courses:

Select two physical activity courses under the Health and Human Performance listings.

Electives:

Select additional elective courses to bring the total to 60 units.



**BUSINESS ADMINISTRATION  
ACCOUNTING**

REQUIRED COURSES:	UNITS
Busad 1A Principles of Accounting and .....	4
Busad 1B Principles of Accounting .....	4
or	
Busad 161A Small Business Accounting I and .....	4
Busad 161B Small Business Accounting II .....	4
Busad 18 Business Law .....	4
Busad 97 Work Experience in Business .....	4
Busad 151 Finance and Investments .....	3
Busad 158 Payroll Accounting .....	3
Busad 159 Income Tax .....	2
Busad 163 Business Mathematics .....	4
Cmpsc 3 Windows and DOS Operating Systems .....	3
Cmpsc 30 Financial Worksheets on Computers .....	3
Six (6) Units Required from Computerized Accounting:	
Busad 131 Computerized Acct. (Peachtree) .....	2
Busad 132 Computerized Acct. (One Write Plus) .....	2
Busad 134 Computerized Acct. (Dac Easy) .....	2
Busad 135 Computerized Acct. (Quick Books) .....	2
Busad 137 Computerized Acct. (MYOB) .....	2
<b>TOTAL REQUIRED UNITS 40</b>	

RECOMMENDED OPTIONAL COURSES:  
Cmpsc 1 Computer Concepts & Information Systems .....

**BUSINESS ADMINISTRATION  
MANAGEMENT**

REQUIRED COURSES:	UNITS
Busad 1A Principles of Accounting and .....	4
Busad 1B Principles of Accounting .....	4
or	
Busad 161A Small Business Accounting I and .....	4
Busad 161B Small Business Accounting II .....	4
Busad 18 Business Law .....	4
Busad 20 Principles of Business .....	3
Busad 24 Human Relations in Organizations .....	3
Busad 30 Principles of Marketing .....	3
Busad 40 Principles of Management .....	3
Busad 150 Small Business Management .....	3
Busad 163 Business Mathematics .....	4
Cmpsc 1 Computer Concepts & Information Systems .....	4
Econ 10 Principles of Economics .....	4
Econ 11 Principles of Economics .....	4
<b>TOTAL REQUIRED UNITS 43</b>	

RECOMMENDED OPTIONAL COURSE:  
Busad 97 Work Experience .....



**BUSINESS ADMINISTRATION  
RETAILING**

REQUIRED COURSES:	UNITS
Busad 18 Business Law .....	4
Busad 20 Principles of Business .....	3
Busad 24 Human Relations in Organizations .....	3
Busad 30 Principles of Marketing .....	3
Busad 124 Retail Sales and Advertising .....	3
Busad 160 Basic Accounting .....	4
or	
Busad 161A Small Business Accounting I .....	4
Busad 161B Small Business Accounting II .....	4
Busad 163 Business Mathematics .....	4
Cmpsc 1 Computer Concepts & Information Systems .....	4
Econ 10 Principles of Economics .....	4
Oftec 25 Business Communications .....	3
<b>TOTAL REQUIRED UNITS 39</b>	

RECOMMENDED OPTIONAL COURSES:  
Busad 40 Principles of Management .....

**COMPUTER SCIENCE**

REQUIRED COURSES:	UNITS
Cmpsc 3 Windows and DOS Operating Systems .....	3
Cmpsc 9 UNIX Operations/Communication .....	3
Cmpsc 22 Programming Concepts & Methodology I .....	4
Cmpsc 24 Programming Concepts & Methodology II .....	4
Cmpsc 40 Assembly Language Programming .....	4
Cmpsc 41 Networking Essentials .....	3
ELECTIVES - Chose two: (6 Units)	
Cmpsc 7 Novell NetWare Management .....	3
Cmpsc 15 Java Programming .....	3
Cmpsc 28 Visual Basic Programming .....	3
Cmpsc 55 Data Base Management .....	4
Math 18A Calculus I: Differential .....	4
Math 18B Calculus II: Integral .....	4
<b>TOTAL REQUIRED UNITS 35-36</b>	

**COMPUTER SCIENCE  
APPLIED COMPUTER STUDIES-  
BUSINESS EMPHASIS**

REQUIRED COURSES:	UNITS
Cmpsc 1 Computer Concepts & Information Systems .....	4
Cmpsc 4 Windows 95 Essentials .....	2
Cmpsc 9 UNIX Operations/Communication .....	3
Cmpsc 22 Programming Concepts & Methodology I .....	4
Cmpsc 30 Financial Worksheets on Computers .....	3
Cmpsc 55 Data Base Management .....	3
Busad 1A Principles of Accounting .....	4
Busad 1B Principles of Accounting .....	4
Busad 40 Principles of Management .....	3
Oftec 40 Beginning Word Processing .....	2
<b>TOTAL REQUIRED UNITS 32</b>	

RECOMMENDED OPTIONAL COURSES:  
Busad 163 Business Mathematics .....

**COMPUTER SCIENCE  
GEOGRAPHIC INFORMATION SYSTEMS**

REQUIRED COURSES:	UNITS
Cmpsc 1 Computer Concepts & Information Systems .....	4
Cmpsc 4 Windows 95 Essentials .....	2
Cmpsc 60 Introduction to GIS - ArcView .....	3
Cmpsc 65 GIS Applications .....	3
Cmpsc 70 Intro to Raster-Based GIS .....	3
Cmpsc 75 GIS Applications in Resource Management .....	3
Draft 50A Computer Assisted Drafting I .....	3
Esc 5 Physical Geology .....	4
or	
Esc 10 Environmental Geology .....	3
or	
Geogr 15 Physical Geography .....	3
Engl 1A Reading & Comp: Beginning .....	3
or	
Engl 151 Preparation for College Composition .....	4
Fortc 153 Forest Surveying Techniques .....	3
Math 101 Algebra I: Fundamentals or equivalent .....	5
or	
Higher level algebra	
Natre 1 Environmental Conservation .....	3
Nartc 160 Aerial Photography & Map Interpretation .....	2
<b>TOTAL REQUIRED UNITS 42-43</b>	

RECOMMENDED OPTIONAL COURSES:  
Busad 97 Work Experience (AutoCAD or GIS) .....

**EMERGENCY HEALTH SERVICES  
PARAMEDIC**

REQUIRED COURSES:	UNITS
EMS 20 Basic Cardiology/Cardiac Dysrhythmias .....	3
EMS 43 Paramedic Training I .....	14
EMS 44 Paramedic Training II .....	11
EMS 45 Paramedic Training III .....	9
<b>TOTAL REQUIRED UNITS 37</b>	

RECOMMENDED OPTIONAL COURSES:  
Biol 10 Human Anatomy .....

**EMERGENCY MEDICAL SERVICES**

REQUIRED COURSES:	UNITS
Biol 10 Human Anatomy .....	4
Biol 60 Human Physiology .....	4
EMS 4 Emergency Medical Technician Training .....	6
EMS 13 Adv. First Aid/Emergency Care .....	3
EMS 20 Basic Cardiology/Cardiac Dysrhythmias .....	3
<b>TOTAL REQUIRED UNITS 20</b>	

**FIRE TECHNOLOGY**

REQUIRED COURSES:	UNITS
EMS 4 Emergency Medical Technician Training .....	6
Fire 101 Firefighter I Academy .....	15
Fire 108 Confined Space Awareness .....	0.5
<b>TOTAL REQUIRED UNITS 21.5</b>	

RECOMMENDED OPTIONAL COURSES:  
Busad 25 Job Search & Interviewing Strategies .....

**FORESTRY TECHNOLOGY**

REQUIRED COURSES:	UNITS
Fores 1 Introduction to Professional Forestry .....	3
Fores 10 Dendrology .....	3
Fortc 153 Forest Surveying Techniques .....	3
Fortc 162 Applied Forest Inventory .....	2
Cmpsc 1 Computer Concepts & Information Systems .....	4
Engl 151 Preparation for College Composition .....	4
or	
Higher level English .....	3
Fire 7 Wildland Fire Control .....	3
Math 101 Algebra I: Fundamentals .....	5
or	
Higher level algebra .....	3-6
Natre 1 Environmental Conservation .....	3
Natre 9 Parks and Forests Law Enforcement .....	2
Natre 30 Introduction to Watershed Management .....	3
Natre 50 Natural History and Ecology .....	2
or	
Biol 24 General Ecology .....	4
Nartc 160 Aerial Photography & Map Interpretation .....	2
Nartc 181 California Wildlife .....	4
<b>TOTAL REQUIRED UNITS 40-45</b>	

RECOMMENDED OPTIONAL COURSES:  
Oftec 100 Computer Keyboarding I .....



**HOSPITALITY MANAGEMENT  
CHEF**

REQUIRED COURSES:	UNITS
Hpmgt 102 Introduction to Hospitality Careers & Human Relations .....	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 120 Safety and Sanitation .....	1
Hpmgt 122 Restaurant Math .....	0.5
Hpmgt 126 Nutrition for Chefs .....	1
Hpmgt 128 Kitchen Management .....	3
Hpmgt 133A Introduction to Commercial Food Preparation .....	3
Hpmgt 133B Commercial Food Preparation .....	4
Hpmgt 134 Commercial Baking: Beginning .....	2
Hpmgt 136 Dining Room Service and Management .....	2
Hpmgt 140 Contemporary Cuisine .....	3.5
Hpmgt 141 Restaurant Desserts .....	2
Hpmgt 142 Garde Manger .....	1
Hpmgt 146 Dining Room Service and Management .....	2
Hpmgt 148 Introduction to Wines .....	2
Hpmgt 190 Culinary Arts Internship .....	2
<b>TOTAL REQUIRED UNITS</b>	<b>32.5</b>

**HOSPITALITY MANAGEMENT  
DINNER LINE COOK**

REQUIRED COURSES:	UNITS
Hpmgt 102 Introduction to Hospitality Careers & Human Relations .....	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 120 Safety and Sanitation .....	1
Hpmgt 122 Restaurant Math .....	0.5
Hpmgt 126 Nutrition for Chefs .....	1
Hpmgt 128 Kitchen Management .....	3
Hpmgt 133A Introduction to Commercial Food Preparation .....	3
Hpmgt 133B Commercial Food Preparation .....	4
Hpmgt 134 Commercial Baking: Beginning .....	2
Hpmgt 136 Dining Room Service and Management .....	2
Hpmgt 142 Garde Manger .....	1
<b>TOTAL REQUIRED UNITS</b>	<b>21</b>

**HOSPITALITY MANAGEMENT  
HOTEL MANAGEMENT**

REQUIRED COURSES:	UNITS
Hpmgt 20 Intro to Travel-Tourism/Industry Tours .....	3
Hpmgt 102 Introduction to Hospitality Careers & Human Relations .....	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 112 Front Office Mgmt/Hotel Catering .....	2
Hpmgt 114 Intro to Maintenance and Housekeeping .....	1.5
Hpmgt 152 Restaurant Planning .....	3
Hpmgt 97 Work Experience .....	2
Busad 1A Principles of Accounting .....	4
or	
Busad 160 Basic Accounting .....	4
or	
Busad 161A Small Business Accounting I .....	4
<b>TOTAL REQUIRED UNITS</b>	<b>19</b>
<b>RECOMMENDED OPTIONAL COURSES:</b>	
Oftec 5 Electronic Printing Calculators .....	1

**HOSPITALITY MANAGEMENT  
PANTRY & DESSERT CHEF**

REQUIRED COURSES:	UNITS
Hpmgt 102 Introduction to Hospitality Careers & Human Relations .....	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 120 Safety and Sanitation .....	1
Hpmgt 122 Restaurant Math .....	0.5
Hpmgt 126 Nutrition for Chefs .....	1
Hpmgt 128 Kitchen Management .....	3
Hpmgt 133A Introduction to Commercial Food Preparation .....	3
Hpmgt 133B Commercial Food Preparation .....	4
Hpmgt 134 Commercial Baking: Beginning .....	2
Hpmgt 136 Dining Room Service and Management .....	2
Hpmgt 140 Contemporary Cuisine .....	3.5
Hpmgt 141 Restaurant Desserts .....	2
Hpmgt 142 Garde Manger .....	1
Hpmgt 148 Introduction to Wines .....	2
<b>TOTAL REQUIRED UNITS</b>	<b>28.5</b>

**HOSPITALITY MANAGEMENT  
RESTAURANT MANAGEMENT**

REQUIRED COURSES:	UNITS
Busad 1A Principles of Accounting .....	4
or	
Busad 160 Basic Accounting .....	4
or	
Busad 161A Small Business Accounting I .....	4
Hpmgt 97 Work Experience .....	2
Hpmgt 102 Introduction to Hospitality Careers & Human Relations .....	1.5
Hpmgt 104 Hospitality Laws and Regulations .....	2
Hpmgt 120 Safety and Sanitation .....	1
Hpmgt 122 Restaurant Math .....	0.5
Hpmgt 126 Nutrition for Chefs .....	1
Hpmgt 128 Kitchen Management .....	3
Hpmgt 133A Introduction to Commercial Food Preparation .....	3
Hpmgt 133B Commercial Food Preparation .....	4
Hpmgt 134 Commercial Baking: Beginning .....	2
Hpmgt 136 Dining Room Service and Management .....	2
Hpmgt 147 Beverage Management .....	2
Hpmgt 152 Restaurant Planning .....	3
<b>TOTAL REQUIRED UNITS</b>	<b>31</b>

**RECOMMENDED OPTIONAL COURSES:**

Hpmgt 148 Introduction to Wines .....	2
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**HUMAN SERVICES**

REQUIRED COURSES:	UNITS
Cmpsc 1 Computer Concepts & Information Systems .....	4
Guide 10A Introduction to Helping Skills .....	1.5
Guide 10B Intermed Helping & Basic Conflict Mgmt Skills .....	1.5
Oftec 31 Office Procedures & Technology .....	3
Psych 30 Personal and Social Adjustment .....	3
Socio 5 Ethnicity & Ethnic Relations in America .....	3

Socio 12 Sociology of the Family .....	3
or	
Child 22 Child, Family, Community .....	3
Socio 97 Work Experience .....	1
Child 1 Principles of Child Development .....	3
or	
Guide 1 Career/Life Planning .....	3
or	
Psych 1 General Psychology .....	3
or	
Socio 1 Introduction to Sociology .....	3
<b>TOTAL REQUIRED UNITS</b>	<b>23</b>

**RECOMMENDED OPTIONAL COURSES:**

Psych 35 Intro to Drugs & Behavior .....	3
Spcom 1 Fundamentals of Speech .....	3

**NATURAL RESOURCES  
WATERSHED MANAGEMENT TECHNOLOGY**

REQUIRED COURSES:	UNITS
Cmpsc 1 Computer Concepts & Information Systems .....	4
Esc 5 Physical Geology .....	4
or	
Esc 10 Environmental Geology .....	3
or	
Geogr 15 Physical Geography .....	3
Fores 10 Dendrology .....	3
Fortc 153 Forest Surveying Techniques .....	3
Natre 3 Natural Resources Law and Policy .....	3
or	
Natre 9 Parks and Forests Law Enforcement .....	2
Natre 22 Ecology/Use of Fire .....	2
Natre 30 Introduction to Watershed Management .....	3
Natre 50 Natural History and Ecology .....	2
or	
Biol 24 General Ecology .....	4
Narte 160 Aerial Photography & Map Interpretation .....	2
Narte 181 California Wildlife .....	4
<b>Plus OPTION A or OPTION B</b>	
<b>OPTION A</b>	
Cmpsc 60 Introduction to GIS - ArcView .....	3
Draft 50A Computer Assisted Drafting I .....	3
<b>OPTION B</b>	
Cmpsc 70 Intro to Raster-Based GIS .....	3
Cmpsc 75 GIS Applications in Resource Management .....	3
<b>TOTAL REQUIRED UNITS</b>	<b>34-38</b>

**NATURAL RESOURCES TECHNOLOGY**

REQUIRED COURSES:	UNITS
Natre 1 Environmental Conservation .....	3
Natre 9 Parks and Forests Law Enforcement .....	2
Natre 30 Introduction to Watershed Management .....	3
Natre 50 Natural History and Ecology .....	2
or	
Biol 24 General Ecology .....	4
Narte 155 Interpretive Guided Tours .....	2
Narte 160 Aerial Photography & Map Interpretation .....	2
Narte 181 California Wildlife .....	4
Biol 179 Fishing and Fisheries .....	1
Esc 10 Environmental Geology .....	3
or	
Esc 25 Geology of National Parks .....	3
Engl 151 Preparation for College Composition .....	4
or	
Higher level English .....	3
Fire 7 Wildland Fire Control .....	3
Fores 1 Introduction to Professional Forestry .....	3
Fores 10 Dendrology .....	3
Fortc 153 Forest Surveying Techniques .....	3
Math 101 Algebra I: Fundamentals or equivalent .....	5
or	
Higher level math course .....	3-6
<b>TOTAL REQUIRED UNITS</b>	<b>40-45</b>

**RECOMMENDED OPTIONAL COURSES:**

Oftec 100 Computer Keyboarding I .....	1
or	
Oftec 110 Computer Keyboarding II .....	2

**OFFICE TECHNOLOGY  
ADMINISTRATIVE ASSISTANT**

REQUIRED COURSES:	UNITS
Oftec 5 Electronic Printing Calculators .....	1
Oftec 20 Machine Transcription .....	2
Oftec 25 Business Communications .....	3
Oftec 31 Office Procedures & Technology .....	3
Oftec 40 Beginning Word Processing .....	2
Oftec 41 Intermediate Word Processing .....	3
Oftec 42 Desktop Publishing .....	3
or	
Cmpsc 11 Presentations Using Computers/Multimedia .....	1-2
Oftec 97 Work Experience .....	1
Oftec 120 Computer Keyboarding III .....	3
Oftec 130 Business English .....	3
Busad 20 Principles of Business .....	3
Busad 163 Business Mathematics .....	4
Cmpsc 1 Computer Concepts & Information Systems .....	4
Cmpsc 30 Financial Worksheets on Computers .....	3
<b>TOTAL REQUIRED UNITS</b>	<b>35-38</b>



**OFFICE TECHNOLOGY  
GENERAL OFFICE CLERK**

REQUIRED COURSES:	UNITS
Oftec 5 Electronic Printing Calculators .....	1
Oftec 20 Machine Transcription .....	2
Oftec 25 Business Communications .....	3
Oftec 31 Office Procedures & Technology .....	3
Oftec 40 Beginning Word Processing .....	2
Oftec 41 Intermediate Word Processing .....	3
Oftec 120 Computer Keyboarding III .....	3
Oftec 130 Business English .....	3
Busad 1A Principles of Accounting .....	4
or	
Busad 160 Basic Accounting .....	4
or	
Busad 161A Small Business Accounting I .....	4
Busad 20 Principles of Business .....	3
Busad 158 Payroll Accounting .....	3
Busad 163 Business Mathematics .....	4
Cmpsc 1 Computer Concepts & Information Systems .....	4
Cmpsc 30 Financial Worksheets on Computers .....	3
TOTAL REQUIRED UNITS 41	

**OFFICE TECHNOLOGY  
INFORMATION PROCESSING**

REQUIRED COURSES:	UNITS
Oftec 20 Machine Transcription .....	2
Oftec 25 Business Communications .....	3
Oftec 40 Beginning Word Processing .....	2
Oftec 41 Intermediate Word Processing .....	3
Oftec 42 Desktop Publishing .....	3
or	
Cmpsc 11 Presentations Using Computers/Multimedia .....	1-2
Oftec 120 Computer Keyboarding III .....	3
Oftec 130 Business English .....	3
Busad 20 Principles of Business .....	3
Busad 160 Basic Accounting .....	4
or	
Busad 161A Small Business Accounting I .....	4
Cmpsc 1 Computer Concepts & Information Systems .....	4
Cmpsc 3 Windows and DOS Operating Systems .....	3
Cmpsc 30 Financial Worksheets on Computers .....	3
Cmpsc 55 Data Base Management .....	3
TOTAL REQUIRED UNITS 37-39	

**OFFICE TECHNOLOGY  
LEGAL OFFICE**

REQUIRED COURSES:	UNITS
Oftec 5 Electronic Printing Calculators .....	1
Oftec 20 Machine Transcription .....	2
Oftec 25 Business Communications .....	3
Oftec 31 Office Procedures & Technology .....	3
Oftec 40 Beginning Word Processing .....	2
Oftec 41 Intermediate Word Processing .....	3
Oftec 60 Legal Transcription/Terminology .....	2
Oftec 97 Work Experience .....	1
Oftec 120 Computer Keyboarding III .....	3

Oftec 130 Business English .....	3
Busad 18 Business Law .....	4
Busad 20 Principles of Business .....	3
Busad 163 Business Mathematics .....	4
Cmpsc 1 Computer Concepts & Information Systems .....	4
TOTAL REQUIRED UNITS 38	

**OFFICE TECHNOLOGY  
MEDICAL OFFICE**

REQUIRED COURSES:	UNITS
Oftec 5 Electronic Printing Calculators .....	1
Oftec 20 Machine Transcription .....	2
Oftec 25 Business Communications .....	3
Oftec 31 Office Procedures & Technology .....	3
Oftec 40 Beginning Word Processing .....	2
Oftec 120 Computer Keyboarding III .....	3
Oftec 130 Business English .....	3
Oftec 50 Medical Terminology .....	3
Oftec 52 Medical Insurance .....	3
Oftec 53A Beginning Medical Transcription .....	2
Busad 20 Principles of Business .....	3
Busad 163 Business Mathematics .....	4
Cmpsc 1 Computer Concepts & Information Systems .....	4
TOTAL REQUIRED UNITS 36	

**OFFICE TECHNOLOGY  
MEDICAL TRANSCRIPTION**

REQUIRED COURSES:	UNITS
Oftec 40 Beginning Word Processing .....	2
Oftec 41 Intermediate Word Processing .....	3
Oftec 50 Medical Terminology .....	3
Oftec 53A Beginning Medical Transcription .....	2
Oftec 53B Beginning Medical Transcription .....	2
Oftec 54 Radiology Transcription .....	1
Oftec 55 Cardiology Transcription .....	1
Oftec 56 Orthopedic Transcription .....	1
Oftec 57 Gastroenterology Transcription .....	1
Oftec 58 Pathology Transcription .....	1
Oftec 120 Computer Keyboarding III .....	3
Oftec 130 Business English .....	3
Cmpsc 1 Computer Concepts & Information Systems .....	4
TOTAL REQUIRED UNITS 27	



**LOWER DIVISION TRANSFER REQUIREMENTS  
FOR PUBLIC CALIFORNIA FOUR-YEAR COLLEGES &  
UNIVERSITIES**

Students should consult the catalog of the college for which they have catalog rights and to which they intend to transfer to ensure that all possible required lower division general education courses and prerequisites for their major are included in their Columbia College program of study.

Columbia College counselors will assist students in the selection of courses that fulfill both major and General Education Breadth Requirements.

The Career/Transfer Center staff will provide students with the latest articulation information between Columbia College and the CSU and UC campuses with which agreements have been completed. Agreements are available for some community colleges and independent four-year colleges.

The responsibility for fulfilling requirements rests with the student.

**CALIFORNIA STATE UNIVERSITY SYSTEM  
(CSU) TRANSFER INFORMATION**

The California State University system (CSU) has established the following campuses:

- California State College, Bakersfield*
- California State University, Channel Island*
- California State University, Chico*
- California State University, Dominguez Hills*
- California State University, Fresno*
- California State University, Fullerton*
- California State University, Hayward*
- California State University, Long Beach*
- California State University, Los Angeles*
- California Maritime Academy*
- California State University, Monterey Bay*
- California State University, Northridge*
- California State Polytechnic University, Pomona*
- California State University, Sacramento*
- California State University, San Bernardino*
- California Polytechnic State University, San Luis Obispo*
- California State University, San Marcos*
- California State University, Stanislaus*
- Humboldt State University*
- San Diego State University*
- San Francisco State University*
- San Jose State University*
- Sonoma State University*

**CSU ADMISSION**

**AS AN UNDERGRADUATE TRANSFER**

**TRANSFER REQUIREMENTS** — You will qualify for admission as a transfer student 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 meet any of the following standards:

1. You will meet the freshman admission requirements (*courses and tests scores*) in effect for the term to which you are applying. (*See Admissions Application: "Freshmen Requirements" section*)
2. You were eligible as a freshman at the time of high school graduation and have been in continuous attendance in an accredited college since high school graduation.
3. You were eligible as a freshman at the time of high school graduation except for the subject requirements, have made up the missing subjects at a high school or college, and have been in continuous attendance in a accredited college since high school graduation.
4. You have completed at least 56 transferable semester (*84 quarter*) units and meet the requirements listed below based on your high school graduation date. Nonresidents must have a 2.4 grade point average or better. *Full junior status requires 60 transferable semester units.*

Applicants who graduated from high school 1988 or later:

- You have completed all subject requirements in effect when you graduated high school (*you can use both high school and college course work*) OR You have completed at least 30 semester units of college course work 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 that meet general education requirements. The 30 units must include all of the general education requirements in communication in the English language and critical thinking (*at least 9 semester units*) and the requirement in mathematics/quantitative reasoning (*usually 3 semester units*) OR the Intersegmental General Education Transfer Curriculum (*IGETC*) requirements in English communication and mathematical concepts and quantitative reasoning.
- Applicants who graduated from high school prior to 1988:
- You have completed 4 years high school English and 2 years high school math, with grades C or better OR



You have completed a baccalaureate course with a grade of C or better that meets the general education requirement in written communication and a course with a grade of C or better that meets the general education requirement in mathematics/quantitative reasoning *OR* the Intersegmental General Education Transfer Curriculum (*IGETC*) requirements in English composition and mathematical concepts and quantitative reasoning. The course meeting either general education math requirement must be above the level of intermediate algebra.

- A maximum of 70 semester (*105 quarter*) units earned in a community college may generally be transferred to the California State University and applied toward the baccalaureate degree.
- Students transferring with full certification of lower division general education requirements are *assured* that they have met 39 of the 48 unit minimum requirements for the Bachelors Degree. Students transferring without certification of general education must complete the pattern of courses required of "native" students as outlined in the catalog of the particular state university. The CSU General Education Breadth Requirements (*see pgs. 42-43*) and the Intersegmental General Education Transfer Curriculum (*IGETC, pgs. 64-65*) are the two patterns of courses which Columbia College uses to certify that the student has met the required minimum semester units of general education.

**Transcripts** — Request official transcripts be sent directly from all colleges or universities previously attended even if there is no applicable or completed course work. Transcripts must be received in sealed envelopes from each institution attended. You should keep personal copies of all transcripts and test scores for academic advising sessions and to complete the admission application.

If transferring with fewer than 56 transferable semester (*84 quarter*) units of study, you must also submit your high school transcript. Applicants with 56 or more transferable semester units may be asked to submit high school transcripts if admissibility cannot be determined by the college or university transcripts.

**Test Scores** — Freshman and transfer applicants who have fewer than 56 semester or 84 quarter units of transferable college credit must submit scores, unless exempt from either the Scholastic Assessment Test (*SAT I*) of the College Board or the American College Testing Program (*ACT*).

If you are applying to an *impacted program* and are required to submit test scores, you should take the test no later than early December if applying for fall admission or no later than November if applying to San Luis Obispo.

Test scores are also used for advising and placement purposes. Registration forms and dates for the SAT I or ACT are available from high school or college counselors or from a CSU campus testing office. Or you may write to or call:

The College Board (SAT I),  
Registration Unit, P.O. Box 592, Princeton, N.J. 08541  
609.771.7588

American College Testing Program (ACT),  
Registration Unit, P.O. Box 168, Iowa City, IA 52240  
319.337.1270

**TOEFL Requirement** — All undergraduate applicants, regardless of citizenship, who have not attended schools at the secondary level or above for at least three years full time where English is the principal language of instruction must present a score of 480 or above on the Test of English as a Foreign Language (*TOEFL*).

**Required Placement Tests** — The CSU requires new students to be tested in English (*English Placement Test—EPT*) and mathematics (*Entry Level Mathematics Test—elm*) as soon as possible after they are admitted. These are not admission tests but determine eligibility to enroll in specific courses. Completion of specified English and mathematics courses taken at the community college level may exempt you from these tests.

**Immunization** — All new and readmitted students born after January 1, 1957, will be notified of the requirement to present proof of measles and rubella immunizations. This is not an admission requirement, but is required of students by the beginning of their second term of enrollment in CSU. Proof of measles and rubella immunizations is also required for certain groups of enrolled students who have increased exposure to these diseases.

**Health Screening** — Students admitted to California Maritime Academy will be required to have a complete physical examination prior to entry to determine qualifications for a merchant marine license. Cal Maritime will provide the necessary physical examination form.

**Educational Opportunity Program (EOP) Admission Requirements** — Each CSU campus has an Educational Opportunity Program for low-income undergraduate students who are disadvantaged because of their economic or educational background. EOP serves California residents who do not meet regular admission criteria, as well as those who qualify for regular admission, if they have a history of low income and need academic and financial assistance.

If you wish to be considered for admission through EOP, you must so indicate on the application. In addition, you must complete and submit the forms included in the EOP Information and Supplementary Application booklet. The

EOP booklet is available at each CSU campus EOP office and the Columbia College EOP&S Office. Submission of an EOP application which results in ineligibility will delay processing of your application for regular admission.

Because the number of EOP places is limited, you should file your application forms early in the filing period. Before doing so, however, please consult with the EOP Office at the campus of your choice and an EOP&S counselor at Columbia College.

**International (Foreign) Student Admission Requirements** — The CSU must assess the academic preparation of foreign applicants. For this purpose, "foreign students" include those who hold U.S. visas as students, exchange visitors, or other non-immigrant classifications.

The CSU issues separate requirements and application filing dates in the admission of foreign students. Verification of English proficiency (*see the TOEFL section on previous page*), financial resources, and academic performance are all important considerations. Official academic records from foreign institutions must be on file at least eight weeks before registration for the first term and, if not written in English, must be accompanied by certified English translations. Priority for admission is given to California residents.

**Selection of Major** — The majors offered at each campus are listed in the back of the CSU application booklet. You should review program descriptions in campus catalogs before you file your application; options within programs at one campus may be similar to differently named programs at other campuses. If you are uncertain about your major, some campuses accept students who are uncertain about their major (*undeclared*). We encourage you to use this category if you are unsure about what field to pursue. There are advising and information resources available on each campus to help you select an appropriate major.

**Choice of Campus** — The CSU application allows you to designate the CSU campus of your choice and an alternate campus to which your application will be forwarded in the event your first choice campus cannot accommodate you. When designating an alternate campus, be sure that your major or alternate major is offered at that campus.

The CSU accepts most applications at the first choice campus in the first choice major during the initial filing period. Most campuses consider applications for an alternate major before forwarding the application to the alternate campus. When designating an alternate campus, you should be certain that the major or alternate major is offered and not impacted at the alternate campus (*see Impacted Programs*) and the alternate campus is still accepting applications. It is not possible for your application to be redirected to impacted campuses and programs.

It is generally unnecessary to file more than one application to CSU during the initial filing period; however see the following section on Impacted Programs. During periods of high demand and limited resources, some campuses may not accept applications for winter, spring or summer terms.

If you choose to apply to more than one CSU campus photocopies of your original application may be used provided each copy has an original signature. Be sure, however, to make appropriate changes to campus and major items (*1, 3, and 10a, b*).

The CSU assigns highest admission priority to California Community College transfer students who have completed the first two years of their baccalaureate program, including those applying for impacted programs. In addition, CSU campuses will make every effort to see that California Community College transfer students originally eligible for admission as first-time freshmen are admitted to their first choice CSU campus.

If time allows and enrollment capacities have not been reached, you may change your campus choice after filing your application by writing the campus you wish to attend.

**Impacted Programs** - The CSU designates programs as impacted when more applications are received in the first month of the filing period than can be accommodated. Some majors are impacted at every campus where they are offered; others may be impacted only at some campuses. *Applicants to impacted majors must file an application for admission during the first month of the filing period and will be subject to supplementary admission criteria.* If you apply by mail, the postmark will be used to determine if you filed in the first month. Priority for admission to impacted programs is given to California residents.

If you wish to be considered in impacted majors at two or more campuses, you must file an application to each. The CSU announces each fall the majors that are impacted and the supplementary criteria required by the campuses. That announcement is published in the *CSU Review* distributed to high school and college counselors. Information about the supplementary criteria is also sent to program applicants.

Last year, several programs were impacted at every CSU campus offering the programs. If you apply to one of these programs and are not accommodated, you can be redirected only in an alternate major that is not impacted.



### Advanced Placement Examination Credit for Columbia College AA/AS and CSU General Education Breadth Requirements

Students must have scored 3, 4, or 5 on an Advanced Placement examination listed below to receive the credit indicated. All CSU campuses will accept the minimum units shown below toward fulfillment of the designated General Education-Breadth area if the examination is included in a full or subject-area certification; individual CSU campuses may choose to accept more units than those specified below towards completion of General Education-Breadth requirements. The CSU campus to which the student is transferring determines the total number of units awarded for successful completion of an Advanced Placement examination and the applicability of the examination to other graduation requirements. Beginning 1998-99, the Columbia College catalog will reflect the CSU GE Breadth pattern numbering system as per E.O. 595, for the Associate Degree and CSU GE Areas. General Education credit will be awarded on the transcript without using the specific Columbia College equivalent course. Columbia College accepts several other AP examinations for AA/AS major or elective units.

AP Subject	Minimum Score Required	Number of Units Applicable to CSU General Education-Breadth Requirements for Students Obtaining Full or Subject-Area Certification:	Columbia College G.E. Pattern for the AA/AS Breadth Requirements
Art: History of Art	3	3 semester units toward Area C1	C1
Biology	3	3 semester units toward Area B2	B2 & B3
Chemistry	3	6 semester units toward Area B1/B3	B1 & B3
Economics: Macroeconomics	3	3 semester units toward Area D2	D2
Economics: Microeconomics	3	3 semester units toward Area D2	D2
English: English Language & Comp	3	3 semester units toward Area A2	A2
English: English Lit & Comp	3	6 semester units toward Areas A2 & C2	A2 & C2
French: French Language	3	6 semester units toward Area C2	C2
French: French Literature	3	6 semester units toward Area C2	C2
German Language	3	6 semester units toward Area C2	C2
Government and Politics: US	3	3 semester units toward Area D8	D8
Government and Politics: Cmptv.	3	3 semester units toward Area D8	D8
History: European History	3	3 semester units toward Area D6	D6
History: United States	3	3 semester units toward Area D6*	D6*
Latin: Virgil	3	3 semester units toward Area C2	C2
Latin: Latin Literature	3	3 semester units toward Area C2	C2
Mathematics: Calculus AB	3	3 semester units toward Area B4	B4
Mathematics: Calculus BC	3	3 semester units toward Area B4	B4
Music Theory	3	3 semester units toward Area C1	C1
Physics B	3	6 semester units toward Area B1 & B3	B1 & B3
Physics C (mechanics)	3	3 semester units toward Area B1 & B3	B1 & B3
Physics C (electricity and magnetism)	3	3 semester units toward Area B1 & B3	B1 & B3
Psychology	3	3 semester units toward Area D9	D9
Spanish: Spanish Language	3	6 semester units toward Area C2	C2
Spanish: Spanish Literature	3	6 semester units toward Area C2	C2
Statistics	3	3 semester units toward Area B4	B4

\*Does not meet CSU E.O. 405

**Supplementary Admission Criteria** - Supplementary admission criteria may include overall grade point average and a combination of campus-developed criteria. If you are required to submit scores on either the SAT I or THE ACT, you should take the test no later than early December if applying for fall admission or November if applying to San Luis Obispo.

please consult with any CSU campus Admission or Relations with Schools Office for further information.

### UNIVERSITY OF CALIFORNIA

#### TRANSFER REQUIREMENTS

The University of California system has established the following campuses:

- University of California, Berkeley
- University of California, Davis
- University of California, Irvine
- University of California, Los Angeles
- University of California, Riverside
- University of California, San Diego
- University of California, San Francisco (medical majors only)
- University of California, Santa Barbara
- University of California, Santa Cruz

#### Selecting Campuses and Programs of Study

The University encourages you to approach your selection of University campuses and programs carefully. You may be familiar with only one or two of the University's eight general campuses, probably those nearest your home or those mentioned more frequently in the news. However, you should consider the many different educational alternatives and programs offered by all the campuses before you make your selections and complete your application. Each of the eight general campuses offers a full range of undergraduate programs.

For each campus you apply to, you must choose a major and indicate your choice on your application. You may choose the same major at all campuses or a different major at each one. You may also select an alternate major at some campuses, *although there is no guarantee that you will be admitted to the alternate major if you are denied admission to your first choice.*

You may apply to some schools or colleges at all of the campuses using the Undeclared, Undecided or Exploratory (at Davis) major option if you have not yet decided on an area of study. The University encourages you to apply as Undeclared (or Exploratory) rather than indicate a major that does not interest you. If you wish to apply as Undeclared, check with the campus(es) first because the options available to Undeclared majors vary from campus to campus. If you apply for one major and later request a change to another, campuses will make every effort to honor your

request but there is no guarantee. When making your selections, keep in mind that some campuses and programs are highly competitive and can accept only a limited number of students each year. The University encourages you to apply to additional campuses that interest you to increase your chance of being admitted to one of your choices.

#### Undergraduate Programs

The undergraduate programs offered by each campus, and the concentrations available within these programs, are listed in the admissions application.

All campuses offer the general courses required for admission to professional schools in the health sciences, business, and law. The University does not offer formal pre-professional majors, however some campuses offer special undergraduate programs that include all the professional school prerequisites.

If you have any questions about academic programs, contact the Admissions or Relations with Schools Office at the campus you wish to attend.

#### Admission as a Transfer Student

The University considers you a transfer applicant if you graduated from high school and enrolled in a regular session at a college or university. Do not disregard your college record and apply as a freshman.

If you plan to attend Columbia College before applying to the University, you should take courses that are UC transferable, that satisfy University and college requirements, and that fulfill admission, lower division general education and prerequisite courses in your major. *Advisors in the Admissions Office at the campus you wish to attend and Columbia College counselors can help you with your planning.* UC will not grant unit credit toward graduation for course work completed in excess of 70 lower division transferrable semester units. (See also *UC Transferable Course Agreement on page 63 and the Intersegmental General Education Transfer Curriculum (IGETC) on pages 64-65.*) The University publishes a booklet especially for transfer applicants called *Answers for Transfers*. It is available in the Career/Transfer Center on campus.

#### Minimum Eligibility Requirements for Transfer to UC:

When there are more eligible applicants than spaces available, each campus uses academic criteria alone—academic course work, grade point average, SAT or ACT results, achievement test scores—to select between 40 and 60 percent of those accepted. Each campus uses a combination of academic and supplemental criteria to select the remaining admittees. If the number of applicants exceeds the spaces available for a particular campus or major, the campus uses criteria that exceed the minimum requirements to select students. Meeting the minimum requirements, therefore, is not enough to gain admission to many UC campuses and programs.



The selection criteria for each academic year described in the UC publication *Introducing the University* and some campus catalogs may be found in the Career/Transfer Center. The criteria vary from year to year and from campus to campus.

All UC campuses are on the quarter calendar except Berkeley, which is on the semester system. The quarter calendar often prohibits mid-year transfer because the end of the fall semester (*typically late January*) and the beginning of the winter quarter (*early January*) overlap. Therefore, you often cannot transfer to the University for the winter quarter if you enroll in a community college or other institution with a fall semester that does not end prior to January 1.

### For California Residents

There are three ways in which you can meet the UC's minimum admission requirements for transfer students. These requirements are described below. In all cases, you must have at least a "C" (2.0) average in all transferable course work.

- If you were eligible for admission to the UC when you graduated from high school—meaning you satisfied the Subject, Scholarship, and Examination Requirements—you are eligible to transfer if you have a "C" (2.0) average in your transferable college course work.
- If you met the Scholarship Requirement, but did not satisfy the Subject Requirement, you must take 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 course work. If you completed less than 12 quarter or semester units of transferable college course work, you must also satisfy the Examination Requirement.
- If you were not eligible for admission to the UC when you graduated from high school because you did not meet the Scholarship Requirement, or you did not meet the Scholarship Requirement and did not complete all the required "a-g" subjects, you must:
  - Complete a minimum of 90 quarter units or 60 semester units of transferable college credit with a grade point average of at least 2.4, and satisfy either (b) or (c) as follows.
  - Take college courses in the subjects you are lacking and earn a grade of "C" or better in each one. (*The University will waive up to two units of the required high school course work except in mathematics and English.*)
  - Complete one college course in mathematics, one in English, and four selected from either U.S. history, laboratory science, or language other than English. You must earn a grade of "C" or better in each course.

### Nonresidents

The minimum admission requirements for nonresident transfer 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 course work.

