## Catalog

## 2009~2010

CSM's new 140,000 square-foot Building 10 will serve as the college's signature building and will support both student services and instructional programs.

collegeofsanmateo.edu

College of $S_{\text {an }}$ Mateo

## Table of Contents

Calendar ..... 2
College Administration ..... 2
College Mission, Vision, Values and Diversity Statements ..... 3
General Information ..... 4
College Policies ..... 6
Admission ..... 10
Special Programs ..... 11
Registration ..... 12
Fees ..... 14
Grades and Scholarship ..... 15
Student Handbook ..... 17
Student Rights and Responsibilities ..... 17
Financial Aid ..... 21
Associated Students ..... 22
Telephone Directory ..... 28
Academic Policies ..... 30
Advanced Placement/IB Exam ..... 33
Instructional Resources ..... 36
Student Services ..... 37
Placement Testing ..... 42
Transfer Planning ..... 45
Transferable Courses - C.S.U. ..... 47
C.S.U. G.E. Transfer Requirements Info Sheet ..... 48
Transferable Courses - U.C. ..... 50
Intersegmental General Education Transfer Curriculum (IGETC) Info Sheet ..... 52
California Articulation Number System (CAN) ..... 53
Transfer Information- Private Schools/UCs/CSUs ..... 53
A.A./A.S. Degree Requirements ..... 58
A.A./A.S. Degree and Certificate Programs ..... 60
Transfer Subject Areas and Majors ..... 61
Major and Certificate Requirements ..... 62
Description of Courses ..... 123
Faculty ..... 201
Emeriti ..... 205
Map ..... 208/209
Index ..... 210

## college of $S_{\text {an }}$ Mateo

## Michael Claire, CSM President

## Board of Trustees

San Mateo County Community College District
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College of San Mateo is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, (10 Commercial Boulevard, Suite 204, Novato, CA 94949, 415-506-0234), an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

This publication is available upon request in an alternate format by calling College of San Mateo's Disability Resource Center at (650) 378-7227.

## Calendar of Important Dates

## Summer Session 2009

Matriculation Activities: See Schedule of Classes Placement Testing
College Orientation
Counseling
Registration See Schedule of Classes
June 22 Classes begin
July 3 Independence Day Holiday observed
July 10 Last day to apply for Summer AA/AS degree or certificate

August 1 Summer session six-week classes close
August 15 Summer session eight-week classes close
August 17 Summer 2009 final grades available on WebSMART

## Fall Semester 2009

Matriculation Activities: See Schedule of Classes Placement Testing College Orientation Counseling
August 17 \& 18 Faculty Flex Days
August 19 Day and evening classes begin
September 1 Last day to add semester-length classes
September 1 Last day to drop semesterlength classes with eligibility for partial credit/refund

September 4 Deadline to pay fees
September 5 \& 6 Declared recess
September 6 Last day to complete registration using WebSMART
September 7 Labor Day Holiday
September 11 Last day to drop semester-length classes without appearing on student record
September 23 Last day to declare P/NP option for designated semester-long courses
October 1 Last day to file application for admission to the International Student ( $\mathrm{F}-1$ visa) Program for Spring 2010
October 2 Last day to apply for Fall AA/AS degree or certificate
November 2 CSM Scholarship Application Process for the 2010-11 Academic year begins
November 11-12 Faculty Flex Days
November 13 Veterans' Day Holiday observed
November 18 Last day to withdraw from a semester-length class with assurance of a "W" grade
November 25 Declared recess for Evening classes
November 26-29 Thanksgiving recess
Registration for continuing students for Spring 2010 See Schedule of Classes for dates, times and places
December 13-19 Final examinations (day, evening and Saturday classes)

December 20-January 18
Inter-Semester recess
January 8, 2010 Fall 2009 final grades available on WebSMART

## Spring Semester 2010

Matriculation Activities: See Schedule of Classes Placement Testing College Orientation Counseling
January 14 \& 15 Faculty Flex Days
January 16 \& 17 Declared recess
January 18 Martin Luther King Holiday
January 19 Day and evening classes begin
February 1 Last day to submit CSM Scholarship Application for the 2010-11 Academic year. Due by 12 p.m.
February 1 Last day to add semester-length classes
February 1 Last day to drop semester-length classes with eligibility for credit/refund
February 12 Lincoln Day Holiday
February 13 \& 14 Declared recess
February 15 President's Day Holiday
February 16 Last day to drop semester-length classes without appearing on student record
February 23 Last day to declare P/NP option for designated courses
March 5 Last day to apply for Spring AA/AS degree or certificate
March 10-12 Faculty Flex Days (no classes)
April 3-9 Spring recess
April 15 Last day to file application for admission to the International Student (F-1 visa) Program for Fall 2010
April 29 Last day to withdraw from a semester-length class with assurance of a "W" grade
Registration for continuing students for Summer 2010 and Fall 2010 See Schedule of Classes for dates, times and places
May 22-28 Final examinations (day and evening classes)
May 28 Commencement
May 29 \& 30 Declared recess
May 31 Memorial Day Holiday
Summer 2010 (Tentative)
Matriculation Activities: See Schedule of Classes Placement Testing College Orientation Counseling
Registration See Schedule of Classes
June 21 Day \& evening classes begin
July 5 Independence Day Holiday (Observed)
July 9 Last day to apply for Summer AA/AS degree or certificate
July 30 Summer six-week classes close
August 13 Summer eight-week classes close

## Administration

## President

Michael Claire
Vice President, Instruction
Susan Estes
Vice President, Student Services Jennifer Hughes

## Academic Divisions

Dean, Business/Technology Kathleen Ross

Dean, Language Arts
Sandra Stefani Comerford
Dean, Mathematics and Science
Charlene Frontiera
Dean, Physical Education/Athletics Andreas Wolf

Dean, Creative Arts/Social Science Kevin Henson

Dean, Coastside/Special Projects Martha Tilmann

## Director, Library Services

Lorrita Ford
Director, Nursing
Jane McAteer

## Student Services

Dean, Counseling, Advising and Matriculation
Marsha K. Ramezane
Dean, Enrollment Services Henry B. Villareal

Dean, Planning, Research, and Institutional Effectiveness John J. Sewart
Director, Student Support
Danita Scott-Taylor

## Operations

Dean, Administrative Services Virgil Stanford

## Accuracy Statement

College of San Mateo and the San Mateo County Community College District have made every reasonable effort to determine that everything stated in this catalog is accurate. Courses and programs offered, together with other information contained herein, are subject to change without notice by the administration of College of San Mateo for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the College. At the time of publication the fees described in this catalog are accurate. However, at any time local or State mandated fees may be imposed or increased. The College and the District further reserve the right to add, amend, or repeal any of their rules, regulations, policies, and procedures, in conformance with applicable laws.

# College Mission, Vision, and Values Statements College Diversity Statement 

## Mission Statement

College of San Mateo, the first community college in San Mateo County, is an open-access, student-focused, teaching and learning institution which serves the diverse educational, economic, social and cultural needs of its students and the community. By offering comprehensive, quality programs and services, and by measuring student learning, College of San Mateo educates students to participate successfully in a changing world.


## Vision Statement

It is our belief that we must continue to build on our strengths to provide an educational experience that, within College of San Mateo's mission, is appropriate to the needs of our students.
College of San Mateo will prepare students to be informed, active, engaged citizens in a global society.
College of San Mateo will continue its commitment to robust programs in transfer, occupational education, basic skills and lifelong learning.
College of San Mateo will recruit, support and retain the best faculty, staff and administrators.
College of San Mateo will strengthen partnerships with businesses and industry and other educational institutions.

College of San Mateo will nurture a campus climate that is inviting and intellectually stimulating to all students and staff.
College of San Mateo will endorse, support and actively pursue a policy of inclusiveness that recognizes, values and reflects the diversity of the com-
munity we serve, the professionals with whom we serve and the subject matter we impart.
College of San Mateo will create a supportive learning environment that maximizes the synergy between instruction and student support services.
College of San Mateo will demonstrate a conscious effort to support student in- and out-of-class learning, measure that learning, assess how well learning is occurring and make changes to improve student learning.
College of San Mateo will support institutional needs identified through program review for updating facilities and equipment to enhance learning environments.

College of San Mateo will promote institutional advancement as a means to increase visibility and funding for program support.
College of San Mateo will promote institutional effectiveness based on research, planning, resource management and evaluation.

## Values Statement

College of San Mateo is a vital community resource. We have an individual and collective responsibility to manage this resource and to fulfill our mission and vision to the best of our ability. To that end,

- we believe in encouraging and motivating students to seek, identify and achieve individual educational goals by providing an intellectually challenging, student-focused environment.
- we believe in supporting open, dynamic and collaborative decision making processes with appropriate representation.
- we believe in fostering sensitivity to, respect for and appreciation of the individual differences among the College's diverse students, faculty and staff.
- we believe that the effectiveness of any College action should be assessed by comparing results against measurable goals and standards.
- we believe in supporting and promoting informed risk taking supported by institutional research and encouraging innovation and creativity in pursuit of College goals.


## Diversity Statement

College of San Mateo endorses, supports and actively pursues a policy of inclusiveness that recognizes, values and reflects the diversity of the community we serve, the professionals with whom we serve, and the subject matter we impart. To thrive as an academic institution, we believe we must foster a learning and working environment that encourages multiple perspectives and the free
exchange of ideas in an unbiased and non-prejudicial way.
To that end, as we strive to attract students, develop curriculum, diversify staffing, and offer support services, we are consciously guided by our priority to achieve broad inclusiveness and afford equal opportunity to all, without regard to gender, color, race, ethnicity, national
origin, religion, age, economic and educational background, sexual orientation, and physical, learning, and psychological differences. We constantly evaluate our progress, and we gratefully acknowledge and welcome the support of the community in our efforts to achieve our goals.

## General Information

## The San Mateo County Community College District

Starting with just 35 students when it first opened its doors at the Baldwin campus in downtown San Mateo in 1922, San Mateo County Community College District has grown to a complex of three modern campuses serving more than 25,000 day and evening students from throughout San Mateo County.
In early years, the District consisted only of the area within the San Mateo Union High School District. In 1937, the Jefferson Union and Half Moon Bay high school districts were included. Sequoia Union High School and South San Francisco Unified School Districts became part of the College District in the 1960s; La Honda-Pescadero Unified School District joined in 1976.
First classes were held in a building shared with San Mateo High School in downtown San Mateo. In 1923, the College moved to a large house on the Kohl Estate, in what is now San Mateo's Central Park. Four years later, the high school occupied a new campus and the College moved back to the Baldwin campus.
In 1939, a new CSM campus went into operation at North Delaware Street and Peninsula Avenue, San Mateo, but because of World War II, development of the site was curtailed. When the war ended, the College leased the Merchant Marine Cadet School at Coyote Point, San Mateo, and added those facilities to the classrooms at the Baldwin and Delaware campuses, conducting classes simultaneously at three separate locations.

In 1957, the Board of Trustees developed a 25 year District master plan based on the recommendations of a citizens' advisory committee, and the same year submitted a $\$ 5.9$ million bond issue to voters that was approved by a three-to-one margin.
The bond issue victory cleared the way for prompt acquisition of the present College of San Mateo campus and also provided funds for purchase of a ini-acre site west of Skyline Boulevard and south of Sharp Park Road in San Bruno. A third site, of I3I acres west of the Farm Hill subdivision on the Redwood CityWoodside line, was purchased in 1962.
The current College of San Mateo campus was opened in 1963, followed by Cañada College, Redwood City, in 1968, and Skyline College, San Bruno, in i969. Construction of Cañada and Skyline was made possible in large part from proceeds from a second bond issue of \$12.8 million approved by District voters in 1964.

## SMCCCD Mission

## Preamble

Recognizing each individual's right to education, the Colleges of the San Mateo County Community College DistrictCañada College, College of San Mateo, and Skyline College-provide the occasions and settings which enable students to develop their minds and their skills, engage their spirits, broaden their understanding of social responsibilities, increase their cultural awareness, and realize their individual potential. The District is committed to leadership by providing quality education and promoting life-long learning in partnership with its community and its surrounding educational institutions. It actively participates in the economic, social and cultural development of San Mateo County. In a richly diverse environment and with increasing awareness of its role in the global community, the District is dedicated to maintaining a climate of academic freedom in which a wide variety of viewpoints is cultivated and shared. The District actively participates in the continuing development of the California Community Colleges as an integral and effective component of the structure of public higher education in the State.