### ASSIST (Articulation System Stimulating Interinstitutional Student Transfer)

As a prospective transfer student, it is important to make sure your community college courses are acceptable to the UC or CSU for transfer credit. ASSIST is California's official statewide repository of transfer information, offering easy access to a single database. ASSIST can help you determine if you will receive credit for courses you have already taken and how those courses apply to general education (IGETC or CSU GE Breadth), major preparation requirements and elective credit. ([www.assist.org](http://www.assist.org))

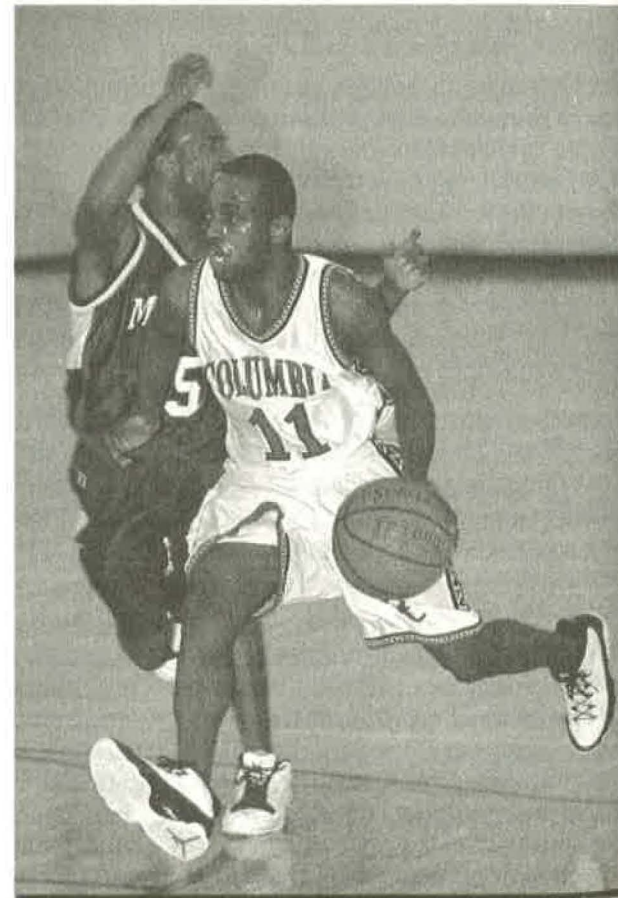


Photo courtesy of The Union Democrat

## CALIFORNIA ARTICULATION NUMBER (CAN) SYSTEM

The California Articulation Number (CAN) System identifies many transferable, lower-division, major preparation courses commonly taught on California College and University campuses. **Courses in the CAN System are primarily lower-division preparation for the major**, but may also be used to meet other requirements. The system assures students that CAN courses on one participating campus will be accepted *in lieu of* the comparable CAN courses on another participating campus. For example: CAN ECON 2 on one campus will be accepted for CAN ECON 2 on every other participating campus. There are also CAN Sequences (SEQA, B, etc.). A sequence means all courses in the sequence at one college must be completed in order to qualify for meeting the sequence for another college. Each campus retains its own numbering system, but adds the CAN designation parenthetically in its publications. Check with the Counseling Office, departmental office, Career/Transfer Center, or Articulation Officer for current listings of CAN courses and campuses participating in the CAN system. A CAN catalog listing campuses and courses is published biannually. The following Columbia College courses have been approved as CAN qualified as of the printing of this catalog:

CAN Subject Prefix Number	Columbia's Course No.	Columbia's Course Title	Effective Date
CAN ANTH 2	ANTHR 1	Physical Anthropology	S90
CAN ANTH 4	ANTHR 2	Cultural Anthropology	S90
CAN ART 2	ART 11	History of Art: Ancient & Medieval	F96
CAN ART 4	ART 12	History of Art: Renaissance, Baroque, & Modern	F96
CAN ART 6	ART 31	Ceramics: Introductory	F00
CAN ART 8	ART 1	Basic Freehand Drawing	F96
CAN ART 10	ART 21A	Painting: Beginning	F96
CAN ART 14	ART 2	Basic Color & Design	F96
CAN ART 18	ART 40	Photography: Beginning	F00
CAN ART SEQ A	ART 11+12	History of Art: Ancient and Medieval + Renaissance, Baroque, & Modern	F98
CAN BIOL 2	BIOL 2	Principles of Biology	F96
CAN BIOL 4	BIOL 4	Principles of Animal Biology	F96
CAN BIOL 6	BIOL 6	Principles of Plant Biology	F96
CAN BIOL 10	BIOL 10	Human Anatomy	F96
CAN BIOL 12	BIOL 60	Human Physiology	F96
CAN BIOL 14	BIOL 65	Microbiology	F96
CAN BIOL SEQ A	BIOL 2+4+6	Principles of Biology + Principles of Animal Biology + Principles of Plant Biology	F98
CAN BIOL SEQ B	BIOL 10+60	Human Anatomy + Human Physiology	F98
CAN BUS 2	BUSAD 1A	Principles of Accounting	F96
CAN BUS 4	BUSAD 1B	Principles of Accounting	F96
CAN BUS 12	BUSAD 18	Business Law	F98
CAN BUS SEQ A	BUS AD 1A+1B:	Principles of Accounting	F98
CAN CHEM 2	CHEM 1A	General Chemistry	S90
CAN CHEM 4	CHEM 1B	General Chemistry	S90
CAN CHEM 6	CHEM 10	Fundamentals of Chemistry	F00

CAN CHEM SEQ A	CHEM 1A + 1B	General Chemistry	F98
CAN CSCI 10	CMPS 40	Assembly Language Programming	F02
CAN CSCI 12	CMPS 1	Computer Concepts & Information Systems	F00
CAN CSCI 22	CMPS 22	Programming Concepts & Methodology	F02
CAN CSCI 24	CMPS 24	Programming Concepts and Methodology II	F00
CAN CSCI 10	CMPS 40	Assembly Language Programming	F96
CAN DRAM 8	DRAMA 42	Acting Fundamentals	F96
CAN ECON 2	ECON 10	Principles of Economics	S90
CAN ECON 4	ECON 11	Principles of Economics	S90
CAN ENGL 2	ENGL 1A	Reading & Composition: Beg.	F96
CAN ENGL 4	ENGL 1B	Reading & Composition: Adv.	F96
CAN ENGL 6	ENGL 10	Creative Writing	F96
CAN ENGL 8	ENGL 46	Survey of English Literature	F00
CAN ENGL 10	ENGL 47	Survey of English Literature	F00
CAN ENGL 14	ENGL 17	American Literature	F96
CAN ENGL 16	ENGL 17 + 18	American Literature + American Literature	F))
SEQ C			
CAN ENGL SEQ A	ENGL 1A+1B	Reading and Composition: Beginning + Advanced	F98
CAN ENGL SEQ B	ENGL 46+47	Survey of English Literature	
CAN FCS 2	BIOL 50	Nutrition	F96
CAN GEOG 2	GEOGR 15	Physical Geography	S95
CAN GEOG 4	GEOGR 12	Cultural Geography	F94
CAN GEOL 2	ESC 5	Physical Geology	S95
CAN GOVT 2	POLSC 10	Constitutional Government	S90
CAN HIST 8	HIST 16	United States: to 1877	F96
CAN HIST 10	HIST 17	United States: 1877 to present	F96
CAN HIST 16	HIST 14	World Civilizations: 1650 to Present	F00
CAN HIST SEQ B	HIST 16+17	United States: to 1877 + United States: 1877-Present	F98
CAN HIST SEQ C	HIST 13 + 14	World Civilizations: To 1650 + World Civilizations: 1650 to Present	F00
CAN JOUR 2	JRNAL 1	Introduction to Journalism	F00
CAN MATH 2	MATH 6	Math for Liberal Arts	S98
CAN MATH 12	MATH 12	Finite Mathematics	S98
CAN MATH 16	MATH 16	Precalculus	F96
CAN MATH 18	MATH 18A	Calculus I: Differential	F96
CAN MATH 20	MATH 18B	Calculus II: Integral	F96
CAN MATH 22	MATH 18C	Calculus III: Multivariable	F96
CAN MATH SEQ B	MATH 18A+18B	Calculus I + Calculus II	F98
CAN MATH SEQ C	MATH 18A+18B+18C	Calculus I + Calculus II + Calculus III	F 98
CAN PHIL 2	PHILO 1	Introduction to Philosophy	F94
CAN PHYS 8	PHYCS 5A	Introductory Physics I	S98
CAN PHYS 12	PHYCS 5B	Introductory Physics II	S98
CAN PSY 2	PSYCH 1	General Psychology	F96
CAN SOC 2	SOCIO 1	Introduction to Sociology	S90
CAN SOC 4	SOCIO 2	American Society	S95
CAN SPAN 2	SPAN 1A	Spanish: Beginning	S95
CAN SPAN 4	SPAN 1B	Spanish: Beginning	S95
CAN SPAN 8	SPAN 2A	Spanish: Intermediate	F96
CAN SPAN 10	SPAN 2B	Spanish: Intermediate	F96
CAN SPAN SEQ A	SPAN 1A+1B	Spanish: Beginning	F98
CAN SPAN SEQ B	SPAN 2A+2B	Spanish: Intermediate	F98
CAN SPCH 4	SPCH 1	Fundamentals of Speech	S90
CAN SPCH 6	SPCH 2	Argumentation	F96
CAN STAT 2	MATH 2	Elements of Statistics	S90



Additional courses might have qualified for or been removed from the CAN System after the printing of this catalog. Check with the counseling department or the Transfer Center for the most current information. Columbia College articulates many other courses with many colleges and universities (*public and private*), in addition to those on the above list. See course descriptions for (*UC/CSU*) transfer designations and check in the Transfer Center or with a counselor for articulation agreements. Updated information can be obtained from: [www.cansystem.org](http://www.cansystem.org).

#### TRANSFER ADMISSION AGREEMENT (TAA)

Columbia College has available guaranteed admission agreements with the University of California campuses at Davis, Riverside, Santa Cruz and Sonoma State University. The purpose of the TAA is to guarantee to students admission to the university or college with which the TAA has been contracted. The TAA assures students that the courses to which they have committed will meet requirements for admission, general education and lower division major preparation. The TAA should be written at least one year prior (*completion of 30 transferable units*) to enrollment in the four year university or college to which the student is transferring and cannot be used for any term other than the one indicated in the signed agreement. If you plan to transfer to any one of these four campuses, you must see a counselor as soon as possible in order to initiate the Transfer Admission Agreement process. There are strict deadlines for UC, Davis at this time and TAA's may not be available for all quarters/semesters of the academic year.

#### UNIVERSITY OF CALIFORNIA

##### TRANSFERABLE COURSE AGREEMENT (TCA)

The Transferable Course Agreement is currently under review. Please contact a counselor or the Transfer Center staff for the revised list once it becomes available.

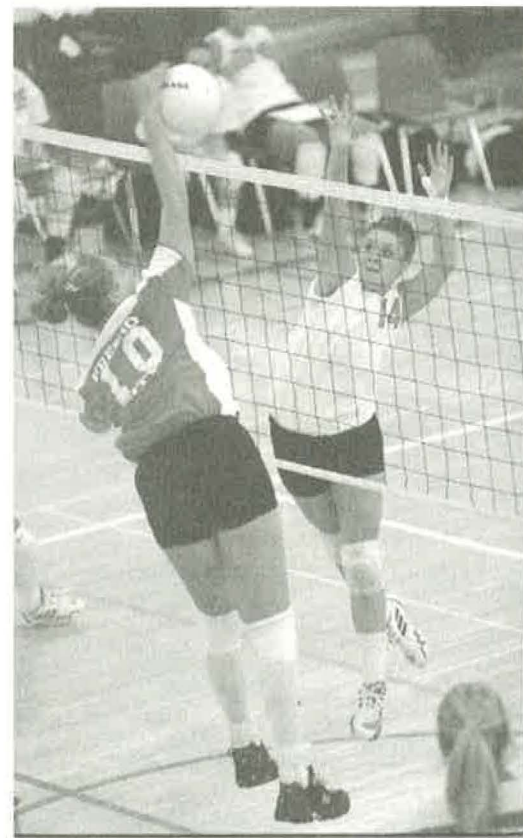


Photo courtesy of The Union Democrat

## COURSE DESCRIPTIONS



*All phone numbers listed are in the 209 area code except as noted.*



**COURSE INFORMATION**

**Numbering of Courses**

- 1 to 99 are designated baccalaureate-level courses.
- 94 are designated Honors courses. (See below)
- 100 to 199 are not intended for transfer, but may be accepted for transfer credit by agreement with specific four-year colleges and universities.
- 200 to 299 are non-degree-applicable courses.
- 300 and above are non-credit courses. These courses are not listed in the College Catalog but are listed in the Schedule of Classes for each academic term.

**Course Articulation With Other Colleges**

Columbia College articulates many of its courses with other public and private two- and four-year colleges and universities. Please ask your counselor or the Career/Transfer Center Technician for information related to agreements which identify courses that will transfer and those that meet lower-division preparation for the major.

**Transferability of Courses**

Courses that transfer to the California State University System (CSU) and/or the University of California System (UC) are so designated in parentheses following the course description:

- (CSU) — Transfer to CSU System
- (UC) — Transfer to UC System
- (UC/CSU) — Transfer to both systems
- (UC under review)
- (UC\*) — Transfer credit limited. See a counselor.

Students must understand that some courses designated as baccalaureate level may not meet certain requirements at the transferring institution; however, they may be used for elective credit at the discretion of the transfer school. Several new courses are under review and should not be considered for transfer until official approval has been received. Check with the Articulation Officer for status of these courses.

**California Articulation Number System (CAN)**

Columbia College participates in the California Articulation Number (CAN) System. An explanation of CAN-designated courses can be found on page 62.

**Course Description**

A course description is given for each credit course offered by the College. Students should refer to the course description for information concerning course prerequisites and allocation of class hours for lecture, laboratory, field trips, or other required learning activities. Refer to page 20 for important prerequisite information.

**Courses Not Listed in The Catalog**

1. *Non-Credit Courses*

In an effort to meet some of the special interest needs of the populations served by the College, non-credit courses are usually offered each semester. These courses are traditionally offered either through Continuing Education or Community Services sponsorship. Non-credit courses cannot be applied toward fulfilling graduation, transfer, or vocational education programs, but such courses do provide information and/or training on a variety of topical subjects.

2. *70/170 Courses: Special Topics*

Instruction in a variety of special topics within broader discipline areas (such as child development). Lecture and/or laboratory hours and units of credit may vary. May be repeated with different topics only. Transferability may vary. Check with school to which student is transferring.

3. *98/198 Courses: Experimental Courses*

Lecture and/or laboratory hours and units of credit may vary. Classes in which a particular topic in a discipline (such as history) is treated with in-depth study. The topic, the number of units and hours, and prerequisites (if any), will be determined in advance and published in the Schedule of Classes. 98/198 courses may be repeated for credit with different topics only. For UC campuses, these courses may transfer for elective or other credit and will not fulfill requirements unless pre-authorized. It is the student's responsibility to have the course pre-authorized by the appropriate UC department chair and admissions office.

4. *99/199 Courses: Independent Study*

Independent study courses are intended to give students an opportunity to independently research specialized areas not available as regular course offerings of the College. They are designed to meet specific student interests and may be made available in any subject matter area. Consult your advisor for specific procedures. (See page 22 for conditions, limitations.) For UC campuses, these courses may transfer as electives or other credit as pre-authorized by the transfer school. It is the student's responsibility to have the course pre-authorized by the appropriate UC department chair and admissions office.

**Course Repetition**

Courses may be repeated for credit only if (1) the student has received a substandard grade (D, F, or NC) or (2) the course is approved as repeatable by the College Curriculum Committee and is so identified in this catalog. See page 21 for more information.

**Credit Value**

The number after the course indicates the unit credit value of the course. Courses listed in this catalog are

described in semester units. One semester unit equals one and one-half quarter units.

**Field Trips**

Field trips may be required in a number of courses where such a statement is not currently a part of the course description.

**Honors Program**

The Honors Program provides opportunities for students to participate in special course work that will challenge their competencies and bring together the depth and breadth of their acquired knowledge in a focused area of study. All students with at least 24 or more units earned at Columbia College and a cumulative GPA of 3.5 or better must be invited to enroll by written notice.

**ANTHROPOLOGY**

**ANTHR 1: PHYSICAL ANTHROPOLOGY 3 Units**

(CAN ANTH 2)  
Lecture: 3 hours  
Humankind and our evolutionary history with emphasis on recent developments; primatology; the fossil sequence beginning with prehuman through the Paleolithic era to the domestication of plants and animals and the dawn of civilization and contemporary hunter-gatherers. (UC/CSU) (MJC ANTHR 101)

**ANTHR 2: CULTURAL ANTHROPOLOGY 3 Units**

(CAN ANTH 4)  
Lecture: 3 hours  
The study of preliterate societies and the concept of culture basic to anthropology. Emphasis is on methods of field work, cultural ecology, language, social and political structure, the psychological perspective, religion, cultural change and the cultural future of humanity. (UC/CSU) (MJC ANTHR 102)

**ANTHR 3: CURRENT ISSUES IN ANTHROPOLOGY 3 Units**

Recommended for Success: Engl 151  
Lecture: 3 hours  
Intra-specific aggression, territoriality, population control, primate social organization, intra- and inter-species communication, and the present and future trends in social organization, war, religion, and cultural change. (UC\*/CSU) (MJC 150) (UC\*) Transfer credit limited. See a counselor.

**ANTHR 10: ARCHAEOLOGY AND CULTURAL PREHISTORY 3 Units**

Lecture: 3 hours  
This course is an introduction to anthropological archaeology including concepts, theories, and methods employed by archaeologists in reconstructing past life ways of humans. Topics include history and interdisciplinary nature of archaeological research; data acquisition, analysis and interpretation with discussion of applicable data and models; cultural resource management selected cultural sequences. (UC/CSU)

**ANTHR 15: NATIVE PEOPLE OF NORTH AMERICA 3 Units**

Recommended for Success: Engl 151  
Lecture: 3 hours  
A survey of the origins, cultures, and customs of peoples indigenous to the North American Continent with a primary emphasis upon folkways dominant prior to interference by foreign cultures; and a secondary emphasis upon the status of the Indians in the USA today. This course is designed to meet an ethnic studies requirement. (UC/CSU) (MJC ANTHR 150)

**ART**

**ART 1: BASIC FREEHAND DRAWING 2-3 Units**

(CAN ART 8)  
Lecture: 1.5-2 hours  
Laboratory: 1.5-4 hours  
Introduction to basic drawing techniques, rendering techniques, linear perspective, composition in charcoal and ink. (UC/CSU) (MJC ART 120)  
May be repeated three times.

**ART 2: BASIC COLOR AND DESIGN 2-3 Units**

(CAN ART 14)  
Lecture: 1.5-2 hours  
Laboratory: 1.5-4 hours  
Introduction to elements and principles of visual design and color theory as applied in a studio setting. (UC/CSU) (MJC ART 124)  
May be repeated three times.

**ART 4: COMPUTER ART 3 Units**

Lecture: 2 hours  
Laboratory: 3 hours  
Introduction to the tools and techniques of basic paint software through a series of drawing, color, and design problems. Assignments will cover elements of design, principles of composition, color theory, perspective, and unconventional approaches. No computer skills necessary. (UC/CSU)

**ART 9A: LIFE DRAWING: Beginning 2-3 Units**

Lecture: 1.5-2 hours  
Laboratory: 1.5-4 hours  
Problems in figure-drawing working from the undraped model. (UC/CSU)  
May be repeated one time.

**ART 9B: LIFE DRAWING: Intermediate 2-3 Units**

Prerequisite: Art 9A or equivalent  
Lecture: 1.5-2 hours  
Laboratory: 1.5-4 hours  
An extension of Art 9A emphasizing various media and compositional problems. (UC/CSU)  
May be repeated one time.

**ART 11: HISTORY OF ART: Ancient & Medieval 3 Units**

(CAN ART 2) (CAN ART SEQ A = ART 11 + ART 12)  
Lecture: 3 hours  
Survey of art history from the Paleolithic Age through the Late Gothic Era. (UC/CSU) (MJC ART 164)



**ART 12: HISTORY OF ART: Renaissance, Baroque, and Modern** 3 Units  
(CAN ART 4) (CAN ART SEQ A = ART 11 + ART 12)

Lecture: 3 hours

Survey of art history from the 14th through the 20th century. (UC/CSU) (MJC ART 165)

**ART 13: ART OF AFRICA, ASIA, AND THE AMERICAS** 3 Units  
(CAN ART 169)

Lecture: 3 hours

Survey of the art of Africa, Asia, Mesoamerica, and South America from prehistoric to modern periods. This course is designed to meet an ethnic studies requirement. (UC/CSU) (MJC Art 169)

**ART 21A: PAINTING: Beginning** 2-3 Units  
(CAN ART 10)

Lecture: 1.5-2 hours

Laboratory: 1.5-4 hours

Basic principles, techniques, and materials of easel painting in oil and/or acrylic. (UC/CSU) (MJC ART 148)

**ART 21B: PAINTING: Intermediate** 2-3 Units

Prerequisite: Art 21A or equivalent

Lecture: 1.5-2 hours

Laboratory: 1.5-4 hours

Continuation of Art 21A with emphasis on personal expression. (UC/CSU) (MJC ART 149)

May be repeated two times.

**ART 23A: WATERCOLOR: Beginning** 2-3 Units

Lecture: 1.5-2 hours

Laboratory: 1.5-4 hours

Introduction to the basic techniques and problems of transparent watercolors. (UC/CSU) (MJC ART 144)

**ART 23B: WATERCOLOR: Intermediate** 2-3 Units

Prerequisite: Art 23A or equivalent

Lecture: 1.5-2 hours

Laboratory: 1.5-4 hours

Continuation of Art 23A introducing opaque watercolors and various experimental techniques. (UC/CSU) (MJC ART 145)

May be repeated two times.

**ART 25: MIXED MEDIA PAINTING** 2-3 Units

Lecture: 1.5-2 hours

Laboratory: 1.5-4 hours

Introduction to special techniques involving creative mixtures of traditional media: pen and ink over watercolor wash, oil, and acrylic in combination. (UC/CSU)

May be repeated three times.

**ART 31: CERAMICS: Introductory** 2-3 Units  
(CAN ART 6)

Lecture: 1.5-2 hours

Laboratory: 1.5-4 hours

Introduction to basic ceramic methods including hand-building and wheel-thrown forms, and introduction to glazes and decoration. (UC/CSU) (MJC ART 108)

**ART 32: CERAMICS: Advanced** 2-3 Units

Lecture: 1.5-2 hours

Laboratory: 1.5-4 hours

Course emphasis is on glazes, formulation and application with increased opportunity for personal expression and experimentation. (UC/CSU)

**ART 33: CERAMICS: Special Problems** 2-3 Units

Lecture: 1.5-2 hours

Laboratory: 1.5-4 hours

Course emphasis is on personal growth and independence. (UC/CSU)

May be repeated one time.

**ART 35: INTRODUCTION TO RAKU** 2-3 Units

Lecture: 1.5-2 hours

Laboratory: 1.5-4 hours

Introduction to raku process, historic origins and contemporary uses. Practical experience in clay bodies, glazes, and raku firing. (UC/CSU)

May be repeated three times.

**ART 51: DESKTOP PUBLISHING I\*** 3 Units

Recommended for Success: Oftec 41

Lecture: 2 hours

Laboratory: 3 hours

This course is an introduction to general desktop publishing theory with emphasis on typography, page layout, graphics, and design. Students will create newsletters, brochures, flyers, resumes, cards, and reports. (CSU)

May be repeated one time.

\*Credit may be earned for either Art 51, Oftec 42, Cmpsc 31, but only from one discipline.

**ART 52: DESKTOP PUBLISHING II\*** 3 Units

Prerequisite: Art 51, Cmpsc 31 or Oftec 42

Lecture: 2 hours

Laboratory: 3 hours

This course is a continuation of study in problems of Desktop Publishing. Areas of focused study will be in advanced problems of page layout, typography, digital image manipulation, and issues related to offset reproduction of graphic design.

May be repeated one time.

\*Credit may be earned for either Art 52, Cmpsc 32 or Oftec 43, but only from one discipline.

**ART 53: COMPUTER GRAPHICS I\*** 3 Units

Lecture: 2 hours

Laboratory: 3 hours

This course introduces the student to the fundamentals of computer graphics. Topics include the elements and principles of good graphic design, vector versus raster graphics, color theory, image scanning and formatting for print and screen. Students will acquire basic skills in current graphic design software and create original design pieces. (CSU)

\*Credit may be earned for either Art 53 or Cmpsc 33, but not both.

**ART 54: COMPUTER GRAPHICS II\*** 3 Units

Lecture: 3 hours

Laboratory:

This class is a continuation of Computer Graphics I. Topics covered will include more advanced techniques of painting and drawing software, color scanning, publishing for the Web and printing. (CSU) \*Credit may be earned for either Art 54 or Cmpsc 34, but not both.

**ART 71: CERAMIC SCULPTURE: Introductory** 2-3 Units

Lecture: 1.5-2 hours

Laboratory: 1.5-4 hours

Basic principles, techniques, and problems in sculpture. (UC/CSU)

**ART 72: CERAMIC SCULPTURE: Advanced** 2-3 Units

Lecture: 1.5-2 hours

Laboratory: 1.5-4 hours

Course emphasis is on advanced problems and techniques in sculpture. (UC/CSU)

**ART 73: CERAMIC SCULPTURE: Special Problems\*** 2-3 Units

Lecture: 1.5-2 hours

Laboratory: 1.5-4 hours

Course emphasis is on experimentation and development of personal expression. (UC/CSU)

May be repeated one time.

**ART 165: METAL SCULPTURE** 1.5 Units

Lecture: .5 hours

Laboratory: 3 hours

This course will offer an introduction to various metal-working techniques with an emphasis on aesthetic design and quality of metal joining.

\*Credit may be earned for either Art 165 or WT 165, but not both.

### PHOTOGRAPHY

**ART 40: PHOTOGRAPHY: Beginning** 4 Units  
(CAN ART 18)

Lecture: 3 hours

Laboratory: 3 hours

Introduction to the history, art, craft, and scope of color and black and white photography. Emphasis will be on the choice, types, and use of various cameras and lenses (special emphasis on the 35mm camera), camera work and handling, composition, and black and white darkroom procedures. Adjustable 35mm camera (or equivalent) will be utilized. (UC/CSU) (MJC ART 170 OR ART 181 AND 182)

Field trips may be required.

**ART 41: PHOTOGRAPHY: Intermediate** 3 Units

Recommended for Success: Art 40

Lecture: 2 hours

Laboratory: 3 hours

Emphasis will be on refining camera work, composition, visual concepts; exposure and development of the negative, and printing skills in black and white. Adjustable 35mm camera (or equivalent) will be utilized. (UC/CSU)

Field trips may be required.

**ART 42: COLOR PHOTOGRAPHY: Slide Making and Positive Printing** 3 Units

Recommended for Success: Art 40

Lecture: 2 hours

Laboratory: 3 hours

Development and printing of color slides. Includes the history and theory of color photography, a survey and analysis of slide films, color balance and temperature, exposure, film speed and push processing and related effects, positive printing. (CSU)

Field trips may be required.

May be repeated one time.

**ART 44: ADVANCED PHOTOGRAPHY LABORATORY** 1 Unit

Recommended for Success: Art 40

Laboratory: 3 hours

Supervised black and white darkroom work in the production of negatives and prints to improve photographic skills. (CSU)

May be repeated three times.

**ART 45: FIELD PHOTOGRAPHY** 1-2 Units

Lecture: .5-1 hour

Laboratory: 1.5-3 hours

An introduction to producing professional quality nature photographs. Field instruction in locations of natural beauty followed by lectures, demonstrations, and critiques. Adjustable 35mm camera or larger utilized. (CSU)

Field trips are required.

May be repeated three times.

**ART 47A: DIGITAL DARKROOM: BEGINNING** 3 Units

Recommended for Success: Art 40, Cmpsc 1

Lecture: 2 hours

Laboratory: 3 hours

Introduction to the electronic darkroom. Scanning of black-and-white and color prints, slides and negatives into the computer. Use of image control software (Adobe's Photoshop) to enhance, refine and artistically interpret images. Printing images using inkjet printers and a variety of photo-quality papers. (CSU)

**ART 47B: DIGITAL DARKROOM: INTERMEDIATE** 2-3 Units

Lecture: 1-2 hours

Laboratory: 3 hours

Study of the electronic darkroom using IBM compatible PC computers. Advanced scanning techniques for optimum image control, higher resolution and larger print sizes. Use of image control software (Adobe Photoshop) to refine and enhance straight and/or composite images. New topics: use of the pen tool, advanced layering techniques, creating masks and channels, painting on photos, plus further use of the special-effects filters and photo-retouching tools. Microsoft Publisher to utilize photos in specialized projects such as: calendars, posters, note cards and brochures. Use of advanced printer control and calibration software to create consistently high-quality prints on photo-quality inkjet printers with a variety of paper mediums. (CSU)



**ART 48: SPECIAL TOPICS IN PHOTOGRAPHY 1-4 Units***Recommended for Success: Art 40**Lecture: .5-2 hours**and/or**Laboratory: 1.5-6 hours*

Various field- and studio-oriented courses limited to particular photographic topics such as slide tape presentations, landscape, architecture, portraiture, nude, small product and still-life, photojournalism, alternative processes and guest lecture forum. (CSU)

*Field trips may be required.**May be repeated with different topics only.***AUTOMOTIVE TECHNOLOGY***See Page 28 for Certificate Requirements***AT 97: WORK EXPERIENCE IN AUTOMOTIVE TECHNOLOGY 1-4 Units***Prerequisite: Must be enrolled in at least seven (7) units including Work Experience.**75 hours paid employment equals 1 unit of credit**60 hours unpaid employment equals 1 unit of credit*

Provides students an opportunity to experience supervised employment in Auto Technology. The student's employment must be related to educational or occupational goals. (CSU\*)

*Offered for Credit/No Credit grading only.**May be repeated for no more than a total of 16 units of credit less any units earned in any other Work Experience course.**For students interested in working full time one semester and attending classes one semester on an alternate basis, see Work Experience 96, Page***AT 100: INTRODUCTION TO AUTOMOTIVE TECHNOLOGY 4 Units***Lecture: 4 hours*

*Introduction to* theory, operation and maintenance of automotive systems. Includes fundamentals of math, measuring devices, fasteners, shop safety, careers and certifications, tools/equipment common to the automotive industry, environmental issues, classifications/applications of lubricants and resume writing. This course is designed to comply with the National Automotive Technicians Education Foundation (NATEF) objectives, enabling students to prepare for Automotive Service Excellence (ASE) certification.

*Offered for Credit/No Credit grading only.***AT 101: AUTOMOTIVE BRAKING SYSTEMS I 2 Units***Recommended for Success: AT 100**Lecture: 1 hour**Laboratory: 3 hours*

Principles of operation and repair of automotive drum and disc brake systems. The subjects covered allow for compliance with the National Automotive Technicians Education Foundation (NATEF) objectives, enabling students to prepare for Automotive Service Excellence (ASE) certification.

*May be repeated one time.***AT 102: ENGINE REPAIR 5 Units***Recommended for Success: AT 100**Lecture: 3 hours**Laboratory: 6 hours*

Techniques involved in gasoline engine diagnosing and repair. Diagnosis of the engine's systems will be emphasized. This course is designed to comply with the National Automotive Technicians Education Foundation (NATEF) objectives, enabling students to prepare for Automotive Service Excellence (ASE) certification. May be repeated for recertification.

*May be repeated three times.***AT 103: PRACTICAL LABORATORY .5-2 Units***Laboratory: 1.5-6 hours*

This course includes special automotive repair projects that are assigned to advanced students, with emphasis on speed, accuracy, and quality work habits. Completion of, or concurrent enrollment in six (6) units of Automotive Technology required. Exceptions to the units requirement will be considered on an individual basis.

*May be repeated three times.***AT 110: AUTOMOTIVE ELECTRONICS I 5 Units***Recommended for Success: AT 100**Lecture: 4 hours**Laboratory: 3 hours*

This course covers fundamentals of electricity and electronics that apply to all automotive electrical and electronic systems. This course will cover electrical theory, lighting systems, and chassis electrical and electronic circuits. Methods of diagnosis will be emphasized. This course is designed to comply with the National Automotive Technicians Education Foundation (NATEF) objectives to enable students to prepare for Automotive Service Excellence (ASE) certification. May be repeated for recertification.

*May be repeated three times.***AT 111: ENGINE PERFORMANCE I 6 Units***Recommended for Success: AT 100**Lecture: 4 hours**Laboratory: 6 hours*

This course covers theory and operation of ignition systems, fuel systems, and on-board computers. Use of hand-held meters, oscilloscopes, late-model computerized analyzers and four-gas infrared analyzers will be covered. This course is designed to comply with the National Technicians Education Foundation (NATEF) objectives enabling students to prepare for Automotive Service Excellence (ASE) exams.

*May be repeated three times.***AT 112: HEATING AND AIR CONDITIONING 3 Units***Recommended for Success: AT 100**Lecture: 2 hours**Laboratory: 3 hours*

This course covers fundamentals and theory of air conditioning (R12 and R134a), as well as techniques of service and diagnosis. Recycling refrigerant and handling of hazardous materials are also covered. This course is designed to comply with the National Automotive Technicians Education Foundation (NATEF) objectives, enabling students to prepare for Automotive Service Excellence (ASE) certification.

*May be repeated three times.***AT 120: SUSPENSION AND STEERING 3 Units***Recommended for Success: AT 100**Lecture: 2 hours**Laboratory: 3 hours*

Operations of automotive suspension and steering systems. Inspection, diagnosis, part replacement, and alignment procedures, wheel alignment and computerized alignment equipment. Emphasis will be placed on analyzing inspection results. This course is designed to comply with the National Automotive Technicians Education Foundation (NATEF) objectives, enabling students to prepare for Automotive Service Excellence (ASE) certification. May be repeated for recertification.

*May be repeated three times.***AT 121: AUTOMOTIVE BRAKING SYSTEMS II 2 Units***Recommended for Success: AT 100 and AT 101**Lecture: 1 hour**Laboratory: 3 hours*

Principles of operation and repair of anti-lock braking systems (ABS). Diagnosis and overhaul of power assist units and brake system electrical and electronic circuits. The subjects covered allow for compliance with the National Automotive Technicians Education Foundation (NATEF) objectives, enabling students to prepare for Automotive Service Excellence (ASE) certification.

*May be repeated one time.***AT 122: MANUAL POWER TRAINS AND AXLES 3 Units***Recommended for Success: AT 100**Lecture: 1.5 hours**Laboratory: 4.5 hours*

Principles and operation of automotive power trains including diagnosis and overhaul of clutches, manual transmissions, and transfer cases. This course is designed to comply with the National Automotive Technicians Education Foundation (NATEF) objectives enabling students to achieve Automotive Service Excellence (ASE) certification. May be repeated for recertification.

*May be repeated three times.***AT 130: ELECTRICAL & ELECTRONICS II 2 Units***Recommended for Success: AT 100 and AT 110**Lecture: 1 hour**Laboratory: 3 hours*

This course covers the study of automotive starting and charging systems and related electrical and electronic controls. This course is designed to comply with the National Automotive Technicians Education Foundation (NATEF) objectives, enabling students to prepare for Automotive Service Excellence (ASE) certification. May be repeated for recertification.

*May be repeated three times.***AT 131: ENGINE PERFORMANCE II 2 Units***Recommended for Success: AT 100 and AT 111**Lecture: 1 hour**Laboratory: 3 hours*

Operation and diagnosis of domestic computerized engine control systems. Use of hand-held meters, oscilloscopes, late model computerized analyzers and enhanced testing equipment. Use of advanced diagnostic routines common to the industry. This course is designed to comply with the National Automotive Technicians Education Foundation (NATEF) objectives enabling students to prepare for Automotive Service Excellence (ASE) examinations.

*May be repeated one time.***AT 132: AUTOMATIC TRANSMISSIONS AND TRANSAXLES 3 Units***Recommended for Success: AT 100**Lecture: 1 hour**Laboratory: 6 hours*

Principles and theories involved with diagnoses, repair, and rebuilding automatic transmissions and transaxles. This course is designed to comply with the National Automotive Technicians Education Foundation (NATEF) requirements, enabling students to prepare for certification. May be repeated for recertification. (CSU)

*May be repeated three times.***AT 165: CLEAN AIR CAR COURSE AND OBD II UPDATE TRAINING 4 Units***Lecture: 4 hours*

This course meets the Bureau of Automotive Repair requirements for Smog Technician candidate training in emission controls and OBDII systems. Successful candidates will partially satisfy the state's prerequisite requirements for the Smog Check technician examination.

*May be repeated as needed for recertification.***AT 170: SPECIAL TOPICS IN AUTOMOTIVE TECHNOLOGY .5-3 Units***Lecture: .5-3 hours**Laboratory: 1.5-3 hours*

Various topics in automotive technology will be covered to meet specific technician needs for inservice training. Emphasis will be placed on special skills pertaining to late model vehicle.

*May be repeated three times.***AT 180: SMALL ENGINE REPAIR 2 Units***Lecture: 1 hour**Laboratory: 3 hours*

Servicing, operation, and maintenance of small gasoline engines, garden and landscape equipment. The student will need safety glasses and a small engine to overhaul.

*May be repeated three times.***AT 181: PREVENTIVE MAINTENANCE 1 Unit***Lecture: .5 hour**Laboratory: 1.5 hours*

Preventive maintenance procedures with emphasis on lubrication, adjustment and safety inspection as it pertains to the late model automobile.

**AT 185: AUTO BODY COLLISION REPAIR I 2 Units***Lecture: 1.5 hours**Laboratory: 1.5 hours*

For beginning students in auto body collision work. Theory and study of the body sheet metal and structure. Theory and manipulative skills in oxy-acetylene welding, sheet metal straightening, plastic filling and shrinking.

*May be repeated three times.***AT 186: AUTO BODY COLLISION REPAIR II 2 Units***Lecture: 1.5 hours**Laboratory: 1.5 hours*

Advanced theory and study of body sheet metal and structure and manipulative skills in M.I.G. welding, sheet metal straightening, body alignment, making adjustments and refinishing equipment.

*May be repeated three times.*



**AT 187: EXTERIOR DETAILING 1 Unit**  
*Lecture: 1 hour*  
*Laboratory: 1.5 hours*  
 This course is for beginning students in auto detailing work. Topics covered include the theory and study of the proper maintenance and restoring of the automobile exterior finish by use of proper cleaning materials and methods approved by the industry. *May be repeated three times.*

**BIOLOGY**

**BIOL 2: PRINCIPLES OF BIOLOGY 4 Units**  
 (CAN BIOL 2) (CAN BIOL SEQ A = BIOL 2 + BIOL 4 + BIOL 6)  
*Recommended for Success: Chem 10*  
*Lecture: 3 hours*  
*Laboratory: 3 hours*  
 A principles course with special reference given to molecular and cellular biology. Topics include the chemical basis of life, cells, metabolism, molecular genetics, classical genetics, evolution and ecology. Designed for Life Science and related majors. (UC\*/CSU) (MJC BIO 101) (UC\*) Transfer credit limited. See a counselor. *Field trips may be required.*

**BIOL 4: PRINCIPLES OF ANIMAL BIOLOGY 4 Units**  
 (CAN BIOL 4) (CAN BIOL SEQ A = BIOL 2 + BIOL 4 + BIOL 6)  
*Prerequisite: Biol 2 or Biol 17 or equivalent*  
*Lecture: 3 hours*  
*Laboratory: 3 hours*  
 A general zoology course for students majoring in related biological sciences. A survey of the animal kingdom including embryological, morphological, anatomical and evolutionary relationships of each of the animal groups. Dissection of animals is required. (UC/CSU) (MJC ZOO 101)  
*Field trips may be required.*

**BIOL 6: PRINCIPLES OF PLANT BIOLOGY 4 Units**  
 (CAN BIOL 6) (CAN BIOL SEQ A = BIOL 2 + BIOL 4 + BIOL 6)  
*Prerequisite: Biol 2 or Biol 17 or equivalent*  
*Lecture: 3 hours*  
*Laboratory: 3 hours*  
 A general botany course with emphasis on plant anatomy, morphology, physiology, and systematics of non-vascular, and vascular plants. (UC/CSU) (MJC BOT 101)  
*Field trips may be required.*

**BIOL 10: HUMAN ANATOMY 4 Units**  
 (CAN BIOL 10) (CAN BIOL SEQ B = BIOL 10 + BIOL 60)  
*Lecture: 3 hours*  
*Laboratory: 3 hours*  
 An introduction to the study of the gross and microscopic structure of the human body. Lab work entails dissection of cats, microscopic work, and demonstrations on models. (UC/CSU) (MJC ANAT 125)

**BIOL 17: FUNDAMENTALS OF BIOLOGY 4 Units**  
*Lecture: 3 hours*  
*Laboratory: 3 hours*  
 An integrated lecture and laboratory course of study emphasizing the fundamental principles common to all forms of life. The course is a core biology class for transfer students and AA and AS students at Columbia College. The laboratory makes extensive use of computer simulations as well as experimentation in traditional laboratory. (UC\*/CSU) (MJC BIO 111) (UC\*) Transfer credit limited. See a counselor.