## SMCCCD Mission

In an atmosphere of collegiality and shared responsibility, and with the objective of sustaining open access for students and being responsive to community needs, the San Mateo County Community College District will fulfill the following mission with excellence:
I. provide a breadth of educational opportunities and experiences which encourage students to develop their general understanding of human effort and achievement;
2. provide lower division programs to enable students to transfer to baccalaureate institutions;
3. provide occupational education and training programs directed toward career development, in cooperation with business, industry, labor, and public service agencies;
4. provide developmental and remedial education in language and computational skills required for the successful completion of educational goals;
5. provide a range of student services to assist students in attaining their education and career goals;
6. provide self-supporting community education classes, contract education and
training, and related services tailored to the human and economic development of the community;
7. celebrate the community's rich cultural diversity, reflect this diversity in student enrollment, promote it in its staff, and maintain a campus climate that supports student success.
To fulfill this educational mission, the District is committed to effective institutional research that supports the evaluation and improvement of programs, services, and student outcomes. Shared governance is practiced through processes that are inclusive with regard to information sharing and decision making, and that are respectful of all participants. The District plans, organizes, and develops its resources to achieve maximum effectiveness, efficiency, equity and accountability.

## Statement on Academic Freedom

The San Mateo County Community College District is dedicated to maintaining a climate of academic freedom encouraging the sharing and cultivation of a wide variety of viewpoints. Academic freedom expresses our belief in inquiry, informed debate and the search for truth; academic freedom is necessary in order to provide students with a variety of ideas, to encourage them to engage in critical thinking and to help them understand conflicting opinions.
Academic freedom encompasses the freedom to study, teach and express ideas, including unpopular or controversial ones, without censorship or political restraint. Academic freedom, rather than being a license to do or say whatever one wishes, requires professional competence, open inquiry and rigorous attention to the pursuit of truth.

The District's faculty have the right to express their informed opinions which relate, directly or indirectly, to their professional activities, whether these opinions are expressed in the classroom, elsewhere on campus or at college-related functions. In a search for truth and in a context of reasoned academic debate, students also have the right to express their opinions and to question those presented by others.
Employment by the District does not in any way restrict or limit the First Amendment rights enjoyed by faculty as members of their communities. Faculty members are free to speak and write publicly on any issue, as long as they do not indicate they are speaking for the institution.

Protecting academic freedom is the responsibility of the college community. Therefore, in a climate of openness and mutual respect, free from distortion and doctrinal obligation, the District protects and encourages the exchange of ideas, including unpopular ones, which are presented in a spirit of free and open dialogue and constructive debate.

## The College

College of San Mateo, the oldest of the three colleges in San Mateo County Community College District, is located on a 153 -acre site that provides a panoramic view of the north Bay Area.
Completed at a cost of almost \$i9.5 million, the campus opened in its current College Heights location in i963 and currently serves approximately in,ooo day and evening students. It enrolls students from the entire District, although its chief service area is central San Mateo County.
The College's main educational structures are built along a north-south axis provided by the main pedestrian mall. A second mall, running east and west, connects the Fine Arts Center with the Library. In addition to three main lecture halls, the College has a three-building science center, an engineering building, a planetarium and two complexes: one which houses dental assisting, cosmetology and nursing, and one which houses electronics and aeronautics. A separate area houses the horticulture programs, Extended Opportunities Programs and Services and the Multicultural Center.
To assist students in profiting from their education, the College helps them explore their interests and abilities, choose their life work, and plan an educational program which will prepare them for that work. It offers this assistance through a formal program of guidance and counseling, and through informal student-teacher relationships which are among the most distinctive and valuable of its services. The College recognizes the educational value of organized student activities and encourages students and faculty participation in these activities.

Situated close to San Francisco and several fine colleges and universities, College of San Mateo is part of a colorful community which enjoys many cultural advantages. Many College of San Mateo graduates transfer to the University of California, California State Universities, and other major public and private colleges and universities. Because the needs of these students who transfer for upper division work are carefully provided for in the curriculum, the College enjoys a fine reputation among the universities of the State. CSM
graduates have consistently had a pattern of success in transfer educational institutions. Many College of San Mateo students, having temporarily completed their formal education with the Associate in Arts or the Associate in Science degree, find employment in business and industry.

## Accreditation

College of San Mateo is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, (io Commercial Boulevard, Suite 204, Novato, CA 94949, (4I5) 506-0234), an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

## Revision of Regulations

Any regulation adopted by the administration of College of San Mateo will be considered an official ruling and will supersede regulations on the same subject which appear in this Cata$\log$ and other official publications, provided that the new regulation has been officially announced and posted.

## Veterans and Veterans' Dependents

College of San Mateo offers approved instruction to veterans, service members, dependents and survivors of veterans and to other eligible persons, and is authorized by the Department of Veterans Affairs to certify students who are working toward an AA/AS degree program, or certain certificate and transfer programs, for benefits under Chapter 30, 33 (Veterans), Chapter 3I (Vocational Rehabilitation), Chapter 35 (Veterans' Spouses or Dependents), and Chapter I606 (Selected Reserve). All students, except those under Chapter 3I, buy their own books and supplies. Those interested in attending College of San Mateo under any of these chapters should contact the Veterans' Assistant in the Office of Admissions and Records (Building i, 2nd floor) to apply for benefits.

Honorably discharged veterans with at least 30 days of active military service may be eligible for educational benefits for a period of ten years following discharge. Benefits are also available to members of the active reserve who pursue approved college studies.
To initiate benefit payments, an eligible student must request that certification of enrollment be sent to the Department of Veterans Affairs. See the Veterans' Assistant in the Office of Admissions and Re-
cords. Those who have previously attended college must file official copies of all college transcripts with the Admissions \& Records.

College policy regarding Academic Probation (explained on page 3i) applies to all students. Veteran students placed on Academic Probation for failure to maintain a 2.0 grade point average must improve their GPA within the following two semesters or the College is required to report a termination of veteran's benefits due to unsatisfactory academic progress (as defined by the Department of Veterans Affairs). More information is available from the Veteran's Assistant.

## Military Service Credit

For academic credit purposes, a veteran is defined as an honorably discharged member of the United States Armed Forces who was on active duty for one year or longer. Upon presentation of separation or discharge papers, veterans are exempted from the Health Science and Physical Education requirements for the AA/AS degree. They are also granted six units of elective credit toward the AA/ AS degree.
In addition, veterans who qualify may receive credit for military service schools toward the Associate in Arts/Science degree upon presentation of proof to the Office of Admissions and Records. They must have completed a minimum of 12 units with a grade-point average of 2.0 at College of San Mateo. Units of credit for military service (six units) and military service schools will be recorded and so annotated on the student's academic record.
For further information contact the Office of Admissions and Records (358-6858).

## High School Diplomas

The College does not issue high school diplomas. Students who wish to complete requirements for the diploma should consult the high school they last attended to determine graduation requirements. Students who are unable to make arrangements with their previous high schools can contact the office of the high school district in which they now reside. Counseling/advising services for high school diplomas may be obtained by residents of the San Mateo Union High School District by telephoning the SMUHSD Adult School at 558-2IOO.

## Transcripts

Official transcripts of a student's academic records can be sent to colleges, universities, employers and other institutions upon a formal request of the student. Transcripts may be requested using the student WebSMART account. On WebSMART, under "Student Records," find "Request Official Transcript" link for this purpose. Students may request official copies to be sent to them by noting "issue to student." All courses completed or in progress at Cañada College, College of San Mateo, and/or Skyline College appear on the transcript. Transcripts from high school and other colleges are not forwarded from CSM to other institutions because our district colleges are authorized to send San Mateo County Community College transcripts only. The first two official transcripts requested by a student are free; thereafter a charge of $\$ 5$ for each transcript is imposed. If a student wants a transcript processed immediately there is an additional "rush" service charge of \$io.
Students may access unofficial transcripts on their Student WebSMART account. This WebSMART transcript reflects courses taken during or after Summer 198I.


## College Policies

## Crime Awareness and Campus Security Policy

In order to make College of San Mateo a safe and pleasant environment for students and employees, the College has established procedures in compliance with Federal Public Law IOI-542 (Student Right-to-Know and Campus Security Act). CSM is an extremely safe campus, a fact confirmed by the most recent FBIreported data. (For more information, please contact CSM's Office of Institutional Research at 574-6196 or e-mail: csmresearch@smccd. net). Persons seeking information concerning CSM campus law enforcement procedures, crime prevention efforts, and crime statistics should contact the College Security Office, Building I, Room 267 (574-64I5).
The Act also requires institutions to make available the completion or graduation rate of certificate or degree-seeking full-time students. Persons seeking information concerning completion or graduation rates specified by the Act should contact the office of the Dean of Articulation and Research, Building I, Room I2I (574-6196). CSM data is also available at the following web site: http://srtk.cccco. edu/index.asp.

## Drug-Free Campus Policy

It is the policy of the San Mateo County Community College District and College of San Mateo to maintain a drug-free workplace and educational environment for its employees and students in accordance with the requirements of the Federal Drug-Free Workplace Act of 1988 and Drug-Free Schools and Communities Act Amendments of 1989. In addition to this policy, the District continues to maintain its employee and student policies pertaining to the possession and use of alcohol and drugs on District property. Employees and students who are under the influence of an intoxicant while on District property are subject to disciplinary action, pursuant to current policies which regulate employee and student conduct.

The unlawful manufacture, distribution, dispensation, possession, or use of alcohol or a controlled substance in the workplace or educational facilities and on any District property is strictly prohibited. "Controlled substance," as defined in the Act, does not include distilled spirits, wine, malt beverages or tobacco.
It is the responsibility of each District student to adhere to the regulations of this drug-free policy. Students found to be in violation of this policy by the unlawful manufacturing, distributing, dispensing, possessing or using alcohol or a controlled substance on

District property will be subject to disciplinary measures up to, and including expulsion, pursuant to District policy.

Persons seeking further information concerning this policy or the health risks and effects associated with alcohol and narcotics or other dangerous or illegal drugs should contact Sharon Bartels, Health Services coordinator, Health Center, Building I, Room 226 (574-6396).

## Matriculation

Matriculation is the process which brings the College and a student who enrolls for credit into an agreement for the purpose of developing and realizing the student's educational objective. The agreement acknowledges responsibilities of both parties to enable students to attain their objectives efficiently through the College's established programs, policies and requirements.