**BIOL 24: GENERAL ECOLOGY 4 Units**  
*Recommended for Success: Engl 1A and Math 101*  
*Lecture: 3 hours*  
*Laboratory: 3 hours*  
 Students will be introduced to environmental biology, which focuses on physiological, behavioral, and population ecology, and on linking ecological processes to evolution. Principles of evolution at the molecular, organismal, and population levels will be related to conservation issues affecting ecosystem management. The ecology component will cover basic principles and experimental approaches to solving ecological problems. Case studies in pollution issues, resource use, global warming, and ozone depletion will also be covered. (UC/CSU)  
*Field trips may be required.*

**BIOL 39: FIELD BIOLOGY 1-2 Units**  
*Lecture: 1-2 hours*  
 A lecture field course in biology to be held in natural surroundings. The study site will vary with the seasons. Natural history, ecology, and biology of the locale will be studied. (CSU)  
*May be repeated three times.*

**BIOL 50: NUTRITION 3 Units**  
 (CAN H EC 2)  
*Lecture: 3 hours*  
 Introductory study of energy and nutrient requirements of the body in relation to growth, maintenance, and reproduction; factors influencing normal metabolism, construction of the adequate diet. Emphasis is placed upon the chemical aspects of nutrition. (UC/CSU) (MJC FDNTR 219)

**BIOL 60: HUMAN PHYSIOLOGY 4 Units**  
 (CAN BIOL 12) (CAN BIOL SEQ B = BIOL 10 + BIOL 60)  
*Recommended for Success: Biol 10 and Chem 10*  
*Lecture: 3 hours*  
*Laboratory: 3 hours*  
 Study of the function, integration and homeostasis of the organ systems of the human body. (UC/CSU) (MJC PHYSO 101)

**BIOL 65: MICROBIOLOGY 4 Units**  
 (CAN BIOL 14)  
*Recommended for Success: Chem 10*  
*Lecture: 3 hours*  
*Laboratory: 3 hours*  
 Morphology, physiology, genetics, cultivation and control of micro organisms, particularly bacteria and viruses. Principles of immunology and the relationship of microbes to disease will be included. (UC/CSU) (MJC MICRO 101)  
*Field trips may be required.*

**BUSINESS**

**Business Administration**

*See Page 28 for Certificate Requirements*

**BUSAD 1A: PRINCIPLES OF ACCOUNTING 4 Units**  
 (CAN BUS 2) (CAN BUS SEQ A = BUSAD 1A + BUSAD 1B)  
*Recommended for Success: Busad 161B*  
*Lecture: 4 hours*  
 Accounting principles and procedures, including set up and maintenance of an accounting system for sole proprietorships in either service or merchandising industries using journalizing, posting, adjusting, and closing methods with emphasis on financial analysis regarding internal control, asset valuation, debt servicing, owner's equity determination, and financial reporting which includes a global perspective. (UC/CSU) (MJC BUSAD 201)

**BUSAD 1B: PRINCIPLES OF ACCOUNTING 4 Units**  
 (CAN BUS 4) (CAN BUS SEQ A = BUSAD 1A + BUSAD 1B)  
*Prerequisite: Busad 1A or equivalent*  
*Lecture: 4 hours*  
 Accounting for partnerships and corporations with emphasis on debt and equity, bond amortization issues and preparation of the statement of cash flows, managerial/cost accounting includes job order, process, and activity based costing systems, and J.I.T. production, cost-volume-profit analysis, budgeting performance evaluation, decision making, budgeting for capital expenditures using present value. (UC/CSU) (MJC BUSAD 202)

**BUSAD 18: BUSINESS LAW 4 Units**  
 (CAN BUS 12)  
*Lecture: 4 hours*  
 Laws and regulations affecting managerial decisions; legal concepts and case analyses in the areas of ethics, employment, consumer transactions, competition, the environment, business torts and crimes, contracts, agency, business organizations, and international business. (UC/CSU) (MJC BUSAD 218)

**BUSAD 20: PRINCIPLES OF BUSINESS 3 Units**  
*Lecture: 3 hours*  
 Survey of business principles, problems and procedures; ownership; recruitment and training of personnel; labor-management relations; production and distribution of goods; competition; profit; transportation; finance; managerial controls; government and business relations. (UC/CSU) (MJC BUSAD 248)

**BUSAD 24: HUMAN RELATIONS IN ORGANIZATIONS 3 Units**  
*Lecture: 3 hours*  
 People and their roles in organizations. The nature of organizational relationships; working in groups, recognizing and solving human relations problems. Creating the win-win situation of satisfying individual and organizational objectives. (CSU)

**BIOL 158: BIRDS OF CENTRAL CALIFORNIA 1.5 Units**  
*Lecture: .5-1.5 hours and/or*  
*Laboratory: 1.5-4.5 hours*  
 A survey of the birds of Central California through field observations and lectures. Students will learn how to identify birds by sight and sound, then use identification skills as a tool for understanding other aspects of avian biology and ecology. Discussion topics will include anatomy, physiology, behavior, and ecology of birds. *Offered for Credit/No Credit grading only.*  
*Field trips are required.*

**BIOL 159: WILDFLOWERS OF THE MOTHER LODGE 1-1.5 Units**  
*Lecture: 1-1.5 hours*  
 An introduction to the Mother Lode flora. A nontechnical approach to botanical traits will be used to learn common and scientific names of local wildflowers. *Offered for Credit/No Credit grading only.*  
*Field trips are required.*  
*May be repeated three times.*

**BIOL 160: MUSHROOMS OF THE MOTHER LODGE 1.5 Units**  
*Lecture: 1.5 hours*  
 Survey of mushrooms of the Mother Lode with emphasis on mushroom taxonomy, identification, and differentiation of common edibles from poisonous fungi, the ecology of fungi, including their habitat and role in various ecosystems, as well as their impact on civilizations. Because there is variability in the mushrooms that fruit annually, this course may be repeated three times. *Offered for Credit/No Credit grading only.*  
*Field trips will be required.*  
*May be repeated three times.*

**BIOL 179: FISHING AND FISHERY BIOLOGY OF THE SIERRA NEVADA 1 Unit**  
*Lecture: .5 hours*  
*Laboratory: 1.5 hours*  
 An overview of the identification, ecology, and management of fish species inhabiting the foothill, forest and alpine communities of the Sierra Nevada. *Offered for Credit/No Credit grading only.*  
*Field trips are required.*

**BIOL 170: SPECIAL TOPICS IN BIOLOGY .5-3 Units**  
*Lecture: .5-3 hours*  
*Laboratory: .5-3 hours*  
 Various field and classroom courses limited to particular biology topics, such as insect identification, bat natural history, stream evaluation, etc. *Offered for Credit/No Credit grading only.*  
*Field trips may be required.*



**BUSAD 25: JOB SEARCH AND INTERVIEWING STRATEGIES\*** 1 Unit*Lecture: 1 hour*

Understanding the employment process and development of written and oral presentation skills necessary to conduct an efficient and effective job search. Topics include: the hiring process, employer perspectives, the hidden job market, networking, research, job search planning, making employer contacts and interviewing. Development of a master application, resume and letter of application. (CSU) (MJC GUIDE 112)

*Offered for Credit/No Credit grading only.*

*\*Credit may be earned for either Busad 25 or Guide 25, but not both.*

**BUSAD 30: PRINCIPLES OF MARKETING** 3 Units*Lecture: 3 hours*

Marketing principles, policies, and functions, price policies and controls, trade channels, merchandising, market research, advertising, and competitive practices. (CSU) (MJC BUSAD 245)

**BUSAD 40: PRINCIPLES OF MANAGEMENT** 3 Units*Lecture: 3 hours*

The functions of management, techniques of decision-making and problem solving and methods used by the manager to achieve organizational goals, various theories of management, lines of authority, functions of departments, and the importance of policies, procedures and controls. (CSU) (MJC BUSAD 240)

**BUSAD 51: MANAGEMENT INFORMATION SYSTEMS\*** 4 Units*Lecture: 4 hours*

This course is an introduction to information systems. The objective is to build a basic understanding of the value and use of information system technology for business operations, managerial decision making, project management, and strategic advantage. Topics of special interest include information system planning, application development including systems analysis and design, decision support systems, and expert systems. (UC) (CSU)

*\*Credit may be earned for either Busad 51 or CMPSC 51, but not both.*

**BUSAD 52: E-COMMERCE\*** 3 Units*Recommended for Success: Busad 20, Cmpsc 1**Lecture: 3 hours*

This course is designed to familiarize individuals with current and emerging electronic commerce technologies using the Internet. Topics include Internet technology for business advantage, managing electronic commerce funds transfer, reinventing the future of business through electronic commerce, business opportunities in electronic commerce, electronic commerce development and marketing, social, political and ethical issues associated with electronic commerce, and business plans for technology ventures. Because companies are using these strategies in a global business environment, discussions of international, legal, ethical, and tax issues are included. The purpose of this course is to educate a new generation of managers, planners, analysts, marketers, and programmers of the realities and potential for electronic comms. (CSU)

*\*Credit may be earned for either Busad 52 or Cmpsc 52, but not both.*

**BUSAD 53: PROJECT MANAGEMENT\*** 3 Units*Recommended for Success: Cmpsc 1**Lecture: 3 hours*

This course is designed to familiarize individuals with current and emerging project management technologies using the Internet, project management software and other application software packages as needed for project completion. Project management knowledge topics will include project integration, scope, time, cost, quality, human resource, communications, risk and procurement management. (CSU)

*\*Credit may be earned for either Busad 53 or Cmpsc 53, but not both.*

**BUSAD 54: DATA MINING\*** 3 Units*Recommended for Success: Cmpsc 1**Lecture: 3 hours*

This course was designed to familiarize individuals with current and emerging data mining technologies using the Internet, database software, and other application software packages as needed for project completion. Data mining knowledge topics will include the process of model building. Students will create a representative model based on an existing dataset to help understand trends, patterns, and correlations, as well as forming predictions based on historical outcomes. Students will be introduced to the tools and technologies needed to research and analyze data, resulting in a strategic decision making, marketing plan development, goal setting and identifying business opportunities. (CSU)

*\*Credit may be earned for either Busad 54 or Cmpsc 54, but not both.*

**BUSAD 70: SPECIAL TOPICS IN BUSINESS** .5-3 Units*Lecture: .5-3 hours*

Instruction in a variety of special topics of business, for example: Entrepreneurship, Supervision, Leadership & Motivation, Training Employees, Budgeting, Conflict Resolution, Planning, Decision Making for Managers, Working with Difficult People. Courses will be presented in a workshop format and may include guest speakers. (CSU)

*Offered for Credit/No Credit grading only.*

*May be repeated with different topics only.*

**BUSAD 90: BUSINESS ADMINISTRATION COMPUTER APPLICATIONS LABORATORY** 1 Unit*Laboratory: 3 hours*

The Business Administration Computer Applications Labs are scheduled during a variety of hours during each week throughout each semester. The lab provides instruction and assistance with assigned exercises in all types of Business Administration courses. By either acquiring the necessary software or by using programs installed on the network, business students are able to complete projects, homework, practice sets, reports, and generic applications in order to experience a well-rounded business curriculum. (CSU)

*Offered for Credit/No Credit grading only.*

*Students who are business majors may repeat the lab each semester they are enrolled in business courses until they have completed the business program.*

**BUSAD 94A(H): FINANCIAL ANALYSIS FOR DECISION-MAKING (HONORS)** 2 Units*Lecture: 2 hours*

This course serves as a comprehensive exercise that will test a wide variety of competencies learned by completion of the business program. Students will have an opportunity to participate as a business firm in competition with other firms in a simulated industry. The course emphasizes data gathering and interpretation, operations analysis, and decision making. It will include formal presentations, written exercises, and spreadsheet calculations that involve resource allocation and planning. This is an Honors course and is so designated in student records. (CSU)

**BUSAD 97: WORK EXPERIENCE IN BUSINESS AND COMMERCE** 1-4 Units

*Prerequisite: Must be enrolled in at least seven (7) units including Work Experience.*

*75 hours paid employment equals 1 unit of credit.*

*60 hours unpaid employment equals 1 unit of credit.*

Provides students an opportunity to experience supervised employment in a variety of occupational settings within Business and Commerce (e.g., *Business Administration, Hospitality Management, Computer Science*). The student's employment must be related to educational or occupational goal. (CSU\*)

*Offered for Credit/No Credit grading only.*

*May be repeated for no more than a total of 16 units of credit less any units earned in any other Work Experience course.*

*For students interested in working full time one semester and attending classes one semester on an alternate basis, see Wkexp 96, page 112.*

**BUSAD 124: RETAIL SALES AND ADVERTISING** 3 Units*Lecture: 3 hours*

Fundamental principles and practices of sales with a critical look at the selling process and effective techniques. A study of advertising techniques for overall market promotion including media, budgets, research, and ad layout.

**BUSAD 131: COMPUTERIZED ACCOUNTING (Peachtree)** .5-2 Units*Recommended for Success: Busad 161A**Lecture: .5-2 hours*

This course provides the student opportunities to set up and maintain an accounting system using application software, and is designed to provide the student with a review of financial accounting including payables, receivables, adjusting and closing entries and financial statements.

*May be repeated one time.*

**BUSAD 132: COMPUTERIZED ACCOUNTING (One Write Plus)** .5-2 Units*Recommended for Success: Busad 161A**Lecture: .5-2 hours*

This course provides the student opportunities to set up and maintain an accounting system using application software, and is designed to provide the student with a review of financial accounting including payables, receivables, adjusting and closing entries and financial statements.

*May be repeated one time.*

**BUSAD 133: COMPUTERIZED ACCOUNTING (Quicken)** .5-2 Units*Recommended for Success: Busad 161A**Lecture: .5-2 hours*

This course offers a simplified method of financial record keeping that provides the student the opportunity to set up and maintain a cash-basis, single entry bookkeeping system using commercial computer application software.

*May be repeated one time.*

**BUSAD 134: COMPUTERIZED ACCOUNTING (Dac Easy)** .5-2 Units*Recommended for Success: Busad 161A**Lecture: .5-2 hours*

This course provides the student opportunities to set up and maintain an accounting system using application software, and is designed to provide the student with a review of financial accounting including payables, receivables, adjusting and closing entries and financial statements.

*May be repeated one time.*

**BUSAD 135: COMPUTERIZED ACCOUNTING (Quickbooks)** .5-2 Units*Recommended for Success: Busad 161A**Lecture: .5-2 hours*

This course provides the student opportunities to set up and maintain an accounting system using application software, and is designed to provide the student with a review of financial accounting including payables, receivables, adjusting and closing entries and financial statements.

*May be repeated one time.*

**BUSAD 137: COMPUTERIZED ACCOUNTING (M.Y.O.B.)** .5-2 Units*Recommended for Success: Busad 161A**Lecture: .5-2 hours*

This course provides the student opportunities to set up and maintain an accounting system using application software, and is designed to provide the student with a review of financial accounting including payables, receivables, adjusting and closing entries and financial statements.

*May be repeated one time.*

**BUSAD 138: EXCEL SPREADSHEETS** .5-1 Unit*Lecture: .5-1 hour*

Instruction in spreadsheet applications on computers, using Excel for Windows. Develop, plan, and build spreadsheets for business decisions. Use formatting, charting, and lists to customize desired output.

*Offered for Credit/No Credit grading only.*

**BUSAD 150: SMALL BUSINESS MANAGEMENT** 3 Units*Lecture: 3 hours*

Small business operation with proper balance between business functions of purchasing, production, sales and finance, and the management functions of planning, organizing, actuating, and controlling.



**BUSAD 151: FINANCE AND INVESTMENTS 3 Units***Lecture: 3 hours*

A study of financial systems and functions including markets, which funds are traded, institutions which participate in fund flows, and principles and concepts of management for making sound financial and investment decisions.

**BUSAD 158: PAYROLL ACCOUNTING 3 Units***Lecture: 3 hours*

Introduction and practice in all payroll operations, the preparation of payroll registers, recording of payroll transactions, understanding of payroll laws, and preparation of required tax returns and reports.

**BUSAD 159: INCOME TAX 2 Units***Lecture: 2 hours*

An introduction to income tax preparation and reporting based on the current requirements of the U.S. Internal Revenue Code that follows the Form 1040 format for individuals and expands briefly to partnerships and corporations.

**BUSAD 160: BASIC ACCOUNTING 4 Units***Lecture: 4 hours*

Basic accounting theory, principles and procedures as related to service and merchandising firms, with emphasis on the sole proprietorship. Double entry accounting, general and special journals/ledgers, worksheets, financial statements, adjustments, accruals and prepaid items, payroll, depreciation, analysis and interpretation of financial statements; completion of the basic accounting cycle.

**BUSAD 161A: SMALL BUSINESS ACCOUNTING I 4 Units***Lecture: 4 hours*

Accounting procedures and analysis for most small businesses. Includes complete double entry accounting system with journals, ledgers, worksheets, and financial statements, with adjusting and closing entries for service or merchandising businesses as well as supplemental material for law and medical offices; payroll for employees and employers, a voucher system, and use of manual and computerized simulations.

**BUSAD 161B: SMALL BUSINESS ACCOUNTING II 4 Units***Prerequisite: Busad 161A or equivalent**Lecture: 4 hours*

Extension of the techniques learned in Business Administration 161A with more in depth treatment of receivables, notes, inventory and depreciation, and with the introduction of partnership and corporation accounting and statements of cash flow and financial analysis; also an introduction to managerial accounting for decision making, departmentalized, cost and manufacturing systems, planning and budgeting, and discussions of computer use in both financial and managerial phases.

**BUSAD 163: BUSINESS MATHEMATICS 4 Units***Prerequisite: Math 201**Lecture: 4 hours*

After review of mathematical processes, students will apply math skills in business situations that include banking, credit cards, discounts, retailing, payroll, interest, compounding, present value, annuities, sinking funds, revolving credit, home mortgages, financial analysis and ratio interpretation, depreciation, inventory, taxes, insurance, stocks, bonds, business statistics.

**BUSAD 170: SPECIAL TOPICS IN BUSINESS .5-3 Units***Lecture: .5-3 hours*

Instruction in a variety of special topics of business, for example: Entrepreneurship, Supervision, Leadership & Motivation, Training Employees, Budgeting, Conflict Resolution, Planning, Decision Making for Managers, Working with Difficult People. Courses will be presented in a workshop format and may include guest speakers. Offered for Credit/No Credit grading only. May be repeated with different topics only.

**OFFICE TECHNOLOGY**

See page 108

**REAL ESTATE**

See page 112

**CHEMISTRY****CHEM 1A: GENERAL CHEMISTRY 5 Units**

(CAN CHEM 2) (CAN CHEM SEQ A = CHEM 1A + CHEM 1B)

*Prerequisite: Chem 10 or equivalent**Recommended for Success: Math 104**Lecture: 4 hours**Laboratory: 3 hours*

Survey of atoms, molecules, ions, chemical reactions, stoichiometry, chemical bonding, gases, liquids, solids, solutions, and thermochemistry. (UC/CSU) (MJC CHEM 101)

**CHEM 1B: GENERAL CHEMISTRY 5 Units**

(CAN CHEM 4) (CAN CHEM SEQ A = CHEM 1A + CHEM 1B)

*Prerequisite: Chem 1A or equivalent**Lecture: 4 hours**Laboratory: 3 hours*

A survey of chemical equilibria, acids and bases, thermodynamics, kinetics, electrochemistry, nuclear chemistry, inorganic chemistry, and organic chemicals. (UC/CSU) (MJC CHEM 102)

**CHEM 10: FUNDAMENTALS OF CHEMISTRY 4 Units**

(CAN CHEM 6)

*Recommended for Success: Math 101**Lecture: 3 hours**Laboratory: 3 hours*

Fundamental theories and principles of chemistry; atomic and molecular structure, chemical reactions, stoichiometry, gases, liquids, solids, solutions, nonmetals, metals, nuclear chemistry, and organic compounds. (UC\*/CSU) (MJC CHEM 143) (UC\*) Transfer credit limited. See a counselor.

**CHEM 20: CONCEPTUAL CHEMISTRY 3 Units***Lecture: 3 hours*

A survey of chemical principles and how they apply to you, the environment and industry. Topics covered include matter, energy, compounds, stoichiometry, acid-base chemistry, electrochemistry, environmental chemistry, geochemistry, organic chemistry, and biochemistry. (UC\*/CSU) (MJC CHEM 150) Transfer credit limited. See a counselor.

**CHEM 21: CONCEPTUAL CHEMISTRY - .5 Unit  
ATOMS, ELEMENTS & IONS***Lecture: .5 hour*

A survey of matter, energy, elements, atoms, ions and how these topics apply to you and your surroundings. (CSU) (The satisfactory completion of the series Chem 21 through Chem 26 is equivalent to the satisfactory completion of Chem 20.) (CC CHEM 21-26 = MJC CHEM 150)

**CHEM 22: CONCEPTUAL CHEMISTRY - .5 Unit  
CHEMICAL COMPOUNDS***Lecture: .5 hour*

A survey of chemical compounds. (CSU) (The satisfactory completion of the series Chem 21 through Chem 26 is equivalent to the satisfactory completion of Chem 20.) (CC CHEM 21-26 = MJC CHEM 150)

**CHEM 23: CONCEPTUAL CHEMISTRY - .5 Unit  
SOLUTIONS***Lecture: .5 hour*

A survey of solutions and their importance in chemistry. (CSU) (The satisfactory completion of the series Chem 21 through Chem 26 is equivalent to the satisfactory completion of Chem 20.) (CC CHEM 21-26 = MJC CHEM 150)

**CHEM 24: CONCEPTUAL CHEMISTRY - .5 Unit  
CHEMICAL REACTIONS***Lecture: .5 hour*

A survey of chemical reactions and how they apply to you and your surroundings. (CSU) (The satisfactory completion of the series Chem 21 through Chem 26 is equivalent to the satisfactory completion of Chem 20.) (CC CHEM 21-26 = MJC CHEM 150)

**CHEM 25: CONCEPTUAL CHEMISTRY - .5 Units  
APPLIED CHEMISTRY***Lecture: .5 hour*

A survey of chemical principles and how they apply to you, the environment and industry. Topics covered include environmental chemistry, food chemistry, geochemistry and industrial chemistry. (CSU) (The satisfactory completion of the series Chem 21 through Chem 26 is equivalent to the satisfactory completion of Chem 20.) (CC CHEM 21-26 = MJC CHEM 150)

**CHEM 26: CONCEPTUAL CHEMISTRY - .5 Unit  
ORGANIC CHEMISTRY***Lecture: .5 hour*

A survey of organic chemistry and how it applies to you and your surroundings. (CSU) (The satisfactory completion of the series Chem 21 through Chem 26 is equivalent to the satisfactory completion of Chem 20.) (CC CHEM 21-26 = MJC CHEM 150)

**CHILD DEVELOPMENT***See Pages 28 for Certificate Requirements*

Students may be required to acquire a fingerprint clearance before working with young children. See your instructor for more details.

**CHILD 1: PRINCIPLES OF CHILD DEVELOPMENT 3 Units***Lecture: 3 hours*

Growth and development of children, birth through adolescence. Basic concepts related to physical, social, intellectual, and emotional development, including the effects of culture, will be explored. (UC/CSU) (MJC CLDDV 245)

**CHILD 2: OBSERVING AND RECORDING THE BEHAVIOR OF YOUNG CHILDREN 1 Unit***Recommended for Success: Child 1**Lecture: 1 hour*

Students will learn and practice the skill of observing and recording children's behavior, as a tool for responsive teaching and assessment of children's development. Weekly field study required. (CSU) (MJC CLDDV 244)

**CHILD 3: PRACTICES IN CHILD DEVELOPMENT 3 Units***Lecture: 3 hours*

The planning and implementing of developmentally appropriate curriculum activities for young children, including anti-bias curriculum and current practices in the field. (CSU)

**CHILD 5: CHILD NUTRITION 2 Units***Lecture: 2 hours*

Basic nutritional needs of children from the prenatal period through adolescence, study of the nutrients in foods, nutrition analysis, assessment of nutritional needs, program requirements/planning, and cooking activities for children in Early Childhood Education programs. (CSU)

**CHILD 7: CHILD HEALTH AND SAFETY 1 Unit***Lecture: 1 hour*

Overview of health and safety issues for children in child care, including prevention of infectious disease, preventive health practices and prevention policies; signs, symptoms and reporting of child abuse; and injury prevention. Students completing this course with a "C" or better will be given a certificate to meet Title 22 requirements for child Health and Safety Training. (CSU) (MJC CLDDV 372)

**CHILD 10: CREATIVE ACTIVITIES IN THE ARTS 2 Units***Lecture: 2 hours*

Survey of a variety of educational activities suitable for young children in art, music, movement, language and literature; for pre-school teachers, family day care providers, parents, teacher aides, and anyone who is interested in creative expression for children. (CSU)

**CHILD 12: CREATIVE ACTIVITIES IN MATH 2 Units***Lecture: 2 hours*

Survey of math activities and concepts developmentally appropriate for young children: for pre-school teachers, family day care providers, teacher aides, parents and anyone interested in early childhood math education. (CSU)



**CHILD 13: CREATIVE ACTIVITIES IN SCIENCE 2 Units***Lecture: 2 hours*

Survey of science activities and concepts developmentally appropriate for young children; for pre-school teachers, family day care providers, teacher aides, parents and anyone interested in early childhood science education. (CSU)

**CHILD 16: PRACTICUM 1-3 Units***Prerequisite: Child 1 or equivalent**Laboratory: 3 hours equals 1 unit of credit**Lecture: 1 hour, Laboratory: 3 hours equals 2 units of credit**Lecture: 1 hour, Laboratory: 6 hours equals 3 units of credit*

Supervised practicum in the Columbia College Child Development Center, Toddler Center, or approved field site. Students will plan and implement activities with the children, develop guidance techniques, and work with staff and children in the classroom as a student teacher. Students will also attend a weekly seminar to evaluate and discuss projects, teaching skills development, and other aspects of student teaching. (CSU)

*May be repeated one time.***CHILD 17: ADULT SUPERVISION PRACTICUM 2 Units***Lecture: 1 hour**Laboratory: 3 hours*

This course will provide students with the skills and techniques needed to supervise adults in a developmentally appropriate children's program. Meets the adult supervision requirement for the Child Development permit. (CSU)

**CHILD 19: EXCEPTIONAL NEEDS CHILDREN 3 Units***Lecture: 3 hours*

A comprehensive overview for the child care provider who will work with young children with disabilities. Includes historical perspective, diversity issues, family partnerships, identifying and referring, caregiver strategies and administrative issues. (CSU)

**CHILD 22: CHILD, FAMILY, COMMUNITY 3 Units***Lecture: 3 hours*

Study of the impact of family interrelationships and community factors on a child's development. Techniques fostering healthy family interactions and use of community resources will be stressed. Visitations to local programs that serve young children and their families will be required. (CSU) (MJC CLDDV 249)

**CHILD 23: GUIDING CHILDREN'S SOCIAL DEVELOPMENT 3 Units***Lecture: 3 hours*

This course is designed to provide early childhood educators and parents with the skills necessary to promote the emotional support and guidance young children need for healthy social development. Topics include: the developmental aspects of social/emotional development, supporting children in stressful situations, fostering self-discipline, supporting children's friendships, promoting prosocial behavior, handling children's aggressive behavior, and diversity issues. (CSU)

**CHILD 25: INFANT/TODDLER CARE 3 Units***Lecture: 3 hours*

Principles and philosophy of infant care for children up to two years of age including growth and development, health and nutritional needs, social-emotional needs, cognitive development, language development, development of a positive self-image, parent education, community resources, and cultural and ethnic differences. (CSU) (MJC CLDDV 251)

**CHILD 27: SCHOOL AGE CHILDREN 3 Units***Lecture: 3 hours*

Overview of cognitive and personality development of children seven to seventeen years of age. Stages and critical periods will be studied. Current issues emphasized include: peer influence, sexual development, value clarification, self-esteem, substance abuse, sexual abuse and eating disorders. Appropriate for parents as well as child development majors, and providers of latch-key programs. (CSU)

**CHILD 28: BOOKS FOR YOUNG CHILDREN 3 Units***Lecture: 3 hours*

An introductory course on books for young children. Topics will include how to evaluate content and illustration; choosing books that relate to children's developmental needs and interest; the art of reading aloud. Field work involving reading aloud to children under six years of age is required. (CSU)

**CHILD 30: CHILD CARE/NURSERY SCHOOL ADMINISTRATION 3 Units***Recommended for Success: Engl 151**Lecture: 3 hours*

Administration of public and private child care and nursery school programs in California. Topics include budget development and management; staff selection and supervision; programs, facilities, and equipment; parent and community relationships; and licensing requirements. (CSU) (MJC CLDDV 250)

**CHILD 31: ADVANCED CHILD CARE ADMINISTRATION 3 Units***Prerequisite: Child 30 or equivalent**Lecture: 3 hours*

An advanced course for directors and lead teachers in child care. Students will learn staff development and leadership techniques. Fiscal, advocacy and current issues will be explored. (CSU)

**CHILD 97: WORK EXPERIENCE IN CHILD DEVELOPMENT 1-4 Units***Prerequisite: Must be enrolled in at least seven (7) units including Work Experience**75 hours paid employment equals 1 unit of credit**60 hours unpaid employment equals 1 unit of credit*

Provides students an opportunity to experience supervised employment in Child Development. The student's employment must be related to educational or occupational goals. (CSU\*)

*Offered for Credit/No Credit grading only.**May be repeated for no more than a total of 16 units of credit less any units earned in any other Work Experience course.**For students interested in working full time one semester and attending classes one semester on an alternate basis, see Wkexp 96, page 112.***CHILD 170: SPECIAL TOPICS IN CHILD DEVELOPMENT .5-3 Units***Lecture: .5-3 hours*

Instruction in a variety of special topics in Child Development, to include parenting, Foster Child care, child growth and development, special needs, anti-bias training, etc. (MJC CLDDV 298)  
*May be repeated with different topics only.*

**COMPUTER SCIENCE***See Page 28 for Certificate Requirements***CMPS 1: COMPUTER CONCEPTS AND INFORMATION SYSTEMS 4 Units***(CAN CSGI 2)**Lecture: 3 hours**Laboratory: 3 hours*

Concepts of computer information systems in business and industry. Study of computers and applications. Actual practice is on IBM Personal Computers in Windows 95 or Windows 98 environments on a network. Lab applications include spreadsheets, word processing, database management, graphics, programming, network communications and World Wide Web access to the Internet. (UC/CSU) (MJC CMPS 201)

**CMPS 3: WINDOWS AND DOS OPERATING SYSTEMS 3 Units***Lecture: 2 hours**Laboratory: 3 hours*

Introduction to file management through a Windows environment and the DOS operating system. Emphasis will be on Windows 95 or Windows 98. Students will learn concepts of a shell, text editors, batch files, desktop procedures, Windows setup, and file handling. (CSU)

**CMPS 4: WINDOWS OPERATING SYSTEMS ESSENTIALS .5-1.5 Units***Lecture: .5 - 1.5 hours*

This course provides instruction in Windows 98. Topics include management of window elements, desktop arrangement, folders, and files and file management. Students will use multitasking, cut and paste, linking, and printing operations within selected Windows 98 applications. (CSU) (MJC CMPS 265)

*Offered for Credit/No Credit grading only.**May be repeated one time.***CMPS 7: NOVELL NETWORK MANAGEMENT 3 Units***Recommended for Success: Cmpsc 3**Lecture: 3 hours**Laboratory: 1 hour*

This course is an introduction to networking and Novell network management. Primary training is for NetWare 4.1, but newer versions will also be discussed. Topics include user accounts, trustee rights, groups, mappings, login scripts, batch files, printer control and definitions, applications software setup, virus protection, backup procedures, Internet and Intranet communications protocols, Netware Directory Services and PC workstation configurations. (CSU)

**CMPS 9: UNIX OPERATIONS AND COMMUNICATIONS 3 Units***Recommended for Success: Cmpsc 3**Lecture: 2 hours**Laboratory: 3 hours*

An introduction to the UNIX computer operating system and concepts needed to access the Internet. Topics include operating system commands, multitasking, editors, data transfer, standard administrative tasks, electronic mail, file transfer, and telnet and World Wide Web communications. (CSU) (MJC CMPS 206)

**CMPS 10: INTRODUCTION TO THE INTERNET 1-2 Units***Lecture: .5 - 1 hours*

This course provides instruction in how to access the Internet using communications software and a web browser on desktop PCs. Topics include navigating browsers, electronic mail, search techniques, personal privacy, downloading and, and the World Wide Web. (CSU) (MJC CMPGR 262)

*Offered for Credit/No Credit grading only.**May be repeated one time.***CMPS 11: PRESENTATIONS USING COMPUTERS AND MULTIMEDIA 1-2 Units***Prerequisite: Cmpsc 4 or equivalent**Lecture: 1-2 hours*

Use presentation software to prepare multimedia presentations. Combine text, graphics, video, and sound. Use the computer and multimedia projector to present information to an audience or to individuals using a PC. (CSU) (MJC CMPGR 215)

*May be repeated one time.***CMPS 12: WEBSITE DEVELOPMENT APPLICATIONS 2-3 Units***Recommended for Success: CMPS 4 or equivalent**Lecture: 2-3 hours*

Students will be able to use website/webpage development application software to prepare multimedia presentations for use with an Internet browser. They will also be able to combine text, graphics, video, and sound and enhance computer displays for an audience and prepare home page links for access over the Internet. (CSU)

*May be repeated one time.***CMPS 13: INTRODUCTION TO HTML 1-2 Units***Recommended for Success: Cmpsc 4**Lecture: 1-2 hours*

Use HTML authoring tools and/or HTML home page software to prepare multimedia presentations to use with an Internet browser. Combine text, graphics, video, and sound. Enhance computer displays for an audience and prepare home page links for access over the Internet. (CSU)

*May be repeated one time.***CMPS 14: ADVANCED TOPICS IN WEBSITE DEVELOPMENT 2-3 Units***Prerequisite: Cmpsc 12**Lecture 2-3 hours*

This course guides students through the process of exploring advanced tools for website design, which may include but are not limited to Flash, Javascript, ASP, and XML. Students will also attain skills in technique for publicizing websites and best practices for site maintenance. (CSU)



**CMPS 15: JAVA PROGRAMMING 3 Units**

*Recommended for Success: Cmpsc 13*  
 Lecture: 2 hours  
 Laboratory: 3 hours

Learn the Java Programming language, an intranet/internet standard language. Topics include classes, objects, arrays, inheritance, interfaces, control flow, input/output, and standard utilities. Create some applications to be used on an intranet or on the Internet. (UC/CSU)

**CMPS 17: ADVANCED INTERNET RESEARCH .5-2 Units**

*Recommended for Success: Cmpsc 13*  
 Lecture: .5-2 hours

This course provides instruction in Advance Internet Research and will provide students advanced search and research techniques via the World Wide Web. The course reviews basic components of Internet search engines and includes advanced subject matter research techniques, database resources and advanced Internet technology skills. Topics include E-Commerce, Internet Resources, Digital Content, and Internet Publications.  
*May be repeated one time.*

**CMPS 22: PROGRAMMING CONCEPTS AND METHODOLOGY I 4 Units**

*Recommended for Success: Math 104*  
 Lecture: 3 hours  
 Laboratory: 3 hours

Introduction to computer programming and program design. Presents algorithm development, structured programming techniques, various methods of problem solving, and an introduction to object oriented programming concepts. Programming is done using C++, but includes some basics of the C language. Language topics include data types, conditions and Boolean logic, recursion, arrays, functions, pointers, and file input/output. (UC/CSU) (MJC CMPS 205)

**CMPS 24: PROGRAMMING CONCEPTS AND METHODOLOGY II (CAN CSCI 24) 4 Units**

*Prerequisite: Cmpsc 22 or equivalent*  
*Recommended for Success: Math 101*  
 Lecture: 3 hours  
 Laboratory: 3 hours

This course is a continuation of CMPS 22, concentrating on problem solving techniques using an object oriented design approach. Programming is done using the C++ language. It also includes an introduction to programming in the Windows environment. Topics include data abstraction, recursion, class functions, operator overloading, templates, string handling, data structures (arrays, records, lists, stacks, and queues), search/sort, pointers, dynamic data, linked lists, and binary trees. (UC/CSU) (CAN CSCI 24)

**CMPS 28: VISUAL BASIC PROGRAMMING 3 Units**

*Lecture: 3 hours*  
 Design of Visual Basic programs using a hands-on approach. Write client applications in a Windows environment and create a variety of custom applications. (CSU) (MJC CMPS 213)

**CMPS 30: FINANCIAL WORKSHEETS ON COMPUTERS 3 Units**

*Lecture: 2 hours*  
*Laboratory: 3 hours*

Electronic spreadsheets will be used to develop a basic understanding of business operations, managerial decision making, and strategic advantage. Students will develop spreadsheets for financial statements, what-if analysis, databases, and other ledger-type applications. Other topics include use of formulas and macros to customize data entry for business applications and combining data between worksheets and link files. Lab projects will focus on the use of spreadsheet design, development, and use for managerial decision making. (CSU) (MJC CMPS 278)

**CMPS 31: DESKTOP PUBLISHING I\* 3 Units**

*Lecture: 2 hours*  
*Laboratory: 3 hours*

This course is an introduction to general desktop publishing theory with emphasis on typography, page layout, graphics and design. Students will create newsletters, brochures, flyers, and resumes, cards and reports. (CSU)

*May be repeated one time.*

*\*Credit may be earned for either Art 51, Oftec 42, or Cmpsc 31, but only from one discipline.*

**CMPS 32: DESKTOP PUBLISHING II\* 3 Units**

*Prerequisite: Cmpsc 31*  
*Lecture: 2 hours*  
*Laboratory: 3 hours*

This course is a continuation of study in problems of Desktop Publishing. Areas of focused study will be in advanced problems of page layout, typography, digital image manipulation, and issues related to offset reproduction of graphic design. (CSU)

*May be repeated one time.*

*\*Credit may be earned for either Oftec 42, Art 52 or Cmpsc 32, but only from one discipline.*

**CMPS 33: COMPUTER GRAPHICS I\* 3 Units**

*Lecture: 2 hours*  
*Laboratory: 3 hours*

This course introduces the student to the fundamentals of computer graphics. Topics include the elements and principles of good graphic design, vector versus raster graphics, color theory, image scanning and formatting for print and screen. Students will acquire basic skills in current graphic design software and create original design pieces. (CSU)

*\*Credit may be earned for either Cmpsc 33 or Art 53, but not both.*

**CMPS 34: COMPUTER GRAPHICS II 3 Units**

*Prerequisite: Cmpsc 33 or equivalent*  
*Lecture: 2 hours*  
*Laboratory: 3 hours*

This class is a continuation of Computer Graphics I. Topics covered will include more advanced techniques of painting and drawing software, color scanning, publishing for the Web and printing. (CSU) *\*Credit may be earned for either CMPS 34 or ART 54, but not both. May be repeated one time.*

**CMPS 40: ASSEMBLY LANGUAGE PROGRAMMING (CAN CSCI 10) 4 Units**

*Prerequisite: Cmpsc 22 or equivalent*  
*Lecture: 3 hours*  
*Laboratory: 3 hours*

Techniques of writing assembly language instructions. Study includes computer architecture and machine logic. Plan, edit, assemble, link, execute and debug assembly language programs on IBM computers. (UC/CSU) (MJC CMPS 241)

**CMPS 41: NETWORKING ESSENTIALS 3 Units**

*Prerequisite: Cmpsc 1 or equivalent*  
*Recommended for success: Cmpsc 3*  
*Lecture: 3 hours*  
*Laboratory: 1 hour*

This course is an introduction to computer networking and data communications. The focus is on concepts, terminology, and technologies in current networking environments. The course is based on, and covers the OSI model including discussions of Local and Wide Area Networks (LAN & WAN). A laboratory component provides hands-on experience in network setup and computer configuration. This course includes the first semester of Cisco Academy training, which is part of a program leading to CCNA certification. The topics covered are also applicable to Microsoft Certified Systems Engineer (MCSE) and other industry networking certification. (CSU)

**CMPS 42: NETWORKING-WAN BASICS 3 Units**

*Prerequisite: Cmpsc 41*  
*Lecture: 3 hours*

This course is an introduction to Wide Area Networks. Emphasis is on the use of routers and data communications equipment. Laboratory assignments provide hands-on experience in the configuration of routers. This course includes the second semester of the Cisco Academy program. Topics covered are also applicable to Microsoft Certified Systems Engineer (MCSE) and other industry certification. (CSU)

**CMPS 43: NETWORKING-ADVANCED WAN 4 Units**

*Prerequisite: Cmpsc 42*  
*Lecture: 4 hours*

This course is a continuation of the Cmpsc 41-42 networking sequence. It covers Virtual LAN, LAN and WAN design, Routing Protocols, Access Control Lists, Novell IPX, PPP, ISDN, Frame Relay, and Network Management case studies. This course includes the second year of the Cisco Academy program. Topics covered are also applicable to MCSE and other industry certification. (CSU)

**CMPS 51: MANAGEMENT INFORMATION SYSTEMS\* 4 Units**

*Lecture: 4 hours*

This course is an introduction to information systems. The objective is to build a basic understanding of the value and use of information system technology for business operations, managerial decision making, project management, and strategic advantage. Topics of special interest include information system planning, application development including systems analysis and design, decision support systems, and expert systems. (UC) (CSU)

*\*Credit may be earned for either Cmpsc 51 or Busad 51, but not both.*

**CMPS 52: E-COMMERCE\* 3 Units**

*Recommended for Success: Cmpsc 1, Busad 20*  
*Lecture: 3 hours*

This course is designed to familiarize individuals with current and emerging electronic commerce technologies using the Internet. Topics include Internet technology for business advantage, managing electronic commerce funds transfer, reinventing the future of business through electronic commerce, business opportunities in electronic commerce, electronic commerce development and marketing, social, political and ethical issues associated with electronic commerce, and business plans for technology ventures. Because companies are using these strategies in a global business environment, discussions of international, legal, ethical, and tax issues are included. The purpose of this course is to educate a new generation of managers, planners, analysts, marketers, and programmers of the realities and potential for electronic commerce. (CSU)

*\*Credit may be earned for either Cmpsc 52 or Busad 52, but not both.*

**CMPS 53: PROJECT MANAGEMENT\* 3 Units**

*Recommended for Success: Cmpsc 1*  
*Lecture: 3 hours*

This course is designed to familiarize individuals with current and emerging project management technologies using the Internet, project management software and other application software packages as needed for project completion. Project management knowledge topics will include project integration, scope, time, cost, quality, human resource, communications, risk and procurement management. (CSU)

*\*Credit may be earned for either Busad 53 or Cmpsc 53, but not both.*

**CMPS 54: DATA MINING\* 3 Units**

*Recommended for Success: Cmpsc 1*  
*Lecture: 3 hours*

This course was designed to familiarize individuals with current and emerging data mining technologies using the Internet, database software, and other application software packages as needed for project completion. Data mining knowledge topics will include the process of model building. Students will create a representative model based on an existing dataset to help understand trends, patterns, and correlations, as well as forming predictions based on historical outcomes. Students will be introduced to the tools and technologies needed to research and analyze data, resulting in a strategic decision making, marketing plan development, goal setting and identifying business opportunities. (CSU)

*\*Credit may be earned for either Cmpsc 54 or Busad 54, but not both.*

**CMPS 55: DATA BASE MANAGEMENT 4 Units**

*Recommended for Success: Cmpsc 1*  
*Lecture: 4 hours*

Fundamentals of database design and administration. Covers basic terminology, types of database systems, and how to design a database appropriate to an application. Topics include linking of tables in a relational database, SQL commands, Query By Example, and design of input forms and reports. Hands-on component uses a current commercial database management system in a Windows environment. (CSU)



**CMPC 58: GIS-ArcVIEW\*** 1 Unit*Lecture: 1 hour*

Introduction to practical application of ArcView software; importation of GIS data, display, visualization, exploration, query, analysis, and production of hard-copy maps and reports. Students will be guided through a complete sequence of application fundamentals similar to what would normally be used in displaying, analyzing, and plotting a standard ArcView GIS application. (CSU)  
*Offered for Credit/No Credit grading only.*

*\*Credit may be earned for either Cmpsc 58 or Geogr 58, but not both.*

**CMPC 59: GEOGRAPHIC INFORMATION AND GLOBAL POSITIONING SYSTEMS\*** 1-3 Units*Lecture: 1 - 3 hours*

Introduction to basic GIS and GPS concepts and applications in the field of natural resources, earth sciences, and environmental systems. Students will learn to use Global Positioning System base stations and rover units, combined with Geographic Information System software to collect field data and produce maps for spatial analysis and decision-making purposes. The first six weeks will be spent learning ArcView software; the second six weeks will be spent learning to use Ashtech GPS units; and the last six weeks will be spent learning to design and carry out a research project merging GPS and GIS technologies. (CSU)

*May be repeated with different topics only.*

*\*Credit may be earned for either Cmpsc 59 or Geogr 59, but not both.*

**CMPC 60: INTRODUCTION TO GIS - ArcView\*** 3 Units*Lecture: 3 hours*

Introduction to basic GIS concepts which can support the various GIS software programs currently available. Students will be introduced to the ArcView software package as the main vehicle for learning GIS. GIS coverages and maps will be produced from several different data sources. Emphasis will be placed on planning the design of GIS coverages which will permit specific types of queries. (CSU)

*\*Credit may be earned for either Cmpsc 60 or Geogr 60, but not both.*

**CMPC 65: GIS APPLICATIONS\*** 3 Units*Recommended for Success: Cmpsc 60**Lecture: 3 hours*

Introduction to practical applications of GIS software, heads-up digitizing, conversion of data, building annotation coverages. Students will gain hands-on experience working on specific projects under supervision. Assignments will include compiling and submitting project reports. (CSU)

*May be repeated two times.*

*\*Credit may be earned for either Cmpsc 65 or Geogr 65, but not both.*

**CMPC 70: INTRODUCTION TO RASTER-BASED GIS SYSTEMS\*** 3 Units*Lecture: 3 hours*

The course will introduce students to the Geographic Resources Analysis Support System (GRASS), a powerful, UNIX-based public domain raster GIS system developed by the US Corps of Engineers. Fundamental GIS concepts will be discussed. Various functions of raster-based GIS systems will be demonstrated and contrasted to vector-based systems such as Arc-View. Students should have some familiarity with maps, UNIX, statistics and algebra. (CSU)  
*May be repeated two times.*

*\*Credit may be earned for either Cmpsc 70 or Geogr 70, but not both.*

**CMPC 75: GIS APPLICATIONS IN RESOURCE MANAGEMENT\*** 3 Units*Recommended for Success: Cmpsc 70**Lecture: 3 hours*

Application of GIS to resource management issues such as watershed analysis, ecosystem analysis, recreation planning, and fire planning. Emphasis on remote sensing data and image processing to derive GIS data. (CSU)

*May be repeated two times.*

*\*Credit may be earned for either Cmpsc 75 or Geogr 75, but not both.*

**CMPC 101: HOW TO SUCCEED AS AN ONLINE STUDENT** .5-2 Units*Lecture: .5-2 hours*

This course is an introduction to a Face-to-Face and Simulated Online combined course for those interested in taking online courses. The course covers basic components of how a Web-based classroom works as well as the technology skills needed to feel more confident in achieving a successful experience.

*May be repeated one time.*

**CMPC 142: DESKTOP PUBLISHING ESSENTIALS\*** 1-2 Units*Prerequisite: Cmpsc 4**Recommended for Success: Oftec 215**Lecture: 1-2 hours*

This course is an introduction to general desktop publishing theory with emphasis on design elements of formatted text, frames, photographs, clipart, lines, and pictures. Students will create sample projects such as newsletters, brochures, flyers, business cards, etc.

*\*Credit may be earned for either Oftec 142 or Cmpsc 142, but not both.*

**CMPC 149 PHOTOSHOP FOR THE WEB** 2-3 Units*Lecture: 2-3 hours*

Photoshop is a comprehensive environment for professional designers and graphic producers to integrate digital content for the Web. This course would involve manipulating graphics and digital content for optimum use on any Web-based platform.

*May be repeated one time.*

**CMPC 155 ACCESS** 1-2 Units*Lecture: 1-2 hours*

Develop database applications using Data Base Management (DBMS) software. Create databases, enter and edit data, query the database, create and use forms, create and print reports, customize fields and tables, manage data and files, use as database for word mail merge.

**CMPC 170 SPECIAL TOPICS IN COMPUTER SCIENCE** .5-3 Units*Lecture: .5-3 hours*

This course will cover special topics in Computer Science to meet individual or agency needs. Emphasis will be on specialized development of skills and knowledge and implementation of training in using computers.

*May be repeated three times.*

**DRAFTING****DRAFT 50A: COMPUTER ASSISTED DRAFTING I** 3 Units*Lecture: 2 hours**Laboratory: 3 hours*

Introduction to the use of the computer as a tool for accomplishing basic drafting tasks. Included topics: polar and rectangular coordinates, lines, polygons, layers, blocks, editing, hatches, dimensioning, orthographic projections, isometric drawing, layout view, plotting, and an introduction to 3-D. (CSU) (MJC ENGTC 210 AND 211)

**DRAFT 50B: COMPUTER ASSISTED DRAFTING II** 3 Units*Prerequisite: Draft 50A or equivalent**Lecture: 2 hours**Laboratory: 3 hours*

Intermediate to advanced features of AutoCAD through creation of 3-D drawings. Included topics: customizing the AutoCAD environment, use of digitizer tablet, 3-D surfaces, solids modeling, elevated plane, extrusions, revolution, shading, rendering, scenes, lighting, textures, user coordinate system, views and ports, exporting of drawing, external databases. (CSU)

**DRAMA****DRAMA 10: INTRODUCTION TO THE THEATRE** 3 Units*Lecture: 3 hours*

This course provides an introduction to the art of theatre, surveying the roles of the playwright, the director, the actor, the designers, the producer, the critics and the audience. This course investigates the variety of theatrical styles observed in contemporary theatre, compares live theatre with the electronic forms, and assesses the value of theatre in modern society. This course is designed to promote the student's greater understanding and enjoyment of the theatrical form. (UC/CSU) (MJC THETR 100)

*Field trips will be required.*

**DRAMA 18: VOICE DYNAMICS\*** 3 Units*Lecture: 2 hours**Laboratory: 3 hours*

A study of Voice Dynamics will focus on vocal psychology, breathing, relaxation, vocal variety, projections, articulation, placement, phonetics, ear training and vocal analyses, character "voices", dialects and accents. This course is designed for self-improvement and for students who wish to increase their vocal skills for professional use. (UC/CSU) (MJC RA/TVSPCOM/THETR 101)

*May be repeated three times.*

*\*Credit may be earned for either Drama 18 or Spcom 18, but not both.*

**DRAMA 19: EXPLORING RADIO DRAMA\*** 1.5-3 Units*Lecture: 1.5-3 hours*

An intensive course focused on the expressive use of the voice and sound effects. It may be taken in two sections, each for 1.5 units. Students will rehearse, perform and provide sound effects for dramatic scripts to be broadcast on radio. Scripts will be rehearsed on campus with final production taped and broadcast. (CSU)

*May be repeated three times. \*Credit may be earned for either DRAMA 19 or SPCOM 19, but not both.*

**DRAMA 20: ORAL EXPRESSION AND INTERPRETATION** 3 Units*Lecture: 3 hours*

Techniques in reading literature aloud; vocal development, production, articulation, and variety; understanding and interpreting prose, poetry, and dramatic literature; processes in the oral performance of principal literary genre. (UC/CSU) (MJC THETR 120)

**DRAMA 22: INTRODUCTION TO READERS' THEATRE** 3 Units*Lecture: 2 hours**Activity: 3 hours*

Theory and practice of Readers' Theatre as an art form. Directed experiences in selecting, cutting, arranging and performing the Readers' Theatre script. (UC/CSU) (MJC THETR 122)

**DRAMA 42: ACTING FUNDAMENTALS (CAN DRAM 8)** 3 Units*Lecture: 2 hours**Activity: 3 hours*

Investigation of techniques and theories prerequisite to theatrical performances; psychological, philosophical, and practical preparation for the actor's art. (UC/CSU) (MJC THETR 160)

*May be repeated three times.*

**DRAMA 43 ACTING-DIRECTING** 3 Units*Lecture: 2 hours**Activity: 3 hours*

A workshop in techniques of both acting and directing with specific focus upon the production of short scenes from a variety of theatrical genres. (UC/CSU)

*May be repeated three times.*



**DRAMA 44: ADVANCED ACTING PROJECTS 1-3 Units**

*Prerequisite: Drama 45*  
*Laboratory: 3 hours equals 1 unit of credit*  
*Lecture: 1 hour, Laboratory: 3 hours equals 2 units of credit*  
*Lecture: 1 hour, Laboratory: 6 hours equals 3 units of credit*

Advanced workshop activity for production of one-act plays, segments of longer plays or full length plays; intensive workshop concentration designed for public performances. Casting subject to audition. (UC/CSU)

*May be repeated three times.*

**DRAMA 45: IMPROVISATION 3 Units**

*Lecture: 3 hours*  
*Laboratory: 1 hour*

Intensive study of the basic techniques of improvisational acting with specific concentration on improvisational theatre production formats as well as development of group inspired and created scenarios and one-act plays. (UC/CSU)

*May be repeated three times.*

**DRAMA 46: IMPROVISATIONAL ACTING FOR PERFORMANCE 3 Units**

*Lecture: 2 hours*  
*Laboratory: 3 hours*

The focus of this course is on the use of improvisation for performance with particular emphasis on complex formats to include various literary genres, song, narrative and mini-plays. The class will perform in a variety of venues, both on campus and in the community for a variety of audiences and purposes. (UC/CSU) (MJC THETR 164)

*May be repeated three times.*

*Field trips may be required.*

**DRAMA 50: MUSICAL THEATRE WORKSHOP 2 Units**

*Lecture: 1 hour*  
*Laboratory: 3 hours*

An exploration of musical theatre to develop singing, dancing, and acting skills, culminating in a public performance of scenes from selected musicals. (UC/CSU)

*May be repeated three times.*

**DRAMA 56: TECHNICAL THEATRE LABORATORY 1-3 Units**

*Laboratory: 3-9 hours*

Applied laboratory experience in all phases of technical theatre related to mounting a production; practical projects in design and construction involving costumes, stage settings, stage properties, lighting, sound, and makeup for a specific theatre production. (UC/CSU)

*May be repeated three times.*

**DRAMA 58: THEATRE PRODUCTION 4 Units**

*Lecture: 1 hour*  
*Laboratory: 9 hours*

Directed activities in acting and technical theatre with participation in public performances and related production activities. (UC/CSU)

*May be repeated three times.*

**EARTH SCIENCE**

**ESC 5: PHYSICAL GEOLOGY (CAN GEOL 2) 4 Units**

*Lecture: 3 hours*  
*Laboratory: 3 hours*

The study of the earth, its materials, structures, and processes. Erosion and deposition by streams, wind, waves and glaciers; mountain building and volcanoes at subduction zones, and rifting of the earth's plates at mid-ocean ridges; tracing the energy from the sun and from the earth's interior as it drives all of the processes of change on earth; the study of life on earth, past and present; the search for valuable minerals and building materials from the earth. (UC/CSU) (MJC GEOL 161)

*Field trips may be required.*

**ESC 10: ENVIRONMENTAL GEOLOGY 3 Units**

*Lecture: 3 hours*

Students will be introduced to environmental geology, which includes the study of hazards associated with seismicity, mass wasting, flooding, coastal processes, and volcanism. Resource and pollution issues will be discussed in the context of population pressures. Global warming and ozone depletion/hole are also covered. Students will learn to conduct geologic research and will work collaboratively with peers inquiring about geo-environmental issues. (UC/CSU)

**ESC 25: GEOLOGY OF THE NATIONAL PARKS 3 Units**

*Lecture: 3 hours*

The study of the earth's surface in relation to the formation of our National Parks. What part glaciation, erosion, volcanism, and other mountain building processes play in the formation of the National Parks. (CSU)

*Field trips may be required.*

**ESC 30: GLOBAL TECTONIC GEOLOGY 3 Units**

*Lecture: 3 hours*

An introduction to the new global geology and how it has revolutionized man's understanding of the way the earth works. For all who wish to learn about the earth's wandering continents and spreading sea floors; what causes rising mountain ranges, volcanoes, and earthquakes; and the role that magnetism has played in the revelation of the new geology. (UC/CSU)

**ESC 35: FIELD GEOLOGY 1-3 Units**

*Lecture: 1-3 hours*

A field study of selected geologic features and related Earth Science topics. A one to seven day field trip will be taken with pre- and post-classroom sessions. (CSU) (MJC GEOL 171A, B)

*May be repeated three times.*

**ESC 40: DESCRIPTIVE ASTRONOMY 3 Units**

*Lecture: 3 hours*

A survey course in astronomy. Topics include history of astronomy, telescopes, solar system, stars, galaxies, origin of universe, and extraterrestrial life. Outside class assignments include one hour per week of computer-assisted learning activity. (UC/CSU)

*Field trips may be required.*

**ESC 60: FUNDAMENTALS OF METEOROLOGY 3 Units**

*Lecture: 2 hours*  
*Laboratory: 3 hours*

Origin of the world's atmosphere, its structure, composition, and circulation; the weather elements, weather instruments and their use, gas laws, air masses, frontal movements, cloud types; lab techniques; meteorological effects on modern society. (UC/CSU)

*Field trips may be required.*

**ESC 150: GEOLOGY OF THE MOTHER LODGE .5-2 Units**

*Lecture: .5-2 hours*

Geology of the Mother Lode from its astronomical beginnings to the present; including rocks and minerals, rivers, glaciers, mountains, earthquakes, and volcanoes.

*Field trips may be required.*

**ECONOMICS**

**ECON 10: PRINCIPLES OF ECONOMICS (CAN ECON 2) 4 Units**

*Lecture: 4 hours*

Macro-economics. Introduction to the U.S. economy and capitalism; national income and employment analysis, economic fluctuations, monetary fiscal policies, economic stability-instability, public finance, and special economic problems. (UC/CSU) (MJC ECON 101)

**ECON 11: PRINCIPLES OF ECONOMICS (CAN ECON 4) 4 Units**

*Lecture: 4 hours*

Micro-economics. The corporation: analysis of costs, theory of production, pricing factor inputs including wages, rent, and interest; the social implications of various market structures; special economic problems. (UC/CSU) (MJC ECON 102)

**EMERGENCY MEDICAL SERVICES**

*See Page 28 for Certificate Requirements*

**EMS 4: EMERGENCY MEDICAL TECHNICIAN TRAINING 7 Units**

*Prerequisite: EMS 13 or EMS 157 or equivalent*

*Lecture: 7 hours*

*Laboratory: 1 hour*

An intensive course to assist the student in developing didactic and manipulative skills to recognize and treat illness and injuries in the pre-hospital environment. The course meets State of California training guidelines and prepares students for state certification as Emergency Medical Technicians. (CSU)

**EMS 7: EMERGENCY MEDICAL TECHNICIAN REFRESHER 1.5 Units**

*Lecture: 1.5 hours*

Designed to update existing EMT certificates which are expiring. An intensive course to assist and refresh the student on the latest techniques and proper application of equipment, recognition of illness and injuries and the latest proper procedures in emergency care. Students will reacquire themselves with the equipment, systems and skills used in emergency medical situations. (CSU)

**EMS 11: PREPARAMEDIC TRAINING 4 Units**

*Prerequisite: Possession of a valid EMT-1 certificate or equivalent*

*Lecture: 3 hours*

*Laboratory: 3 hours*

Provides prerequisites needed for entry into a Paramedic Training program. An intensive course dealing with anatomy, physiology, pharmacology, and EKG interpretation, and their relationship in the pre-hospital environment. Current EMT certification is required. Two or more years of pre-hospital work experience is strongly recommended. A class entrance exam will be administered on the first evening of class. (CSU)

*May be repeated one time.*

**EMS 13: ADVANCED FIRST AID AND EMERGENCY CARE 3 Units**

*Lecture: 3 hours*

To develop functional capabilities of individuals who as a part of everyday experiences may be required to provide emergency first aid prior to care by qualified medical personnel. (CSU) (MJC HE 101)

*May be repeated three times.*

**EMS 20: BASIC CARDIOLOGY AND CARDIAC DYSRHYTHMIAS 3 Units**

*Lecture: 3 hours*

An intensive course that details basic cardiac anatomy and physiology, normal vs. abnormal cardiac function, electrocardiogram recognition of cardiac dysrhythmias, and the interventions, including pharmacologic therapy, pertaining to specific dysrhythmias. Designed for the health care professional and the pre-hospital care professional. Serves as an excellent ACLS review and/or prepares students for paramedic training program. Meets requirements for "Monitor Technician" at many health care facilities. (CSU) (MJC ALHE 380)

*May be repeated three times.*

**EMS 43: PARAMEDIC TRAINING I 11 Units**

*Prerequisite: EMS 11 or equivalent; or Btol 10, Btol 60, and EMS 20, or equivalent*

*Lecture: 9 hours*

*Laboratory: 7 hours*

Semester one of an intensive three semester program designed to assist the student in developing didactic and manipulative skills to recognize and treat illness and injuries in the prehospital environment. Focus is to provide the student with core knowledge and exposure to prehospital paramedic skills. This series of courses (EMS 43, 44 and 45) meets or exceeds all course requirements as outline in Title 22, Division 9, Chapter 4, Article 3 of the California Code of Regulations for Paramedic Training Programs and prepares students for state licensure as an Emergency Medical Technician-Paramedic. (CSU)



**EMS 44: PARAMEDIC TRAINING II 11 Units**

*Prerequisite: EMS 43 or equivalent*  
*Lecture: 7 hours*  
*Laboratory: 12 hours*

Semester two of an intensive three semester program designed to assist the student in developing didactic and manipulative skills to recognize and treat illness and injuries in the pre-hospital environment. This series of courses (EMS 43, 44 and 45) meets or exceeds all course requirements as outlined in Title 22, Division 9, Chapter 4, Article 3 of the California Code of Regulations for Paramedic Training Programs and prepares students for state licensure as an Emergency Medical Technician-Paramedic. (CSU)

**EMS 45: PARAMEDIC TRAINING III 9 Units**

*Prerequisite: EMS 43 and 44*  
*Laboratory: 27 hours*

Semester three of an intensive three semester program designed to assist the student in developing didactic and manipulative skills to recognize and treat illness and injuries in the prehospital environment. The course encompasses the practical application of knowledge and skills in the prehospital field environment under the direct oversight of a field training officer. The series of courses (EMS 43, 44 and 45) meets or exceeds all course requirements as outlined in Title 22, Division 9, Chapter 4, Article 3 of the California Code of Regulations for Paramedic Training Programs and prepares students for state licensure as an Emergency Medical Technician-Paramedic. (CSU)

**EMS 70: SPECIAL TOPICS IN EMS .5-4 Units**

*Lecture: .5-4 hours*  
*and/or*

*Laboratory: .5-3 hours*

Various topics in Emergency Medical Services. Emphasis will be placed on specialized courses to meet industry or governmental mandates. (CSU)

*May be repeated with different topics only.*  
*Field trips may be required.*

**EMS 97: WORK EXPERIENCE IN EMERGENCY MEDICAL SERVICE 1-4 Units**

*Prerequisite: Must be enrolled in at least seven (7) units including Work Experience.*

*75 hours paid employment equals 1 unit of credit*  
*60 hours unpaid employment equals 1 unit of credit*

Provides students an opportunity to experience supervised employment in EMS. The student's employment must be related to educational or occupational goals. (CSU\*)

*Offered for Credit/No Credit grading only*  
*May be repeated for no more than a total of 16 units of credit less any units earned in any other Work Experience course.*

*For students interested in working full time one semester and attending classes one semester on an alternate basis, see Wkexp 96, page 112.*

**EMS 110: AUTOMATED EXTERNAL DEFIBRILLATION & PROFESSIONAL RESCUER CPR .5 Unit**

*Lecture: .5 hour*

Course is designed for First Responder & Emergency Medical Technicians seeking initial certification or recertification for Automated External Defibrillation & Professional Rescuer CPR. This will provide or improve core knowledge and develop and improve psychomotor skills associated with the delivery of professional health care to the patient experiencing a life-threatening cardiac emergency. It will also provide professional rescuers with current cardiopulmonary arrest resuscitative techniques and AED treatment modalities. This course meets and/or exceeds the minimum standards of state and local EMS agencies, as well as the American Heart Association for Automated External Defibrillation Provider. Upon successful completion student shall receive American Heart Association Automated External Defibrillation Provider recognition. *May be repeated if information changes; due to state/local government regulations; as required for employment or to maintain employment.*

*Offered for Credit/No Credit grading only*

**EMS 153: CPR AND BASIC FIRST AID\* .5 Unit**

*Lecture: .5 hour*

A basic course for those who wish to learn cardio-pulmonary resuscitation (CPR) and basic first aid techniques, and for Emergency Services professionals who wish to maintain or acquire CPR and Basic First Aid certification. Successful course completion results in National Safety Council Certification.

*Offered for Credit/No Credit grading only*

*\*Credit may be earned for EMS 153 or H-HP 160, but not both.*

**EMS 157: FIRST RESPONDER AND CPR 3 Units**

*Lecture: 3 hours*

A basic course for emergency service workers (volunteer or professional) who may be responding to medical emergencies. Emphasis will be placed on situations unique in the rural setting. The course stresses continuity of care through the approach to the patients and prioritization of their injuries/illnesses where advanced life support response is delayed or unavailable. Meets or exceeds United States Department of Transportation National Standard Curriculum, and state and local government requirements. Course may be repeated to comply with updated requirements. (MJC FSCI 365)

*Offered for Credit/No Credit grading only*

**EMS 170: SPECIAL TOPICS IN EMS .5-4 Units**

*Lecture: .5-4 hours*

*And/or*

*Laboratory: .5-3 hours*

Various topics in Emergency Medical Services. Emphasis will be placed on specialized courses to meet industry or governmental mandates. (CSU)

*May be repeated with different topics only.*

*Field trips may be required.*

**ENGLISH**

(Note: Please see Schedule of Classes for English as a Second Language, English 305, a non-credit course)

**ENGL 1A: READING AND COMPOSITION: 3 Units**

**Beginning**  
 (CAN ENGL 2) (CAN ENGL SEQ A = ENGL 1A + ENGL 1B)

*Prerequisite: Engl 151, or placement through the assessment process, or equivalent*

*Lecture: 3 hours*

Development of college level reading and composition skills. Emphasis will be on applying techniques of critical analysis to reading, interpreting, writing, and conducting research. Writing emphasis will be on the expository essay, including the longer documented essay. Note: Students will complete a minimum of 8,000 words by the end of the semester if transferring to a UC. (UC/CSU) (MJC ENGL 101)

**ENGL 1B: READING AND COMPOSITION: 3 Units**

**Advanced**  
 (CAN ENGL 4) (CAN ENGL SEQ A = ENGL 1A + ENGL 1B)

*Prerequisite: Engl 1A or equivalent*

*Lecture: 3 hours*

Further development of reading and composition skills based on critical study of poetry, drama, and fiction. (UC/CSU) (MJC ENGL 102)

**ENGL 1C: CRITICAL REASONING AND WRITING 3 Units**

*Prerequisite: Engl 1A or equivalent*

*Lecture: 3 hours*

Designed to develop critical thinking, reading, and writing beyond the level taught in English 1A. Will focus on the development of logical reasoning, analysis, and argumentation in composition. (UC/CSU) (MJC ENGL 103)

**ENGL 10: CREATIVE WRITING 3 Units**

(CAN ENGL 6)

*Prerequisite: Engl 1A or equivalent*

*Lecture: 3 hours*

Instruction and practice in writing poetry, fiction drama, and non-fiction prose, including autobiography, essays, and articles. Students may choose to concentrate on one particular form. Analysis of contemporary works with respect to literary techniques. The class employs a workshop format. (UC/CSU) (MJC ENGL 106)  
*May be repeated two times.*

**ENGL 11: FILM APPRECIATION 3 Units**

*Prerequisite: Engl 1A or equivalent*

*Lecture: 2.5 hours*

*Laboratory: 1.5 hours*

Development of technical awareness and critical thinking in individual response to cinema and cinema into video. (UC/CSU) (MJC ENGL 161)

*May be repeated one time.*

**ENGL 17: AMERICAN LITERATURE 3 Units**

(CAN ENGL 14) (CAN ENGL SEQ C = ENGL 17 + ENGL 18)

*Prerequisite: Engl 1A or equivalent*

*Recommended for Success: Engl 1B*

*Lecture: 3 hours*

A study of American literature from its beginning to the late nineteenth century. Reading, analysis, and discussion of the major literary trends and authors of the time, including Emerson, Thoreau, Poe, Hawthorne, Melville, Whitman, and Dickinson. (UC/CSU) (MJC ENGL 135)

**ENGL 18: AMERICAN LITERATURE 3 Unit**

(CAN ENGL 16) (CAN ENGL SEQ C = ENGL 17 + ENGL 18)

*Prerequisite: Engl 1A or equivalent*

*Recommended for Success: Engl 1B*

*Lecture: 3 hours*

A study of American literature from the late nineteenth century to the present. Reading, analysis, and discussion of the major literary trends and authors of the time, including Twain, James, Crane, Frost, Eliot, and Faulkner as well as a diverse group of contemporary writers. (UC/CSU) (MJC ENGL 136)

**ENGL 46: SURVEY OF ENGLISH LITERATURE 3 Units**

(CAN ENGL 8) (CAN ENGL SEQ B = ENGL 46 + ENGL 47)

*Prerequisite: Engl 1A or equivalent*

*Recommended for Success: Engl 1B*

*Lecture: 3 hours*

English literature from the Anglo-Saxons through the 18th Century. (UC/CSU) (MJC ENGL 137)

**ENGL 47: SURVEY OF ENGLISH LITERATURE 3 Units**

(CAN ENGL 10) (CAN ENGL SEQ B = ENGL 46 + ENGL 47)

*Prerequisite: Engl 1A or equivalent*

*Recommended for Success: Engl 1B*

*Lecture: 3 hours*

English literature of the 19th and 20th Centuries. (UC/CSU) (MJC ENGL 138)

**ENGL 49: CALIFORNIA LITERATURE 3 Units**

*Prerequisite: Engl 1A or equivalent*

*Recommended for Success: Engl 1B*

*Lecture: 3 hours*

An overview of the literary heritage of California, from its early origins to Harte, Bierce, and Twain through the realism of Norris and London, the regionalism of Steinbeck, Saroyan, Jeffers to the naturalism of Muir. Also will include writings from the Carmel cadre, the San Francisco Beat writers, to contemporary writers including Stegner, Yamamoto, Soto, Haslam, Tan, Didion, Rose, Miles, and Valdez. The approach will emphasize the rich ethnic diversity that has contributed to our literary heritage. (UC/CSU)



**ENGL 50: INTRODUCTION TO SHAKESPEARE 3 Units**

*Prerequisite: Engl 1A or equivalent*  
*Recommended for Success: Engl 1B*  
*Lecture: 3 hours*

An introduction to the representative works by Shakespeare including the characteristics of the different genres-comedy, history, and tragedy, and a study of a number of the sonnets. In addition, students will study the literary, social, and historical backgrounds of Shakespeare's time as they affect the meaning of the works studied. (UC/CSU) (MJC ENGL 163)

**ENGL 95A: SERVICE LEARNING I IN ENGLISH 2 Units**

*Lecture: 1 hour*  
*Laboratory: 3 hours*

Service Learning Experience I, when paired with course curriculum, is designed to create an opportunity to understand the relationship between academic study and community service through both practical applications and critical reflection. Volunteerism and Service Learning will be examined from theory to practice. This course is designed to meet specific student interests. Consult the Service Learning coordinator for specific procedures. Students will be required to participate in a Service Learning experience for a minimum of 54 hours and attend 18 hours of lecture. (CSU)

**ENGL 95B: SERVICE LEARNING II IN ENGLISH 2 Units**

*Lecture: 1 hour*  
*Laboratory: 3 hours*

Continues the Service Learning Experience with a mentoring component in which Service Learning II students mentor Service Learning I students. (CSU)  
*May be repeated three times.*

**ENGL 151: PREPARATION FOR COLLEGE COMPOSITION 4 Units**

*Recommended for Success: Engl 250*  
*Lecture: 4 hours*

Developing writing skills. Students will implement writing process strategies in the production of 500-750 word essays. This course will emphasize techniques for developing descriptive, narrative, and expository essays, while demonstrating control over structural components of writing. Reading skills as they relate to writing will be developed in conjunction with writing assignments. Instruction will include using word processing for writing. Satisfactory completion of this course will prepare students for English 1A. Note: Concurrent enrollment in Writing Skills Workshop (Engl 249) will facilitate success in English 151. (MJC ENGL 50)  
*May be repeated one time.*

**ENGL 206: ENGLISH AS A SECOND LANGUAGE - ADVANCED 3 Units**

*Lecture: 3 hours*

This course will prepare the non-native speaker of English for regular college courses. It will involve reading, writing, listening and speaking with emphasis on reading various college-level materials and writing essays with additional preparation for success on the TOEFL.  
*May be repeated three times.*

**ENGL 249: WRITING SKILLS WORKSHOP 1 Unit**

*Co-requisite: Enrollment in Engl 151 or Engl 250*  
*Lecture: 1 hour*

Individual assistance for students enrolled in English 151 or English 250. Students will be assisted with prewriting, revision and proofreading strategies. The focus will be on encouraging students to identify their specific problems when completing writing assignments for English 151/250.

*Offered Credit/No Credit grading only.*  
*May be repeated 2 times.*

**ENGL 250: ENGLISH FUNDAMENTALS 3 Units**

*Lecture: 3 hours*

Fundamentals of writing process. Students will engage in the various stages of writing process. Emphasis will be on improving writing fluency and grammatical skills; developing sentence structure and proofreading strategies within the context of brief 250-500 word essays. Instruction will include using word processing for writing. (MJC ENGL 49)

**FIRE TECHNOLOGY**

See Page 28 for Certificate Requirements

**FIRE 1: FIRE PROTECTION ORGANIZATION 3 Units**

*Lecture: 3 hours*

Introduction to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; fire department as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics. (CSU) (MJC FSCI 301)

**FIRE 2: FIRE PREVENTION TECHNOLOGY 3 Units**

*Prerequisite: Fire 1 or equivalent*  
*Lecture: 3 hours*

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. (CSU) (MJC FSCI 302)

**FIRE 3: FIRE PROTECTION EQUIPMENT AND SYSTEMS 3 Units**

*Prerequisite: Fire 1 or equivalent*  
*Lecture: 3 hours*

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. (CSU) (MJC FSCI 303)

**FIRE 4: BUILDING CONSTRUCTION FOR FIRE PROTECTION 3 Units**

*Prerequisite: Fire 1 or equivalent*  
*Lecture: 3 hours*

This course is the study of the components of building construction that relate to fire safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, pre-planning fire operations, and operating at fires. The development and evolution of building and fire codes will be studied in relation to past fires in residential, commercial, and industrial occupancies. (CSU) (MJC FSCI 304)

**FIRE 5: FIRE BEHAVIOR AND COMBUSTION 3 Units**

*Prerequisite: Fire 1 or equivalent*  
*Lecture: 3 hours*

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. (CSU) (MJC FSCI 305)

**FIRE 7: WILDLAND FIRE CONTROL 3 Units**

*Prerequisite: Fire 1 or equivalent*  
*Lecture: 3 hours*

Covers factors affecting wildland fire prevention, fire behavior, and fire control techniques; the statewide wildland fire problem and protection system; pre-suppression, suppression, post-suppression activities of a protection organization; and the utilization of resources to complete the suppression organization activities using strategy and tactics and safety procedures effectively. (CSU) (MJC FSCI 337)

**FIRE 10: INTRODUCTION TO SEARCH THEORY\* 2 Units**

*Lecture: 2 hours*

An overview of current search theories as developed by the National Park Service and the National Association for Search and Rescue. National Association for Search and Rescue Certification available to the student. (CSU)

*May be repeated two times.*

*\*Credit may be earned for either Fire 10 or SAR 10, but not both.*

**FIRE 29A: DRIVER/OPERATOR TRAINING 1A 1 Unit**

*Prerequisite: Fire 101 or Firefighter 1 certificate or Volunteer Firefighter certification or equivalent*  
*Lecture: .5 hours*  
*Laboratory: 1.5 hours*

Designed to provide the student with information on driver techniques for emergency vehicles and techniques of basic inspection and maintenance for emergency vehicles, including actual driving exercises under simulated emergency conditions. (CSU)

**FIRE 29B: DRIVER/OPERATOR TRAINING 1B 1 Unit**

*Prerequisite: Fire 101 or Firefighter 1 certificate or Volunteer Firefighter certification or equivalent*  
*Lecture: .5 hours*  
*Laboratory: 1.5 hours*

Designed to provide the student with information and skills on Pump Techniques and Operations including basic inspection and maintenance. (CSU) (CC FIRE 29A AND 29B = MJC FSCI 364)  
*May be repeated two times.*

**FIRE 50: LOW ANGLE ROPE RESCUE\* 1.5 Units**

*Lecture: 1.5 hours*

Instruction in techniques used to evacuate injured or trapped people in less than vertical terrain settings. Topics include knots, anchor systems, and rescue of ambulatory and non-ambulatory persons. (CSU)

*This course meets certificate requirements from the California State Fire Marshals Office in Low Angle Rope Rescue.*

*Offered for Credit/No Credit grading only.*  
*May be repeated three times.*

*\*Credit may be earned for either Fire 50 or SAR 50, but not both.*

**FIRE 51: RAPPPELLING SAFETY/TOWER RESCUE FOR THE FIRE SERVICE\* 1 Unit**

*Lecture: 1 hour*

Designed to update rescue personnel in equipment and technical developments in rappelling. Emphasis on individual safety, rescue of the injured or trapped rappeller and safe management of the training tower and/or incident scene, review and discussion of documented rappelling accidents. (CSU)

*Offered for Credit/No Credit grading only.*  
*May be repeated three times.*

*\*Credit may be earned for either Fire 51 or SAR 51, but not both.*

**FIRE 56: EMERGENCY TRENCH SHORING\* 1 Unit**

*Lecture: 1 hour*

Pre-planning, size-up and management of the trench rescue. Hands-on experience in emergency shoring techniques. (CSU)

*This course meets or exceeds latest CAL-OSHA and California State Fire Training requirements in trench rescue procedures.*

*Offered for Credit/No Credit grading only.*  
*May be repeated two times.*

*\*Credit may be earned for either Fire 56 or SAR 56, but not both.*

**FIRE 58: RESCUE SYSTEMS I: FUNDAMENTALS OF HEAVY RESCUE\* 1.5 Units**

*Lecture: 1 hour*  
*Laboratory: 1.5 hours*

Instruction in techniques used to evaluate injured or trapped people in above and below ground settings. Topics include rope rescue; building collapse and shoring; lifting and moving heavy objects; and the use of fire service ladders as rescue tools. (CSU)

*This course meets or exceeds certificate requirements from the California State Fire Marshals Office and the Federal Emergency Management Agency in Rescue Systems I: Fundamentals of Heavy Rescue.*

*Offered for Credit/No Credit grading only.*  
*May be repeated three times.*

*\*Credit may be earned for either Fire 58 or SAR 58, but not both.*

**FIRE 59: RESCUE SYSTEMS I: INSTRUCTOR TRAINING\* 3 Units**

*Lecture: 3 hours*

Review and update of heavy duty rescue skills and techniques designed to prepare qualified personnel to teach those skills and techniques to others. (CSU)

*Offered for Credit/No Credit grading only.*  
*May be repeated three times.*

*\*Credit may be earned for either Fire 59 or SAR 59, but not both.*



**FIRE 70: SPECIAL TOPICS IN FIRE TECHNOLOGY .5-3 Units**

Lecture: .5-3 hours  
and/or

Laboratory: 1.5-3 hours

Various topics in Fire Technology will be covered to meet individual or agency needs. Emphasis on specialized development of skills and knowledge, district planning, development and implementation of training and fire ground evolutions. (CSU)

May be repeated with different topics only.

**FIRE 97: WORK EXPERIENCE IN FIRE TECHNOLOGY 1-4 Units**

Prerequisite: Must be enrolled in at least seven (7) units including Work Experience.

75 hours paid employment equals 1 unit of credit

60 hours unpaid employment equals 1 unit of credit

Provides students an opportunity to experience supervised employment in Fire Technology. The student's employment must be related to educational or occupational goals. (CSU\*)

Offered for Credit/No Credit grading only.

May be repeated for no more than a total of 16 units of credit less any units earned in any other Work Experience course.

For students interested in working full time one semester and attending classes one semester on an alternate basis, see Wkexp 96, page 112.

**FIRE 101: FIREFIGHTER I ACADEMY 15 Units**

Prerequisite: Fire 1 or equivalent

Lecture: 15 hours

Basic Firefighter Academy includes: firefighter safety, use and maintenance of tools and equipment, emergency scene operations, basic fire prevention and investigation. (Partial fulfillment of requirements for California State Board of Fire Services, "Firefighter I Certification.")

**FIRE 102: FIREFIGHTER I INTERNSHIP 4 Units**

Prerequisite: Fire 101 or equivalent

300 hours supervised employment equals 4 units of credit

Provides eligible Fire Technology students an opportunity to complete the requirements for the California Firefighter I certification through supervised employment in the fire service.

Offered for Credit/No Credit grading only.

May be repeated two times.

**FIRE 103: FIREFIGHTER ACADEMY II 7 Units**

Prerequisite: California Firefighter I certification

Lecture: 7 hours

Prepares firefighters to perform essential and advanced emergency scene operations with minimal supervision. Includes safety, rescue operations, use and maintenance of tools and equipment, fire prevention and investigation.

Field trips may be required.

May be repeated one time.

**FIRE 104: FIREFIGHTER II INTERNSHIP 4 Units**

Prerequisite: Fire 103 or equivalent

300 hours of supervised employment equals 4 units of credit.

Provides eligible Fire Technology students an opportunity to complete the requirements for the California Firefighter II certification through supervised employment in the fire service.

Offered for Credit/No Credit grading only.

May be repeated three times.

**FIRE 106: HAZARDOUS MATERIALS FIRST RESPONDER "OPERATIONAL" 1 Unit**

Prerequisite: Fire 1 or equivalent

Lecture: 1 hour

Meets requirements of CAL-OSHA for training of emergency responders to hazardous materials incidents. Includes awareness and recognition of potential hazards, and procedures to insure safety of emergency personnel, the public and the environment.

Offered for Credit/No Credit grading only.

**FIRE 108: CONFINED SPACE AWARENESS .5 Unit**

Prerequisite: Fire 101 or Volunteer Firefighter Certification or equivalent

Prepares students to safely conduct rescue operations in confined spaces. Meets the requirements of CAL-OSHA Title 8 for "Confined Space Awareness Level" training.

Field trips may be required.

Offered for Credit /No Credit grading only.

**FIRE 109: HAZARDOUS MATERIALS FIRST RESPONDER "OPERATIONAL" REFRESHER .5 Unit**

Prerequisite: Fire 106 or equivalent

Lecture: .5 hours

Review of safety issues and changes in placarding and labeling. Required annual update by CAL-OSHA.

Offered for Credit/No Credit grading only.

May be repeated three times.