Students who i) plan to complete a vocational certificate, and/or 2) plan to complete an associate degree, and/or 3) plan to transfer to a baccalaureate institution, or 4) are currently undecided but are considering numbers i through 3, are "nonexempt" students and are expected to complete matriculation requirements.
Students who already hold an associate degree or higher, or those students who are matriculated students at another educational institution and taking courses at the College of San Mateo to meet the requirements of that institution, or students currently employed and taking only classes related to their jobs, are "exempt" students and are not required to participate in matriculation. Exempt students, however, may choose to participate in matriculation components.
The College provides matriculation services organized in several interrelated components:
I. Admissions: Collects and analyzes information on each applicant, identifies students needing special services, and assists students to enroll in a program of courses to attain their educational goals.
2. Skills Assessment and Placement Testing: Measures students' abilities in English, reading, mathematics, learning and study skills, and assesses students' interests and values related to the world of work. In addition to helping students with course selection, assessment results are used to determine honors eligibility and for referral to specialized support services.
3. Orientation: Acquaints students with College facilities, special programs and services, as well as academic expectations and procedures.
4. Advisement/Counseling and Course Selection: A process in which students meet with a counselor to develop educational plans, choose specific courses, and update their plans periodically.
5. Student Follow-up: Ensures that the academic progress of each student is regularly monitored, with special efforts made to assist students who have not determined an educational goal, who are enrolled in pre-collegiate basic skills courses, and/or who have been placed on academic probation.
Each matriculated student is expected to:
I. Express at least a broad educational intent at entrance and to declare a specific educational goal following the completion of 15 semester units of degree applicable credit course work.
2. Attend classes regularly and complete assigned course work.
3. Work with a college counselor or advisor to develop a student educational plan within 90 days after declaring a specific educational goal, and subsequently abide by the terms of this plan or approved revision thereof, making continued progress toward the defined educational goal.
Note: The College may withhold matriculation services from students failing to cooperate in meeting the above expectations.
Each matriculated student is entitled to:
I. Participate in the process of developing his/ her student educational plan. A student who believes the College has not afforded him/her the opportunity to develop or implement this plan may file a complaint in the Office of the Vice President for Student Services, Building I, Room 273.
2. Be given equal opportunity to engage in the educational process regardless of sex, marital status, disability, race, color, religion or national origin. A student who alleges he/ she has been subject to unlawful discrimination may file a grievance in the Office of the Vice President for Student Services, Building I, Room 273.
3. Challenge any prerequisite or corequisite, filing a petition in the Assessment Center, Building I, Room I30, on one or more of the following grounds:
a. The student has the knowledge or ability to succeed in the course despite not meeting the prerequisite.
b. The prerequisite or corequisite was established in violation of district policies or Title 5 regulations.
c. The prerequisite or corequisite is unlawfully discriminatory or applied in an
unlawfully discriminatory manner.
d. The prerequisite or corequisite has not been made reasonably available and the student is subject to undue delay in goal attainment.
Students who wish to challenge prerequisites or corequisites must, within the established time frame, complete the Prerequisite Challenge Petition and attach required documentation. For semester length courses, petitions with documentation must be submitted to the Assessment Center, Bldg. I, Rm. I30 at least five working days prior to the last day of the published late registration period. For courses that are not semester length, the petition with documentation must be submitted prior to the first day of the class. It is the responsibility of students to provide compelling evidence to support the challenge. Prerequisite Challenge Petitions are available on the college web site at collegeofsanmateo. edu/forms.
4. Request a waiver of any matriculation requirement on the basis of extraordinary circumstances by filing a petition with the Dean of Counseling, Advising and Matriculation, Building I, Room 2II.
5. Review the matriculation regulations of the California Community Colleges and exemption criteria developed by this District and file a complaint when he/she believes the College has engaged in any practice prohibited by these regulations. The regulations are available and complaints may be filed with the Dean of Counseling, Advising and Matriculation.
Alternative matriculation services are available for students who require special accommodations in the educational setting:
I. Students with physical, visual, communication or learning disabilities are advised to contact: Disability Resource Center, Building 16, Room I5O or call 574-6438.
2. Students who speak English as their second language may contact: Multicultural Center, Building 20, Room io7 or call 5746154.

Any student who wishes to challenge any requirement of Matriculation should contact the Dean of Counseling, Advising and Matriculation, Building I, Room 2 II.

## Nondiscrimination Policy

College of San Mateo is committed to equal opportunity regardless of age, gender, marital status, disability, race, color, sexual orientation, religion, national origin, or other similar factors, for admission to the College, enrollment in classes, student services, financial
aid, and employment in accordance with the provisions of Title VI of the 1964 Civil Rights Act, Title IX of the Educational Amendments of 1972 (45CRF 86), Section 504, Rehabilitation Act of 1973 (P.L. 93-II2), and the Americans With Disabilities Act of 1990 .

It is important that students, staff, and all others associated with the College understand the importance of reporting concerns about possible violations of this policy. The College's commitment to equal opportunity demands full investigation of possible violations and an opportunity for a fair and impartial hearing on any matter relating to these laws and policies.
Any person seeking information concerning these laws and policies or claiming grievance because of alleged violations of Title VI of the 1964 Civil Rights Act and Sec. 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 should contact the Vice Chancellor, Human Resources/Employee Relations (358-6767).
All grievances will be reviewed in terms of Title VI and Title IX law, and persons involved will be advised of the provisions of the law and their legal rights. If normal channels are not available or fail to meet legal requirements, the necessary action will be initiated. The office will maintain a record of all Title VI and Title IX grievances, and will report to the Faculty and Staff Diversity Advisory Committee the general nature of such grievances and progress toward their resolution.

## Política <br> Antidiscriminatoria

El Colegio de San Mateo se compromete a proporcionarles a todos la misma oportunidad de ingresar en el colegio, de matricularse en las clases y de recibir servicios, ayuda financiera y empleo estudiantil, sin que se tenga en cuenta la edad, el sexo, el estado civil, la incapacidad física o mental, la raza, el color, la orientación sexual, la religión, el origen u otro factor similar. Nuestra política se basa en las disposiciones de las leyes referidas en los siguientes títulos reglamentarios, a saber: Title VI of the 1964 Civil Rights Act; Title IX of the Educational Amendments of 1972 (45CRF 86); Section 504, Rehabilitation Act of 1973 (P.L. 93II2); Americans with Disabilities Act of 1990.
Es importante que todo estudiante, empleado o individuo asociado con el Colegio aprecie lo importante que es el reportar cualquier caso que parezca ser una infracción de esta política. El Colegio se propone ofrecerles las mismas oportunidades a todos y por eso facilita la investigación exhaustiva de posibles infracciones y asegura el establecimiento de un foro legal para la vista justa e imparcial
de cualquier asunto relacionado con las leyes y nuestra política．Cualquier persona que necesite obtener más información sobre estas leyes o esta política o que quiera hacer una reclamación basada en la infracción al－ egada de los títulos susodichos－Title VI of the 1964 Civil Rights Act y Section 504， Rehabilitation Act of 1973 －debe dirigirse a la Oficina del Vice Canciller de Recursos Humanos y Relaciones del Personal al teléfono 358－6767．
Conforme a las leyes en los títulos citados anteriormente，se estudiará cada reclamación y a todas las personas a quienes concierna se les informará sobre las disposiciones de las leyes y los derechos legales pertinentes．Si por la manera prescrita resulta imposible ejecutar el proceso susodicho，o si no se cumple con los requisitos prescritos por las leyes，se iniciará la acción legal necesaria．Se compilará un registro de todas las reclamaciones basadas en los títulos mencionados y se comunicará al comité encargado del plan de Acción Afir－ mativa－Faculty and Staff Diversity Advisory Committee－sobre la naturaleza de las rec－ lamaciones，así como también su gestión y resolución．

## Walang Diskriminasyong Patakaran

Ang Kolehiyo ng San Mateo ay nagbibigay ng pantay na pagkakataon sa lahat anuman ang edad，kasarian，katayuang marital，kapan－ sanan，lahi，kulay，orientasyong seksuwal， relihiyon，bansang pinagmulan，o iba pang batayan，para sa pagtanggap sa Kolehiyo， pagpapatala sa klase，serbisyo sa estudyante， tulong na pinansiyal，at trabaho ayon sa mga itinatadhana ng Title VI ng1964 Civil Rights Act，Title IX ng Educational Amendments ng 1972 （45CRF 86），Section 504，Rehabilitation Act of 1973 （P．L．93－II2），at ng Americans With Disabilities Act of 1990.

Mahalagang maintindihan ng mga estudyante， kawani，at lahat ng iba pang kaugnay ng Kole－ hiyo ang kahalagahan ng pag－uulat ng mga tungkol sa posibleng paglabag sa patakarang ito．Upang maibigay ng Kolehiyo ang pantay na pagkakataon，kailangan ang kumpletong imbestigasyon ng posibleng paglabag at ng pagkakataon para sa pantay at walang kini－ kilingang pagdinig ng anumang bagay na may kinalaman sa mga batas at patakaran．
Sinumang naghahangad ng impormasyon tungkol sa mga batas at patakarang ito o nagrereklamo ng paglabag sa Title VI ng 1964 Civil Rights Act at Sec．504ng Rehabilita－ tion Act of 1973 ay dapat kontakin ang Office of Vice Chancellor of Human Resourc－ es and Employee Relations．Telephone 358－6767．

Ang lahat ng reklamo ay susuriin ayon sa batas ng Title VI at Title IX，at ang mga taong kasangkot ay pagpapayuhan ng mga tadhana ng batas at ng kanilang mga legal na kara－ patan．Kung ang mga normal na paraan ay hindi magagamit o hindi matugunan ang mga pangangailangang legal，ang kinakailangang hakbang ay gagawin．Ang opisina ay hahawak ng mga rekord ng lahat ng reklamong pang－ Title VI at Title IX，at iuulat sa Lupon ng Apir－ matibong Aksiyon ang katayuan ng reklamo at hakbang tungo sa kalutasan．

## 一視同仁政策

聖馬习書院在取錄新生，課程選修，學生服務，經濟援助及聘請職員方面的宗旨，是根據1964年公民權利法案第六章，1972年教育修訂法 （45CRF86）第九章，1973年康復法案（P．L．93－ 112）第504節，以及1990年美國人殘障法案來提供均等的機會，無分年紀，性別，婚姻狀況，殘疾，種族，膚色，性取向，宗教，原國籍，或其他類似的因素。
本校學生，職員及一概與書院有關之人士均須明白舉報可能觸犯此政策事例之重要性。校方秉承均等機會的宗旨，務必徹查所有舉報，更會就任。何有關造些法例及政策的事件，舉行聆聽會以示公允。

任何人士如欲查詢有關這些法例及政策的資料，或投訴涉嫌觸犯1964年公民權利法第六章及 1973年康復法案（P．L．93－112）第504節之事件者，請聯絡「特別計劃及服務部」主任 Vice Chancellor，Human Resources／Employee Relations（358－6767）

所有投訴均會按照第六章及第九章法例來審查。有關人等會收到法例內容及法定權利的通知。正常途徑如果受阻，或有違法律規定者，校方將會採取適當的行動。除記錄所有關於第六及第九章法例的投訴之外，校方亦會將投訴內容報告權益娄員會（Affirmative Action Committee）並依循委員會的決定來處理。

## Privacy Rights of Students Policy

The Family Educational Rights and Privacy Act（FERPA）affords students certain rights with respect to their education records．These rights include：
I．The right to inspect and review the stu－ dent＇s education records within 45 days of the day the College receives a request for access．Students should submit to the registrar，dean，head of the academic department，or other appropriate official， written requests that identify the record（s） they wish to inspect．The College official
will make arrangements for access and notify the student of the time and place where the records may be inspected．If the records are not maintained by the College official to whom the request was submit－ ted，that official shall advise the student of the correct official to whom the request should be addressed．

2．The right to request the amendment of the student＇s education records that the student believes are inaccurate or misleading．Students may ask the College to amend a record that they believe is inac－ curate or misleading．They should write the College official responsible for the record， clearly identify the part of the record they want changed，and specify why it is inac－ curate or misleading．If the College decides not to amend the record as requested by the student，the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment．Additional infor－ mation regarding the hearing procedures will be provided to the student when noti－ fied of the right to a hearing．
3．The right to consent to disclosures of personally identifiable information contained in the student＇s education records，except to the extent that FERPA authorizes disclosure without consent． One exception，which permits disclosure without consent，is disclosure to school officials with legitimate educational inter－ ests．A school official is a person employed by the College in an administrative，super－ visory，academic or research，or support staff position（including law enforcement unit personnel and health staff）；a person or company with whom the College has contracted（such as an attorney，auditor，or collection agent）；a person serving on the Board of Trustees；or a student serving on an official committee，such as a disciplin－ ary or grievance committee，or assisting another school official in performing his or her tasks．A school official has a legitimate educational interest if the official needs to review an education record in order to ful－ fill his or her professional responsibility．
4．The right to file a complaint with the U．S． Department of Education concerning al－ leged failures by the College to comply with the requirements of FERPA．
The Act provides that the College may release certain types of＂Directory Informa－ tion＂unless the student submits a request in writing to the Dean of Enrollment Ser－ vices that certain or all such information not be released without his／her consent． Currently enrolled students may request that＂Directory Information＂be withheld
by notifying the Dean of Enrollment Services in writing each term or semester.
External entities have access to only the following directory information (I) student's name and city of residence; (2) email address; (3) participation in recognized activities and sports; (4) dates of enrollment; (5) degrees and awards received; (6) the most recent previous educational agency or institution attended; and (7) height and weight of members of athletic teams.
Appropriate college personnel as noted in No. 3 above have access to full address information.
The Federal Solomon Act requires colleges to release full directory information (including address) to U.S. Armed Forces.
A copy of the Family Educational Rights and Privacy Act (Sec. 438, P.L. 93-380) is available in the Office of Admissions \& Records, Administration Building, Room 210, during normal business hours.