**FIRE 155: VOLUNTEER FIREFIGHTING TRAINING 2.5 Units**

Lecture: 2 hours

Laboratory: 1.5 hours

Current concepts, techniques, skills and theories for volunteer firefighters.

Offered for Credit/No Credit grading only.

**FIRE 170: SPECIAL TOPICS IN FIRE TECHNOLOGY .5-3 Units**

Lecture: .5-3 hours

and/or

Laboratory: 1.5-3 hours

Various topics in Fire Technology will be covered to meet individual or agency needs. Emphasis on specialized development of skills and knowledge, district planning, development and implementation of training and fire ground evolutions.

May be repeated with different topics only.

**FOREIGN LANGUAGE**

(See Spanish)

**FORESTRY**

**FORES 1: INTRODUCTION TO PROFESSIONAL FORESTRY 3 Units**

Lecture: 3 hours

Survey of the major U.S. forest regions and significant forest history events. Forestry practices, wood utilization and applied techniques of private tree farm/woodlot management for long-term production of timber, fuel wood, Christmas trees and other resources. Forestry education, career opportunities, licensing and ethics. (CSU) (MJC NR 220)

Field trips are required.

**FORES 10: DENDROLOGY 3 Units**

Lecture: 2 hours

Laboratory: 3 hours

Silvicultural and botanical characteristics, identification, classification, range, and uses of native forest species of the United States; emphasis on plants of economic importance to forest practices in California and the western United States. (UC/CSU) (MJC NR 376)

Field trips will be required.

**FORESTRY TECHNOLOGY**

See Page 28 for Certificate Requirements

**FORTC 153: FOREST SURVEYING TECHNIQUES 3 Units**

Lecture: 2 hours

Laboratory: 3 hours

Use of basic forest surveying instruments. Application of hand and staff compass, topographic and engineer's chain, clinometer, abney, dumpy and auto level, E-Z arc slope reducer, redy mapper, plane table and alidade, engineer's transit, theodolite, electronic theodolite, electronic distance meter and total station. Field recording techniques, laboratory computations and map drafting.

Field trips will be required.

**FORTC 162: APPLIED FOREST INVENTORY AND MANAGEMENT 2 Units**

Lecture: 1 hour

Laboratory: 3 hours

Techniques of forest inventory including cruising, scaling, and evaluation; field tabulation and computation methods; location and inventory of a given forest property in the field including property corners and boundaries; inventory of timber and other natural resource uses of property.

Field trips are required.

**GEOGRAPHY**

**GEOGR 12: CULTURAL GEOGRAPHY 3 Units**  
(CAN GEOG 4)

Lecture: 3 hours

The study of humankind's relationship with the environment. The techniques and resources of cultural and physical geography, anthropology, environmental science, history, political science and sociology will be emphasized. (UC/CSU) (MJC GEOG 102)

**GEOGR 15: PHYSICAL GEOGRAPHY 3 Units**  
(CAN GEOG 2)

Lecture: 3 hours

An introduction to selected aspects of the earth's physical environment (landforms, weather, climate, soils, and vegetation) and the processes and conditions giving rise to their worldwide distribution. The study of the earth as the home of man. (UC/CSU) (MJC GEOG 101)

**GEOGR 18: WORLD REGIONAL GEOGRAPHY 3 Units**

Lecture: 3 hours

Introduction to the regional geography of the world. A regional study of the people, countries, land forms, climate, religions, languages, political and economic systems, and natural resources of the world. (UC/CSU) (MJC GEOG 110)

**GEOGR 58: GIS-ArcVIEW\* 1 Unit**

Lecture: 1 hour

Introduction to practical application of ArcView software; importation of GIS data, display, visualization, exploration, query, analysis, and production of hard-copy maps and reports. Students will be guided through a complete sequence of application fundamentals similar to what would normally be used in displaying, analyzing, and plotting a standard ArcView GIS application. (CSU)

Offered for Credit/No Credit grading only.  
\*Credit may be earned for either Geogr 58 or Cmpsc 58, but not both.

**GEOGR 59: GEOGRAPHIC INFORMATION AND GLOBAL POSITIONING SYSTEMS\* 1-3 Units**

Lecture: 1 - 3 hours

Introduction to basic GIS and GPS concepts and applications in the field of natural resources, earth sciences, and environmental systems. Students will learn to use Global Positioning System base stations and rover units, combined with Geographic Information System software to collect field data and produce maps for spatial analysis and decision-making purposes. The first six weeks will be spent learning ArcView software; the second six weeks will be spent learning to use Ashtech GPS units; and the last six weeks will be spent learning to design and carry out a research project merging GPS and GIS technologies. (CSU)

May be repeated with different topics only.

\*Credit may be earned for either Geogr 59 or Cmpsc 59, but not both.



**GEOGR 60: INTRODUCTION TO GIS 3 Units**

- ArcView\*  
Lecture: 3 hours

Introduction to basic GIS concepts which can support the various GIS software programs currently available. Students will be introduced to the ArcView software package as the main vehicle for learning GIS. GIS coverages and maps will be produced from several different data sources. Emphasis will be placed on planning the design of GIS coverages which will permit specific types of queries. (CSU) (MJC GEOG 160)

\*Credit may be earned for either Geogr 60 or Cmpsc 60, but not both.

**GEOGR 65: GIS APPLICATIONS\* 3 Units**

Recommended for Success: Geogr 60  
Lecture: 3 hours

Introduction to practical applications of GIS software, heads-up digitizing, conversion of data, building annotation coverages. Students will gain hands-on experience working on specific projects under supervision. Assignments will include compiling and submitting project reports. (CSU)

May be repeated two times.

\*Credit may be earned for either Geogr 65 or Cmpsc 65, but not both.

**GEOGR 70: INTRODUCTION TO RASTER-BASED GIS SYSTEMS\* 3 Units**

Lecture: 3 hours

The course will introduce students to the Geographic Resources Analysis Support System (GRASS), a powerful, UNIX-based public domain raster GIS system developed by the US Corps of Engineers. Fundamental GIS concepts will be discussed. Various functions of raster-based GIS systems will be demonstrated and contrasted to vector-based systems such as Arc-View. Students should have some familiarity with maps, UNIX, statistics and algebra. (CSU)

May be repeated two times.

\*Credit may be earned for either Geogr 70 or Cmpsc 70, but not both.

**GEOGR 75: GIS APPLICATIONS IN RESOURCE MANAGEMENT\* 3 Units**

Recommended for Success: Geogr 70  
Lecture: 3 hours

Application of GIS to resource management issues such as watershed analysis, ecosystem analysis, recreation planning, and fire planning. Emphasis on remote sensing data and image processing to derive GIS data. (CSU)

May be repeated two times.

\*Credit may be earned for either Geogr 75 or Cmpsc 75, but not both.

**GUIDANCE**

**GUIDE 1: CAREER/LIFE PLANNING 3 Units**

Recommended for Success: Engl 151  
Lecture: 3 hours

Designed to assist students develop and experience an organized and realistic approach to Career-Life Planning. Development of awareness and objectivity in areas of interests, skills, values, etc. Introduction to decision-making, career information, career trends, and social influences on Career-Life Planning. Includes administration of interest and personality inventories. (CSU)

**GUIDE 7: COLLEGE AND LIFE SUCCESS 3 Units**

Lecture: 3 hours

An introduction to the fundamental principles and practices for succeeding in the educational setting. Topics include learning styles, reading, memory, note-taking, test taking, and the use of the library and campus resources. A study of topics related to an understanding of the self. Topics include health, nutrition, exercise, stress management and time management. An introduction to principles and practices pertinent to a healthy adjustment to the social environment. Topics include a study of relationships, money management, critical thinking and creativity, cultural and ethnic diversity, disabilities and community resources. (CSU) (MJC GUIDE 110)

**GUIDE 10A: INTRODUCTION TO HELPING SKILLS 1.5 Units**

Lecture: 1.5 hours

An introduction to the skills basic to a helping relationship. Includes instruction in the concepts and principles, as well as experience in the use of specific skills. Designed for non-professional and para-professional helpers such as peer tutors, peer counselors, advisors, managers, supervisors etc. (CSU)

Offered for Credit/No Credit grading only.

**GUIDE 10B: INTERMEDIATE HELPING AND BASIC CONFLICT MANAGEMENT SKILLS 1.5 Units**

Prerequisite: Guide 10A or equivalent  
Lecture: 1.5 hours

Continued instruction in concepts, principles and skills basic to a helping relationship. Experience in the specific use of each skill. Includes an emphasis on both helping skills and introduction to the skills unique to the process of conflict resolution. Designed for non-professional and para-professional helpers, especially in informal settings, including, but not limited to: friend-friend, parent-child, teacher-student, supervisor-employee, worker-client, and peer counseling situations. (CSU)

Offered for Credit/No Credit grading only.

**GUIDE 25: JOB SEARCH AND INTERVIEWING STRATEGIES\* 1 Unit**

Lecture: 1 hour

Understanding the employment process and development of written and oral presentation skills necessary to conduct an efficient and effective job search. Topics include: the hiring process, employer perspectives, the hidden job market, networking, research, job search planning, making employer contacts and interviewing. Development of a master application, resume and letter of application. (CSU) (MJC GUIDE 112)

Offered for Credit/No Credit grading only.

\*Credit may be earned for either Busad 25 or Guide 25, but not both

**GUIDE 100: COLLEGE SURVIVAL 3 Units**

Lecture: 3 hours

Designed to familiarize the student with college procedures and personnel, community resources, and study techniques that can assist the student in successfully achieving an educational goal. Recommended for reentry students, probationary students, and students whose educational goals will be completed at Columbia College.

**GUIDE 101: OCCUPATIONAL EXPLORATION 1 Unit**

Lecture: 1 hour

An introduction to occupational exploration with an emphasis on Career Center resources, personal interests, values, and skills. Includes instruction in decision-making as it relates to the development of occupational educational plans. (MJC GUIDE 111)  
Offered for Credit/No Credit grading only.

**GUIDE 107: ORIENTATION TO COLLEGE .5-1 Unit**

Lecture: .5-1 hour

A course designed to prepare the student to meet the demands of college rigor. Especially beneficial to new students to Columbia College and students returning to college after a long absence, this course addresses policies and practices at Columbia College. (MJC GUIDE 110)

Offered for Credit/No Credit grading only.

**GUIDE 110: HOW TO TRANSFER SUCCESSFULLY .5 Unit**

Lecture: .5 hour

Introduction to the resources and planning process needed for a seamless transition from a community college to another institution of higher education. Recommended for students planning to transfer to either a public or private four-year college or university or another two-year college.

Offered for Credit/No Credit grading only.

**GUIDE 115: PRINCIPLES OF LEADERSHIP 1 Unit**

Lecture: 1 hour

Designed to assist students in gaining basic knowledge of leadership skills, to develop skills in principles and administration of parliamentary law; the co-curricular activity program; finances, including budgetary procedure; and group dynamics. (MJC SOCS 58)

Offered for Credit/No Credit grading only.

**HEALTH and HUMAN PERFORMANCE**

COLUMBIA COLLEGE HEALTH AND HUMAN PERFORMANCE ACTIVITY COURSES RECEIVE EQUIVALENT CREDIT AT MJC FOR PHYSICAL EDUCATION.

**H-HP 3: INTRODUCTION TO KINESIOLOGY 3 Units**

Prerequisite: Biol 10 or equivalent

Lecture: 3 hours

This course will provide the student with understanding of normal human movement with an introduction to common movement deviations as a result of pathological processes. (UC/CSU)

**H-HP 4: CARE AND PREVENTION OF ATHLETIC INJURIES 3 Units**

Recommended for Success: Biol 10

Lecture: 2.5 hours

Laboratory: 1.5 hours

This course will provide the student with an introduction to the basic theories of prevention, assessment, care, and rehabilitation of athletic injuries. (UC/CSU) (MJC PE 108)

May be repeated one time.

**H-HP 5: INTRODUCTION TO RECREATION AND LEISURE\* 3 Units**

Lecture: 3 hours

This course provides students a detailed overview of the history, developments, and current trends in leisure and recreation studies. It reflects recent social change and challenges facing recreation industries in the 21st Century including: population shifts, technology and marketing. It also addresses the history of the parks movement and tourism/sport segments. This course is of interest to students of Hospitality and Human Performance (Recreation related subjects). (CSU)

\*Credit may be earned for either H-HP 5 or HPMGT 10, but not both.

**H-HP 6A: LIFETIME FITNESS PROGRAM I 1-3 Units**

Lecture: .5-1.5 hours

Laboratory: 1.5-4.5 hours

Introduction to the fundamental principles and practices of scientific exercise conditioning, nutritional requirements, weight control techniques, coronary heart disease concepts, and considerations of preventive medicine. Basic exercise routine involves the circuit training system. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

**H-HP 6B: LIFETIME FITNESS PROGRAM II .5-2 Units**

Prerequisite: H-HP 6A or equivalent

Laboratory: 1.5-6 hours

A continuation of the exercise principles and practices employing the circuit training system presented in Lifetime Fitness I with emphasis on improving fitness component levels, compliance, motivation, and increased awareness of sound nutritional practices. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

May be repeated two times.

**H-HP 7: EXPANDING DYNAMICS OF FITNESS .5-2 Units**

Laboratory: 1.5-6 hours

Designed to acquaint students with a variety of nontraditional physical activities as a means to achieve personal fitness goals. Workouts may include, but are not limited to: stability ball training, yoga for flexible strength, functional training, backpacker's conditioning. Coursework will focus on the development/improvement of muscular strength and endurance, cardiorespiratory fitness, and flexibility within the framework of the specific activity. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

May be repeated three times.

**H-HP 8: AEROBIC EXERCISE .5-1.5 Units**

Laboratory: 1.5-4.5 hours

Designed to promote cardiovascular conditioning, muscular strength and endurance, and flexibility with emphasis on the fundamental principles of exercise as a component of health. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

May be repeated three times.

**H-HP 9: CIRCUIT CROSS-TRAINING .5-2 Units**

Activity: 1.5-6 hours

A comprehensive workout to achieve personal fitness goals through the use of cardiovascular and strength training systems. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

May be repeated three times.



**H-HP 10: ADAPTIVE PHYSICAL EDUCATION .5-2 Units***Activity: 1.5-6.5 hours*

Designed to offer individually prescribed fitness direction to the physically limited with emphasis on the improvements of cardiovascular, flexibility, and strength components. (UC\*/CSU)  
*May be repeated three times.*

**H-HP 11: PULMONARY REHABILITATION 1 Unit***Lecture: .5-1 hour**Laboratory: 2-4 hours*

Involves the education, evaluation, care, treatment, and management of breathing difficulties. Designed to help individuals with chronic lung disease such as asthma, emphysema, bronchitis, bronchiectasis, or other respiratory problems. Primary physician referral required. (CSU)

*May be repeated three times.***H-HP 13A: INTRODUCTION TO CARDIAC REHABILITATION PROGRAM 1 Unit***Lecture: .5-1 hour**Laboratory: 1.5-6 hours*

A secondary prevention program designed for patients with angina pectoris, healed myocardial infarctions, or post-cardiac surgical referrals whose functional capacity is relatively uncompromised. Primary physician referral required. (CSU)

*May be repeated three times.***H-HP 13B: CARDIAC REHABILITATION PROGRAM: Phase III 1 Unit***Laboratory: 3-6 hours*

Continuation of Cardiac Rehabilitation Program without lecture series. Primary physician referral required. (CSU)

*May be repeated three times.***H-HP 15A: INTRODUCTION TO CARDIAC FAMILY FITNESS 1 Unit***Lecture: .5-1 hour**Laboratory: 1.5-6 hours*

Designed to introduce the cardiac student's family to cardiovascular fitness principles and practices and to share in the modification of risk factors found necessary for the full rehabilitation of the cardiac student. Must be a member of enrolled cardiac student's family. (CSU)

*May be repeated three times.***H-HP 15B: CARDIAC FAMILY FITNESS 1 Unit***Laboratory: 3-6 hours*

A continuation of H-HP 15A with emphasis on developing a higher level of cardiovascular functional capacity and reducing the risk factors associated with coronary artery disease. Must be a member of enrolled cardiac student's family. (CSU)

*May be repeated three times.***H-HP 18: YOGA I FOR BETTER HEALTH .5-2 Units***Lecture: .5 hour**Activity: 1.5-6 hours*

This is a beginning Yoga class using postures, breathing and relaxation techniques to increase flexibility, strength, balance and coordination. (CSU)

*May be repeated three times.***H-HP 20: DANCE SURVEY 3 Units***Lecture: 2 hours**Laboratory: 3 hours*

Introduction to the fundamentals of dance movement, including ballet, jazz, contemporary, and folk. Participatory work will be supplemented with lectures on the history and development of each style along with videotapes of dance performances. (UC/CSU)

**H-HP 21: BALLET .5-1.5 Units***Activity: 1.5-4.5 hours*

Introduction to fundamental classical technique, including basic concepts, positions, and combinations designed to acquaint the student with ballet as an expressive art form while developing strength, flexibility, and coordination. (UC/CSU)

*May be repeated one time.***H-HP 23A: CONTEMPORARY DANCE I .5-1.5 Units***Activity: 1.5-4.5 hours*

Introduction to contemporary dance technique; designed to acquaint the student with the fundamentals of dance and creative movement exploration while developing strength, flexibility, and expressiveness. (UC/CSU)

*May be repeated one time.***H-HP 23B: CONTEMPORARY DANCE II .5-1.5 Units***Prerequisite: H-HP 23A or equivalent**Activity: 1.5-4.5 hours*

Contemporary dance technique at the intermediate level with emphasis on developing artistic competence, performance skills, and basic choreographic concepts. (UC/CSU)

*May be repeated one time.***H-HP 25A: JAZZ DANCE I .5-1.5 Units***Activity: 1.5-4.5 hours*

Introduction to the fundamentals of jazz dance; designed to acquaint the student with basic technique in a cultural and historical context while developing strength, flexibility, and stylistic awareness. (UC/CSU)

*May be repeated one time.***H-HP 25B: JAZZ DANCE II .5-1.5 Units***Prerequisite: H-HP 25A or equivalent**Activity: 1.5-4.5 hours*

Continuing work in jazz dance with emphasis on developing stylistic elements and performance techniques. Specific attention given to learning extended movement combinations and compositional forms indigenous to American jazz. (UC/CSU)

*May be repeated one time.***H-HP 27: CHOREOGRAPHY 3 Units***Lecture: 2 hours**Activity: 3 hours*

A comprehensive exploration of choreography fundamentals through a sequential progression of movement experiences designed to develop the creative potential and provide a fuller understanding of the creative process. (UC/CSU)

*May be repeated three times.***H-HP 28: DANCE PRODUCTION 2 Units***Recommended for Success: H-HP 23A or H-HP 25A or H-HP 27, or previous dance training**Activity: 6 hours*

Dance production for public performance; theory and practice in choreography, performance styles, and dance rehearsal combined with theatrical structure and technical staging designed for concert presentation. (UC/CSU)

*May be repeated three times.***H-HP 29: THEATRE PRODUCTION: Dance Emphasis 1-2 Units***Laboratory: 3-6 hours*

Directed activities in theatre production for public performance with a concentration in dance. (UC/CSU)

*May be repeated three times.***H-HP 32: BASKETBALL: Men's Rules .5-1.5 Units***Activity: 1.5-4.5 hours*

Instruction, practice, and participation in game play. Emphasis on rules, individual and team skills, and team strategy. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated three times.***H-HP 34: BASKETBALL: Advanced Theory and Practice 2 Units***Lecture: 1 hour**Activity: 3 hours*

Advanced concepts, strategy, and practice necessary in the playing and understanding of collegiate basketball. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated three times.***H-HP 38A: GOLF I .5-1.5 Units***Activity: 1.5-4.5 hours*

Instruction and practice in fundamentals. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

**H-HP 38B: GOLF II .5-1.5 Units***Prerequisite: H-HP 38A or equivalent**Activity: 1.5-4.5 hours*

Instruction and practice in skills, rules and strategy. (UC\*/CSU)

*May be repeated two times.***H-HP 39: INTRAMURAL ATHLETICS .5-1.5 Units***Activity: 1.5-4.5 hours*

Organized competition for school championships in a variety of sports. Fall - Volleyball, Basketball, Table Tennis. Spring - Basketball, Table Tennis, Paddle Ball, Tennis, Golf, and a variety of other activities. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated three times.***H-HP 40: RACQUET SPORTS .5-1.5 Units***Activity: 1.5-4.5 hours*

An introductory level course with instruction and participation in badminton, paddle tennis, and tennis. Each activity is taught for six weeks and provides the student with instruction in basic skills, rules, and strategies of each of the above activities. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated three times.***H-HP 41: FENCING: THE SPORT AND MARTIAL ART .5-1.5 Units***Activity: 1.5-4.5 hours*

An introduction to the sport of fencing; modern swordplay for women and men. Instruction in the skills, techniques, physical and mental conditioning in preparation for fencing. Overview of strategy and tournament play, rules and officiating. Emphasis on life-long health and fitness, as well as fencing-specific recreation and competition. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated three times.***H-HP 42: FENCING: II .5-2 Units***Prerequisite: H-HP 41**Activity: 1.5-6 hours*

Acquaints students with intermediate and advanced foot and hand technique in fencing, strategies and tactics for fencing competition, psycho-physical preparation for competition, ritualized fitness and individual training regimes. Workouts may include coordination warm-up and flexibility exercises, specific advanced footwork combinations, advanced handwork drills, competitive "bouting scenarios" and practice competitions. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated three times.***H-HP 43: INTRODUCTION TO SAILING 2 Units***Prerequisite: Certified ability to swim fifty yards or tread water for 5 minutes, verified by WSI/Lifeguard**Lecture: 1 hour**Activity: 3 hours*

The course introduces the student to the fundamentals of sailing through dockside/classroom lectures and hands-on experience in sailboats. Points of sail, basic terminology, tacking, jibing, theory and safety are stressed. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*Field trips may be required.**May be repeated three times.***H-HP 47A: SOCCER I .5-1.5 Units***Activity: 1.5-4.5 hours*

Instruction, practice, and participation in game play. Emphasis on rules, individual skills, and strategy in the field. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated three times.***H-HP 47B: SOCCER II .5-1.5 Units***Prerequisite: H-HP 47A or equivalent**Activity: 1.5-4.5 hours*

Instruction and practice in the advanced aspects of soccer. Emphasis on individual positioning and strategy of the game. Includes set plays and advanced skill builders. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated three times.*



**H-HP 48: CO-ED SOFTBALL .5-1.5 Units***Activity: 1.5-4.5 hours*

Discussion and practical application of rules, strategy, fielding, throwing, base running, team offense and defense in the sport of softball. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor. *May be repeated three times.*

**H-HP 50A: TENNIS I .5-1.5 Units***Activity: 1.5-4.5 hours*

Instruction and practice in fundamentals of Eastern grip tennis. Emphasis on development of sound ground strokes, serve, and volley. Includes rules, scoring, and game play in both singles and doubles tennis. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated one time.***H-HP 50B: TENNIS II .5-1.5 Units***Prerequisite: H-HP 50A or equivalent**Activity: 1.5-4.5 hours*

Instruction and practice in the advanced aspects of Eastern grip tennis. Emphasis on game play and development with individualized coaching and analysis for the more experienced player. Includes tactics and court coverage to encourage a more powerful game in both singles and doubles tennis. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated one time.***H-HP 53A: VOLLEYBALL I .5-1.5 Units***Activity: 1.5-4.5 hours*

Basic techniques with emphasis on offensive and defensive tactics of team play. Rules and intra-class competition included. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated one time.***H-HP 53B: VOLLEYBALL II .5-1.5 Units***Prerequisite: H-HP 53A or equivalent**Activity: 1.5-4.5 hours*

An intermediate level of skills and strategies for the experienced player; an introduction to power volleyball play. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated one time.***H-HP 56A: WEIGHT TRAINING I .5-1.5 Units***Activity: 1.5-4.5 hours*

Instruction in use of weights and body building equipment with emphasis upon individual program development. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated one time.***H-HP 56B: WEIGHT TRAINING II .5-1.5 Units***Prerequisite: H-HP 56A or equivalent**Activity: 1.5-4.5 hours*

Designed to help individuals accomplish a fine state of physical fitness through the use of "overload" equipment and progressive resistance exercises. Each person shall, with the counseling of the instructor, analyze particular needs and establish a program that will help accomplish these goals. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated one time.***H-HP 57: BODY SCULPTING .5-1.5 Units***Activity: 1.5-4.5 hours*

The active application of mechanical and anatomical principles designed to develop muscular strength and endurance using free weights, resistance bands, and toning exercises. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor. *May be repeated three times.*

**H-HP 58: ULTIMATE FRISBEE I 1 Unit***Activity: 3 hours*

This course is designed to enhance the student's skills and abilities in ultimate Frisbee. Emphasis will be placed on cardiovascular and muscular fitness. This course is progressive; the intensity increases as the individual improves abilities. (CSU)

*May be repeated three times.***H-HP 59: BEGINNING TAI CHI 1 Unit***Activity: 3 hours*

This is a beginning course in Tai Chi Chuan--Yang-style short form, 21 movements. Also included will be a history of Tai Chi and warm-up exercises.

*May be repeated three times.***H-HP 60: HEALTH AND FITNESS EDUCATION 3 Units***Lecture: 3 hours*

Personal and community health: an understanding of contemporary health issues and problems with an emphasis on personal fitness and adjustment. An informative material survey contributing to a person's mental, physical, and social well-being. (UC/CSU)

**H-HP 62: SAFETY AND FIRST AID EDUCATION 2 Units***Lecture: 2 hours*

Theory and skills involved in the immediate and temporary care given to the victims of accidents and sudden illnesses. Covers American Red Cross Standard First Aid with certificate available upon satisfactory completion of the course. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*May be repeated three times.***H-HP 65: STRESS MANAGEMENT 3 Units***Lecture: 3 hours*

Overview of the psychological, physiological, sociological and behavioral dynamics underlying the management of the human stress response. Also included are history of stress management, life-style choices, relaxation training (including biofeedback), and interpersonal communication techniques. (CSU)

**H-HP 82: VARSITY BASKETBALL (Men's Rules) 1 Unit***Co-requisite: Must be enrolled as a full-time student**Activity: 10 hours*

Preparation and training for intercollegiate varsity basketball competition. Participation in contests with other colleges will be scheduled. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*Field trips will be required.**May be repeated three times.***H-HP 84: VARSITY TENNIS (CO-ED) 2 Units***Co-requisite: Must be enrolled as a full-time student**Activity: 10 hours*

Preparation and training for intercollegiate varsity tennis competition. Participation in contests with other colleges will be scheduled. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*Field trips will be required.**May be repeated three times.***H-HP 86: VARSITY VOLLEYBALL (Women) 2 Units***Co-requisite: Must be enrolled as a full-time student**Activity: 10 hours*

Preparation and training for intercollegiate varsity volleyball competition. Participation in contests with other colleges will be scheduled. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*Field trips will be required.**May be repeated three times.***H-HP 88: VARSITY GOLF (CO-ED) 2 Units***Co-requisite: Must be enrolled as a full-time student**Activity: 10 hours*

Preparation and training for intercollegiate golf competition. (UC\*/CSU) (UC\*) Transfer credit limited. See a counselor.

*Field trips will be required.**May be repeated three times.***H-HP 160: CARDIOPULMONARY RESUSCITATION .5 Unit***Lecture: .5 hour*

Information necessary to develop the student's first aid knowledge, skills, and judgment to provide basic life support until the victim recovers or until advanced life support is available.

*Offered for Credit/No Credit grading only.**May be repeated three times.***HEALTH OCCUPATIONS****HL-OC 97: WORK EXPERIENCE IN HEALTH OCCUPATIONS 1-4 Units***Prerequisite: Must be enrolled in at least seven (7) units including Work Experience.**75 hours paid employment equals 1 unit of credit**60 hours unpaid employment equals 1 unit of credit*

Provides students an opportunity to experience supervised employment in Health Occupations. The student's employment must be related to educational or occupational goals. (CSU\*) (UC\*) Transfer credit limited. See a counselor.

*Offered for Credit/No Credit grading only.**May be repeated for no more than a total of 16 units of credit less any units earned in any other Work Experience course.**For students interested in working full time one semester and attending classes one semester on an alternate basis, see Wkexp 96, page 112.***HISTORY****HIST 11: HISTORY OF CALIFORNIA 3 Units***Lecture: 3 hours*

Survey of California history from pre-Colombian period to the present. Emphasis will include the Indians, Spaniards, Mexicans, and Anglo-Americans. Considerable attention will be devoted to California's influential role in national and world events. (UC/CSU) (MJC HIST 129)

**HIST 13: WORLD CIVILIZATIONS: to 1650 3 Units**  
(CAN HIST SEQ C = HIST 13 + HIST 14)*Lecture: 3 hours*

Survey of the history of the world from the Neolithic period to the middle of the seventeenth century. The course will use a cross-cultural comparative approach as it analyzes the origins, achievements and decline of civilizations in Asia, Africa and the Americas, as well as the Middle East and Western Europe. Emphasis on the application of major theories of history to various stages of world development. The position of women in society will be highlighted. (UC/CSU)

**HIST 14: WORLD CIVILIZATIONS: 1650 to Present 3 Units**  
(CAN HIST 16)  
(CAN HIST SEQ C = HIST 13 + HIST 14)*Lecture: 3 hours*

Survey of world history from the middle of the seventeenth century to the present time. The theme of revolution will be illustrated by the Industrial Revolution, the democratic revolutions of the eighteenth century, and the Communist revolutions of the twentieth century. Contemporary problems in Asia, Africa, Central and South America will be placed in historical context. The contributions of women in history will be a special topic of study. (UC/CSU)

**HIST 16: UNITED STATES: to 1877 3 Units**  
(CAN HIST 8)  
(CAN HIST SEQ B = HIST 16 + HIST 17)*Lecture: 3 hours*

Survey of history of the United States from the arrival of European settlers at the beginning of the 17th century to the end of Reconstruction. Important topics include Colonial life, the Revolutionary War, Constitutional Development, Westward Expansion, and the Civil War. Particular emphasis will be given the fate of American Indians, the nature and abolition of slavery, the early political organization of workers and the struggles of women for equal rights. (UC/CSU) (MJC HIST 101)

*(With Polsc 10 meets the California State requirement in United States History, Constitution and American Ideals.)*



**HIST 17: UNITED STATES: 1877 to Present 3 Units**  
(CAN HIST 10) (CAN HIST SEQ B = HIST 16 + HIST 17)

*Lecture: 3 hours*

Survey of the history of the United States from the end of Reconstruction to the present era. Course includes discussion of major foreign wars, Depression, Industrialization and Presidential power. Special attention will be given to the efforts of American Indians, Blacks, women, workers and the disabled to gain full recognition in law and practice. Problems facing post-industrial society will be highlighted. (UC/CSU) (MJC HIST 102)  
(With Polsc 10 meets the California State requirement in United States History, Constitution and American Ideals.)

**HIST 20: AFRICAN-AMERICAN HISTORY 3 Units**

*Lecture: 3 hours*

The history and development of African Americans and their contributions to American culture. Major topics include the African slave trade, slavery and the American Revolution, slave expansion, Civil War and Post-Emancipation America through the twentieth century. This course is designed to meet an ethnic studies requirement. (UC/CSU) (MJC HIST 154)

**HIST 21: WOMEN IN AMERICAN HISTORY 3 Units**

*Lecture: 3 hours*

Review and evaluate the roles and contributions of American women from the colonial period to the present, viewed within the context of the total American experience. The diversity of experience according to class and ethnicity will be emphasized, including the roles and experiences of Native American, African American, European, Latina, and Asian women in American history. (UC/CSU) (MJC HIST 116)

**HIST 49: THE MOTHER LODE 3 Units**

*Lecture: 3 hours*

History and lore of the Gold Rush country with emphasis on the Central Sierra communities. (CSU)

**HIST 55: THE AMERICAN FRONTIER 3 Units**

*Lecture: 3 hours*

Study of successive frontier zones and hostile environments in reshaping imported customs and habits into uniquely American characteristics. Emphasis will be on the 19th century. (UC/CSU) (MJC HIST 128)

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**HOSPITALITY MANAGEMENT**

See Pages 28 for Certificate Requirements

**HPMGT 97: WORK EXPERIENCE IN HOSPITALITY MANAGEMENT 1-4 Units**

*Prerequisite: Must be enrolled in at least seven (7) units including Work Experience.*

*75 hours paid employment equals 1 unit of credit  
60 hours unpaid employment equals 1 unit of credit*  
Provides students an opportunity to experience supervised employment in Hospitality Management. The student's employment must be related to educational or occupational goals. (CSU\*) (UC\*) Transfer credit limited. See a counselor.

*Offered for Credit/No Credit grading only.  
May be repeated for no more than a total of 16 units of credit less any units earned in any other Work Experience course. Two units of hotel work is required of hotel students.*

*For students interested in working full time one semester and attending classes one semester on an alternate basis, see Wkexp 96, page 112.*

**HPMGT 102: INTRODUCTION TO HOSPITALITY CAREERS AND HUMAN RELATIONS 1.5 Units**

*Lecture: 1.5 hours*

Introduction to the hospitality industry (comprising lodging, food and beverage services, and tourism) with focus on its career opportunities. Human relations management in the hospitality industry. Individual goal-setting and career planning are emphasized.

**HPMGT 104: HOSPITALITY LAWS AND REGULATIONS 2 Units**

*Lecture: 2 hours*

The study of legal issues relating to commercial food service and lodging operations—national, state and local in scope. Using both the case method and specific statutes, this class introduces students to general concepts including the types of law, the nature of agreements and the judicial system, as well as regulatory agencies and the particular laws they enforce in the hospitality field.

**HPMGT 112: FRONT OFFICE MANAGEMENT/ HOTEL CATERING 2 Units**

*Lecture: 2 hours*

Essential equipment, routines, and duties of the front desk clerk and relationship to other hotel departments; planning and preparation for private parties, dinners, meetings, and other special events that a hotel or restaurant may cater.

**HPMGT 114: INTRO TO MAINTENANCE AND HOUSEKEEPING 1.5 Units**

*Lecture: 1.5 hours*

Provides essential technical information on equipment and its servicing to establish a preventive maintenance routine. Provides broad scope of the housekeeping position, stressing employee responsibilities, record-keeping and use of equipment and materials.

**Food Services**

**HPMGT 120: SAFETY AND SANITATION 1 Unit**

*Lecture: 1 hour*

Sanitation and safety principles and practices for the food service professional. Provides ServSafe certification from the National Restaurant Association. (MJC CLART 311)  
*May be repeated one time.*

**HPMGT 122: RESTAURANT MATH 1.0 Unit**

*Lecture: 1.0 hour*

This is an arithmetic course for restaurant personnel. Students will be learning and applying basic math skills: addition, subtraction, multiplication, division, fractions, and percentages. There will be use of hand-held calculators, gauges, scales and devices for measuring weights and volumes. Currency will be handles and time, distance, and temperature will be measured. There will be an emphasis on recognition and use of geometric shapes.  
*May be repeated one time.*

**HPMGT 126: NUTRITION FOR CHEFS 1 Unit**

*Lecture: 1 hour*

Techniques of healthy cooking for the professional chef. The use of fresh ingredients, reduced fat and salt, particular cooking methods and tools plus shorter cooking times are brought together to provide satisfying dining with fewer calories, cholesterol and sodium while retaining more of food's nutritional value.  
*May be repeated one time.*

**HPMGT 128: KITCHEN MANAGEMENT 3 Units**

*Lecture: 3 hours*

Development of skills used to manage a commercial kitchen. Students will write menus and develop recipes, establish portion sizes and recipe costs, then price the menu items. Purchasing foods and supplies: comparative pricing among vendors, ordering, receiving, rotating and storing goods; taking and extending inventories. Students will learn to base production plans on sales forecasts, staff the kitchen accordingly, establish policies, standards and procedures regarding production, staff issues, facility/equipment maintenance and kitchen cleanliness. Basic concepts from the Uniform System of Accounts for Restaurants relating to kitchen operations.  
*May be repeated one time.*

**HPMGT 133A: INTRO TO COMMERCIAL FOOD PREPARATION 3 Units**

*Lecture: 1.5 hours*

*Laboratory: 5.0 hours*

This course is an initial culinary training for chefs. Topics covered include an introduction to safe, sanitary and efficient food production procedures, orientation and training on equipment, hand tools and foods, application of nutritional concepts. Food inventory management and traditional and computer-aided recipe writing/costing. Adopting to professional standards regarding uniforms, dependability, teamwork and quality performance will be emphasized.

**HPMGT 133B: COMMERCIAL FOOD PREPARATION 4 Units**

*Prerequisite: Hpmgt 133A or equivalent*

*Lecture: 1.5 hours*

*Laboratory: 7.5 hours*

Focus is on restaurant line cookery. Involves preparation of soups, salads, entrees, vegetables and starches. Menu cycle extends from family-style to classical cuisine, including buffets. Quality assurance, production efficiency and kitchen management are emphasized.

**HPMGT 134: COMMERCIAL BAKING: Beginning 2.5 Units**

*Co-requisite: Hpmgt 120 and Hpmgt 122*

*Lecture: 1 hour*

*Laboratory: 4.5 hours*

This course covers tools, terms and functions in preparation of baked goods: yeast breads and pastries, cookies, cakes and specialty items.

*Field trips may be required.*

**HPMGT 135: COMMERCIAL BAKING: Advanced 2 Units**

*Prerequisite: Hpmgt 134 or equivalent*

*Lecture: 2 hours*

Formulas used in commercial pastry shop, cake decoration, marzipan and chocolate work, paté à chou and specialty items. Student participation.

*Field trips may be required.*

**HPMGT 136: DINING ROOM SERVICE AND MANAGEMENT 2 Units**

*Co-requisite: Hpmgt 120 and Hpmgt 122 or equivalent*

*Lecture: 1 hour*

*Laboratory: 4 hours*

This course covers the operation of the Cellar Restaurant dining room and related service support stations. Topics covered include how to hire, train, motivate, schedule and assign jobs to a wait staff. Cost controls for labor and supplies will be covered as well as quality assurance and productivity standards.

*May be repeated one time.*

**HPMGT 140: CONTEMPORARY CUISINE 3.5 Units**

*Prerequisite: Hpmgt 133B or equivalent*

*Lecture: 1.5 hours*

*Laboratory: 6 hours*

Contemporary cuisine with focus on the preparation of seasonal ingredients used to develop the menus at the City Hotel. Cooking techniques and theory pertaining to contemporary cuisine will be emphasized and the student will begin to prepare for working on-line cooking stations in pastry, pantry, sauté, and grill.

**HPMGT 141: RESTAURANT DESSERTS 2 Units**

*Prerequisite: Hpmgt 134 or equivalent*

*Lecture: 1 hour*

*Laboratory: 3 hours*

The production and presentation of classical and contemporary restaurant desserts. A practical study of the restaurant pastry chef's special vendors, equipment, supplies, foods, processes and techniques used to produce a wide variety of desserts.

*May be repeated one time.*



**HPMGT 142: GARDE MANGER 1 Unit**

*Lecture: .5 hours*  
*Laboratory: 1.5 hours*  
 Study of cold food preparation which includes vegetable and fruit carvings, appetizers, hors d'oeuvres, canapés, sauces, salads, forcemeats, patés, tray presentations, table setups, room setups, and food show competitions.  
*Field trips may be required.*

**HPMGT 146: DINING ROOM SERVICE AND MANAGEMENT 2 Units**

*Prerequisite: Hpmgt 136 or equivalent*  
*Lecture: 1 hour*  
*Laboratory: 3 hours*  
 Advanced service techniques, table settings and dining room etiquette using the City Hotel as a laboratory. Emphasis is on elegance and showmanship, developing the fine points of service, understanding wine and food compatibility's, building sales, managing the dining room with reservation systems, proper staffing and hosting.  
*Field trips may be required.*

**HPMGT 147: BEVERAGE MANAGEMENT 2 Units**

*Lecture: 1.5 hours*  
*Laboratory: 1.5 hours*  
 Study of all aspects of beverage management including federal, state and local regulations, mixology, background and future of the beverage industry. Students under 21 will do special assignments rather than labs.  
*Field trips may be required.*

**HPMGT 148: INTRODUCTION TO WINES 2 Units**

*Lecture: 2 hours*  
 Study of wines from around the world with an emphasis on California. History and development of the wine industry, viticulture, wine making techniques, restaurant sales, and restaurant service. Wine evaluation, marketing, and wine's relationship to food and menus will be covered.  
*Field trips may be required.*

**HPMGT 152: RESTAURANT PLANNING 3 Units**

*Lecture: 3 hours*  
 Using a restaurant as a vehicle for attaining personal and professional goals. Conceiving, designing, staffing, equipping, stocking, marketing and opening the restaurant. Developing systems, policies and procedures for daily operations as well as relationships with professional service providers, vendors, lenders and regulatory agencies. This is an advanced class. Many topics will have been addressed and skills developed in earlier courses. This class unifies that knowledge and skill in the formation of a comprehensive restaurant plan.

**HPMGT 190: CULINARY ARTS INTERNSHIP 2 Units**

*Prerequisite: HPMGT 140*  
*Lecture: 1 hour*  
*Laboratory: 75 hours of discipline-specific work experience*  
 Supervised field experience in Culinary or Pastry Arts study and research related to job training. Current developments in Culinary Arts.  
*May be repeated 2 times.*  
*Offered for Credit/No Credit grading only.*

**Recreation Industry**

**HPMGT 10: INTRODUCTION TO RECREATION AND LEISURE 3 Units**

*Lecture: 3 hours*  
 This course provides students a detailed overview of the history, developments, and current trends in leisure and recreation studies. It reflects recent social change and challenges facing recreation industries in the 21st Century including: population shifts, technology and marketing. It also addresses the history of the parks movement and tourism/sport segments. This course is also of interest to students of Hospitality and Human Performance (Recreation related subjects).

*\*Credit may be earned for either H-HP 5 or HPMGT 10, but not both.*

**HPMGT 20: INTRODUCTION TO LEISURE TRAVEL AND TOURISM 3 Units**

*Recommended for success: Students should have experience with web navigation and e-mail usage.*  
*Lecture: 3 hours*  
 This course provides a survey of the scope and nature of leisure travel and tourism; its history, organization, problems, opportunities and future trends. Emphasis is placed on the interplay of consumer behavior, motivations and perceptions with the economic, environmental and social implications of tourism. Includes analysis of the links between the hotel, food, transportation, recreation and other tourism sectors. This course will be beneficial to the consumer of travel services as well as the travel/tourism professional. Students will need an e-mail account and access to the Internet.

**HPMGT 30: GEOGRAPHY OF TRAVEL AND TOURISM: WESTERN HEMISPHERE 3 Units**

*Lecture: 3 hours*  
 This course focuses on the geographic and cultural characteristics of key travel "destinations" within the Western Hemisphere (N. America, S. America, The Caribbean, the Pacific Island Nations, and Antarctica). The three "Ps." (place, protocols, and promotion) will assist students in an understanding of why consumers choose certain destinations, how they are "positioned," the key entry requirements/ports of entry, and how best to prepare for visits/business with each host culture. This is a geography-oriented course and emphasizes location/map/"identification."

**HPMGT 162: INTRO TO TOURISM MARKETING, SALES AND CUSTOMER SERVICE 3 Units**

*Lecture: 3 hours*  
 This course will emphasize the sales and promotion of the services that the tourism/hospitality industries offer guests. The development of business through personal selling, media, advertising, and publicity are covered. Quality customer service will be addressed through the practice of responsive telephone manners and problem-solving techniques.

**HPMGT 164: TOURISM PLANNING AND IMPACTS 3 Units**

*Lecture: 3 hours*  
 This course provides an introduction to the relationship between tourism and "sustainable" development. Consideration is given to planning, implementation and management models within both international tourism and U.S. park "gateway" communities. It offers a special emphasis on the assessment of tourism impacts (economic, social, and environmental) in determining the costs/benefits of tourism. Mediation strategies will be addressed, as well as cases of successful "sustainable tourism" development.

**HPMGT 168: DEVELOPING AN HOSPITALITY/ TOURISM/RECREATION CAREER PATH AND PORTFOLIO 2 Units**

*Lecture: 1 hour*  
*Laboratory: 3 hours*  
 This course prepares students to consider opportunities available in the "H.T.R. (Hospitality/Tourism/Recreation) Mega-Profession," and begin a career planning process. Emphasis is given to the development of an introductory job skills "Portfolio" utilizing ten computer-generated template documents. Portfolios allow a more organized preparation for internship/job interviews and scholarship/school applications. Students from all backgrounds may benefit from this class.

**HUMANITIES**

**HUMAN 1: OLD WORLD CULTURE 3 Units**

*Lecture: 3 hours*  
 An introductory survey of influences on Western culture, historically structured from classical Greece to the Renaissance, presenting enduring works of art, drama, literature, music, and philosophy. (UC/CSU)

**HUMAN 2: MODERN CULTURE 3 Units**

*Lecture: 3 hours*  
 An introductory survey of humanistic culture, historically structured from the enlightenment to the present scene, presenting enduring works of art, drama, literature, music, and philosophy. (UC/CSU) (MJC HUMAN 106)

**HUMAN 3: WORLD CULTURE 3 Units**

*Lecture: 3 hours*  
 A study of selected works of literature, art, music, film, religion, philosophy, theatre and other forms of expression, particularly emphasizing the non-Western world. The works will be studied in their historical and cultural contexts. Specific works will vary from time to time, depending upon the interests and needs of students and the instructor. (UC/CSU) (MJC HUMAN 110)

**HUMAN 4: WORLD RELIGIONS AND SPIRITUALITY\* 3 Units**

*Lecture: 3 hours*  
 Study of the development of religious consciousness, including the earliest belief systems in the world, the major "living religions" today, tribal religions, "new age" religion and spirituality, and an examination of the meaning of the religious experience. (UC/CSU) (MJC PHILO 115)  
*Field trips may be required.*  
*\*Credit may be earned for either Human 4 or Philo 4, but not both.*

**INDEPENDENT STUDY**

Independent Study courses are intended to give students an opportunity to independently research specialized areas not available as regular course offerings of the college. They are designed to meet specific student interests and may be made available in any subject matter area. Consult your advisor for specific procedures. (See page 22 for conditions, limitations.) These courses may transfer as electives or other credit as authorized by the transfer school. For UC, student is responsible for pre-authorization from UC department chair and Admissions Office.

**INTERDISCIPLINARY STUDIES**

**INDIS 1: UNITY OF HUMAN KNOWLEDGE 3 Units**

*Lecture: 3 hours*  
 The study of various modern "knowledge systems" (e.g., biology, history, physics, sociology, English, religion) with a focus on the fundamental modes humans use to arrive at knowledge within each system. Solutions to selected human problems (e.g., environmental degradation, war, world hunger) will be attempted using knowledge and methods from the various knowledge systems. (UC/CSU)

**INDIS 10: INTRODUCTION TO EDUCATION: PRACTICUM IN TEACHING 3 Units**

(CAN SOCS 109)  
*Recommended for Success: Engl 151*  
*Lecture: 3 hours*  
 Orientation to the teaching profession. Designed for prospective elementary, secondary, special or alternative education teachers, but open to all students. Classroom experience will include 15 weeks of 2 hours per week tutoring students in content area reading in area schools. Students will receive training for tutoring, share experiences, and receive support from faculty and peers. (CSU) (MJC SOCS 109)

**INDIS 12: INTRODUCTION TO EDUCATION: INTERMEDIATE FIELD EXPERIENCE 3 Units**

(CAN SOCS 110)  
*Recommended for Success: Engl 151 and Indts 10*  
*Lecture: 3 hours*  
 Orientation to the teaching profession. Designed for prospective elementary, secondary, special or alternative education teachers, but open to all students. Classroom experience will include 15 weeks of 2 hours per week of observation in area classrooms as a required part of preparation for teaching careers. Students will be guided by faculty and practicing teachers from area schools. Observations will be analyzed and discussed with attention to teaching styles and classroom management techniques. (CSU)



**INDIS 14: BASIC STRATEGIES TO IMPROVE CONTENT AREA READING 1 Unit**

*Recommended for Success: Engl 151*

*Lecture: 1 hour*

*Laboratory: 1 hour*

Strategies for improvement of student reading comprehension in a variety of content areas in K-12 schools. Includes both elementary and secondary attention to textbook reading in mathematics, science, social science and any classwork or course that requires non-fiction reading for information through print and/or electronic methods. (CSU)

*Offered for Credit/No Credit Grading Only.*

**INDIS 15: ADVANCED STRATEGIES TO IMPROVE CONTENT AREA READING 1 Unit**

*Recommended for Success: Indis 14*

*Lecture: 1 hour*

Implementation of advanced strategies for improvement of student reading comprehension in a variety of content areas in K-12 schools. Includes both elementary and secondary attention to textbook reading in mathematics, science, social science and any classwork or course that requires non-fiction reading for information through print and/or electronic methods. Designed for currently employed K-12 teachers. Course experience will also include ten hours of supervision and guidance for tutors in K-12 content area reading in participant's classroom. (CSU)

*Offered for Credit/No Credit Grading Only.*

**JOURNALISM**

**JRNAL 1: INTRODUCTION TO JOURNALISM 3 Units**

(CAN JOUR 2)

*Lecture: 2 hours*

*Laboratory: 3 hours*

This course will cover the basic techniques of newspaper writing and reporting, including the theory and practice of hard news, features, profiles, columns, interviewing. (CSU) (MJC JRNAL 100)

**JRNAL 10: NEWSPAPER PRODUCTION 1-2 Units**

*Laboratory: 3-6 hours*

Production of the campus newspaper, including writing, editing, advertising sales and layout, page design and paste-up preparation for printing. (CSU) (MJC JRNAL 120A AND 120B)

*May be repeated three times.*

**LIBRARY**

**LIBR 1: INTRODUCTION TO LIBRARY & INFORMATION RESOURCES 1 Unit**

*Lecture: 1 hour*

This course is an introduction to the use of electronic and print resources, including developing effective search strategies and evaluating information sources. Emphasis is on library on-line catalogs, on-line periodical database, print and electronic reference sources, and Internet resources. (UC/CSU)

*Offered for Credit/No Credit grading only.*

**MATHEMATICS**

**MATH 2: ELEMENTS OF STATISTICS 3 Units**

(CAN STAT 2)

*Prerequisite: Math 104, or placement through the assessment process, or equivalent*

*Lecture: 4 hours*

or

*Lecture: 3 hours*

*Laboratory: 2 hours*

Statistical concepts of probability, analysis and significance of measurements, measures of central tendency, correlation, variation, distributions, and reliability and validity of tests. (UC/CSU) (MJC MATH 134)

**MATH 4A: MATHEMATICS FOR ELEMENTARY TEACHERS I 4 Units**

*Prerequisite: Math 104, or placement through the assessment process, or equivalent*

*Lecture: 4 hours*

Structure of arithmetic for prospective elementary school teachers. The definitions, operations, and properties of sets, counting numbers, integers, rational and irrational numbers; numeration systems; number theory, logic. (UC/CSU)

*Field trips may be required.*

**MATH 4B: MATHEMATICS FOR ELEMENTARY TEACHERS II 4 Units**

*Prerequisite: Math 4A or equivalent*

*Recommended for Success: High School Geometry*

*Lecture: 4 hours*

Elementary probability, statistics and geometry for prospective elementary school teachers. Includes Euclidean geometry, measurement, and analytic geometry. (UC/CSU)

*Field trips may be required.*

**MATH 6: MATHEMATICS FOR LIBERAL ARTS STUDENTS 3 Units**

(CAN MATH 2)

*Prerequisite: Math 104, or placement through the assessment process, or equivalent*

*Lecture: 3 hours*

A survey of important mathematical ideas with insight into their historical development. Topics may include sets and logic, number theory, functions and graphs, geometric ideas, probability and statistics. (UC/CSU) (MJC MATH 101)

**MATH 8: TRIGONOMETRY 3 Units**

*Prerequisite: Math 104, or placement through the assessment process, or equivalent*

*Lecture: 3 hours*

Mathematics of angles, triangles, trigonometric functions, circular functions, trigonometric identities, graphs, and logarithms. (CSU)

**MATH 10: COLLEGE ALGEBRA 3 Units**

*Prerequisite: Math 104, or placement through the assessment process, or equivalent*

*Lecture: 3 hours*

Extension of algebraic concepts; includes quadratic equations, inequalities, systems of equations, complex numbers, matrices, determinants, and polynomial, exponential, and logarithmic functions. (UC/CSU) (MJC MATH 121)

**MATH 12: FINITE MATHEMATICS 3 Units**

(CAN MATH 12)

*Prerequisite: Math 104, or placement through the assessment process, or equivalent*

*Lecture: 3 hours*

Introduction to mathematical modeling, linear systems of equations and inequalities (linear programming) sets, combinatorics, probability, statistics, and the mathematics of finance. (UC/CSU) (MJC MATH 130)

**MATH 16: PRECALCULUS 4 Units**

(CAN MATH 16)

*Prerequisite: Math 8 or equivalent*

*Lecture: 5 hours*

Topics from Algebra, Trigonometry, and Analytic Geometry are studied in preparation for Calculus. Functions and their graphs will be particularly emphasized. (UC/CSU) (MJC MATH 122)

**MATH 18A: CALCULUS I: DIFFERENTIAL CALCULUS 4 Units**

(CAN MATH 18)

(CAN MATH SEQ B = MATH 18A + MATH 18B)

(CAN MATH SEQ C = MATH 18A + MATH 18B + MATH 18C)

*Prerequisite: Math 16, or Math 8 and Math 10, or placement through the assessment process, or equivalent*

*Lecture: 5 hours*

Numeric, graphic and algebraic exploration of the rate of change of a function, including trigonometric, exponential and logarithmic functions. Topics include families of functions, the concepts of limits, continuity, and the derivative, derivative formulas, implicit differentiation, applications of derivatives, Newton's method, and an introduction to concepts and applications of the definite integral. (UC/CSU) (MJC MATH 171)

**MATH 18B: CALCULUS II: INTEGRAL CALCULUS 4 Units**

(CAN MATH 20)

(CAN MATH SEQ B = MATH 18A + MATH 18B)

(CAN MATH SEQ C = MATH 18A + MATH 18B + MATH 18C)

*Prerequisite: Math 18A or equivalent*

*Lecture: 5 hours*

Evaluation and application of definite integrals. Topics include the fundamental theorem of calculus, techniques of integration, numerical methods, differential equations, Taylor series, areas defined by polar curves, and applications to geometry, physics, probability, and economics. (UC/CSU) (MJC MATH 172)

**MATH 18C: CALCULUS III: MULTIVARIABLE CALCULUS 4 Units**

(CAN MATH 22)

(CAN MATH SEQ B = MATH 18A + MATH 18B)

(CAN MATH SEQ C = MATH 18A + MATH 18B + MATH 18C)

*Prerequisite: Math 18B or equivalent*

*Lecture: 5 hours*

Vectors and solid analytic geometry, vector-valued functions, partial differentiation, multiple integrals, vector fields, and topics in vector calculus. (UC/CSU) (MJC MATH 173)

**MATH 100A: ALGEBRA I: FUNDAMENTALS 3 Units**

First Half

*Prerequisite: Math 202 or placement through the assessment process, or equivalent*

*Lecture: 3 hours*

This course is equivalent to the first half of Math 101, allowing the student more study time for the course topics. Completion of both Math 100A and Math 100B is equivalent to completion of Math 101. (MJC MATH 71)

**MATH 100B: ALGEBRA I: FUNDAMENTALS 3 Units**

Second Half

*Prerequisite: Math 100A or equivalent*

*Lecture: 3 hours*

This course is equivalent to the second half of Math 101, allowing the student more study time for the course topics. Completion of both Math 100A and Math 100B is equivalent to completion of Math 101. (MJC MATH 72)

**MATH 101: ALGEBRA I: FUNDAMENTALS 5 Units**

*Prerequisite: Math 202 or placement through the assessment process, or equivalent*

*Lecture: 5 hours*

or

*Lecture: 4.5 hours*

*Laboratory: 1.5 hours*

Introduction to algebraic structure; techniques to simplify, evaluate, and solve algebraic problems; and applications of algebra in a variety of contexts. (MJC MATH 70)

**MATH 104: ALGEBRA II: MODELING 5 Units**

*Prerequisite: Math 100B, Math 101, or placement through the assessment process, or equivalent*

*Lecture: 5 hours*

or

*Lecture: 4.5 hours*

*Laboratory: 1.5 hours*

A study of mathematical modeling with linear, absolute value, quadratic, exponential and logarithmic functions through verbal, numerical, algebraic and graphical representations. Other topics include systems of linear and nonlinear equations, linear and nonlinear inequalities and rational exponents. The use of graphing calculators is required. This course is prerequisite to undergraduate transfer general education mathematics courses.

**MATH 165: REVIEW ALGEBRA 3 Units**

*Prerequisite: Math 101, or placement through the assessment process, or equivalent*

*Lecture: 3 hours*

Designed for the student who has successfully completed a course in beginning algebra and wants to review introduction to algebraic structure; techniques to simplify, evaluate, and solve algebraic problems; and applications of algebra in a variety of contexts.

*May be repeated one time.*

*Drama 18, but not both.*



**MATH 201: MATH CONCEPTS: AN INTERACTIVE APPROACH 3 Units**

*Lecture: 4 hours*  
 Concept topics include patterns and symbolic representation, estimation, visual models for operations, fractions, decimals, percents, perimeter, area, volume, mean, mode, median, ratio, proportion, prime factoring, theoretical and empirical probabilities and student skills. This course is taught in a visual and computational way and is designed to help the student build a meaningful, internal, intuitive mathematical framework. It includes the "why" behind computation.

**MATH 202: INTERACTIVE ALGEBRA PREPARATION 3 Units**

*Lecture: 4 hours*  
 This course is designed for students who want to approach math from a "What's it for? And why does it work?" point of view. Students investigate and experience real mathematics relevant to their lives. Students will experiment, analyze data, develop conjectures, and ripen intuition and skills in order to broaden their picture of mathematics and prepare for algebra. As students examine the real world of applications, they will develop and enhance the math strands of problem solving, reasoning, communication, and making connections. Topics include analyzing data, exponents, estimation, order of operations, signed numbers, expressions, linear equation of the form  $ax+b=c$ , symmetry, tessellations, transformations, patterns, ratio, proportion, similarity, scaling, right triangle trigonometry (3 basic functions), probability, and linear functions to describe change.

**MUSIC**

**Repeat Limitations on Music Courses**

The following limitations apply to *all* Music activity classes. Each activity is limited to a maximum of four enrollments, regardless of the skill level of the individual courses. For example, a student may enroll (a) in beginning piano four times or (b) twice in beginning piano and twice in intermediate piano. In either of these cases, the student cannot enroll in any additional piano courses because the maximum of four piano courses has been met.

**MUSIC 1: MUSIC FUNDAMENTALS 3 Units**

*Lecture: 3 hours*  
 Introduction to traditional musical notation, key signatures, scales, intervals and chords, sight singing and ear training. (UC\*/CSU) (MJC MUSIC 100) (UC\*) Transfer credit limited. See a counselor.

**MUSIC 2: INTRODUCTION TO MUSIC 3 Units**

*Lecture: 3 hours*  
 Survey of the many fields within the discipline of music, including a brief overview of fundamentals, music history, the voice, musical instruments, the science of acoustics, rock, jazz, and current styles, psychology of music, and analytical listening. Attendance at selected local concerts is required. (UC/CSU)

**MUSIC 4A: ELEMENTARY MUSICIANSHIP 2 Units**

*Lecture: 2 hours*  
 Basic course for developing musical skills. Teaches sight singing, ear training, melodic dictation, and basic keyboard skills. (UC/CSU) *May be repeated one time.*

**MUSIC 4B: ELEMENTARY MUSICIANSHIP 2 Units**

*Prerequisite: Music 4A or equivalent*  
*Lecture: 2 hours*  
 Continuation of Music 4A to develop skills in sight singing, melodic and rhythmic dictation, and aural analysis of harmonic materials, and basic keyboard skills. (UC/CSU) *May be repeated one time.*

**MUSIC 5A: INTERMEDIATE MUSICIANSHIP 2 Units**

*Prerequisite: Music 4B or equivalent*  
*Lecture: 2 hours*  
 Continuation of Music 4B, including development of individual proficiency in sight singing, dictation, aural and keyboard skills. (UC/CSU) *May be repeated one time.*

**MUSIC 5B: INTERMEDIATE MUSICIANSHIP 2 Units**

*Prerequisite: Music 5A or equivalent*  
*Lecture: 2 hours*  
 Continuation of Music 5A, including sight singing, melodic and rhythmic dictation, and aural analysis of harmonic materials and basic keyboard skills. (UC/CSU) *May be repeated one time.*

**MUSIC 10: SURVEY OF MUSIC HISTORY AND LITERATURE: Ancient to 1750 3 Units**

*Lecture: 3 hours*  
 A survey of elements of style, major composers, and masterpieces of music from the Greek era through Medieval, Renaissance, Baroque, and Early Classic periods; survey from 1000 BC through 1750 AD. Includes the music of Palestrina, Bach, and Handel. (UC/CSU) (MJC MUSIC 112)

**MUSIC 11: SURVEY OF MUSIC HISTORY AND LITERATURE: 1750 to Present 3 Units**

*Lecture: 3 hours*  
 A survey of elements of style, major composers, and masterpieces of music during the Classic, Romantic, and 20th Century periods from 1750 to the present. Includes music of Mozart, Beethoven, Wagner, Debussy, Schoenberg, and Copland. (UC/CSU) (MJC MUSIC 113)

**MUSIC 12: SURVEY OF JAZZ AND POPULAR MUSIC 3 Units**

*Lecture: 3 hours*  
 An introduction to jazz style and history and important trends in 20th century popular music. (UC/CSU)

**MUSIC 20A: ELEMENTARY MUSIC THEORY 3 Units**

*Recommended for Success: Concurrent enrollment in Music 4A*  
*Lecture: 3 hours*  
 Analysis of the essentials for understanding and writing music. Included are rhythm, scales, intervals, chords, notation, melody writing; study of diatonic 4 part harmony, figured bass, chord progressions, and harmonic motion. (UC\*/CSU) Transfer credit limited. See a counselor. *May be repeated one time.*

**MUSIC 20B: ELEMENTARY MUSIC THEORY 3 Units**

*Prerequisite: Music 20A or equivalent*  
*Lecture: 3 hours*  
 Continuing study in harmony and analysis. Included are secondary dominants, modulation, altered chords, nonharmonic notes, and extended chords. (UC\*/CSU) Transfer credit limited. See a counselor. *May be repeated one time.*

**MUSIC 21A: INTERMEDIATE MUSIC THEORY 3 Units**

*Prerequisite: Music 20B or equivalent*  
*Lecture: 3 hours*  
 A continuation of the study of the basic structural elements of music such as melody, rhythm, harmony and form with an emphasis on the organization of these elements; also includes a study of chromaticism, chromatic alterations, and complex tertian structures. (UC\*/CSU) *May be repeated one time.*

**MUSIC 21B: INTERMEDIATE MUSIC THEORY 3 Units**

*Prerequisite: Music 21A or equivalent*  
*Lecture: 3 hours*  
 Continued development of analytical and compositional techniques; study of modal and tonal counterpoint; introduction to Impressionism and to 20th century concepts of melody, harmony, and form. (UC\*/CSU) *May be repeated one time.*

**MUSIC 31A: ELEMENTARY PIANO 1.5 Units**

*Lecture: 1 hour*  
*Activity: 2 hours*  
 An introduction to the skill of piano playing based on music reading; fundamentals of rhythm, notation, and technique. Basic theory will include knowledge and application of musical terms, scales, key signatures, and chords. (UC/CSU)

**MUSIC 31B: ELEMENTARY PIANO 1.5 Units**

*Prerequisite: Music 31A or equivalent*  
*Lecture: 1 hour*  
*Activity: 2 hours*  
 Continuation of the fundamentals of piano performance with emphasis given to the essentials of music reading. Theory will include the presentation of scales and keys, both major and minor; review and application of chords and inversions, and an introduction to improvisation. Piano literature will include both classical and popular compositions as well as exercises and technical studies. (UC/CSU)

**MUSIC 36: ELEMENTARY VOICE 1.5 Units**

*Lecture: 1 hour*  
*Activity: 2 hours*  
 Large group instruction in singing for those with little or no vocal solo training. Includes basic singing techniques and songs for improving pitch, building range, endurance, tone, and breath control. (UC/CSU)

**MUSIC 37: ADVANCED ELEMENTARY VOICE 1.5 Units**

*Lecture: 1 hour*  
*Activity: 2 hours*  
 Large group instruction in singing for those with one semester of private or solo class voice. Includes reinforcement of basic singing techniques for building range, endurance, tone, and breath capacity as taught in Music 36. Music includes folk/traditional as well as English and Italian art song. (UC/CSU) (CC MUSIC 37 OR 38 = MJC MUSIC 132)

**MUSIC 38: INTERMEDIATE VOICE 1.5 Units**

*Lecture: 1 hour*  
*Activity: 2 hours*  
 Individual and small group instruction in the refinement of vocal technique for people with two semesters of class voice. Includes continued development of tone, endurance, and flexibility with an emphasis on solo public performance with traditional and art song literature. (UC/CSU) (CC MUSIC 37 OR 38 = MJC MUSIC 132)

**MUSIC 39: ADVANCED INTERMEDIATE VOICE 1.5 Units**

*Lecture: 1 hour*  
*Activity: 2 hours*  
 Individual and small group instruction in the development of vocal technique for people with three semesters of class voice. Includes continued development of expression and increased emphasis on public performance. (UC/CSU) (MJC MUSIC 133)

**MUSIC 41A: INTERMEDIATE PIANO 1.5 Units**

*Prerequisite: Music 31B or equivalent*  
*Lecture: 1 hour*  
*Activity: 2 hours*  
 Continuation of the fundamentals of piano performance attained in Music 31A and 31B with more emphasis given to technique, phrasing, and dynamics as progressively difficult music is presented. Theory will include additional major and minor scales and keys, chords, and inversions including seventh chords, improvisation, and transposition. Piano literature will include both classical and popular compositions as well as exercises and technical studies. (UC/CSU)

**MUSIC 41B: INTERMEDIATE PIANO 1.5 Units**

*Prerequisite: Music 41A or equivalent*  
*Lecture: 1 hour*  
*Activity: 2 hours*  
 Continuation of the fundamentals of piano performance attained in Music 31A, 31B, and 41A with more emphasis given to the adaptation of various techniques regarding style, touch, dynamics, and phrasing as they apply to different periods of piano literature. Opportunity to accompany instrumentalists and vocalists is offered as well as the performance of two-piano works. Theory will include all key signatures, scales, embellishments, diminished and augmented chords, and study of the Baroque, Classical, Romantic, and Contemporary periods in Music. (UC/CSU)



**MUSIC 49: BEGINNING GUITAR 1.5 Units**

*Lecture: 1 hour*  
*Activity: 2 hours*

Basic guitar techniques, open string chords, right hand string and finger-picking. Introduction to music reading, basic chords, simple song accompaniments and melodic playing in first position. Student must provide a tunable, nylon string acoustic guitar. (UC/CSU) (MJC MUSIC 163)

*May be repeated three times.*

**MUSIC 50: SERIES — APPLIED MUSIC**

*Lecture: 1 hour*

Study of performance techniques, interpretation, and repertoire related to private music instruction. Designated for music majors and minors. (UC/CSU)

*May be repeated three times.*

**MUSIC 50 — APPLIED MUSIC: Guitar 1 Unit**

(MJC MUSIC 166)

**MUSIC 51 — APPLIED MUSIC: Keyboard 1 Unit****MUSIC 52 — APPLIED MUSIC: Woodwinds 1 Unit**

(MJC MUSIC 144)

**MUSIC 53 — APPLIED MUSIC: Brass 1 Unit****MUSIC 54 — APPLIED MUSIC: Strings 1 Unit****MUSIC 55 — APPLIED MUSIC: Percussion 1 Unit****MUSIC 56 — APPLIED MUSIC: Voice 1 Unit**

(MJC MUSIC 134)

**MUSIC 60: CHOIR 1 Unit**

*Activity: 3-6 hours*

Instruction and performance in vocal and choral techniques including group tone production, singing, parts, and reading music. Designed for singers with limited or no choir experience as well as intermediate. Repertoire includes selections of various styles. (UC/CSU) (MJC MUSIC 152)

*May be repeated three times.*

**MUSIC 64: JAZZ CHOIR 1 Unit**

*Activity: 3-6 hours*

Study and performance of vocal jazz and improvisation in an ensemble of limited size. Audition required. (UC/CSU) (MJC MUSIC 155)

*May be repeated three times.*

**MUSIC 65: THEATRE PRODUCTION: Music Emphasis 1 Unit**

*Activity: 3-6 hours*

Directed activities in theatre production for public performance with a concentration in vocal or instrumental music. Audition required. (UC/CSU)

*May be repeated three times.*

**MUSIC 66: COLUMBIA COLLEGE COMMUNITY CHORUS 1 Unit**

*Activity: 3-6 hours*

Study and performance of mixed choral works of various styles and periods. Includes development of vocal technique and musicianship. Audition required. (UC/CSU) (MJC MUSIC 185)

*May be repeated three times.*

**MUSIC 69: MADRIGAL ENSEMBLE 1 Unit**

*Activity: 3-6 hours*

Study and performance of vocal chamber music with emphasis on the Renaissance and Contemporary periods. Audition required. (UC/CSU) (MJC MUSIC 153)

*May be repeated three times.*

**MUSIC 70: COLLEGE BAND 1 Unit**

*Activity: 3-6 hours*

Study and performance of band and instrumental ensemble literature of all styles. (UC/CSU)

*May be repeated three times.*

**MUSIC 72: JAZZ ENSEMBLE 1 Unit**

*Activity: 3-6 hours*

Study and performance of instrumental jazz and improvisation; techniques of improvisation will be explored. Audition required. (UC/CSU) (MJC MUSIC 149)

*May be repeated three times.*

**MUSIC 75: JAZZ STUDIES 1 Unit**

*Activity: 6-12 hours*

Study and performance of instrumental and vocal jazz in both solo and ensemble (including big band, choir, combos, and solo with accompaniment). Includes beginning jazz theory, improvisation, style, interpretation, performance practice and the development of an individual standard jazz repertoire. Repertoire may vary from semester to semester. (UC/CSU)

*Field trips may be required.*

*May be repeated three times.*

**MUSIC 76: COMMUNITY ORCHESTRA 1 Unit**

*Activity: 3-6 hours*

Study and performance of orchestral literature of various styles and media. Audition required for wind, brass, and percussion players as needed. (UC/CSU)

*May be repeated three times.*

**MUSIC 78: ENSEMBLE: Instrumental Emphasis 1 Unit**

*Activity: 3-6 hours*

Study and performance of music for small ensembles, duets, and chamber groups. Audition required. (UC/CSU)

*May be repeated three times.*

**NATURAL RESOURCES**

See Page 28 for Certificate Requirements

**NATRE 1: ENVIRONMENTAL CONSERVATION 3 Units**

*Lecture: 3 hours*

Conservation of the biological and physical environment. History of the conservation movement. A case-study approach to land use practices of environmental conservation with current topics on endangered species, environmental pollution, wilderness management, energy, population, and the uniqueness of California and Alaska natural resources. (UC/CSU)

*Field trips may be required.*

**NATRE 3: NATURAL RESOURCES LAW AND POLICY 3 Units**

*Lecture: 3 hours*

Introduction to principles and practice of environmental law in the United States; exposure to major legislation and significant cases, and discussion of their interrelationships. Topics include overview of development and limits of legislative and judicial approaches to solving environmental problems; environmental ethics; local action and historical role of activists in legislative change and enforcement. (UC/CSU)

**NATRE 9: PARKS AND FORESTS LAW ENFORCEMENT 2 Units**

*Lecture: 2 hours*

Knowledge and skills required in areas of constitutional, criminal, and civil law as related to law enforcement activities conducted by resource agencies. (CSU)

*Field trips may be required*

**NATRE 22: ECOLOGY AND USE OF FIRE IN FOREST ECOSYSTEMS 2 Units**

*Lecture: 1.5 hours*

*Laboratory: 1.5 hours*

Introduction to the ecology of fire in the mixed coniferous forest and to the use of prescribed burning as a resource management tool. Selected topics include the effects of fire on vegetation, soils, hydrology, wildlife, air quality, and esthetics; forest fire behavior and the role of fire suppression; the history and current issues of prescribed burning; the planning and implementation of a prescribed burning program in selected locations. (CSU)

*Field trips will be required.*

**NATRE 30: INTRODUCTION TO WATERSHED MANAGEMENT 3 Units**

*Lecture: 2 hours*

*Laboratory: 3 hours*

Fundamentals of watershed protection, management, and monitoring with an emphasis on California and the Sierra. Applications of geology, soils, meteorology, hydrology, biology, chemistry, physics and engineering as they pertain to management of our land and water resources and watersheds. Field techniques of sampling and monitoring soil, water, air, vegetation, and other biota for beneficial uses of water. Application of integrated ecosystem approaches to natural resource protection management of watersheds. (CSU)

*Field trips will be required.*

**NATRE 50: NATURAL HISTORY AND ECOLOGY 2 Units**

*Lecture: 2 hours*

Natural history and ecology with emphasis on the interrelationships among plants, animals, soils, geology, and climate of California. Selected topics on plant succession, terrestrial and aquatic ecosystems, organism adaptation and diversity, evolution, California's physical/biological environment, California biomes, and Sierra Nevada life zones. (CSU)

*Field trips may be required*

**NATRE 95A: SERVICE LEARNING I IN NATURAL RESOURCES 2 Units**

*Lecture: 1 hour*

*Laboratory: 3 hours*

Service Learning Experience I, when paired with course curriculum, is designed to create an opportunity to understand the relationship between academic study and community service through both practical applications and critical reflection. Volunteerism and Service Learning will be examined from theory to practice. This course is designed to meet specific student interests. Students will be required to participate in a Service Learning experience for a minimum of 54 hours and attend 18 hours of lecture. (CSU)

**NATRE 95B: SERVICE LEARNING II IN NATURAL RESOURCES 2 Units**

*Lecture: 1 hour*

*Laboratory: 3 hours*

Continues the Service Learning experience with a mentoring component in which Service Learning II students mentor Service Learning I students. (CSU)

*May be repeated three times*

**NATRE 97: WORK EXPERIENCE IN FORESTRY AND NATURAL RESOURCES 1-4 Units**

*Prerequisite: Must be enrolled in at least seven (7) units including Work Experience.*

*75 hours paid employment equals 1 unit of credit*

*60 hours unpaid employment equals 1 unit of credit*

Provides students an opportunity to experience supervised employment in Forestry and Natural Resources. The student's employment must be related to educational or occupational goals. (CSU\*)

*Offered for Credit/No Credit grading only.*

*May be repeated for no more than a total of 16 units of credit less any units earned in any other Work Experience course.*

*For students interested in working full time one semester and attending classes one semester on an alternate basis, see Wkexp 96, page 115.*

**NATURAL RESOURCES TECHNOLOGY**

See Page 28 for Certificate Requirements

**NARTC 155: INTERPRETIVE GUIDED TOURS 2 Units**

*Lecture: 2 hours*

Methods of meeting and serving diverse public groups in their social, cultural, and recreational use of wildland recreation sites. *Field trips will be required.*

**NARTC 160: AERIAL PHOTOGRAPHY AND MAP INTERPRETATION 2 Units**

*Lecture: 1 hour*

*Laboratory: 3 hours*

Use of basic photogrammetric instruments and equipment; techniques of delineating soil-vegetation and timber types and distinguishing physical features on aerial photographs; techniques of interpretation of planimetric, topographic, orthophoto-topographic, and geologic maps; principles of remote sensing.

*Field trips may be required.*



**NARTC 163: WATER FOR CONSUMPTION 3 Units**

*Lecture: 3 hours*  
 Study of present and future sources of community water supply with special attention to state standards for potable water; analysis, processing, treatment, quality control, storage, and distribution of community water.  
*Offered for Credit/No Credit grading only.*  
*Meets Water Treatment Plant Operator state certification prerequisite for examination at Grade 2 level.*  
*Field trips may be required.*

**NARTC 181: CALIFORNIA WILDLIFE 4 Units**

*Lecture: 4 hours*  
 Study of the field identification characteristics, habitat requirements, life history, management, and population dynamics of selected California mammals, birds, and fish; methods and problems of appraising and manipulating game mammals, furbearers, upland game, and fisheries to improve populations; techniques of habitat appraisal and manipulation to improve wildlife populations. (MJC NR 215)  
*Field trips are required.*

**OFFICE TECHNOLOGY**

*See Page 28 for Certificate Requirements*

**OFTEC 5: ELECTRONIC PRINTING CALCULATORS 1 Unit**

*Laboratory: 3 hours (Self-paced)*  
 Developing speed by touch on the 10 keypad. Practical instruction in the operations of an electronic calculator emphasizing business applications. (CSU)

**OFTEC 20: MACHINE TRANSCRIPTION 2 Units**

*Recommended for Success: Oftec 130 or Engl 151, and Oftec 40*  
*Lecture: 1 hour*  
*Laboratory: 3 hours (Self-paced)*

Study and use of various transcribing machines, emphasizing the development of an employable skill in machine transcribing mailable business documents. (CSU) (MJC OFADM 328B)

**OFTEC 25: BUSINESS COMMUNICATIONS 3 Units**

*Recommended for Success: Oftec 130 or Engl 151*  
*Lecture: 3 hours*  
 Study of communication skills in business with an emphasis on writing business documents. Techniques for writing request, refusal, collection and adjustment letters, as well as writing memorandums and business reports. (CSU) (MJC BUSAD 210) including organization and research as well as presentations. Introduction to travel and conference planning, financial procedures, records management, and employment preparation.

**OFTEC 40: BEGINNING WORD PROCESSING 2 Units**

*Recommended for Success: Oftec 100*  
*Lecture: 2 hours*  
 Students receive instruction in a current word processing program which includes editing, saving, changing format, fonts, tabs; using Spell Check; creating headers/footers and footnotes/endnotes; cutting and pasting; and using file management techniques. (CSU)  
*May be repeated one time.*

**OFTEC 41: INTERMEDIATE WORD PROCESSING 3 Units**

*Recommended for Success: Oftec 40*  
*Lecture: 2 hours*  
*Laboratory: 3 hours*  
 Students receive instruction in intermediate word processing features which will be applied to creating business documents. Areas of emphasis will include text columns, macros, styles, math, merge, repetitive documents, sort and select, and graphics. (CSU) (MJC OFADM 231)  
*May be repeated one time.*

**OFTEC 42: DESKTOP PUBLISHING I\* 3 Units**

*Recommended for Success: Oftec 41*  
*Lecture: 2 hours*  
*Laboratory: 3 hours*  
 This course is an introduction to general desktop publishing theory with emphasis on typography, page layout, graphics, and design. Students will create newsletters, brochures, flyers, resumes, cards, and reports. (CSU)  
*May be repeated one time.*  
*\*Credit may be earned for either Art 51, Oftec 42, or Cmpsc 31, but only from one discipline.*

**OFTEC 43: DESKTOP PUBLISHING II\* 3 Units**

*Prerequisite: Cmpsc 31*  
*Lecture: 3 hours*  
 This course is a continuation of study in problems of Desktop Publishing. Areas of focused study will be in advanced problems of page layout, typography, digital image manipulation, and issues related to offset reproduction of graphic design.  
*\*Credit may be earned for either Art 52, Oftec 43, or Cmpsc 32, but only from one discipline.*

**OFTEC 50: MEDICAL TERMINOLOGY 3 Units**

*Lecture: 3 hours*  
 An introduction to basic word structure including word roots, prefixes and suffixes used in medical vocabulary; also specialized vocabulary for the various anatomical systems used by allied health fields. (CSU) (MJC MDAST 321)

**OFTEC 52: MEDICAL INSURANCE 3 Units**

*Lecture: 3 hours*  
 A fundamental course in medical insurance and insurance billing including instruction in coding, Blue Cross and Blue Shield forms, Medicaid and Medi-Cal, Medicare, Champus and Workers' Compensation. (CSU)

**OFTEC 53A: BEGINNING MEDICAL TRANSCRIPTION 2 Units**

*Recommended for Success: Oftec 50*  
*Laboratory: 6 hours (Self-paced)*  
 Transcription of authentic physician-dictated reports organized by body systems or medical specialties. Development of accuracy, speed, and medical knowledge for transcription of letters, chart notes, history and physicals, consultations, ER reports, operative reports, discharge summaries, and lab reports. (CSU)

**OFTEC 53B: BEGINNING MEDICAL TRANSCRIPTION 2 Units**

*Prerequisite: Oftec 53A or equivalent*  
*Laboratory: 6 hours (Self-paced)*  
 Continuation of Office Technology 53A. Transcription of medical reports in specialties of orthopedics, cardiology, pulmonary, OB/GYN, ENT, and neurology. (CSU)

**OFTEC 54: RADIOLOGY TRANSCRIPTION 1 Unit**

*Recommended for Success: Oftec 53B*  
*Laboratory: 3 hours (Self-paced)*  
 Familiarization with radiology terminology and transcription of medical reports, including dictation on bones, soft tissue, ultra sound, CT scans, and MRI studies. (CSU)

**OFTEC 55: CARDIOLOGY TRANSCRIPTION 1 Unit**

*Recommended for Success: Oftec 53B*  
*Laboratory: 3 hours (Self-paced)*  
 Transcription of cardiology procedures including operative and emergency room reports, discharge summaries, history and physical examination. Also included are diagnostic procedures such as echocardiograms, treadmill tests, and cardiac catheterizations. (CSU)

**OFTEC 56: ORTHOPEDIC TRANSCRIPTION 1 Unit**

*Recommended for Success: Oftec 53B*  
*Laboratory: 3 hours (Self-paced)*  
 Transcription of orthopedic history and physicals, consultations, discharge summaries, and operative reports. (CSU)

**OFTEC 57: GASTROENTEROLOGY TRANSCRIPTION 1 Unit**

*Recommended for Success: Oftec 53B*  
*Laboratory: 3 hours (Self-paced)*  
 Transcription of gastroenterology reports including history and physicals, consultations, discharge summaries, emergency room records and operative reports. Includes medical treatments and GI procedures such as endoscopy and cholecystectomy. (CSU)

**OFTEC 58: PATHOLOGY TRANSCRIPTION 1 Unit**

*Recommended for Success: Oftec 53B*  
*Laboratory: 3 hours (Self-paced)*  
 Familiarization with pathology terminology. Transcription of gross and microscopic autopsies, microscopic descriptions of tissue specimens and diagnoses. (CSU)

**OFTEC 60: LEGAL TRANSCRIPTION/TERMINOLOGY 2 Units**

*Recommended for Success: Oftec 110*  
*Laboratory: 6 hours (Self-paced)*  
 Study of legal terminology and its relationship to transcriptions of specialized legal documents and legal correspondence. Computers are used. (CSU)

**OFTEC 62: LEGAL OFFICE PROCEDURES 2 Units**

*Recommended for Success: Oftec 110*  
*Laboratory: 6 hours (Self-paced)*  
 A comprehensive course for students who desire to become legal secretaries. General procedures in the law office will be introduced as well as instruction in the preparation of legal documents and introduction to the law library and legal research. (CSU)

**OFTEC 97: WORK EXPERIENCE IN OFFICE TECHNOLOGY 1-4 Units**

*Prerequisite: Must be enrolled in at least seven (7) units including Work Experience.*  
 Provides students an opportunity to experience supervised employment in Office Technology. The student's employment must be related to educational or occupational goals. (CSU\*)  
*Offered for Credit/No Credit grading only*  
*May be repeated for no more than a total of 16 units of credit less any units earned in any other Work Experience course.*  
*For students interested in working full time one semester and attending classes one semester on an alternate basis, see Wkexp 96, page 112.*

**OFTEC 100: COMPUTER KEYBOARDING I 1 Unit**

*Laboratory: 3 hours (Self-paced)*  
 Designed for students wishing to master the touch method of keyboarding.