## Sexual Assault Policy

It is the policy of the San Mateo County Community College District to educate all students, faculty, and staff on the prevention of sexual assault. The District and Colleges will provide information to all faculty, staff, and registered students on the definition of sexual assault, how to prevent it, and how to report it if assaulted.
"Sexual assault" includes but is not limited to rape, forced sodomy, forced oral copulation, rape by a foreign object, sexual battery, or threat of sexual assault.
Any sexual assault or physical abuse, including, but not limited to, rape, as defined by California law, whether committed by a student, faculty, staff, administrator, visitor, or invitee of College of San Mateo, occurring on College property, or on an off-campus site or facility maintained by the College, or on grounds or facilities maintained by a student organization, is a violation of College policies and regulations, and is subject to all applicable punishment, including criminal procedures and employee or student discipline procedures.
Information and literature is available in the office of the Vice President, Student Services, the Health Center and the Security Office.
Any faculty, staff member, or student who has been sexually assaulted should immediately contact the Health Center, 574-6396, or the Security Office, 574-6415.

## Sexual Harassment Policy

It is the policy of the San Mateo County Community College District and the College of San Mateo to provide an educational and work environment free from unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct or communications constituting sexual harassment. The District promotes zero tolerance for behaviors which constitute sexual harassment in its educational and workplace environment for both employees and non-employees.
This policy defines sexual harassment and sets forth a procedure for the investigation and resolution of complaints of sexual harassment by or against any faculty member, staff member, Board member or student within the District. Sexual harassment violates State and Federal laws, as well as this policy, and will not be tolerated. It is also illegal to retaliate against any individual for filing a complaint of sexual harassment or for participating in a sexual harassment investigation. Retaliation constitutes a violation of this policy.
It is the responsibility of each District employee and student to maintain a level of conduct that is in compliance with District policy. Employees who violate this policy may be subject to disciplinary action up to and including termination. Students who violate this policy may be subject to disciplinary measures up to and including expulsion.
The District provides both informal and formal complaint resolution procedures; considers as serious matters all complaints of sexual harassment; is committed to full investigation and resolution; and takes steps to ensure that persons complaining of sexual harassment will not be subjected to retaliation or reprisals of any kind.
Students or staff seeking further information concerning this policy or claiming grievance because of alleged violations of this policy should contact the Vice-Chancellor of Human Resources and Employee Relations, 358-6767.

## Additional Redress

In addition to and concurrently with the filing of a written grievance, a student has the right to file a complaint or charges with other appropriate governmental agencies such as the Equal Employment Opportunity Commission, the Office for Civil Rights, the Department of Fair Employment and Housing, the Chancellor's Office of the California Community Colleges, or state or federal court.

## Smoking Policy

It is the policy of San Mateo County Community College District to provide a safe learning and working environment for both students and employees. It is recognized that smoke from cigarettes, pipes and/or cigars is hazardous to health; therefore, it is the intent of the District to provide a smoke-free environment to the greatest extent possible. To achieve this goal, smoking will be limited to parking lots and designated outdoor areas only. Designated smoking areas are identified and clearly marked in various locations on campus.
I. Smoking is prohibited in all indoor locations within the District.
2. District managers are responsible for publicizing the policy to students, employees and visitors, and are responsible for the posting of signs. Notification about the policy on smoking will be included in employee and student publications, newsletters and in other written materials as appropriate. In addition, materials which are used to publicize District public events will include policy notification to the general public.
3. To assist in the implementation of this policy, the District will provide education and training in the areas of smoking dangers and smoking cessation. Contact the CSM Health Center at 574-6396 for more information.
4. It is the responsibility of all students and employees to observe the policy and guidelines on smoking. Failure to comply with the policy on smoking will be treated in the same manner as other violations of District Rules and Regulations and may result in disciplinary action.
5. It is the responsibility of College and District Office managers to enforce the policy on smoking. Disputes over the interpretation of the policy or complaints about individuals violating the policy should be brought to the attention of the person's supervisor, the Vice-President of Student Services at the College level, or the Vice-Chancellor of Human Resources and Employee Relations in the District Office. When the evidence is non-persuasive on either side, such disputes will be settled in favor of the nonsmoker(s) in recognition of the policy of the District to provide a smoke-free environment. Such disputes shall be settled at the lowest management level.
6. This policy does not supercede more restrictive policies which may be in force in compliance with State or Federal regulations.
7. Please refer to collegeofsanmateo.edu/ smokingpolicy to view a map of CSM's Designated Smoking Areas.

## Admission

## Eligibility Requirements

Graduation from high school or successful completion of the California High School Proficiency Examination or the General Education Development Examination (GED), is a prerequisite for admission for a person under 18 years of age. Any person who is 18 years of age or older and is able to benefit from the instruction offered is eligible to attend this public community college.
The policy of this district is that, unless specifically exempted by statute or regulation, every course, course section, or class, reported for state aid, wherever offered and maintained by the district, shall be fully open to enrollment and participation by any person who has been admitted to the college(s) and who meets such prerequisites as may be established pursuant to regulations contained in Article 2.5 (commencing with Section 55200 ) of Subchapter I of Chapter 6 of Division 6 of Title 5 of the California Code of Regulations.

## Procedures for Admission

Students must be admitted to College of San Mateo before they are permitted to register. The first step is to apply online at collegeofsanmateo.edu/apply.
Prospective students should have college transcripts sent directly to College of San Mateo (Office of Admissions) by all institutions they have attended.
New students who plan to complete one or more of the educational goals listed below are expected to complete the matriculation process to enroll in classes:
Step I) complete the application for admission;
Step 2) complete the College of San Mateo placement tests in English or ESL and mathematics;
Step 3) complete the orientation program;
Step 4) meet with a counselor;
Step 5) register for classes. Students who are "exempt" from matriculation may choose to participate in matriculation but are not required to do so.
Step 6) sign in and use your assigned SMCCD email;
Educational goals that define a "non-exempt" student are: I) plan to complete a vocational certificate; and/or 2) plan to complete an associate degree; and/or 3) plan to transfer to a university; or 4) undecided, but considering one of the goals listed above.

An "exempt" student is one who: i) has completed an associate degree or higher; or 2 ) is taking a course only for personal enrichment; or 3) is a matriculated student at another educational institution and taking courses at the College of San Mateo to meet the requirements of that institution.

Matriculation information, which includes the admissions application, placement test dates, orientation options, and counseling hours, is provided in the schedule of classes and on the college web site.
Students planning to enroll in the Cosmetology, Nursing, or Dental Hygiene program must file a separate application in addition to the application for admission to the College. To obtain the appropriate application form, call 574-6363 (Cosmetology), 574-6219 (Nursing), or 574-640I (Dental Hygiene).

## Residence Requirements

It is not necessary to be a resident of California (as defined in the Education Code) in order to attend College of San Mateo. California State law requires that each student enrolled in or applying for admission to a California Community College provide such information and evidence as deemed necessary to determine his/her residence classification. The burden of proof to establish residence is on the student. For more information, contact the Office of Admissions and Records, Building I, second floor (574-6165).

## High School Students/ College Connection Concurrent Enrollment Program

Students attending high school may register concurrently for CSM classes with the approval of the Dean of Enrollment Services. Interested students must submit a College Connection/ High School Concurrent Enrollment Application (collegeofsanmateo.edu/ce) with the required recommendation, together with their high school transcript.
Concurrently enrolled high school students are exempted from payment of the enrollment fee and health fee if registered for less than II. 5 units. Because of enrollment limitations, high school students may not be permitted to enroll in classes in certain impacted programs.
College Connection Concurrent Enrollment Program students receive college credit for all course-work successfully completed. In addition, students may request that a transcript be sent to their high school registrar to be considered toward high school graduation.

## Transfer Credits

Students who have completed lower-division coursework at other colleges and universities accredited by the Western Association of Schools and Colleges or equivalent accrediting body and wish to apply that credit to the completion of a College of San Mateo certificate, associate degree, California State University General Education (CSUGE) certification, or the Intersegmental General Education (IGETC) certification must make a formal request to have their transcripts evaluated by the College of San Mateo Admissions and Records evaluator. Students should make the request using the Transcript Evaluation Request form within the first semester in attendance at College of San Mateo. To initiate a transcript evaluation students must:

- be actively enrolled in a minimum of 6 units at College of San Mateo; and
- intend to complete at College of San Mateo a certificate program, associate degree program, and/or CSUGE certification or IGETC certification; and
- have official transcripts from other colleges and universities sent to the College of San Mateo Office of Admissions and Records; and submit a Transcript Evaluation Request form to the Office of Admissions and Records.
Previous coursework is reviewed, analyzed, and applied, as appropriate, to the stated educational goals. Official results of the evaluation are included in students' electronic files, and a copy is sent to students for their records. The results of the official evaluation should be used with a counselor for the purpose of academic planning. Credit will not be allowed for units awarded at other colleges or universities in the following categories: credit by examination, military schooling credit, military service credit, Advanced Placement credit, College Level Examination Program (CLEP), or credit by other equivalency examinations. For more information about credit through examinations see Credit by Examinations in this catalog addendum.


## Former Students of College of San Mateo

Former students of College of San Mateo are normally eligible to return. However, if they have less than a 2.0 grade point average in courses taken at College of San Mateo or in the SMCCC District, they will be readmitted according to provisions of the current academic standards policy of the College (see Index: "Academic Policy"). Prior to being readmitted, former students must clear any holds on their records due to unpaid fees, fines, etc.

## International Students

College of San Mateo is authorized under Federal law to enroll non-immigrant international students. College of San Mateo does not normally admit persons who enter the United States as visitors (B-I/B-2 visa) to its International (F-I visa) Student Program. In order to be admitted to the program, an international student must:
I. complete the equivalent of an American high school education with satisfactory grades (normally a B or 3.0 average);
2. demonstrate sufficient command of English to profit from instruction at the College. A minimum score of 480 (paper based), I60 (computer based) or 56 (internet based) on TOEFL is required;
3. present evidence of sufficient funds to cover tuition fees and living expenses while attending College of San Mateo. The tuition fee for the 2009-20IO academic year is $\$ 200$ per unit of credit and a $\$ 20$ per unit enrollment fee; and
4. provide proof, before registration, of medical insurance coverage or enroll in a medical insurance plan provided for international students by San Mateo County Community College District.

International students are required to complete 12 units of class work each semester to maintain their status. A tuition deposit of $\$ 500$ is required before issuance of the Form I-20 for visa purposes. Additional fees are payable at the time of registration.
Under certain circumstances of unforeseen financial hardship, continuing international students may petition to pay the tuition in three installments or petition for a waiver of the tuition fee. This does not apply to students enrolling for their first semester at College of San Mateo.

A required international student application is available from the International Student Center. Telephone: 574-6525. Fax: 574-6i66. The international student application is also available online at collegeofsanmateo.edu/ international. For priority admission processing, applications for the Fall 2009 semester must be filed by April I5, 2009. Applications for the Spring 20IO semester must be filed by October I, 2009. Applications for the Fall 2010 semester must be filed by April I5, 2010.

## Choice of College

Residents of the District may elect to attend College of San Mateo, Cañada College or Skyline College.

## Special Programs

## Distance Learning

College transfer classes are offered by College of San Mateo online and on television. Distance learning courses present college-level instructional material for students who wish to gain academic credit for a degree, a certificate or for personal enrichment. The credits earned may be applied to College of San Mateo programs or transferred to most colleges and universities. Students may obtain a degree by taking a combination of distance learning courses and evening or weekend classes. See the Schedule of Classes for information on distance learning offerings.

## San Mateo Middle College High School

San Mateo Middle College High School is an alternative education collaboration between the San Mateo Union High School District and College of San Mateo. The program's primary goal is to provide a supportive and challenging environment, along with the opportunity for academic success and career exploration, to students whose needs are not met in a traditional high school environment.
The program includes 60 high school juniors and seniors, all of whom were selected from among the district's seven schools. While these students are perceived as bright, creative and in some cases gifted, their grades and behavior may not yet reflect this potential.
As part of the Middle College program, these students take three SMUHSD-approved classes taught by SMUHSD instructors on the CSM campus; they round out their schedules with CSM courses. In many cases, students can earn both high school credits and college units. The Middle College program also includes comprehensive academic and career advising and access to all of CSM's support services. Cabrillo Unified School District students may be eligible and should contact their guidance counselor for information. For information, call the Middle College Office (Bldg. ir, Room I36) at 574-6IoI or email middlecollege@ smuhsd.org. The Middle College web site is collegeofsanmateo.edu/middlecollege.

## Study Abroad Program

The San Mateo County Community Colleges, in cooperation with the American Institute for Foreign Study, offer students the opportunity to study and live abroad, earning up to i5 units toward an AA/AS degree which are transferable for Bachelor's degree credit. Current offerings include a London or Paris Semester in Fall 2009, a Semester in Florence in Spring 20IO, and a summer 20IO program with location to be determined. Students applying to participate must have completed at least I2 college units with a minimum GPA of 2.5 .
Costs, including flights and living accommodations, are reasonable and financial aid is available. Early planning is advisable. For further information, visit collegeofsanmateo. edu/studyabroad.

## Summer Session

A balanced offering of day and evening summer session classes enables students to accelerate their programs and satisfy course or curriculum requirements. The summer session also affords opportunity to exceptionally able high school students, after completing the sophomore year, to take selected college courses. Further information may be obtained through the Office of Admissions and Records, Building i, Second Floor (574-6I65).


## Registration

New matriculating "non-exempt" students (see definition listed on page 6) complete the following steps to register for classes:

Step i - Admission Application
Step 2 - College of San Mateo placement tests in English or ESL and mathematics

Step 3 - College Orientation Program
Step 4 - Meet with a counselor/advisor
Step 5 - Register for classes
Step 6 - Sign In and Use Your Assigned SMCCD Email
Students "exempt" from matriculation may choose to participate in the matriculation steps.

## Enrollment Management

## A Student Responsibility

At the College of San Mateo, it is the student's responsibility to manage his/her enrollment. This includes updating personal information records via WebSMART, registering for classes in a timely manner, adhering to all deadlines listed on the Important Dates page in the Schedule of Classes (in particular late registration, withdrawal from classes, payment of fees, retrieving grades), and monitoring academic standing.

## WebSMART Registration and Services for Students

Your student WebSmART account is the vehicle to use to manage enrollment, view academic records, and maintain up to date student information. Using WebSMART (collegeofsanmateo.edu/websmart) you can:

- View the College Catalog;
- View the most accurate representation of the Schedule of Classes;
- Schedule an appointment to complete placement testing;
- Schedule an appointment to meet with a college counselor;
- Check registration appointment and status;
- Register for classes;
- Add/drop classes within the published deadlines;
- Confirm and print your schedule of classes;
- View and pay enrollment fees;
- Purchase a parking permit;
- Purchase textbooks;
- Apply for financial aid;
- View grades;
- View transcripts;
- Monitor academic standing;
- Obtain an evaluation of your progress toward an associate degree or certificate;*
- Obtain an evaluation of your progress toward CSU GE or IGETC certification;*
- Order an official transcript;
- Update address, phone number, emergency contact information and other personal information; and
- Update educational goals.
*Beginning July 2009, students can use WebSMART to review progress toward the following educational goals: associate degree, certificate, CSU GE certification, and IGETC certification. Find this degree evaluation tool under Student Services and Student Records. Be sure to consult with a college counselor to review and confirm the information at the degree evaluation site and to discuss the evaluation process for coursework completed outside of the SMCCCD.


## Unit Load Limitations

A normal class load for a full-time student for fall and spring semesters is between I2 - I9 units. For summer session a full time load is considered to be 6 units. Students are not permitted to take more than 19 units during the fall and spring semesters or more than II units during the summer session without approval from a College of San Mateo counselor. To request approval, students follow the directions on the Petition to Enroll in Beyond the Maximum Units available at collegeofsanmateo.edu/forms. A program of i2 units or more during fall and spring terms is considered a full-time load for athletic eligibility, financial aid, international students with F-I visa, veterans' benefits, social security benefits, and most other benefits which are dependent upon student enrollment status.

## Program Changes

## Adding Classes

Students may add classes up to one day prior to the start date of the class by using WebSMART. Once the class begins (ist class meeting), students may add classes by being in attendance, obtaining the instructor's authorization, completing registration and paying fees within published timelines.
In order to add a semester-long class, a student must be in attendance in the class by the second week of instruction. In evening classes which meet twice a week, a student must be in attendance by the third class meeting. To add a short course or a summer course, a student must be in attendance in the course within the first $12 \%$ of the class meetings.

When utilizing WebSMART to register for classes, students should print a schedule summary as a receipt of their registration.

## Wait Lists

Students wishing to add classes which have reached the enrollment limit may use WebSMART to add themselves to the waitlist. If seats become available in the class, the student will be notified by email through the my.smccd.edu account. If the student fails to enroll in the class within the 48 hours, $\mathrm{s} /$ he will be placed at the bottom of the waitlist. Students who are on waitlist for classes that have established prerequisites are required to complete prerequisite requirements prior to enrolling. (Refer to the Class Schedule for more information.)

## Dropping Classes

Classes may be dropped without the instructor's approval. Withdrawal from a class or classes must be initiated by the student by the appropriate deadline date by using WebSMART during published service hours, in person at the Office of Admissions and Records, by mail, or by fax at 574-6506 (including the student's signature). Withdrawal requests must be postmarked or faxed by the appropriate deadline date as published in the Schedule of Classes.
When utilizing WebSMART to drop a class, it is important to print a copy of the transaction as a receipt.
A student who stops attending a class may not be dropped from the roll by the instructor, and therefore may receive a penalty grade of F or NP. It is the student's responsibility to withdraw officially following prescribed timelines and procedures. A student who does not withdraw in accordance with established procedures will receive a grade of F or NP .
A student may withdraw from a semesterlength class during the first four weeks of instruction and no notation will be made on the student's academic record. In courses of less than a regular semester's duration, a student may withdraw prior to the completion of $30 \%$ of the scheduled class meetings and no notation will be made on the student's academic record.
After the fourth week of instruction, a student may withdraw from a semester-length class, whether passing or failing, at any time through the end of the fourteenth week of instruction (or $75 \%$ of a term, whichever is less); a W grade will be recorded on the student's academic record. In courses of less than a regular semester's duration, a student may withdraw prior to the completion of $75 \%$ of the scheduled class meetings; a W grade will be recorded on the student's academic record.

A student who must withdraw for verifiable extenuating circumstances after the deadline (i.e., personal illness, automobile accident, death or severe illness in the immediate family or other severe physical or emotional hardship) may submit a petition to the Office of Admissions and Records for an exception to this policy. Any extenuating circumstance must be verified in writing (i.e., letter from physician, official accident report, obituary notice, etc.). Petition forms are available from and submitted to the Office of Admissions and Records, Building I, Second Floor (574-6165).

The academic record of a student who remains in class beyond the time periods set forth above must reflect an authorized symbol other than W (see Index: "Grades, Grade Points").

A student failing to follow established withdrawal procedures may be assigned an F or NP grade by the instructor.

## Audit Policy

The Colleges of the District allow auditing of courses with the exception of courses in programs that require special preparation and/ or program admissions on a limited basis. A student may audit a course only under the following circumstances.
I. The student must have previously enrolled for credit for the maximum number of times allowed for the particular course.
2. The instructor of record for the course must approve the enrollment as an auditor.
3. The student must be in good academic standing.
4. If the course is a variable unit class, the student must enroll for the maximum number of units available.
5. The student must enroll as an auditor immediately following the published late registration period and pay the auditing fee.
A student may enroll as an auditor the week after the late registration period is concluded because those students taking the course for credit have first priority for all classroom space. Enrollment as an auditor is a manual process and the student should obtain a PERMIT TO ENROLL AS AN AUDITOR from the Office of Admissions and Records. No student auditing a course shall be permitted to change his or her enrollment to receive credit for the course. An auditing fee as established by California Education Code is payable at the time of enrollment as an auditor, with the exception of students enrolled in ten (io) or more semester units.

## Prerequisites, Corequisites, and Recommended Preparation

The Board of Trustees of the San Mateo County Community College District allows colleges to establish prerequisites, corequisites, and recommended preparation for courses and educational programs. Prerequisites and corequisites must be determined to be necessary and appropriate and must be established in accordance with Title 5 regulations in the California Administrative Code. They are designated in course descriptions in the college catalog and appear in the class schedules.
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 program. As an example, students must successfully complete elementary algebra (Math iio), prior to enrolling in intermediate algebra (Math I2O). So, Math IIo is a prerequisite for Math I2O. A prerequisite course must be completed successfully to enroll in the course which follows. Successful completion is defined as earning a grade of "C" or better. Placement test results can also be used to meet prerequisite skill levels.
A Corequisite is a course that a student is required to take simultaneously in order to enroll in another course. Corequisites are designated in course descriptions in the catalog.
Recommended Preparation for a course or program is a condition that a student is advised, but not required, to meet before enrollment. Recommended preparation is designated in course descriptions in the catalog. A number of courses list English 848 and Reading 400 as recommended preparation which alerts students to the writing and reading skills that are important to student success in a class.

## Computerized Prerequisite Checking

The San Mateo County Community College District enforces all prerequisite and corequisite requirements. Mathematics and English classes have computerized prerequisite checking in place. When attempting to register for a course that has a prerequisite, the computer registration system searches the San Mateo County Community College District student data base for one of two things: I) the successfully completed prerequisite course(s) or 2) placement test results from testing completed within the last two years that identify the appropriate skill level prerequisite requirements. If neither prerequisite identifier is in place, registration for the class is not completed. If a student is currently enrolled in the prerequisite course(s), the system allows
registration into the next level course. However, if the in progress prerequisite course is not successfully completed, the student will be withdrawn from the course.

How Can Students Meet Prerequisite Requirements?
There are four ways students can meet prerequisite requirements:
I. complete the prerequisite course(s) within the San Mateo County Community College system, with a grade of "CR/P or C" or higher; or
2. complete placement tests in the San Mateo County Community College District within the last two years with results that indicate the prerequisite skill level; or
3. *complete the prerequisite course at another accredited college/university in the United States;
4. *meet prerequisites through the College Board Advanced Placement Exam results (AP Tests).
*For 3 and 4, students must use the Prerequisite Equivalency Petition to secure approval. Prerequisite Equivalency Petitions are available on the college web site collegeofsanmateo.edu/forms. If a student has not completed a course or test to meet prerequisite requirements but has other experience that meets the prerequisite skill level then the prerequisite challenge process is the means to determine course eligibility.

## How Can Prerequisites and Corequisites Be

 Challenged?A prerequisite or corequisite may be challenged on one or more of the following grounds.

- The student has the knowledge or ability to succeed in the course despite not meeting the prerequisite.
- The prerequisite or corequisite was established in violation of district policies or Title 5 regulations.
- The prerequisite or corequisite is unlawfully discriminatory or applied in an unlawfully discriminatory manner.
- The prerequisite or corequisite has not been made reasonably available and the student is subject to undue delay in goal attainment.

Students who wish to challenge prerequisites or corequisites must, within the established time frame, complete the Prerequisite Challenge Petition and attach documentation. For semester length courses, petitions with documentation must be submitted at least five working days prior to the last day of the published late registration period. For courses that are not semester length, the petition with documentation must be submitted prior to the
first day of the class. It is the responsibility of the student to provide compelling evidence to support the challenge. Prerequisite Challenge Petitions are available on the college web site collegeofsanmateo.edu/forms.

## Fees

Note: The fees listed in this Catalog are those in effect at the time of publication. Fees are subject to change at any time by action of the State Legislature, Board of Governors of the California Community Colleges, or District Board of Trustees.

## Enrollment Fee

A State-mandated enrollment fee of $\$ 20$ per unit is payable at the time of registration.

The Board of Governors of the California Community Colleges has established a grant program to help low income students pay the enrollment fee. Information on eligibility requirements and application deadlines, as well as application forms, are available in the Financial Aid Office.
In addition to other costs, students classified as non-residents of the state of California must pay a tuition fee. See details under NonResident Tuition Fee.

## Health Services Fee

All students, except concurrently enrolled high school students enrolled in less than i2 units or those registering only for telecourses, off-campus classes or weekend classes, are required to pay a \$17 health services fee each fall and spring semester at the time of registration for day or evening classes. For the summer session 2009 the health services fee is \$I4. In addition to campus health services, the fee provides accident insurance coverage which is in effect when the student is on campus or attending a College-sponsored event.
Students who depend exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization may be exempted from paying the health services fee. A petition for health services fee exemption can be obtained from the Health Center, Building i, Room 226 (574-6396).