**OFTEC 110: COMPUTER KEYBOARDING II 2 Units**

*Recommended for Success: Oftec 100*  
*Lecture: 1.5 hours*  
*Laboratory: 1.5 hours (Self-paced)*  
 Continuation of Computer Keyboarding I with further emphasis on speed and accuracy development. Provides instruction for creating memos, letters, reports, and tables using a word processing program.

**OFTEC 120: COMPUTER KEYBOARDING III 3 Units**

*Recommended for Success: Oftec 110*  
*Lecture: 2 hours*  
*Laboratory: 3 hours (Self-paced)*  
 Development of speed, accuracy, production-level mastery on a wide variety of business documents using word processing functions and features to facilitate the creation of professional looking documents. (MJC OFADM 301 and 302)

**OFTEC 130 BUSINESS ENGLISH 3 Units**

*Lecture: 3 hours*  
 The mechanics of English including grammar, punctuation, sentence structure, spelling, and use of the dictionary.

**OFTEC 131: OFFICE PROCEDURES AND TECHNOLOGY 3 Units**

*Recommended for Success: Oftec 100*  
*Lecture: 3 hours*  
 This course will establish a foundation in office procedures, provide experience in integration of business skills and issues, and develop decision-making and team building skills. Students will participate in a variety of electronic office technologies and procedures. Experience will be gained in all aspects of the document cycle. Emphasis will be placed on oral and written communications including organization and research as well as presentations. Introduction to travel and conference planning, financial procedures, records management, and employment preparation.



**OFTEC 142: DESKTOP PUBLISHING ESSENTIALS\*** 1-2 Units*Prerequisite: Cmpsc 4**Recommended for Success: Oftec 215**Lecture: 3 hours*

This course is an introduction to general desktop publishing theory with emphasis on design elements of formatted text, frames, photographs, clipart, lines, and pictures. Students will create sample projects such as newsletters, brochures, flyers, business cards, etc.

*\*Credit may be earned for either Oftec 142 or Cmpsc 142, but not both.*

**OFTEC 210: TYPING SPEED AND ACCURACY BUILDING** 1 Unit*Laboratory: 3 hours (Self-paced)*

Speed building and accuracy on straight copy, and statistical writing, intensive drills, timed writings and remedial work.

*May be repeated three times.*

**OFTEC 215: WORD PROCESSING FOR PERSONAL USE** 1 Unit*Lecture: 1 hour*

Instruction in typing, storing, revising, and printing and other beginning commands for a variety of applications using a word processing program. Designed for non-majors; no previous computer experience is required.

*Offered for Credit/No Credit grading only.*

**PHILOSOPHY****PHILO 1: INTRODUCTION TO PHILOSOPHY** 3 Units  
(CAN PHIL 2)*Lecture: 3 hours*

Survey of the field of philosophy, including human nature, meaning in life, and values in ethics, social justice, and art; knowledge, truth, logic, and the scientific method; ultimate reality and philosophy of religion. (UC/CSU) (MJC PHILO 101)

**PHILO 4: WORLD RELIGIONS AND SPIRITUALITY\*** 3 Units*Lecture: 3 hours*

Study of the development of religious consciousness, including the earliest belief systems in the world, the major "living religions" today, tribal religions, "new age" religion and spirituality, and an examination of the meaning of the religious experience. (UC/CSU) (MJC PHILO 115)

*Field trips may be required.*

*\*Credit may be earned for either Philo 4 or Human 4, but not both.*

**PHILO 25: TWENTIETH CENTURY PHILOSOPHY** 3 Units*Lecture: 3 hours*

A brief survey of nineteenth and twentieth century philosophy emphasizing the contributions of various thinkers to our understanding of what it is to be human, the nature of society and the relationship of the individual to it, science, technology and human values, and the meaning of life itself. (UC/CSU)

**PHOTOGRAPHY**  
(See Art)**PHYSICS****PHYS 1: CONCEPTUAL PHYSICS** 3 Units*Lecture: 3 hours*

A conceptual investigation of the physics of motion, energy, light and color, gravitation, and an introduction to black holes and relativistic time travel. (UC\*/CSU)

**PHYS 4A: INTRODUCTORY PHYSICS I: TRIGONOMETRY LEVEL** 4 Units  
(CAN PHYS 2)

*Prerequisite: Math 8 and Math 10, or Math 16, or equivalent*

*Lecture: 4 hours**Laboratory: 2 hours*

A trigonometry-level introduction to the modeling of physical phenomena using Newtonian theory and its extensions. Topics include macroscopic force laws, linear and rotational dynamics, energy, fluids, oscillations, waves, and thermal physics. This course requires the student to use the following college-level skills: algebra, trigonometry, abstract concept assimilation, and critical thinking. (UC\*/CSU) (MJC PHYS 142) (UC\*) Transfer credit limited. See a counselor.

*Field trips may be required.*

**PHYS 4B: INTRODUCTORY PHYSICS II: TRIGONOMETRY LEVEL** 4 Units

*Prerequisite: Phys 4A or equivalent*

*Lecture: 4 hours**Laboratory: 2 hours*

A trigonometry-level introduction to the modeling of physical phenomena using electrostatics, magneto statics, electromagnetic induction, and electric circuit theories. Includes an introduction to optics, and modern physics. This course requires the student to use the following college-level skills: algebra, trigonometry, abstract concept assimilation, critical thinking, and a four-stage physics modeling procedure (developed in Introductory Physics I). (UC\*/CSU) (MJC PHYS 143) (UC\*) Transfer credit limited. See a counselor.

**PHYS 5A: INTRODUCTORY PHYSICS I: CALCULUS LEVEL** 5 Units  
(CAN PHYS 8)

*Prerequisite: Math 18A or equivalent, or concurrent enrollment in Math 18A*

*Lecture: 5 hours**Laboratory: 2 hours*

A calculus-based introduction to the modeling of physical phenomena using Newtonian theory and its extensions. Topics include macroscopic force laws, linear and rotational dynamics, energy, fluids, oscillations, thermal physics, and waves. This course requires the student to use the following college-level skills: algebra, trigonometry, beginning calculus, abstract concept assimilation, and critical thinking. (UC\*/CSU) (MJC PHYS 101) (UC\*) Transfer credit limited. See a counselor.

*Field trips may be required.*

**PHYS 5B: INTRODUCTORY PHYSICS II: CALCULUS LEVEL** 5 Units  
(CAN PHYS 12)

*Prerequisite: Phys 5A or equivalent, and Math 18B or equivalent, or concurrent enrollment in Math 18B*

*Lecture: 5 hours**Laboratory: 2 hours*

A calculus-level introduction to modeling with electrostatics, magneto statics, electromagnetic induction, and electric circuit theories. Includes an introduction to optics and modern physics. The course requires the student to use the following college-level skills: algebra, trigonometry, integral calculus, abstract concept assimilation, critical thinking, and a four-stage physics modeling procedure (developed in Introductory Physics I). (UC\*/CSU) (MJC PHYS 103) (UC\*) Transfer credit limited. See a counselor.

**POLITICAL SCIENCE****POLSC 10: CONSTITUTIONAL GOVERNMENT** 3 Units  
(CAN GOVT 2)*Lecture: 3 hours*

A survey course in the political system of the United States from its inception at the end of the eighteenth century until the present time. Primary focus will be the Constitution, its ideological underpinnings, uses and limitations. Class will also cover the two party system, the process of justice, the specific mechanisms of legislature, and the governmental power at the national, state, and local levels. The interests and rights of all historically under represented groups will be included in the analysis of the power structure. (UC/CSU) (MJC POLSC 101)

*(With Hist 16 or Hist 17 meets California State requirement for United States History, Constitution and American Ideals.)*

**POLSC 12: AMERICAN POLITICAL THOUGHT** 3 Units*Lecture: 3 hours*

Historical survey of American political processes, traditions and aspirations. Emphasis will be on contemporary political issues. (UC/CSU)

**POLSC 14: INTERNATIONAL RELATIONS** 3 Units*Lecture: 3 hours*

Dynamics of interstate relations; diplomacy and international law; international, regional, and supra-national organizations; war and peace; foreign policy. (UC/CSU)

**POLSC 94A(H): HONORS SEMINAR IN GLOBAL ISSUES** 3 Units*Lecture: 3 hours*

Honors seminar in contemporary global problems focusing on specific issues such as war, ethnic conflict, human rights, poverty, the environment, development; historical and philosophical background as well as current political situation; emphasis on strategies for change. Course will involve intensive research and engagement of issues as well as practice in written and oral presentation of ideas. (UC/CSU)

**POLSC 95A: SERVICE LEARNING I IN POLITICAL SCIENCE** 2 Units*Lecture: 1 hour**Laboratory: 3 hours*

Service Learning Experience I, when paired with course curriculum, is designed to create an opportunity to understand the relationship between academic study and community service through both practical applications and critical reflection. Volunteerism and Service Learning will be examined from theory to practice. This course is designed to meet specific student interests. Students will be required to participate in a Service Learning experience for a minimum of 54 hours and attend 18 hours of lecture. (CSU)

**POLSC 95B: SERVICE LEARNING II IN POLITICAL SCIENCE** 2 Units*Lecture: 1 hour**Laboratory: 3 hours*

Continues the Service Learning experience with a mentoring component in which Service Learning II students mentor Service Learning I students. (CSU)

*May be repeated three times*

**PSYCHOLOGY****PSYCH 1: GENERAL PSYCHOLOGY** 3 Units  
(CAN PSY 2)

*Recommended for Success: Engl 151*

*Lecture: 3 hours*

An introductory survey course of the general field of psychology. Topics to be covered include conditioning, personality development, aggression, emotions, stress, anxiety, therapy, sexuality, motivation, consciousness, biology and behavior, and abnormal psychology. (UC/CSU) (MJC PSYCH 101)

**PSYCH 2: CURRENT ISSUES IN PSYCHOLOGY** 3 Units

*Prerequisite: Psych 1 or equivalent*

*Lecture: 3 hours*

A look at the more advanced areas of study in psychology concentrating on current theoretical approaches and research findings regarding areas of controversy. (UC\*/CSU)

**PSYCH 5: HUMAN SEXUAL BEHAVIOR** 3 Units  
(CAN PSYCH 110)

*Recommended for Success: Engl 151*

*Lecture: 3 hours*

Exploration of issues in human sexuality from the perspective of the behavioral and social sciences. Study and discussion of sexual behavior, feelings, and attitudes as they affect one's self and others. (UC/CSU) (MJC PSYCH 110)

**PSYCH 10: LIFESPAN HUMAN DEVELOPMENT** 3 Units  
(CAN PSYCH 141)

*Recommended for Success: Psych 1*

*Lecture: 3 hours*

Introduction to the scientific study of the human being from conception to death. The interplay of biological, psychological, social and cultural forces on the developing human will be examined. Instruction will include theoretical concepts as well as practical application. (UC/CSU) (MJC PSYCH 141)



**PSYCH 30: PSYCHOLOGY OF ADJUSTMENT** 3 Units  
(CAN PSYCH 130)

*Recommended for Success: Engl 151*  
*Lecture: 3 hours*  
The study of personal growth and adjustment to help prepare the individual for lifelong understanding of self. Discussion of personality development, interpersonal relations, sexuality, stress management, family dynamics, dealing with losses, and other concerns of the individual in our society. (CSU) (MJC PSYCH 130)  
*Field trips may be required.*

**PSYCH 35: INTRODUCTION TO DRUGS AND BEHAVIOR** 3 Units

*Recommended for Success: Psych 1*  
*Lecture: 3 hours*  
An introduction to how drugs affect behavior. Instruction in basic pharmacology and neurophysiology as it relates to drug self-administration and resultant altering of behavior. Overview of the history, concepts and theory of drug use. Includes discussion of issues related to drug use such as drug abuse as a disease or disorder, and drug use for specific purposes such as enhancing sports performance. Designed for students who do not possess a technical background. (UC/CSU) (CAN HUMSR 116)

**PYSCH 95A: SERVICE LEARNING I IN PSYCHOLOGY** 2 Units

*Lecture: 1 hour*  
*Laboratory: 3 hours*  
Service Learning Experience I, when paired with course curriculum, is designed to create an opportunity to understand the relationship between academic study and community service through both practical applications and critical reflection. Volunteerism and Service Learning will be examined from theory to practice. This course is designed to meet specific student interests. Students will be required to participate in a Service Learning experience for a minimum of 54 hours and attend 18 hours of lecture. (CSU)

**PSYCH 95B: SERVICE LEARNING II IN PSYCHOLOGY** 2 Units

*Lecture: 1 hour*  
*Laboratory: 3 hours*  
Continues the Service Learning experience with a mentoring component in which Service Learning II students mentor Service Learning I students. (CSU)  
*May be repeated three times*

**REAL ESTATE**

**RLEST 1: PRINCIPLES OF REAL ESTATE** 3 Units

*Lecture: 3 hours*  
Real and personal acquisition, ownership, estates, joint tenancies, partnerships, sales, contracts, deeds, taxes, and financing real estate. (CSU) (MJC RLES 380)

**RLEST 5: REAL ESTATE PRACTICE** 3 Units

*Lecture: 3 hours*  
Customer relationship; general real estate operations and the industry; includes types and valuation of listings, selling and current marketing techniques, financing, taxes, leasing, appraisals, insurance, public sales, exchanges, trade-in programs and investments. (CSU) (MJC RLES 381)

**RLEST 10: LEGAL ASPECTS OF REAL ESTATE** 3 Units

*Lecture: 3 hours*  
California real estate law, titles, encumbrances, recordings, real property acquisition and transfer; Penal Code. (CSU) (MJC RLES 382)

**RLEST 15: REAL ESTATE FINANCE** 3 Units

*Lecture: 3 hours*  
Residential and commercial financing; lending institutions, money markets and interest rates. (CSU)

**RLEST 20: REAL ESTATE APPRAISAL** 3 Units

*Lecture: 3 hours*  
Emphasis on appraisal of residential properties, with an introduction to appraising commercial properties. Instruction in the methods and techniques for estimating market value; the appraisal report. (CSU)

**RLEST 25: REAL ESTATE ECONOMICS** 3 Units

*Lecture: 3 hours*  
Economic factors influencing real estate; real estate market and business cycles; commercial, industrial, and residential properties, urban development and renewal; regulation of land uses. (CSU)

**SEARCH and RESCUE**

**SAR 10: INTRODUCTION TO SEARCH THEORY\*** 2 Units

*Lecture: 2 hours*  
An overview of current search theories as developed by the National Park Service and the National Association for Search and Rescue. National Association for Search and Rescue Certification available to the student. (CSU)  
*May be repeated two times.*  
*\*Credit may be earned for either SAR 10 or Fire 10, but not both.*

**SAR 50: LOW ANGLE ROPE RESCUE\*** 1.5 Units

*Lecture: 1.5 hours*  
Instruction in techniques used to evacuate injured or trapped people in less than vertical terrain settings. Topics include knots, anchor systems, and rescue of ambulatory and non-ambulatory persons. (CSU)  
*This course meets certificate requirements from the California State Fire Marshal's Office in Low Angle Rope Rescue.*  
*Offered for Credit/No Credit grading only.*  
*May be repeated three times.*  
*\*Credit may be earned for either SAR 50 or Fire 50, but not both.*

**SAR 51: RAPPELLING SAFETY/TOWER RESCUE FOR THE FIRE SERVICE\*** 1 Unit

*Lecture: 1 hour*  
Designed to update rescue personnel in equipment and technical developments in rappelling. Emphasis on individual safety, rescue of the injured or trapped rappeller and safe management of the training tower and/or incident scene, review and discussion of documented rappelling accidents. (CSU)  
*Offered for Credit/No Credit grading only.*  
*May be repeated three times.*  
*\*Credit may be earned for either SAR 51 or Fire 51, but not both.*

**SAR 56: EMERGENCY TRENCH SHORING\*** 1 Unit

*Lecture: 1 hour*  
Pre-planning, size-up and management of the trench rescue. Hands-on experience in emergency shoring techniques. (CSU)  
*This course meets or exceeds latest CAL-OSHA and California State Fire Training requirements in trench rescue procedures.*  
*Offered for Credit/No Credit grading only.*  
*May be repeated two times.*  
*\*Credit may be earned for either SAR 56 or Fire 56, but not both.*

**SAR 58: RESCUE SYSTEMS I: FUNDAMENTALS OF HEAVY RESCUE\*** 1.5 Units

*Lecture: 1 hour*  
*Laboratory: 1.5 hours*  
Instruction in techniques used to evaluate injured or trapped people in above and below ground settings. Topics include rope rescue; building collapse and shoring; lifting and moving heavy objects; and the use of fire service ladders as rescue tools. (CSU)  
*This course meets or exceeds certificate requirements from the California State Fire Marshals Office and the Federal Emergency Management Agency in Rescue Systems I: Fundamentals of Heavy Rescue.*  
*Offered for Credit/No Credit grading only.*  
*May be repeated three times.*  
*\*Credit may be earned for either SAR 58 or Fire 58, but not both.*

**SAR 59: RESCUE SYSTEMS I: INSTRUCTOR TRAINING\*** 3 Units

*Lecture: 3 hours*  
Review and update of heavy duty rescue skills and techniques designed to prepare qualified personnel to teach those skills and techniques to others. (CSU)  
*Offered for Credit/No Credit grading only.*  
*May be repeated three times.*  
*\*Credit may be earned for either SAR 59 or Fire 59, but not both.*

**SAR 70: SPECIAL TOPICS IN SEARCH AND RESCUE** .5-3 Units

*Lecture: .5-3 hours*  
*and/or*  
*Laboratory: 1.5-3 hours*  
Various topics in rescue will be covered to meet the individual firefighter or fire department needs. Emphasis on specialized development of skills and knowledge, area planning for rescue, development and implementation of training, and rescue evaluations. (CSU)  
*Offered for Credit/No Credit grading only.*  
*May be repeated with different topics only.*

**SERVICE LEARNING EXPERIENCE**

**SERVICE LEARNING EXPERIENCE I** 2 Units

*Lecture: 1 hour*  
*Laboratory: 3 hours*  
Service Learning Experience I, when paired with course curriculum, is designed to create an opportunity to understand the relationship between academic study and community service through both practical applications and critical reflection. Volunteerism and Service Learning will be examined from theory to practice. This course is designed to meet specific student interests and will be made available in any discipline. Students will be required to participate in the Service Learning experience for a minimum of 54 hours and attend 18 hours of lecture. (CSU)

**SERVICE LEARNING EXPERIENCE II** 2 Units

*Lecture: 1 hour*  
*Laboratory: 3 hours*  
Continues the Service Learning experience with a mentoring component in which Service Learning II students mentor Service Learning I students. (CSU)  
*May be repeated three times*

**SKILLS DEVELOPMENT**

**SKLDV 10: BASIC READING TUTOR TRAINING COURSE** .5 Unit

*Recommended for Success: Engl 151*  
*Lecture: .5 hour*  
Trains students to be reading tutors using the language experience approach for reading and comprehension and the word pattern approach for phonics. Tutors will apply their skills during the laboratory section. (CSU)  
*Offered for Credit/No Credit grading only.*

**SKLDV 11: BASIC READING TUTOR TRAINING COURSE LABORATORY** 1 Unit

*Co-requisite: Skldv 10 or equivalent*  
*Recommended: Eligibility for Engl 151*  
*Laboratory: 3 hours*  
Designed for reading tutors to apply their skills with children or adult new readers. (CSU)  
*Offered for Credit/No Credit grading only.*  
*May be repeated three times.*



**SKLDV 125: INTRODUCTION TO THE GRAPHING CALCULATOR** .5 Unit

*Recommended for Success: Completion of or concurrent enrollment in Math 100A, Math 101 or higher*

*Lecture: .5 hour*

How to use the graphing calculator and develop strategies to use the accompanying instruction booklet. Applications and topics will cover basic operation, general concepts, graphing, zooming, range changes, tracing, friendly windows, plotting, storing and retrieving variables, solutions, editing, programming, and error messages. Also covered are keyboard menus for math, number, testing, drawing, programming, and (as needed by students) probability statistics and matrices. Instruction will focus on the TI 80-83 series of graphing calculators.

*Offered for Credit/No Credit grading only.*

**SKLDV 196: PEER TUTORING** 1 Unit

*Lecture: 1 hour*

Provides students with techniques and strategies for peer tutoring. Students will study learning styles, multiple intelligence theory, learning disabilities, as well as effective communication skills, planning and structuring a tutor session, questioning techniques and multicultural perspectives. Studying these topics will lead to clarifying the nature of an effective tutor. This course meets state regulations for peer tutoring training and College Reading and Learning Association (CRLA) certification.

*Offered for Credit/No Credit grading only.*

*May be repeated one time.*

**SKLDV 197: ADVANCED PEER TUTORING** .5 Unit

*Prerequisite: Skldv 196 or equivalent*

*Lecture: .5 hour*

The Advanced Peer Tutoring course will train students to facilitate a structured group tutoring session. Particular emphasis will be on tutoring techniques designed to improve study skills of students attending group sessions.

**SKLDV 210: INTRODUCTION TO COMPUTER ACCESS** .5-1 Unit

*Prerequisite: Verified disability according to California Community College Title V regulations*

*Laboratory: 1.5-3 hours*

This course is designed to provide access to and instruction of specialized computer programs for students with verified learning, developmental, or physical disabilities. Students will work in one or more areas, including adaptive typing and word processing, fundamental academic skills such as reading, spelling, vocabulary, grammar, and mathematics and/or cognitive exercises and memory building techniques.

*Offered for Credit/No Credit grading only.*

*May be repeated three times.*

**SKLDV 250: SENTENCE WRITING STRATEGY** 3 Units

*Lecture: 3 hours*

Designed for students with learning disabilities and others who have difficulty with basic writing skills. The course emphasizes mastering basic English sentence structure and how to write four kinds of sentences: simple, compound, complex and compound-complex. Students will learn a set of steps and key formulas that help them recognize and write different types of sentences.

*May be repeated one time.*

**SKLDV 251: DIAGNOSTIC LEARNING** 1.5 Unit

*Lecture: 1.5 hours*

Individualized assistance in analyzing learning problems and selecting and applying strategies necessary for academic success in college courses.

**SKLDV 270: BASIC ENGLISH SKILLS** 2.5 Unit

*Lecture: 2 hours*

*Laboratory: 2 hours*

Review of basic skills for writing. The focus will be on writing error-free sentences in the context of short pieces of writing. Instruction will be individualized according to student's needs. Writing on the word processor will be available and encouraged.

*May be repeated one time.*

**SKLDV 275: COLLEGE SPELLING AND PROOFREADING** 2 Units

*Lecture: 2 hours*

For the student needing to improve spelling and proofreading for college writing. Will include using resources to correct spelling, "tricks" to recall the correct spelling of words, understanding traditional conventions of writing and proofreading strategies. Students will also learn to use word processing to complete writing assignments.

**SKLDV 277: BASIC READING DEVELOPMENT** 1 Unit

*Laboratory: 4 hours*

Designed for students who read at or below the fifth grade reading level. Students will work one on one with tutors from the Basic Reading Tutor Training Course. Instruction will emphasize phonics, sight word recognition, and reading comprehension.

*Offered Credit/No Credit only.*

*May be repeated three times.*

**SKLDV 278: READING DEVELOPMENT I** 3 Units

*Lecture: 3 hours*

Designed for the student who needs to develop reading skills. The course is conducted as a reading workshop which focuses on sustained silent reading in combination with short lessons on literature and the reading process. Enrollment in Eng 250 (English Fundamentals) will compliment studies in Skldv 278.

*May be repeated one time.*

**SKLDV 279: PREPARATION FOR COLLEGE READING** 3 Units

*Lecture: 3 hours*

This course will prepare students to read college-level material, including textbooks, essays, short stories, novels and poetry. Reading comprehension will be improved by developing learning strategies and techniques related to reading efficiency and learning to apply word knowledge while reading.

**SKLDV 280: READING STRATEGIES** .5-3 Units

*Lecture: .5-3 hours*

Using textbooks from another course, students will work on reading comprehension, learning strategies and techniques related to reading efficiency. This course is particularly directed at students who did not achieve a recommended placement into English 1A following the Columbia College Assessment Test. To participate in this class, students need to be concurrently enrolled in a course for which there are regular reading assignments in a textbook (not a literature text).

*Offered for Credit/No Credit grading only.*

*May be repeated two times.*

**SKLDV 287: VOCABULARY DEVELOPMENT** 2 Units

*Lecture: 2 hours*

*Laboratory: 2 hours*

A systematic strategy of vocabulary development will be presented and practiced with the vocabulary of specific disciplines such as humanities, applied science, social science, and vocational arts. Various aids to vocabulary expansion will also be examined.

*May be repeated two times.*

**SKLDV 290: STUDY SKILLS** .5 Unit

*Lecture: .5 hour*

An introductory discussion of effective study methods. Topics will include goal setting, time management, learning styles, note-taking, textbook analysis, memory/concentration, and test taking.

*May be repeated one time.*

**SKLDV 296: APPLIED TEST-TAKING SKILLS** .5-1 Unit

*Lecture: .5-1 hour*

Basics of successful test taking with emphasis on the skills necessary to improve performance on a specific exam such as the S.A.T., C.B.E.S.T., or Civil Service Exam.

*Offered for Credit/No Credit grading only.*

*May be repeated three times.*

**SOCIOLOGY**

*See Page 28 for Human Resources Certificate Requirements*

**SOCIO 1: INTRODUCTION TO SOCIOLOGY** 3 Units (CAN SOC 2)

*Recommended for Success: Engl 151*

*Lecture: 3 hours*

Introduction to the principal concepts and methods of sociology; survey of interactions, interrelationships and processes of society, such as culture, socialization, stratification, minorities, primary and secondary groups, social change. (UC/CSU) (MJC SOCIO 101)

**SOCIO 2: AMERICAN SOCIETY: SOCIAL PROBLEMS AND DEVIANCE** 3 Units (CAN SOC 4)

*Lecture: 3 hours*

Social concerns, such as family disorganization, religious conflicts, educational irregularities, poverty, physical and mental health care, political issues, crime and justice, violence and aggression, drug issues, and environmental problems will be studied from the social institutions and social deviance perspectives. (UC/CSU)

**SOCIO 5: ETHNICITY AND ETHNIC RELATIONS IN AMERICA** 3 Units

*Lecture: 3 hours*

This is a multidisciplinary study of ethnicity (belonging to an ethnic group) and ethnic group relations in the United States from an historical and sociological perspective. It emphasizes a challenging field of study with the dynamics of emergence, ethnocentrism, change, marginality and acculturation of major ethnic groups in the United States. The immense diversity of these groups will be explored and analyzed through the methodology of recent sociological research. This course is designed to meet an ethnic studies requirement. (UC/CSU) (MJC SOCIO 150)

**SOCIO 12: SOCIOLOGY OF THE FAMILY** 3 Units

*Lecture: 3 hours*

Comparative and historical treatment of the family institution. Analysis of kinship and family structure, roles and relationships within the family. Assessment of the contemporary society on the American family. (UC/CSU) (MJC SOCIO 125)

**SOCIO 28: DEATH AND DYING** 3 Units

*Recommended for Success: Engl 151*

*Lecture: 3 hours*

Examination of the predominant attitudes and practices with regard to death, dying, and grief in the U.S.; included will be material relevant to suicide, the terminally ill, bereavement, and various viewpoints about the phenomenon of death. (CSU) (MJC HUMSR 114)

*Field trips may be required.*

**SOCIO 95A: SERVICE LEARNING I IN SOCIOLOGY** 2 Units

*Lecture: 1 hour*

*Laboratory: 3 hours*

Service Learning Experience I, when paired with course curriculum, is designed to create an opportunity to understand the relationship between academic study and community service through both practical applications and critical reflection. Volunteerism and Service Learning will be examined from theory to practice. This course is designed to meet specific student interests. Students will be required to participate in a Service Learning experience for a minimum of 54 hours and attend 18 hours of lecture. (CSU)

**SOCIO 95B: SERVICE LEARNING II IN SOCIOLOGY** 2 Units

*Lecture: 1 hour*

*Laboratory: 3 hours*

Continues the Service Learning experience with a mentoring component in which Service Learning II students mentor Service Learning I students. (CSU)

*May be repeated three times*

**SOCIO 97: WORK EXPERIENCE IN HUMAN SERVICES** 1-4 Units

*Prerequisite: Must be enrolled in at least seven (7) units including Work Experience.*

*75 hours paid employment equals 1 unit of credit*

*60 hours unpaid employment equals 1 unit of credit*

Provides students an opportunity to experience supervised employment in Human Services. The student's employment must be related to educational or occupational goals. (CSU\*)

*Offered for Credit/No Credit grading only.*

*May be repeated for no more than a total of 16 units of credit less any units earned in any other Work Experience course.*

*For students interested in working full time one semester and attending classes one semester on an alternate basis, see Wkexp 96, page 115.*

*(UC\*) Transfer credit limited. See a counselor.*



**SPANISH**

**SPAN 1A: SPANISH: Beginning 5 Units**  
(CAN SPAN 2)  
(CAN SPAN SEQ A = SPAN 1A + SPAN 1B)

Lecture: 5 hours

Laboratory: 1 hour

Introduction to the Spanish language, emphasizing natural communications and supported by foundation grammar. For students with fewer than two years of high school Spanish or the equivalent. (UC/CSU) (MJC SPAN 101)

**SPAN 1B: SPANISH: Beginning 5 Units**  
(CAN SPAN 4)  
(CAN SPAN SEQ A = SPAN 1A + SPAN 1B)

Prerequisite: Span 1A or equivalent

Lecture: 5 hours

Laboratory: 1 hour

Continuation of Spanish 1A. Recommended for students with two years of high school Spanish. (UC/CSU) (MJC SPAN 102)

**SPAN 2A: SPANISH: Intermediate 5 Units**  
(CAN SPAN 8)  
(CAN SPAN SEQ B = SPAN 2A + SPAN 2B)

Prerequisite: Span 1B or equivalent

Lecture: 5 hours

Laboratory: 1 hour

An intermediate level course designed to refine skills in oral and written expression through reading, composition and discussion of contemporary issues, cultural material and literature. (UC/CSU) (MJC SPAN 103)

**SPAN 2B: SPANISH: Intermediate 5 Units**  
(CAN SPAN 10)  
(CAN SPAN SEQ B = SPAN 2A + SPAN 2B)

Prerequisite: Span 2A or equivalent

Lecture: 5 hours

Laboratory: 1 hour

A continuation of intermediate level Spanish, to include poetry and prose, in-depth discussion and composition. An attempt is made to refine all of the language skills in Spanish. (UC/CSU) (MJC SPAN 104)

**SPAN 10A: CONVERSATIONAL SPANISH: Beginning 3 Units**

Lecture: 3 hours

Practice in vocabulary, idioms and grammatical usage with emphasis on conversational use of the language as spoken in Hispanic America. (CSU) (MJC SPAN 51)

May be repeated one time.

**SPAN 10B: CONVERSATIONAL SPANISH: Beginning 3 Units**

Prerequisite: Span 10A or equivalent

Lecture: 3 hours

A continuation of Spanish 10A with emphasis on ideas, culture and use of the total language. (CSU)

May be repeated two times.

**SPAN 20A: CONVERSATIONAL SPANISH: Intermediate 3 Units**

Prerequisite: Span 10B or equivalent

Lecture: 3 hours

An intermediate level conversation course designed for the practice of listening and speaking skills in Spanish with a focus on everyday activities in a comparative cultural context. Preparation includes reading of assigned material. (CSU)

May be repeated two times.

**SPAN 20B: CONVERSATIONAL SPANISH: Intermediate 3 Units**

Prerequisite: Span 20A or equivalent

Lecture: 3 hours

An intermediate level conversation course designed to refine listening and speaking skills through discussion of contemporary issues in a comparative cultural context. Preparation includes reading of assigned material. (CSU)

May be repeated two times.

**SPAN 170: SPECIAL TOPICS IN .5-3 Units SPANISH**

Lecture: .5-3 hours

Emphasis on the fundamentals of the Spanish language with basic structures and vocabulary. Various topics in Spanish will be covered to meet individual and agency needs.

Offered for Credit/No Credit grading only.

May be repeated with different topics only.

**SPEECH COMMUNICATION**

**SPCOM 1: FUNDAMENTALS OF SPEECH 3 Units**  
(CAN SPCH 4)

Lecture: 3 hours

Principles of oral communication; speech composition and techniques of presenting informal and formal speeches. Emphasis given to organization, delivery, critical thinking, and evaluative listening. (UC/CSU) (MJC SPCOM 100)

**SPCOM 2: ARGUMENTATION 3 Units**  
(CAN SPCH 6)

Prerequisite: Spcm 1 or equivalent

Lecture: 3 hours

A study of the art of argumentation; analysis of issues and evidence; the elements of logic; analysis of others' arguments; oral presentation of arguments. (UC/CSU) (MJC SPCOM 104)

**SPCOM 4: INTRODUCTION TO HUMAN COMMUNICATION 3 Units**

Lecture: 3 hours

The study of human communication including verbal, nonverbal and listening skills. Effective oral participation in interpersonal contexts, group discussions, and individual presentations in public settings. (UC/CSU) (MJC SPCOM 102)

**SPCOM 18: VOICE DYNAMICS\* 3 Units**

Lecture: 2 hours

Laboratory: 3 hours

A study of Voice Dynamics will focus on vocal psychology, breathing, relaxation, vocal variety, projections, articulation, placement, phonetics, ear training and vocal analyses, character "voices", dialects and accents. This course is designed for self-improvement and for students who wish to increase their vocal skills for professional use. (UC/CSU)

\*Credit may be earned for either Spcm 18 or

Drama 18, but not both.

May be repeated three times.

**SPCOM 19: EXPLORING RADIO DRAMA 1.5-3 Units**

Lecture: 1.5-3 hours

An intensive course focused on the expressive use of the voice and sound effects. It may be taken in two sections, each for 1.5 units. Students will rehearse, perform and provide sound effects for dramatic scripts to be broadcast on radio. Scripts will be rehearsed on campus with final production taped and broadcast. (CSU)

May be repeated three times.

\*Credit may be earned for either Spcm 19 or

Drama 19, but not both.

**SPCOM 50A: SIGN LANGUAGE 2 Units**

Lecture: 2 hours

Development of expressive and receptive skills in sign language including skills in finger spelling. Receptive skills will be emphasized. Signing systems will include Pigeoned Signed English (PSE), American Sign Language (ASL) and Signing Exact English (SEE). American Sign Language will be emphasized. (CSU)

**SPCOM 50B: SIGN LANGUAGE 2 Units**

Prerequisite: Spcm 50A or equivalent

Lecture: 2 hours

Development of advanced level receptive and expressive skills in conversational sign language and finger spelling. (CSU)

May be repeated two times.

**TEACHER AIDE TRAINING**

**T-AID 97: WORK EXPERIENCE AS A TEACHER AIDE 1-4 Units**

Prerequisite: Must be enrolled in at least seven (7) units including Work Experience.

75 hours paid employment equals 1 unit of credit

60 hours unpaid employment equals 1 unit of credit

Provides students an opportunity to experience supervised employment in Teacher Aide Training. The student's employment must be related to educational or occupational goals. (CSU\*)

Offered for Credit/No Credit grading only.

May be repeated for no more than a total of 16 units of credit less any units earned in any other Work Experience course.

For students interested in working full time one semester and attending classes one semester on an alternate basis, see Wkexp 96, page 115.

**WELDING TECHNOLOGY**

**WT 97: WORK EXPERIENCE IN WELDING TECHNOLOGY 1-4 Units**

Prerequisite: Must be enrolled in at least seven (7) units including Work Experience.

75 hours paid employment equals 1 unit of credit

60 hours unpaid employment equals 1 unit of credit

Provides students an opportunity to experience supervised employment in Welding Technology. The student's employment must be related to educational or occupational goals. (CSU\*) (UC\*) Transfer credit limited. See a counselor.

Offered for Credit/No Credit grading only.

May be repeated for no more than a total of 16 units of credit less any units earned in any other Work Experience course.

For students interested in working full time one semester and attending classes one semester on an alternate basis, see Wkexp 96, page 115.

**WT 100: INTRODUCTION TO WELDING 3 Units**

Lecture: 1 hour

Laboratory: 6 hours

Basic arc and oxygen-acetylene welding as it applies to shop and field techniques. (CSU) (MJC WELD 200)

**WT 101: PRACTICAL LABORATORY 1 Unit**

Prerequisite: WT 111 or equivalent

Laboratory: 3 hours

The student shall gain practical experience by working on an individual project (including certification projects). Emphasis on quality, appearance and function. (CSU)

May be repeated one time.

**WT 110: METALLIC AND TUNGSTEN INERT GAS WELDING (M.I.G./T.I.G.) 3 Units**

Lecture: 1 hour

Laboratory: 6 hours

Prepare metals for welding, make basic joints on various metals using the M.I.G. and T.I.G. welding processes. Interpret blueprint lines and symbols used in M.I.G. and T.I.G. welding. (CSU)

**WT 111: ADVANCED ARC WELDING TECHNIQUES 3 Units**

Prerequisite: WT 100 or equivalent

Lecture: 1 hour

Laboratory: 6 hours

Arc welding in flat, horizontal, vertical and overhead positions. Welding cast iron, carbon arc cutting, basic pipe welding, plasma cutting, metallurgy, hard facing technology. Special emphasis on control of heat and distortion and failure analysis. Preparation for A.W.S. certification. (CSU)



**WT 165: METAL SCULPTURE 1.5 Units**

Lecture: .5 hours  
Laboratory: 3 hours

This course will offer an introduction to various metal working techniques with an emphasis on aesthetic design and quality of metal joining.

\*Credit may be earned for either Art 165 or WT 165, but not both.

(UC\*) Transfer credit limited. See a counselor.

**WT 180: WELDING CERTIFICATION .5 Units**

Prerequisite: WT 100 and 110 or equivalent  
Laboratory: 1.5 hours

This course is designed to prepare the student for the welding certification test according to industry codes and standards. Special emphasis will be placed on welder dexterity and correcting deficiencies in welding techniques.

Offered for Credit/No Credit grading only.  
May be repeated three times.

**WORK EXPERIENCE**

All CSU campuses will accept Work Experience; see your counselor or work experience coordinator for limitations.

**WKEXP 96: COOPERATIVE WORK EXPERIENCE 1-8 Units**

75 hours of paid employment equals 1 unit of credit.  
60 hours of unpaid employment equals 1 unit of credit.  
Provides OCCUPATIONAL students with the opportunity to alternate full-time terms in school with full-time employment during which no classes are required and the student may earn a maximum of 8 units of work experience credit during the term (semester) on the job. Participants in the alternate plan may not take more than one other course with work experience. (CSU\*) (UC\*) Transfer credit limited. See a counselor.

Offered for Credit/No Credit grading only.  
May be repeated for a maximum of 16 units of credit from Wkexp 96 and/or Wkexp 97.

**WKEXP 97: COOPERATIVE WORK EXPERIENCE 1-4 Units**

Corequisite: Enrollment in a minimum of seven (7) units of course work including Cooperative Work Experience at Columbia College.

75 hours of paid employment equals 1 unit of credit.  
60 hours of unpaid employment equals 1 unit of credit.  
The student's part-time or full-time employment is parallel or concurrent with enrollment in regular college classes, and the student receives a maximum of 4 units per semester. A student must enroll in and complete a total of at least 7 units per semester including work experience. GENERAL CWEE students may enroll in a maximum of 3 units of CWEE per semester. (CSU\*) (UC\*) Transfer credit limited. See a counselor.

Offered for Credit/No Credit grading only.  
May be repeated for a maximum of 16 units of credit from Wkexp 96 and/or Wkexp 97.

**TWO-YEAR COURSE OFFERINGS  
COURSES REQUIRED FOR CERTIFICATES  
AND ASSOCIATE DEGREES**

To assist students in planning their schedules, Columbia College has prepared a proposed listing of courses to be offered for the next two years. This list is subject to change due to fiscal constraints and availability of staff and/or facilities.

COURSE	2002-2003		2003-2004	
	FALL	SPR.	FALL	SPR.