## Student Representation Fee

A representation fee of \$ per student per semester was established by an election of the student body at College of San Mateo. Under applicable provisions of the Education Code, the students established the representation fee by a two-thirds majority of students who voted in the election.

The money collected through this fee will be expended to provide support for students or their representatives who may be stating their positions and viewpoints before city, county,
and district government and before offices and agencies of the local, State and Federal government.
A student has the right to refuse to pay the student representation fee for religious, political, moral or financial reasons. This refusal must be submitted in writing. The fee is not covered by financial aid.

## Parking Fee

All persons driving motor vehicles onto campus and utilizing the parking facilities during regular class hours, including final examinations, are required to pay a parking fee. Parking permits are not required for students enrolling in telecourses, off-campus or weekend classes. Student parking permits are available for $\$ 40$ each for the fall and spring semesters or $\$ 70$ for a two term (fall/spring) permit, and \$20 for the summer session. Parking permits for low income students are $\$ 20$ per semester. Low income students are those who demonstrate financial need under federal standards or state BOG income standards or those who receive assistance through CalWORKs, SSI or general assistance. If a semester length parking permit s is lost or stolen, replacements are available at full price. Two-term permits are replaced on a sliding scale, depending on the point in the academic year. Permits lost during the Fall term costs $\$ 60$ to replace and permits lost during the Spring term costs \$30 to replace. One-day parking permits (\$2) for all student lots are available from machines in Lots I, 2, IO, I4 and I5.

Permits may be purchased online using WebSMART. Up to a certain date, published in the class schedule, parking permits will be mailed to students as part of the Registration Statement. After this date, students must obtain their permits in the Cashier's Office. Parking is on a first-come, first-served basis. A permit is not a guarantee of a parking space. The College and San Mateo County Community College District accept no liability for vandalism, theft or accidents. Use of parking facilities is at the user's risk. Parking and traffic regulations are enforced by the Campus Security Office staff, and violators are cited to the civil administrative procedures on campus as set forth in the California Vehicle Code. Students who violate traffic regulations are subject to disciplinary action as outlined in the student conduct code. The College reserves the right to change parking regulations for special events.
Special Parking for Students with Disabilities Blue handicapped parking spaces have been provided in Lots 3, 5, 6, 7A, 13, I4, I7 and 23. Students must have both a California State Placard (issued by DMV) and a CSM parking permit to park in these blue spaces. Temporary parking permits are also available with doctor's verification. For further information contact the

Disabled Student Center, Building I6, Room I50, 574-6438; voice 358-6803 (TTY).

## Student Body Fee

The optional student body fee is $\$ 8$ per semester and is assessed at the time of registration. This entitles the student to a photo ID student body card, which can be obtained at the Student Activities Office during regular office hours. This photo identification card entitles students to special discount of IO\% to $40 \%$ at participating local businesses, movie theaters, shops and restaurants. On-campus discounts are available at the cosmetology salon, CSM Bookstore (non-book items), and all athletic events. Funds collected from the student body fee help support numerous programs and services on campus including scholarships, emergency student loans, child care, athletics, guest speakers and concerts.

## Non-Resident Tuition Fee

No tuition is charged to legal residents of California. In 2009-20IO, students who have not been residents of California (as defined in the Education Code) for one year or longer prior to the beginning of a term are required to pay a non-resident tuition fee of \$191 per unit (\$200 per unit for foreign students) at the time of registration in addition to the $\$ 20$ per unit enrollment fee. Residency status is determined by the Office of Admissions and Records.

In general, an unmarried minor (a person under is years of age) derives legal residence from his/her father (or his/her mother if the father is deceased), or, if the case of permanent separation of the parents, from the parent with whom the minor maintains his/ her abode. The residence of a minor cannot be changed by an act of the minor or an act of the minor's guardian while the minor's parents are living.
An adult must take steps to establish legal residency in California at least one year prior to the beginning of the term in order to be classified as a resident student for that term. Information concerning acceptable documentation of intent to establish and maintain California residency is available in the Office of Admissions and Records.

## Other Expenses

Students must purchase their own textbooks and supplies. A considerable saving is possible through the purchase of used texts from the on-campus College of San Mateo Bookstore. The San Mateo County Community College District offers a textbook rental program to assist students with textbook costs. Special equipment is needed for certain programs such as Electronics, Drafting, Nursing, Cosmetology, Engineering, Art and Architecture, involving an additional initial outlay ranging from $\$$ Ioo to $\$ 600$. Please refer to course descriptions for special costs.

## Credit and <br> Refund Policy

## Enrollment Fee <br> Nonresident Tuition Fee <br> Health Services Fee <br> Parking Fee <br> Student Representation Fee

Students who officially withdraw from semester-long classes on or before the date published as the last day to add semester-long classes, or who officially withdraw from short courses or summer courses within the first Io\% of the class meetings, will receive credit toward future fees for the full amount of all fees paid for those classes.

Example: If a short course has eight meetings, $10 \%$ of $8=0.8$, and this is rounded up to i.o. Therefore, the student must officially withdraw no later than the end of the day of the first class meeting to be eligible for a credit or refund.

A \$10 processing fee (plus an additional \$50 processing fee for nonresident tuition) will be retained by the College if a refund is issued to a student withdrawing from all classes.

For semester-long classes dropped after the date published as the last day to add semesterlong classes, short courses or summer courses dropped after the first io\% of the class meetings, these fees are not refundable unless an action of the College (e.g., class cancellation) prevents a student from attending class.

## Variable Unit Courses

No enrollment fee or non-resident tuition refund or credit will be available to students enrolled in variable unit courses who earn fewer units of credit than the number for which they originally registered. Students earning additional units will be charged accordingly.

## Student Body Fee

This fee is refundable through Friday of the third week of classes of the semester. To request a credit or refund of this fee, contact the Student Activities Office at 574-6I4I.

## Important Notes:

I. If a parking permit has been issued, it must be returned to the Cashier's office or the Security Office before a credit or refund of the parking fee will be processed.
2. Credit balances remain on student accounts for a maximum of five (5) years.
3. A student may either choose to maintain a credit balance on account or contact the Cashier's Office to arrange for a refund.
4. Refunds are NOT issued automatically and are subject to a \$io processing fee if the student withdraws from all classes.

Refunds of nonresident tuition are subject to an additional \$50 processing fee.
5. Fees paid by personal check require 30 days for bank clearance before refunds can be processed.
6. To be eligible for a credit or refund, a student must officially withdraw from a course within the stated deadline. A withdrawal initiated by an instructor may NOT result in a credit or refund.
7. A processing fee is charged only once per semester or session. If a student pays an enrollment fee of less than \$IO, and cancels his/her registration or withdraws from all classes before the deadline, the processing fee is equal to the enrollment fee.
8. Fees will be credited or refunded if an action of the College (e.g., class cancellation) prevents a student from attending.
9. A student is entitled to a full non-resident tuition credit or refund if tuition has been collected in error.
Io. Student records, including transcripts, are automatically held until all debts to the District colleges have been cleared.

## Grades and Scholarship

## Units of Work and Credit

A unit of college credit normally represents one hour each week of lecture or three hours of laboratory, or similar scheduled activity, during one full semester.

## Grades, Grade Point Average and Grading Symbols

The instructor of the course shall determine the grade to be awarded to the student.

Grades from a grading scale are averaged on the basis of their point equivalencies to determine a student's grade point average. Grades earned in non-degree applicable courses are not counted in calculating a student's grade point average. The highest grade (A) receives four points, and the lowest grade $(\mathrm{F})$ receives o points, using only the following evaluative symbols.
Symbol Definition
Grade Points

| A | Excellent | 4 |
| :--- | :--- | ---: |
| B | Good | 3 |
| C | Satisfactory | 2 |
| D | Passing, less than satisfactory | I |
| F | Failing | o |
| *P | Pass (at least satisfactory;units |  |


| *NP | No Pass (less than |  |
| :--- | :--- | :--- |
|  | satisfactory or failing; |  |
|  | units not counted in GPA) |  |
| I | Incomplete | o |
| IP | In Progress | o |
| MW | Military Withdrawal | o |
| RD | Report Delayed | o |
| W | Withdrawal | o |

*Used in courses in which grades of Pass or No Pass are given. The units earned with a grade of Pass count as units completed. No Pass means the student is not charged with units attempted and is not credited with units completed.
The determination of the student's grade by the instructor shall be final in the absence of mistake, fraud, bad faith, or incompetency. Procedures for the correction of grades given in error shall include expunging the incorrect grade from the record.

## I - Incomplete

This symbol is used in case of incomplete academic work for unforeseeable, emergency and justifiable reasons. Conditions for removal are set forth by the instructor in a written record which also indicates the grade to be assigned in the event that the student fails to meet the stated conditions. The student will receive a copy of this record, and a copy will be filed by the Dean of Enrollment Services. A final grade will be assigned by the instructor when the stipulated work has been completed and evaluated. In the event that the work is not completed within the prescribed time period, the grade previously determined by the instructor will be entered in the permanent record by the Dean of Enrollment Services.
An Incomplete must be made up no later than one year following the end of the term in which it was assigned. Established College procedures may be utilized to request a time extension in cases involving unusual circumstances. The I shall not be used in the computation of grade point average.

## MW - Military Withdrawal

Military withdrawal may be requested when a student who is a member of an active or reserve United States military service receives orders compelling a withdrawal from courses. Upon verification of such orders, a military withdrawal symbol (MW) will be assigned for each course if the withdrawal occurs after the period during which no notation is made for withdrawals on the student's record. Military withdrawals are not counted in progress probation and dismissal calculations. Students granted military withdrawal may request refund of the enrollment fee. The entire enrollment fee will be refunded unless academic credit has been awarded.

## RD - Report Delayed

This symbol is used only by the Dean of Enrollment Services for the purpose of indicating that there has been a delay in reporting the grade due to circumstances beyond the student's control. It is replaced by a permanent symbol as soon as possible.
The RD is not used in the computation of grade point average.

## W - Withdrawal

See Index: "Withdrawal from Classes"

## Pass/No Pass Option

Updated Title 5 regulations eliminate the Credit/No Credit (CR/NC) option and replace it with Pass/No Pass (P/NP). The new designators, $\mathrm{P} / \mathrm{NP}$, are weighed in the same manner as the former CR/NC designators. Students electing to use the PASS/NO PASS option for a course should use the student WebSMART account to make this designation. After students have registered for a class, on WebSMART find "grade mode." "Grade mode" allows students to select either a letter grade or pass/no pass grading option if the option exists. (Not all courses offer the P/NP option.)

Students may also submit the appropriate form to the Office of Admissions and Records within the first $30 \%$ of the term. Changes will not be permitted after this time.

Each division of the College may designate courses in which a student may elect to receive a letter grade or be graded on a Pass/No Pass basis.

Grade option courses allow students to explore various fields of study and to broaden their knowledge, particularly outside their major field, without jeopardizing their grade point average. Courses in which such option exists will be so designated by the Division Dean in consultation with appropriate members of the division faculty.
The utilization of courses graded on a Pass/ No Pass basis to satisfy major or certificate requirements must be approved by the Division Dean in consultation with appropriate members of the division faculty. A maximum of 12 units toward an Associate degree or 6 units toward a certificate may be applied from courses in which the student has elected a Pass/No Pass option. Additionally, each division of the College may determine certain courses in which all students are evaluated on a Pass/No Pass basis only. These courses will be so identified in the class schedule and are exempt from the above $12 / 6$ unit limitation.
Four-year colleges and universities vary widely in the number of units of Pass/No Pass courses they accept. Students should consult the catalog of the college to which they may transfer for its regulations in this regard.

## Final Examinations

Final examinations are required and will be given in accordance with the final examination schedule. The final examination schedule is printed in the class schedule so that students may plan their programs to avoid conflicts or an excessive load.

## Grade Reports

A student is held responsible for his/her own academic progress. Final grades are not mailed to students. Dates of grade availability for specific semesters are published in the Schedule of Classes. Final grades are available to students via WebSMART on the dates as published.

## Change of Grade

After a grade has been issued, only the instructor has the authority to change the grade per California Education Code Section 76224. A student wishing to have a posted grade changed must submit appropriate documentation to the instructor who issued the grade. The instructor must deliver the grade change to Admissions and Records. There is a deadline of one year from the date that the grade is posted to initiate a grade change.
Responsibility for monitoring personal academic records rests with the student.

## Honors

## Dean's List Recognition

Students who qualify for Dean's List status at the end of the fall and spring semesters and summer session will be notified by letter. The student will be honored by the college (College of San Mateo, Cañada, or Skyline College) from which the majority of the units in any given semester are earned. Full-time students must complete twelve (I2) or more units of lettergraded classes and achieve a GPA of 3.30 or better in any given semester or summer session. Part-time students must initially qualify by accumulating twelve (I2) or more lettergraded units at a college or colleges within the District with a GPA of 3.30 or better by the end of a given semester or summer session. Once qualified, in a subsequent semester the student must enroll in and complete at least six (6) units but no more than eleven and onehalf (II.5) units with a GPA of 3.30 or better in any given semester or summer session. Once a student has qualified for either the full-time or part-time Dean's List, the student may go back and forth between the full-time and part-time Dean's List status, depending upon the number of units completed in any given semester.

## Honors at Graduation

Honors are awarded at graduation (A.A./A.S. degree) as follows, based upon GPA in all degree-applicable courses taken at College of San Mateo, Cañada College and Skyline College, together with GPA of degree-applicable coursework completed at other accredited institutions.

### 3.30-3.49 Graduation with Honors 3.50-4.00 Graduation with High Honors

Students are required to submit all official college transcripts to Admissions and Records for GPA calculation and determination of honors at graduation.

In every case, the student's cumulative GPA in degree-applicable courses taken only at College of San Mateo, Cañada College and Skyline College must equal or exceed the minimum required GPA for the honors category for which the student is being considered.

## Honor Societies

## Alpha Gamma Sigma

College of San Mateo is affiliated with the California Community College Honor Scholarship Society, Alpha Gamma Sigma. The local chapter is the Eta Chapter. Alpha Gamma Sigma maintains academic standards for induction, continued membership and permanent membership. Membership during a semester in AGS is based upon the student's GPA as of the previous semester at CSM or elsewhere. New members must have completed a minimum of 12 graded college units and achieve a semester GPA of 3.30 or higher to be invited to join the local chapter. Continuing members must maintain a cumulative GPA of 3.0 or higher. There is no unit requirement for continuing membership. There are two avenues to permanent membership: I) a 3.25 cumulative GPA, 60 units and two semesters of local chapter membership; or 2) a 3.50 cumulative GPA, 60 units and at least one semester of local chapter membership. Contact the chapter advisor of Alpha Gamma Sigma for further information.

## Phi Theta Kappa

College of San Mateo is affiliated with Phi Theta Kappa, the international honor society of the two-year college, which recognizes the scholarly achievements of over I. 5 million students throughout all 50 states, U.S. territories, Canada, and Germany. The local chapter is the Beta Xi Eta Chapter. Phi Theta Kappa maintains academic standards for both induction and continued membership. New members must complete at least i2 credit hours and attain a GPA of 3.5 or better. Continuing members must maintain at least a 3.25 GPA. Contact the chapter advisor of Phi Theta Kappa for further information.

## Student Handbook

## Student Rights and Responsibilities

The principle of personal honor is the basis for student conduct. The honor system rests on the sincere belief that College of San Mateo students are mature and self-respecting, and can be relied upon to act as responsible and ethical members of society. Each individual has the obligation to observe the College rules and regulations.
Social or other functions using the name of the College are thereby identified as College functions and become subject to the same standards of conduct and of supervision, whether conducted on or off the campus.
Social or other functions for which no College staff member is listed as a sponsor are not considered College functions. Further, no off-campus organizations may use the name of the College of San Mateo or imply College sponsorship in any publicity or other information. Guidelines addressing student cheating and plagiarism are found in the catalog under College Policies.

## Student Conduct

All members of the San Mateo County Community College District community share the responsibility for preserving the freedom to learn. The College's policies and procedures are designed to safeguard this freedom. Students attending any college in the San Mateo County Community College District will have full access to the rules and regulations under which these colleges operate and will be assured an impartial hearing in instances when a regulation allegedly is violated.

Students enrolled in the Colleges of the District are expected to conduct themselves as responsible citizens and in a manner compatible with the District and College function as an educational institution.
Students are also subject to civil authority and to the specific regulations established by each College in the District. Violators shall be subject to disciplinary action, including possible cancellation of registration, and may be denied future admission to the Colleges of the San Mateo County Community College District.

A system of derived authority provides the basis for the regulation of the conduct of students of the San Mateo County Community College District. Authority for the public educational system in California rests with the state. The state legislature has full authority, subject only to the limits placed upon it by the Constitution of the United States and the State
of California, and fulfills its duty as follows:
I. By creating laws to regulate public education - these are to be found principally in the Education Code.
2. By delegating authority to local agencies such as the Board of Trustees of the San Mateo County Community College District, which, in turn, may delegate its administrative authority.
The following actions are prohibited and may lead to appropriate disciplinary action:
I. Continued disruptive behavior, continued willful disobedience, habitual profanity or vulgarity, the open and persistent defiance of the authority of, or persistent abuse of, college personnel.
2. Assault, battery, or any threat of force or violence upon a student or college personnel.
3. Physical abuse or verbal abuse or any conduct which threatens the health or safety of any person (including any action on campus or at any event sponsored or supervised by the College).
4. Theft or damage to property (including College property or the property of any person while he/she is on the College campus).
5. Interference with the normal operations of the College (i.e., obstruction or disruption of teaching, administration, disciplinary procedures, pedestrian or vehicular traffic, or other College activities, including its public service functions or other authorized activities on college premises).
6. Use of personal portable sound amplification equipment (e.g., radios and tape players) in a manner which disturbs the privacy of other individuals and/or the instructional program of the college. Determination of an acceptable level of amplification will be made by the Vice President, Student Services or his/her designee(s).
7. Unauthorized entry into, or use of, College facilities.
8. Forgery, falsification, alteration or misuse of College documents, records, or identification.
9. Dishonesty such as cheating, plagiarism, or knowingly furnishing false information to the College and its officials.
Io.Disorderly conduct or lewd, indecent, or obscene conduct or expression on any College owned or controlled property or at any College sponsored or supervised function.
II. Extortion or breach of the peace on College property or at any College sponsored or supervised function.

I2.The use, possession, sale or distribution of narcotics or other dangerous or illegal drugs (as defined in California statutes) on College property or at any function sponsored or supervised by the College.
13. Possession or use of alcoholic beverages on College property, or at any function sponsored or supervised by the College.
14. Illegal possession or use of firearms, explosives, dangerous chemicals, or other weapons on College property or at College sponsored or supervised activities.
I5. Smoking within any indoor location within the College or in any location other than those designated smoking areas.
I6.Failure to satisfy College financial obligations.
17. Failure to comply with directions of College officials, faculty, staff, or campus security officers who are acting in performance of their duties.
18. Failure to identify oneself when on College property or at a College sponsored or supervised event, upon the request of a College official acting in the performance of his/her duties.
I9.Gambling.
20.Sexual harassment; sexual or racial discrimination.
2I. Violation of other applicable federal and state statutes and District and College rules and regulations.
Guidelines for campus assembly procedures:
I. Any public meeting, demonstration, or rally on campus will be governed by the regulations of the College of San Mateo as to time, place, and manner.
2. Students have the full right to express their views on any matter, subject to college regulations in regard to time, place, and manner.
3. Disruptive behavior is defined as any action which interferes with the functions or activities of the College to the point where such functions or activities can no longer effectively continue. Examples of such functions or activities are classroom activities, athletic events, administrative activities, approved assemblies, meetings and programs, and construction work. Examples of disruptive activities are blocking access to college facilities, disrupting classroom activities to the point where the instructor, in his/her opinion, is no longer able to continue the class, heckling an assembly speaker so that the speaker cannot continue talking, and unauthorized use of sound equipment.
4. In the event of disruptive behavior, the President of the College or his/her representative will make every effort to restore order within the context of the College of San Mateo community itself. Should disruptive activity continue, the administration may suspend those individuals continuing to engage in disruptive behavior. The administration of the College may take whatever steps are necessary to restore order, including requests for aid from appropriate law enforcement agencies.
5. Violent behavior will be defined as any action that results in physical harm to persons or property or an overt and public threat of harm.
6. In case of violence, the President or his/ her delegated representative, may request immediate and appropriate action by law enforcement authorities.
7. In the case of extreme violation of the rule(s), a student may face expulsion by action of the Board of Trustees on recommendation of the College President and the Chancellor-Superintendent. Procedures in this instance are provided for in the District Rules and Regulations, as adopted by the Board of Trustees.

## Disciplinary Actions

Any student may be subject to disciplinary action, including suspension and/or expulsion, if his/her actions on campus are disruptive or are in violation of College rules and regulations. In cases involving disciplinary action, the student will have access to established appeals procedures.

## I. General Disciplinary Actions

A. Decisions regarding the following types of disciplinary action are the responsibility of the Vice President, Student Services. Unless the immediate application of disciplinary action is essential, such action will not be taken until the student has had an opportunity to utilize the established appeal procedures found in Rules and Regulations, Section 7.73.
I. WARNING - A faculty or staff member may give notice to a student that continuation or repetition of specified conduct may be cause for further disciplinary action.
2. TEMPORARY EXCLUSION - a faculty or staff member may remove a student who is in violation of the guidelines for student conduct for the duration of the class period or activity during which the violation took place and, if necessary, for the day following. The faculty or staff
member shall immediately report such removal to the college chief executive officer or his/her designee for appropriate action.
3. CENSURE - The Vice President, Student Services may verbally reprimand a student or may place on record a written statement which details how a student's conduct violates a District or College regulation. The student receiving such a verbal or written statement shall be notified that such continued conduct or further violation of District/College rules may result in further disciplinary action.
4. CANCELLATION OF REGISTRATION - The Vice President, Student Services may cancel a student's registration in the event of falsification of educational and/or financial records and related documents or for failure to meet financial obligations to the District.
5. DISCIPLINARY PROBATION - The Vice President, Student Services or his/ her designee may place a student on disciplinary probation for a period not to exceed one semester. Repetition of the same action or other violations of District/College rules and regulations during the probationary period may be cause for suspension or expulsion. Disciplinary probation may include one or both of the following:
a. Removal from any or all College organizations or offices; and/or
b. Denial of privileges of participating in any or all College or student sponsored activities.
6. RESTITUTION - The Vice President, Student Services may require a student to reimburse the District for damage or misappropriation of property. Restitution may take the form of appropriate service to repair or other wise compensate for damages.
B. Disciplinary action shall not of itself jeopardize a student's grades nor will the record of such action be maintained in the student's academic files.
C. A student subject to disciplinary action has a right to appeal the decision in accordance with Rules and Regulations, Section 7.73.

## II. Suspension and Expulsion

A. Suspension is the termination of student status for a definite period of time. A suspended student may not be present on campus and is denied College privileges including class attendance and all other student body or College granted privileges.
I. Summary suspension is limited to that period of time necessary to insure that
the school is protected from the immediate possibility of violence, disorder, or threat to the safety of persons or property. Summary suspension is not necessarily considered a disciplinary action against the student.
2. Disciplinary suspension is a temporary termination of student status and includes exclusion from classes, privileges, or activities for a specified period of time as stipulated in the written notice of suspension.
B. The chief executive officer of the college or his/her designee may suspend a student, as deemed appropriate, for any of the following time periods:
I. From one or more classes for a period of up to ten days.
2. From one or more classes for the remainder of the semester or session.
3. From all classes and activities of the college for one or more semesters or sessions.
C. In cases involving disciplinary suspension:
I. The student shall have the opportunity to examine any materials upon which the charges are based.
2. The student shall be informed of the nature of the violations and/or actions which constitute the basis for the suspension.
3. The student shall be allowed to present evidence refuting the charges to the college chief executive officer or his/ her designee.
4. A letter explaining the terms and conditions of the suspension shall be sent to the student's address of record. The student's professors/instructors and counselor shall be informed, in writing, of the suspension.
D. At the end of the term of suspension, the student must obtain an authorization form from the Vice President, Student Services before returning to classes.
E. A student under suspension at any District College may not enroll in any other District College during the period of suspension.
F. The chief executive officer of the College shall report all suspensions of students to the Chancellor-Superintendent.
G. If the suspended student is a minor, the parent or guardian shall be notified in writing by the chief executive officer of the College or his/her designee.
H. Expulsion of a student is the indefinite termination of student status and all attending rights and privileges. Expulsion of a student is accomplished by action of the

Board of Trustees on recommendation of the college President and the ChancellorSuperintendent. An expelled student shall not be allowed to register in any subsequent semester without the approval of the College President.