**ANTHROPOLOGY**

1 Physical Anthropology	yes	no	yes	no
2 Cultural Anthropology	yes	yes	yes	yes
3 Current Issues	no	no	no	no
15 Native People North America	yes	no	no	no

**ART**

1 Basic Freehand Drawing	yes	no	yes	no
2 Basic Color and Design	no	yes	no	yes
9A Life Drawing: Beginning	yes	yes	yes	yes
11 Hist. of Art: Anc. & Med.	yes	yes	yes	yes
12 Hist. of Art: Ren. Bar. & Mod.	yes	yes	yes	yes
13 Art of Africa, Asia, Americas	no	no	no	no
21A Painting: Beginning	yes	yes	yes	yes
23A Watercolor: Beginning	yes	yes	no	yes
31 Ceramics: Introductory	yes	yes	yes	yes
40 Photography: Beginning	yes	yes	yes	yes
41 Photography: Intermediate	no	yes	no	yes
42 Color Photography	no	no	no	no
45 Field Photography	no	no	no	no
48 Special Topics in Photography	yes	yes	yes	yes
71 Intro to Ceramic Sculpture	yes	yes	yes	yes

**AUTOMOTIVE TECHNOLOGY**

97 Work Experience in Auto Tech	yes	yes	yes	yes
100 Intro to Automotive Tech	yes	no	yes	no
101 Automotive Braking Systems I	yes	no	yes	no
102 Engine Repair	yes	no	yes	no
103 Practical Laboratory	yes	yes	yes	yes
110 Automotive Electronics I	no	yes	no	yes
111 Engine Performance I	no	yes	no	yes
112 Heating and Air Conditioning	no	yes	no	yes
120 Suspension and Steering	yes	no	yes	no
121 Automotive Braking Systems II	yes	no	yes	no
122 Manual Power Trains & Axles	yes	no	yes	no
130 Automotive Electronics II	no	yes	no	yes
131 Engine Performance II	no	yes	no	yes
132 Transmissions & Transaxles	no	no	no	yes
165 Clean Air Car Course	no	yes	no	no

**BIOLOGY**

2 Principles of Biology	yes	no	yes	no
4 Principles of Animal Biology	yes	no	yes	no
6 Principles of Plant Biology	no	yes	no	yes
10 Human Anatomy	yes	no	yes	no
17 Fundamentals of Biology	yes	yes	yes	yes
24 General Ecology	no	yes	yes	yes
39 Field Biology	yes	yes	yes	yes
50 Nutrition	yes	no	yes	no
60 Human Physiology	no	yes	no	yes
65 Microbiology	no	yes	no	yes
97 Work Experience	yes	yes	yes	yes
179 Fishing & Fishery Biology of the Sierra Nevada	no	no	no	no

COURSE	2002-2003		2003-2004	
	FALL	SPR.	FALL	SPR.

**BUSINESS ADMINISTRATION**

1A Principles of Accounting	yes	no	yes	no
1B Principles of Accounting	no	yes	no	yes
18 Business Law	yes	yes	yes	yes
20 Principles of Business	yes	yes	yes	yes
24 Human Relations in Organizations	no	yes	no	yes
30 Principles of Marketing	yes	no	yes	no
40 Principles of Management	yes	no	yes	no
97 Work Experience	yes	yes	yes	yes
124 Retail Sales and Advertising	no	no	no	no
131 Comput. Acct. (Peachtree)	no	yes	no	yes
132 Comput. Acct. (OWP)	no	yes	no	yes
134 Comput. Acct. (Dac Easy)	no	yes	no	yes
135 Comput. Acct. (Quick Books)	no	yes	no	yes
137 Comput. Acct. (M.Y.O.B.)	no	yes	no	yes
150 Small Business Management	no	yes	no	yes
151 Finance and Investments	no	yes	no	yes
158 Payroll Accounting	yes	no	yes	no
159 Income Tax	no	yes	no	yes
160 Basic Accounting	no	yes	no	yes
161A Small Business Accounting	yes	no	yes	no
161B Small Business Accounting	no	yes	no	yes
163 Business Mathematics	yes	yes	yes	yes

**CHEMISTRY**

1A General Chemistry	yes	no	yes	no
1B General Chemistry	no	yes	no	yes
10 Fundamentals of Chemistry	yes	yes	yes	yes
20 Conceptual Chemistry	no	yes	no	yes

**CHILD DEVELOPMENT**

1 Principles of Child Dev.	yes	yes	yes	yes
2 Observ./Recording Behavior	yes	no	yes	no
3 Practices in Child Dev.	no	yes	no	yes
5 Child Nutrition	no	yes	no	yes
7 Child Health and Safety	no	yes	no	yes
10 Creative Activities in the Arts	yes	no	yes	no
12 Creative Activities in Math	yes	no	yes	no
13 Creative Activities in Science	yes	no	yes	no
16 Practicum	yes	yes	yes	yes
19 Except. Needs Children	yes	no	yes	no
22 Child, Family, Community	yes	yes	yes	yes
25 Infant/Toddler Care	yes	no	yes	no
27 School Age Children	no	yes	no	yes
28 Books for Young Children	no	yes	no	yes
30 Child Care/Nursery S. A.	no	yes	no	yes

**COMPUTER SCIENCE**

1 Computer Concepts and Information Systems	yes	yes	yes	yes
3 Windows/DOS Oper. Systems	yes	yes	yes	yes
4 Windows Operating Systems Essentials	yes	yes	yes	yes
7 Novell Network Management	yes	no	yes	no
9 UNIX Operations	no	yes	no	yes
10 Intro to Internet	yes	yes	yes	yes
11 Presentations Using Computers	no	yes	no	yes
12 Website Development Applic.	no	yes	yes	no
13 Introduction to HTML	yes	yes	yes	yes
14 Adv. Topics in Website Dev.	yes	no	no	yes
15 Java Programming	yes	no	yes	no
17 Advanced Internet Research	no	no	yes	yes
22 Programming Concepts I	yes	no	yes	no
24 Programming Concepts II	no	yes	no	yes
28 Visual Basic Programming	yes	yes	yes	yes

COURSE	2002-2003		2003-2004	
	FALL	SPR.	FALL	SPR.

30 Financial Worksheets	no	yes	no	yes
33 Computer Graphics I	no	yes	no	yes
40 Assembly Language	no	yes	no	no
41 Networking Essentials	yes	yes	yes	yes
51 Management Information Systems	yes	no	yes	no
52E Commerce	no	yes	no	yes
53 Project Management	yes	no	yes	no
54 Data Mining	no	yes	no	yes
55 Data Base Management	yes	no	yes	no
59 GIS/GPS	no	yes	no	yes
60 Intro to GIS-ArcView	yes	no	yes	no
65 GIS Applications	no	no	no	yes
70 Intro to Raster-Based GIS Systems	yes	no	yes	no
75 GIS Applications in Resource Mgmt	no	yes	no	no
149 Photoshop for the Web	yes	yes	yes	yes

**DRAFTING**

50A Computer Assisted Draft. I	yes	yes	yes	yes
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**DRAMA**

10 Intro to the Theatre	no	no	yes	no
20 Oral Expressions & Interpret.	yes	yes	no	yes
22 Intro to Reader's Theatre	yes	no	no	no
42 Acting Fundamentals	no	no	yes	no
43 Acting/Directing	no	no	no	yes
44 Advanced Acting Projects	no	no	no	no
45 Improvisation	yes	no	no	no

**EARTH SCIENCE**

5 Physical Geology	yes	yes	yes	yes
10 Environmental Geology	no	yes	no	yes
25 Geology of the National Parks	no	no	yes	no
30 Global Tectonic Geology	yes	yes	yes	yes
35 Field Geology	yes	yes	yes	yes
40 Descriptive Astronomy	yes	no	yes	no

**ECONOMICS**

10 Principles of Economics	yes	no	yes	no
11 Principles of Economics	no	yes	no	yes

**EMERGENCY MEDICAL SERVICES**

4 Emer. Medical Tech. Training	yes	yes	yes	yes
13 Advanced First Aid/Emergency Care	yes	yes	yes	no
20 Basic Cardiology/Cardiac Dysrhythmias	yes	no	yes	no
43 Paramedic Training I	no	yes	no	yes
44 Paramedic Training II	no	no	no	no
45 Paramedic Training III	yes	no	yes	no
157 First Responder & CPR	yes	yes	yes	yes

**ENGLISH**

1A Reading & Comp.: Beginning	yes	yes	yes	yes
1B Reading & Comp.: Advanced	yes	yes	yes	yes
1C Critical Reasoning & Writing	yes	yes	yes	yes
10 Creative Writing	no	yes	no	yes
11 Film Appreciation	yes	yes	yes	yes
17 American Literature	no	no	yes	no
18 American Literature	no	no	no	yes
46 Survey of English Literature	yes	no	no	no
47 Survey of English Literature	no	yes	no	no
49 California Literature	yes	no	no	no
50 Introduction to Shakespeare	no	no	no	yes



COURSE	2002-2003		2003-2004	
	FALL	SPR.	FALL	SPR.
151 Prep for College Composition	yes	yes	yes	yes
<b>FIRE TECHNOLOGY</b>				
1 Fire Protection Organization	yes	yes	yes	yes
2 Fire Prevention Tech.	no	no	no	no
3 Fire Protection Equipment	no	no	no	no
4 Building Construction for Fire Protection	yes	no	yes	no
5 Fire Behavior & Combustion	no	yes	no	yes
7 Wildland Fire Control	no	yes	no	yes
29A Driver/Operator Training 1A	no	yes	no	yes
29B Driver/Operator Training 1B	no	yes	no	yes
97 Work Experience	yes	yes	yes	yes
101 Firefighter Academy I	yes	yes	yes	yes
108 Confined Space Awareness	yes	yes	yes	yes
<b>FOREIGN LANGUAGE (see Spanish)</b>				
<b>FORESTRY</b>				
1 Intro. to Professional Forestry	yes	no	yes	no
10 Dendrology	yes	no	yes	no
<b>FORESTRY TECHNOLOGY</b>				
153 Forest Surveying Techniques	no	yes	no	yes
162 Applied Forest Inventory/Management	yes	no	yes	no
<b>GEOGRAPHY</b>				
12 Cultural Geography	yes	yes	yes	yes
15 Physical Geography	yes	yes	yes	yes
18 World Regional Geography	no	no	no	yes
<b>GUIDANCE</b>				
1 Career/Life Planning	yes	yes	yes	yes
7 College and Life Success	yes	yes	yes	yes
10A Intro to Helping Skills	no	yes	no	no
10B Inter Helping Skills	no	yes	no	no
<b>HEALTH AND HUMAN PERFORMANCE</b>				
6A Lifetime Fitness Program I	yes	yes	yes	yes
20 Dance Survey	no	yes	no	yes
21 Ballet	no	no	no	no
23A Contemporary Dance I	no	yes	no	yes
25A Jazz Dance I	yes	no	yes	no
27 Choreography	yes	no	yes	no
28 Dance Production	no	yes	no	yes
29 Theatre Production: Dance Emphasis	no	no	no	no
60 Health & Fitness Education	yes	yes	yes	yes
62 Safety & 1st Aid Education	no	yes	no	yes
65 Stress Management	yes	yes	yes	yes
<b>HISTORY</b>				
11 History of California	yes	no	yes	no
13 World Civilizations: to 1650	yes	no	yes	no
14 World Civ.: 1650 to Present	no	yes	no	yes
16 United States: to 1877	yes	yes	yes	yes
17 United States: 1877 to Present	yes	yes	yes	yes
20 African-American History	no	no	no	yes

COURSE	2002-2003		2003-2004	
	FALL	SPR.	FALL	SPR.
55 The American Frontier	no	yes	no	no
<b>HOSPITALITY MANAGEMENT</b>				
10 Intro to Recreation & Leisure	no	yes	no	yes
20 Intro to Leisure Travel & Tourism	yes	yes	yes	no
30 Geography of Travel & Tourism: Western Hemisphere	yes	no	no	yes
97 Work Experience	yes	yes	yes	yes
102 Careers & Human Relations	yes	no	yes	no
104 Hospitality Laws & Reg.	yes	no	yes	no
112 Front Off. Mgmt./Catering	no	yes	no	yes
114 Intro. to Maint. & House.	no	yes	no	yes
120 Safety & Sanitation	yes	yes	yes	yes
122 Restaurant Math	yes	yes	yes	yes
126 Nutrition for Chefs	no	yes	no	yes
128 Kitchen Management	no	yes	no	yes
133A Intro. to Comm. Food Prep.	yes	yes	yes	yes
133B Commercial Food Preparation	yes	yes	yes	yes
134 Commercial Baking: Beg.	no	yes	no	yes
135 Commercial Baking: Adv.	yes	no	yes	no
136 Dining Room Scr. & Mgmt.	yes	yes	yes	yes
140 Contemporary Cuisine:	yes	yes	yes	yes
141 Restaurant Desserts	yes	no	yes	no
142 Garde Manger	yes	no	yes	no
146 Dining Room Scr. & Mgmt.	no	yes	no	yes
147 Beverage Management	yes	yes	yes	yes
148 Intro to Wines	yes	no	yes	no
152 Restaurant Planning	no	yes	no	yes
162 Intro to Travel Marketing, Sales & Customer Service	yes	no	yes	no
164 Tourism Planning & Impacts	no	yes	no	yes
168 Developing a Hospitality/ Tourism/Recreation Career Path & Portfolio	no	yes	yes	no
<b>HUMANITIES</b>				
1 Old World Culture	yes	no	yes	no
2 Modern Culture	no	yes	no	yes
3 World Culture	no	yes	no	yes
4 World Religions/Spirituality	yes	no	no	no
<b>JOURNALISM</b>				
1 Intro to Journalism	no	no	no	no
<b>MATHEMATICS</b>				
2 Elements of Statistics	yes	yes	yes	yes
6 Math for Liberal Arts Students	yes	yes	yes	yes
8 Trigonometry	yes	no	yes	no
10 College Algebra	no	yes	no	yes
12 Finite Mathematics	yes	no	yes	no
16 Precalculus	no	yes	no	yes
18A Calculus I	yes	no	yes	no
18B Calculus II	no	yes	no	yes
18C Calculus III	yes	no	yes	no
100B Beginning Algebra: 2nd Half	no	yes	no	yes
101 Algebra I	yes	yes	yes	yes

COURSE	2002-2003		2003-2004	
	FALL	SPR.	FALL	SPR.
104 Algebra II	yes	yes	yes	yes
<b>MUSIC</b>				
1 Music Fundamentals	no	no	no	no
2 Introduction to Music	yes	yes	yes	yes
4A Elementary Musicianship	yes	no	yes	no
4B Elementary Musicianship	no	yes	no	yes
10 Survey of Music History and Literature: Ancient to 1750	yes	no	yes	no
11 Survey of Music History and Literature: 1750 to present	no	yes	no	yes
12 Survey of Jazz/Popular Music	yes	yes	yes	yes
20A Elementary Music Theory	yes	no	yes	no
20B Elementary Music Theory	no	yes	no	yes
36 Elementary Voice	yes	yes	yes	yes
37 Elementary Voice	yes	yes	yes	yes
38 Intermediate Voice	no	no	no	no
39 Intermediate Voice	no	no	no	no
41B Intermediate Piano	yes	yes	yes	yes
49 Beginning Guitar	yes	yes	yes	yes
50-56 Applied Music Series	yes	yes	yes	yes
60 Choir	yes	yes	yes	yes
64 Jazz Choir	yes	yes	yes	yes
66 Community Chorus	yes	yes	yes	yes
69 Madrigal Ensemble	no	no	no	no
70 College Band	yes	yes	no	yes
72 Jazz Ensemble	yes	yes	yes	yes
75 Jazz Studies	yes	yes	yes	yes
76 Community Orchestra	yes	yes	yes	yes
78 Ensemble: Instrumental Emph.	no	no	no	no
<b>NATURAL RESOURCES</b>				
1 Environmental Conservation	yes	yes	yes	yes
3 Natural Resources Law/Policy	yes	yes	no	yes
9 Parks and Forests Law Enforcement	no	no	no	yes
22 Ecology/Use of Fire	yes	no	no	no
30 Intro to Watershed Mgmt.	no	yes	no	yes
50 Natural History & Ecology	no	yes	no	yes
<b>NATURAL RESOURCES TECHNOLOGY</b>				
155 Interpretive Guided Tours	no	yes	no	no
160 Aerial Photography and Map Interpretation	yes	no	yes	no
181 California Wildlife	no	yes	no	yes
<b>OFFICE TECHNOLOGY</b>				
5 Elec. Printing Calculators	yes	yes	yes	yes
20 Machine Transcription	yes	yes	yes	yes
25 Business Communications	no	yes	no	no
40 Beginning Word Processing	yes	yes	yes	yes
41 Intermed. Word Processing	yes	yes	yes	yes
42 Desktop Publishing	yes	no	yes	no
50 Medical Terminology	yes	no	yes	yes
52 Medical Insurance	no	yes	yes	no
53A Beg. Medical Transcription	yes	yes	yes	yes
53B Beg. Medical Transcription	yes	yes	yes	yes
54 Radiology Transcription	yes	yes	yes	yes
55 Cardiology Transcription	yes	yes	yes	yes
56 Orthopedic Transcription	yes	yes	yes	yes
57 Gastroenterology Transcription	yes	yes	yes	yes
58 Pathology Transcription	yes	yes	yes	yes
60 Legal Transcription/Term.	yes	yes	yes	yes
97 Work Experience in Oftec	yes	yes	yes	yes
120 Computer Keyboarding III	yes	yes	yes	yes
130 Business English	yes	no	yes	no
131 Office Procedures	no	no	no	yes

COURSE	2002-2003		2003-2004	
	FALL	SPR.	FALL	SPR.
<b>PHILOSOPHY</b>				
1 Introduction to Philosophy	yes	yes	yes	yes
4 World Religions/Spirituality	yes	no	no	no
25 20th Century Philosophy	no	yes	no	yes
<b>PHYSICS</b>				
1 Conceptual Physics	yes	yes	yes	yes
4A Introductory Physics I: Trig	yes	no	yes	no
4B Introductory Physics II: Trig	no	yes	no	yes
5A Intro Physics I: Calculus	yes	no	yes	no
5B Intro Physics II: Calculus	no	yes	no	yes
<b>POLITICAL SCIENCE</b>				
10 Constitutional Government	yes	yes	yes	yes
12 American Political Thought	no	no	no	yes
14 International Relations	no	yes	no	no
<b>PSYCHOLOGY</b>				
1 General Psychology	yes	yes	yes	yes
5 Human Sexual Behavior	yes	yes	yes	yes
10 Lifespan Human Development	no	no	no	yes
30 Personal & Social Adjustment	yes	yes	yes	yes
35 Intro to Drugs & Behavior	yes	no	yes	no
<b>SEARCH &amp; RESCUE</b>				
50 Low Angle Rope Rescue	yes	yes	yes	yes
<b>SOCIOLOGY</b>				
1 Introduction to Sociology	yes	yes	yes	yes
2 American Society: Soc. Prob.	no	yes	no	yes
5 Ethnicity/Ethnic Relations	no	no	yes	no
12 Sociology of the Family	yes	no	yes	no
97 Work Experience	yes	yes	yes	yes
<b>SPANISH</b>				
1A Spanish: Beginning	yes	no	yes	no
1B Spanish: Beginning	no	yes	no	yes
2A Spanish: Intermediate	yes	no	yes	no
2B Spanish: Intermediate	no	yes	no	yes
<b>SPEECH COMMUNICATION</b>				
1 Fundamentals of Speech	yes	yes	yes	yes
2 Argumentation	yes	yes	yes	yes
4 Human Communication	yes	yes	yes	yes
<b>WELDING TECHNOLOGY</b>				
97 Work Experience in Welding	yes	yes	yes	yes
100 Introduction to Welding	yes	no	yes	no
101 Practical Laboratory	yes	yes	yes	yes
110 Metallic/Tungsten Inert Gas Welding	no	yes	no	yes
111 Adv. Arc Welding Techniques	no	yes	no	yes



## Faculty

*Date of appointment follows name*

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A.S., Contra Costa College  
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 ROBERT H. HAMILTON (1968-1985) History, Humanities, Philosophy, Political Science  
 FRANCES V. HEGWEIN (1974-1985) Health Occupations  
 TOM G. HOLST (1974-1996) Earth Science, Computer Science  
 FLOYD L. HOPPER (1976-1988) Counselor  
 ROBERT H. GIBSON (1970-1993) Physical Education  
 THELMA A. JENSEN (1968-1984) Health Occupations  
 JAMES R. KINDLE (1974-1990) Learning Skills  
 WALTER L. LEINEKE (1968-1991) Assistant Dean of Instruction  
 JERRY D. LYON (1971-1984) Business  
 JOHN C. MINOR (1970-1993) English  
 BARBARA C. PAINTER (1969-1980) Counselor  
 CHESTER H. PALMER (1976-1989) English, Speech  
 FRED J. PETERSEN (1981-1999) Computer Science  
 ALAN RAMSARAN (1988-2002) Counselor  
 HARVEY B. RHODES (1967-1979) President  
 RICHARD H. ROGERS (1968-1982) Business  
 JOHN R. ROSS (1970-1987) Health Education, Health Occupations, Search and Rescue  
 MELBORN N. SIMMONS (1969-1992) Mathematics  
 V. PETER SULLIVAN (1961-1992) Physical Education, Athletic Director  
 CLARENCE O. WOLGAMOTT, JR. (1971-2001) Chemistry

### Classified Staff

*Date of appointment follows name*

KANDEE AITON (1999) Account Technician I  
 SIGRID A. ANDERSEN (1985) Instructional Assistant II - Tutoring  
 WENDY ARCHER (1989) Career Development & Transfer Center Technician III  
 SHERRYL A. BAHTEN (1975) Manager, Auxiliary Services  
 MERLIN BART (1984) Lab Assistant II, Auto Technology  
 DOREEN BASS (1991) Lab Assistant II, Biology  
 KONI BICKNELL (2002) Administrative Secretary, Dean of Instructional Services, Arts & Science  
 PRESTON BIRDWELL (1998) Manager, Fire Station  
 LONNIE BLANSIT (1997) Laboratory Assistant II, Computer Science  
 DARIN BLUME (2000) Maintenance II  
 CASEY BONAVIA (1989) Laboratory Assistant III, Mathematics  
 FRANCES BORICCHIO (1991) Admissions & Records Technician III  
 DEBORAH K. BOSWELL (1987) Secretary I, EOPS & Disabled Student Services  
 RYAN BRADY (1999) Electronic Technician  
 NANCY M. BROOKS (1982) Library Media Technician III  
 ANGELA BRUNTON (2000) Child Development Center Master Teacher  
 NANCY BULL (1996) Account Technician II  
 OPAL BYE (1990) Child Development Center Master Teacher  
 KARYN CALHOUN (2000) Custodian  
 CONI CHAVEZ (2002) Outreach Recruiter/Program Representative I  
 DAVID CHESNUT (2000) Program Representative III  
 ROB CHRISTIAN (2000) Custodian  
 CHUCK COOPER (2000) Maintenance III, Carpenter  
 DOUG CROMWELL (2001) HVAC Technician  
 LINDA CROSS (2001) Support Staff II  
 EILEEN CUPIT (1996) Custodian  
 CHRYS DAY (2001) Instructional Assistant II  
 DENISE DEATSCH (1978) Administrative Secretary, Dean of Instructional Services, Vocational Education  
 TERRILL DEATSCH (1975) Transportation Technician II/ Grounds Maintenance III  
 KATHY DIENER (1998) Child Development Master Teacher  
 BEN DORSETT (2001) Maintenance I  
 DAVID EBERHARDT (2002) Campus Security Officer I  
 GREG ELAM (1997) Campus Security Officer, Lead  
 PHILLIP FISH (2000) Campus Security Officer  
 CYNTHIA K. FRAGUERO (1987) Bookstore Operations, Lead  
 STEVEN FROST (1979) Custodial Crew Chief  
 WILLIAM J. GAISER (1970) Mechanic III  
 VICKIE GARRETT (2001) Instructional Assistant II, Business Administration & Computer Lab  
 SUZANNE GARRIGAN (2001) Program Representative I  
 DORIS I. GOLDSON (1970) Administrative Secretary, Technology  
 CHRIS GRANDSTAFF (1998) Grounds Maintenance II  
 ROBERT GRITZ (1998) Account Technician II  
 FREDERICK GROLE (1989) Electronics Specialist  
 LANAI HALLMEYER (1999) Executive Secretary, Vice President for Student Services  
 SUE ELLEN HARWOOD (2000) Director, Community Outreach & Columbia College Foundation

LORI HEDGES (2001) Foster Care/ILP  
 INA HEINRICHS (2001) Secretary I, Instructional Materials Center  
 MIKE HERNANDEZ (1998) Campus Security Officer I  
 BARBARA HIRE (1999) Food Services Specialist, Lead  
 TERRI ISAMAN (2002) Administrative Secretary, Administrative Services  
 CASS LARKIN (1998) Financial Aid Accountant  
 DOUG LAU (2000) Director of Marketing/Public Information  
 WENDY LINK (1984) Technician, Media Services  
 JOYCE LOPEZ (2002) Support Staff II Facilities  
 NICKY LOWITZ (2002) Support Staff II, Community Outreach, Development Services and Public Information  
 KENNETH R. LUCAS (1967) Manager, Facilities Operation  
 TIMOTHY MANN (1983) Athletic Equipment Technician  
 KELLEY MARSHALL (2002) Alternate Media Access Technician  
 ANDREW B. MAURER (1974) Graphic Artist, Instructional Materials Center  
 SANDRA McCRACKEN (2002) Admissions & Records Technician I  
 CONNIE MICAL (1991) Director, Administrative Services  
 ADDIE MINNERS (1989) Support Staff II, Health & Human Performance  
 SHELLEY MUNIZ (2002) Library Media Technician III  
 PATRICIA PANTALEONI (1985) Administrative Assistant, President  
 JESSIE PEARSON (1992) Reprographic Operator III, Instructional Materials Center

ELIZABETH PFLEGING (2000) Support Staff I, Financial Aid  
 RICHARD PRICE (2000) Campus Security Officer  
 DORYENE M. RAPINI (1975) Coordinator, Instructional Materials Center  
 KAREN RASMUSSEN (1989) Software/Network Analyst  
 CHARLES RICE (1997) Laboratory Assistant II Hospitality Management  
 KARIN RODTS (1989) Laboratory Assistant I, Disability Services  
 LIZ RUMNEY (1998) Bookstore Buyer  
 STEVEN SHIVELY (1987) Maintenance II  
 KATHLEEN SMITH (1984) Director of Matriculation/Assessment  
 CYNTHIA TAYLOR (2000) Food Services Specialist  
 SUSAN VEGTER-SLAPE (2001) Executive Secretary, Vice President of Instruction  
 SUE VILLIERS (2001) Program Representative I, CalWORKS  
 LINDA WATKINS (2001) Support Staff II  
 ADRIENNE WEBSTER (1998) Child Development Center Manager  
 RINNÉ WEST (1990) Admissions & Records Technician III  
 MARNIE WHITE (2000) Financial Aid Technician II  
 ADELE WIKNER (1985) Library Media Technician II  
 KAREN YACOVETTI (1995) Instructional Assistant II, Health & Human Performance  
 BARBARA YOUNG (1986) Custodian

## Index

### Symbols

AA/AS/AS(OC) Degree Majors, Columbia College 43-56

### A

Absence 22  
 Academic Calendar 4  
 Academic Probation and Dismissal 22  
 Academic Renewal 20  
 Academic Requirements Review Committee 22  
 Academic Resource Center 14  
 Accounting Certificate, Business Administration 29, 52  
 Accreditation 7  
 Adding a Course 19  
 Administrative Assistant Certificate, Office Tech. 34, 55  
 Admission of International Students 12  
 Admission of Non-Resident Students 10  
 Admission Procedures 11  
 Admissions 9  
 Allied Health Major 47  
 Alternative Matriculation for Disabled Students 11  
 Anthropology Courses 67  
 Appeals 26  
 Applied Computer Studies Certificate 30, 31, 52  
 Art Courses 67-70  
 Athletics 6  
 Attendance 22  
 Automotive Technology Certificates 51  
 Automotive Technology Courses 70-72

### B

Background, College 6  
 Baker Certificate, Hospitality Management 32  
 Bartender Certificate, Hospitality Management 32  
 Biology Courses 72-73  
 Business Administration Certificates 29  
 Business Administration Courses 73-91  
 Business Majors 47-56

### C

California Articulation Number System 63-64  
 California State University System 57  
 Campus and Facilities 6  
 Career Center 15  
 Catalog Rights 18  
 Certificates of Achievement 28-35  
 Challenge Procedures, Matriculation 11  
 Change of Official Records 14  
 Chef Certificate, Hospitality Management 32, 54  
 Child Care Facility 16  
 Child Development Center 6, 16  
 Child Development Certificates 30  
 Child Development Courses 77-79  
 Child Development Teacher, Associate 30  
 Classification of Students 22  
 Code of Conduct, Student 25  
 College Bookstore 15  
 College Credit From Other Institutions 21  
 College Functions 7  
 College Level Examination Program (CLEP) 21, 60



Community Services 7  
 Computer Science Courses 79-83  
 Computer Science Major 48  
 Confidentiality of Student Records 8  
 Conversion of Units 18  
 Cooperative Agencies Resources for Education 13  
 Counseling Services 11  
 Course Articulation with other Colleges 66  
 Course Challenge 21  
 Course Descriptions 65  
 Course Information 66  
 Course Prerequisite and Corequisite Appeal 18  
 Course Repetition 66  
 Courses, Non-Credit 66  
 Courses Not Listed in The Catalog 66  
 Courses, Numbering of 66  
 Courses, Transferability of 66  
 Credit by Examination (Course Challenge) 21  
 Credit for Military Service 22  
 Credit, Unit of 18  
 Credit Value 66  
 Credit/No Credit Grading (CR/NC) 20  
 CSU Admission as an Undergraduate Transfer 57  
 CSU Transfer Information 57  
 CSU, Transfer Requirements to a 37

**D**

Deli Cook & Baker Certificate, Hospitality Mgmt. 32  
 Dining Room Management Certificate, Hosp. Mgmt. 32  
 Dining Room Staff Certificate, Hospitality Mgmt. 32  
 Dinner Line Cook Certificate, Hospitality Mgmt. 33, 54  
 Diploma and Certificate Replacement 13  
 Disabled Student Services 14  
 Disciplinary Action 26  
 Disclaimer 1  
 Drafting Courses 83  
 Drama Courses 83-84  
 Dropping a Course 19  
 Drug and Alcohol Policy 8, 26

**E**

Earth Science Courses 84-85  
 Economics Courses 85  
 Educational Expenses 24  
 Eligibility, Admission 9  
 Emergency Medical Services Certificate 53  
 Emergency Medical Services Courses 85-86  
 Engine Repair & Engine Performance Certificate 29, 51  
 English Courses 87-88  
 Enrollment and Academic Status Verification 14  
 Enrollment Fee Refund Policy 24  
 Examination Program, College Level (CLEP) 21, 60  
 Exemption Categories, Matriculation 11  
 Extended Opportunity Programs and Services 13

**F**

Facilities 6  
 Field Trips 67  
 Final Examinations 22  
 Fine Arts Majors 44

Fire Technology Certificate 53  
 Fire Technology Courses 88-90  
 Food Service 13  
 Forestry Courses 91  
 Forestry Technology Certificate 53  
 Forestry Technology Courses 91  
 Forestry Technology Major 48

**G**

GED, High School Equivalency Diploma 7  
 General Auto Repair Certificate, Auto Tech. 29, 51  
 General Education 7  
 General Office Clerk Certificate, Office Tech. 35, 56  
 Geographic Information Systems Certificate 31, 53  
 Geography Courses 91-92  
 Grade In-Progress 19  
 Grade Point Average 23  
 Grade Reports 22  
 Grading, Credit/No Credit (CR/NC) 20  
 Grading Scale 23  
 Grading System 18  
 Graduate, Notice of Intent to 37  
 Graduation & Transfer Requirements 36-38  
 Graduation Requirements 36-37  
 Guidance Courses 92-93

**H**

Health and Human Performance Courses 93-97  
 Health Occupations Courses 97  
 High School Equivalency Diploma (G.E.D.) 7  
 History Courses 97-98  
 Honors Program 67  
 Hospitality Management Certificates 32-35  
 Hospitality Management Course Descriptions 98  
 Hotel Management Certificate, Hospitality Mgmt. 33, 54  
 Human Services Certificate 34, 54  
 Humanities Courses 101

**I**

IGTEC 37  
 Incomplete Grades 20  
 Independent Study Courses 101  
 Independent Study Provisions 20  
 Information Processing Certificate, Office Tech. 35, 56

**J**

Job Placement Services 15

**L**

Language Arts Majors 44  
 Legal Office Certificate, Office Technology 35, 56  
 Liberal Studies Major 45-56  
 Library 7  
 Lower Division Transfer Requirements 57

**M**

Management Certificate, Business Administration 29, 52  
 Mathematics Courses 102-104  
 Mathematics Major 46

Matriculation Program, Student Success 11  
 Medical Office Certificate, Office Technology 35, 56  
 Medical Transcription Certificate, Office Tech. 35, 56

**N**

Natural Resources Courses 106-107  
 Natural Resources Major 49  
 Natural Resources Technology Certificate 34  
 Natural Resources Technology Courses 107-108  
 Non-Credit Courses 66  
 Non-Discrimination 7  
 Non-Resident Students, Admission of 10  
 Nondiscrimination Policy, Student 24  
 Notice of Acceptance 11  
 Notice of Intent to Graduate 37  
 Numbering of Courses 66

**O**

Office Technology Certificates 34-35  
 Open Class Policy 7

**P**

Pantry & Dessert Chef Certificate, Hosp. Mgmt. 33, 54  
 Parking Fee Refund Policy 24  
 Philosophy Courses 110  
 Physics Courses 110-111  
 Political Science Courses 111  
 Privacy Rights of Students 14  
 Procedures, Admission 11  
 Psychology Courses 111-112

**R**

Readmission 9  
 Refund Policy, Enrollment Fee 24  
 Refund Policy, Parking Fee 24  
 Reinstatement After Dismissal 23  
 Remedial Education 7  
 Repetition of Courses 19, 66  
 Repetition of Courses for Improvement of Grades 19  
 Replacement, Diploma and Certificate 13  
 Residence Requirements, Admission 9  
 Restaurant Management Certificate, Hosp. Mgmt. 33, 54  
 Retailing Certificate, Business Administration 30, 52  
 Rights, Catalog 18

**S**

Safety & Sanitation Certificate, Hospitality Mgmt. 33  
 Satisfactory Progress 22  
 Schedule of Classes 12  
 Scholarships and Awards 12  
 Scholastic Honors 23  
 Search and Rescue Courses 112-113  
 Service Learning Experience Courses 113  
 Sexual Harassment Policy 8  
 Skills Development Courses 113-115  
 Social Science Majors 46-47  
 Sociology Courses 115  
 Spanish Courses 116  
 Speech Courses 116-117

Student Activities 15  
 Student Code of Conduct 25  
 Student Grievance Procedure 25  
 Student Housing 16  
 Student Identification Cards 15  
 Student Insurance 15  
 Student Load 22  
 Student Nondiscrimination Policy 24  
 Student Records, Confidentiality of 8  
 Student Services 7, 9  
 Student Success Matriculation Program 11  
 Substance Abuse Policy 26

**T**

Teacher Aide Training Courses 117-118  
 Teacher, Associate Child Development 30  
 Transcripts, Columbia College 13  
 Transcripts, Other College or High School 13  
 Transfer Admission Agreement 64  
 Transfer Center 15  
 Transfer Information, CSU 57  
 Transfer Requirements, Lower Division 57  
 Transfer Requirements to a CSU 37  
 Transfer Requirements, UC 61-62  
 Transferability of Courses 66  
 Transferable Course Agreement (TCA), UC 64

**U**

Unit of Credit 18  
 Units, Conversion of 18  
 University of California, Transfer to 61-62

**V**

Veterans Affairs 12  
 Vocational Education 7

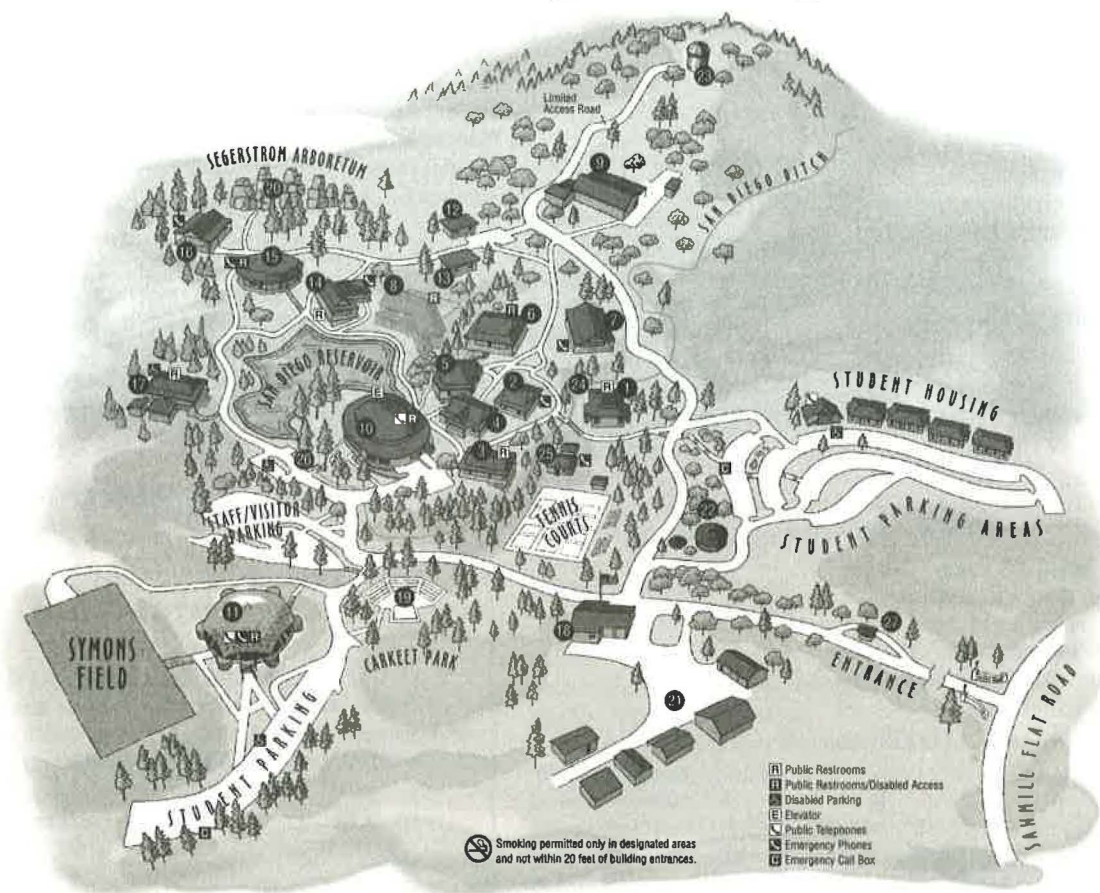
**W**

Watershed Management Technology Certificate 34, 55  
 Welding Technology Courses 118  
 Withdrawal From College 24  
 Work Experience Courses 118





# Columbia College Campus



## Key:

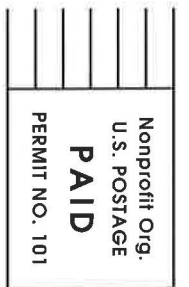
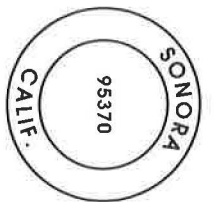
- |   |   |  |
|---|---|--|
| 1) Alder, Rms. 3-5  | 10) Manzanita, Rms. 2-104<br>(Administration, Student Services,<br>Instruction Office, Library,<br>Manzanita Bookstore, The Cellar<br>Restaurant & Cafeteria) | 18) Fire Science Center,<br>Rms. 1000-1001                         |
| 2) Aspen, Rms. 1-5  | 11) Oak Pavilion, Rms. 1-27   | 19) Charles Segerstrom, Jr. Memorial<br>Amphitheater               |
| 3) Buckeye, Rms. 1-5  | 12) Ponderosa (Child Development<br>Center)   | 20) Segerstrom Arboretum Nature Trail                              |
| 4) Cedar, Rms. 1-10   | 13) Pinyon (Toddler Center)   | 21) Warehouse, Shipping/Receiving,<br>Transportation & Maintenance |
| 5) Dogwood (Forum Bldg.), Rm. 1                                       | 14) Redbud, Rms. 1-14   | 22) Mi-wok Cultural Center   |
| 6) Fir, Rms. 1-8  | 15) Sequoia, Rms. 1-11  | 23) Observatory  |
| 7) Juniper, Rms. 1-7 (College Nurse)                                  | 16) Toyon, Rms. 1-4   | 24) Start Point, Fitness Jogging Trail                             |
| 8) Learning Resources/Media<br>Technology Center (under construction) | 17) Willow (Creative Arts), Rm. 1   | 25) Security Office (Davis Cabin)                                  |
| 9) Madrone (Auto & Welding Technology),<br>Rms. 1-2                   |   | 26) Transit Stop   |
|   |   | 27) Information/Toll Booth   |

*All phone numbers listed are in the 209 area code except as noted.*





Admissions & Records  
11600 Columbia College Drive  
Sonora, CA 95370



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[www.gocolumbia.org](http://www.gocolumbia.org)