## I. The College President shall forward to

 the Chancellor-Superintendent a letter of recommendation for expulsion which includes a brief statement of charges and a confidential statement of background and evidence relating to the charge(s).2. The Chancellor-Superintendent shall review the recommendation for expulsion with the Office of County Counsel.
3. The Chancellor-Superintendent, as Secretary for the Board, shall forward a letter to the student by certified mail advising him/her of the charges and of the intention of the Board to hold a closed session to consider his/her expulsion. Unless the student requests a public hearing in writing at least 48 hours prior to the scheduled hearing, the hearing shall be conducted in a closed session.
4. The student is entitled to be present during presentation of the case and may be accompanied by a representative. If the student chooses to be represented by an attorney, the student must so notify the ChancellorSuperintendent no later than five working days prior to the hearing. The student has the right to examine any materials upon which charges against him/her are based, and shall be given the opportunity to present his/her evidence refuting the charges to the Board. The student or his/her representative may cross-examine any witness. The district bears the burden of proof.
5. The report of final action taken by the Board in public session shall be made a part of the public record and forwarded to the student. Other documents and materials shall be regarded as confidential and will be made public only if the student requests a public hearing.

## Student Grievances and Appeals

## Initial College Review

Students are encouraged to pursue their academic studies and become involved in other college sponsored activities that promote their intellectual growth and personal development. The college is committed to the concept that, in the pursuit of these ends, students should be free of unfair and improper actions on the part of any member of the academic community. If, at any time, a student feels that he or she has been subject
to unjust actions or denied his or her rights, redress can be sought through the filing of a grievance, or an appeal of the decision/action taken in response to a grievance, within the framework of policy and procedure set forth below.

## College Channels

The chart on the following page summarizes the appropriate college channels to be utilized by any student wishing to seek redress. For further information concerning any aspect of student grievances or rights of appeal, students should contact the Office of the Vice President, Student Services. As an inherent right, basic to the concept of due process, students may elect to appeal any decisions or actions taken to the President of the College, to the Chancellor-Superintendent of the District, and ultimately to the Board of Trustees. All grievances, or appeals of the decision/ action taken in response to a grievance, will be dealt with in a timely manner.

## College and District Appeal Procedures

At any time during the process outlined below, informal resolution of a grievance may be sought by mutual agreement.

## I. Step i - College Procedure

Before initiating formal grievance procedures, the student should attempt to resolve the dispute informally with the staff member concerned. If the dispute is not resolved, the student may initiate a formal grievance in accordance with the procedures set forth below.
A. First Level: The initial grievance must be filed with the administrator, or appropriate committee, responsible for the area in which the dispute arose. In presenting a grievance, the student shall submit a written statement to include, where appropriate, the following information:
I. A statement describing the nature of the problem and the action which the student desires taken.
2. A statement of the steps initiated by the student to resolve the problem by informal means.
3. A description of the general and specific grounds on which the grievance is based.
4. A listing, if relevant, of the names of all persons involved in the matter at issue and the times, places, and events in which each person so named was involved.
The designated administrator or committee chairperson shall provide the student with a hearing, if requested, and shall review the grievance. A written notice of the decision shall be provided to the student, within ten days of the review of the student's grievance.

In the event that the grievance is not resolved to the student's satisfaction, he or she may appeal the decision or action and will be advised in writing of the process to do so.

## B. Second Level

I. In the event that the grievance has not been resolved at the first level, the student may appeal in writing to the administrator, or appropriate committee, responsible for the area in which the first decision or action was taken. This appeal must be made within five days after receipt of the written decision made or action taken in response to the initial grievance.
2. In the event the President is not involved at the second level, the student may request a review of the appeal within five days after receipt of the decision made or action taken in response to the appeal. The President shall provide the student with a hearing, if requested, and shall review the appeal. A written notice of the President's decision shall be provided to the student within ten days of the review of the student's written request for the review. In the event that the President's response is not satisfactory to the student, he or she may appeal the decision or action. This student will be advised in writing of his/her further rights of appeal.

## II. Step 2 - District Procedure

A. If the dispute has not been resolved at the College level, the student may appeal, in writing, to the Chancellor-Superintendent within five days after receipt of the decision of the President.
B. The Chancellor-Superintendent, or his/her designee, shall provide the student with a hearing, if requested, and shall review the appeal. A written notice of the decision of the Chancellor-Superintendent shall be provided to the student within ten days of the review of the student's written appeal. In the event that the appeal is not granted, the student shall be advised in writing of his/her further rights of appeal.

## III. Step 3 - Board of Trustees Procedure

A. If the dispute has not been resolved during the course of earlier procedures, the student may appeal, in writing, to the Board of Trustees, or its designee, within five days after receipt of the decision of the Chancellor-Superintendent.
B. The Board of Trustees, or its designee, shall provide the student with a hearing, if requested, and shall review the appeal. Participants in previous reviews or hearings may be directed to appear before the

Board. A written notice of the decision of the Board shall be mailed to the student and to appropriate staff members, within twenty days following the review. The decision of the Board of Trustees is final.

## IV. Timelines

A. Failure by the appropriate staff member to transmit notice of the decision or action to the student within the specified time period shall permit the student to request a review at the next level as set forth in the procedures.
B. Failure of the student to file a written appeal within the specified time period shall be deemed acceptance of the decision.
C. The timelines indicated for each step refer to working days. The designated time periods should be regarded as maximum limits and every effort should be made to expedite the process. Time limits may be extended by mutual agreement if circumstances indicate the desirability of such an extension.

## Additional Redress

In addition to and concurrently with the filing of a written grievance, a student has the right to file a complaint or charges with other appropriate governmental agencies such as the Equal Employment Opportunity Com-
mission, the Office for Civil Rights, the Department of Fair Employment and Housing, the Chancellor's Office of the California Community Colleges, or state or federal court.

## Fines

Fines are assessed for failure to comply promptly with library regulations, and students are also required to pay for careless or unnecessary damage to College property. Students who are delinquent in their financial obligations to the College may not receive grade reports or other records of their work until such delinquencies have been adjusted to the satisfaction of the College authorities. Future admission/registration may be denied until these delinquencies are removed.

## Secret Organizations

Sororities and fraternities and other secret organizations are banned on community college campuses under the Education Code of the State of California.

## Extended Absence

Students who will be absent from any class or classes for one week or longer for any health reason should request notification to instructors by the Student Health Center (574-6396).
Students who will be absent from any class or classes for one week or longer for other personal emergencies should request notification to instructors by the Dean of Counseling, Advising and Matriculation (see Index: "Attendance Regulations").
If a medical or personal emergency requires absence of more than one week, the student should consult with his/her instructors and counselor/advisor regarding the advisability of continuing in classes.

## Official Withdrawal

A student withdrawing from some or all of his/ her classes is responsible for following official withdrawal procedures. A student who does not withdraw in accordance with established procedures may receive a grade of F or NP .
See Index: "Program Changes: Dropping Classes" for specific deadlines and procedures.

## College Grievance and Appeal Procedure



## Financial Aid

The Financial Aid Office at College of San Mateo is dedicated to the concept that no individual should be denied an education solely for financial reasons. Any student applying for admission to the College who has a financial need for assistance is urged to apply for aid.

The Financial Aid Office administers several federal grant, loan, and work-study programs. In addition, it also administers the Cal-Grant B and Cal-Grant C programs. The priority deadline for Cal-Grants is the March 2 that precedes the new academic year. For all federal and Cal Grant programs, except the Pell Grant, students must be enrolled at least half-time (6 units) to receive financial assistance.

Financial aid can assist students in paying for enrollment fees, books, transportation,
room and board, and other educational expenses. Students who need financial assistance to pay the enrollment fee are encouraged to apply for the Board of Governors Enrollment Fee Waiver. There is no minimum unit requirement for this program.

All financial aid awards are based on need; the determination of need is based upon a careful analysis of family income and assets, liabilities, number of children, etc. While the determination of the student's financial need is geared mainly to the student's educational and vocational career plans, it is recognized that frequently the student may have personal considerations that play an important part in this determination. Each application is evaluated on an individual basis with special and extenuating circumstances taken into consideration. Students must meet certain
academic progress eligibility criteria prior to receiving financial aid and must maintain financial aid satisfactory progress standards while receiving financial aid.
While students may apply for federal aid throughout the academic year, several programs have limited funds. Students, therefore, are strongly encouraged to apply by the March 2 priority deadline. Processing of the financial aid applications by the Financial Aid Office usually takes approximately 8 weeks.
For information regarding specific assistance programs and financial aid satisfactory progress standards, students should visit the Financial Aid Office on the second floor of the Administration Building, Room 217. Applications for small emergency loans are available through the Financial Aid Office.

| Type of aid | Amount | Eligibility | Application |
| :--- | :--- | :--- | :--- |

## Repayment of Federal Funds For Students Who Withdraw From School

College of San Mateo will determine the amount of federal financial aid that a student has earned in accordance with federal law. Students who receive federal financial aid and do not attend any classes will be required to repay all of the funds they received. Students who withdraw from all classes prior to completing more than $60 \%$ of the semester will have their financial eligibility recalculated based on the percentage of the semester completed and will be required to repay any unearned financial aid they received.
At College of San Mateo a student's withdrawal date is:
I. the date the student officially notified the Admissions Office of his or her intent to withdraw, or
2. the midpoint of the semester for a student who leaves without notifying the college, or
3. the student's last date of attendance at a documented academically-related activity.


## Associated Students

The Associated Students of the College of San Mateo (ASCSM) is the official representative student government organization at College of San Mateo. The Associated Students organization is charged with the responsibility of assessing and meeting student needs and of providing student input into the decision making process of the college. The activities of the organization are carried out by the Student Senate and major advisory committees in the areas of Finance and Administration, Public Relations, Programs and Services, Academic Affairs and Enhancement, Inter-Club Council, Student Lounge/Game Area, Legislative Affairs and Governmental Relations, and Volunteer Community Service.

Major elected and appointed officers and representatives of the association are as follows:
President
Vice President (Senate Chairperson)
Secretary
Finance Director
Senators (one for every five hundred students enrolled)
CSM Student Trustee Nominee to the Board of Trustees

In addition, students are selected by the Student Senate to serve on the following College and District Advisory Committees:
College Council (4)
College Auxiliary Services Advisory
Committee (CASAC) (4)
College Diversity in Action Group (DIAG) (2+)
College Enrollment Management Committee (2)
College Faculty Academic Senate (2)
College Library and Media Center Committee (2)
College Safety Committee (2)
Committee on Instruction (2)
Disciplinary Advisory Committee (2)
District Auxiliary Services Advisory
Committee (DASAC) (3)
District Shared Governance Council (DSGA) (I)
Further information about the Associated Students can be obtained by contacting current student officers through the Student Activities Office or the Coordinator of Student Activities. Meeting times for Associated Student groups are available through the Student Activities Office in Building I3.

## Student Senate

The Student Senate is responsible for the administrative affairs of the association including the monitoring of programs approved by the Student Senate and the representation of the association's viewpoint in college-wide matters.
The Student Senate is comprised of students elected at-large in an annual campus-wide election.

## Inter-Club Council

The Inter-Club Council is comprised of representatives from each student club on campus. Its purpose is to provide an information exchange between clubs, coordinate events sponsored by more than one club, and has a very important role in advising the Student Senate regarding support for club activities.

## Academic Affairs \& Enhancement Committee

The Academic Affairs and Enhancement Committee is responsible for reviewing academically related issues and making recommendations to the Senate regarding such issues. Topics reviewed in the past have included changes in the academic calendar, student evaluation of courses, and a review of current "college hour" policies. The members are also responsible for developing ways to enhance the academic experience of students on campus.

## Student Lounge/Game Room Advisory Committee

The Student Lounge/Game Room Advisory Committee is responsible for the ongoing review and policy recommendations regarding the use of the Student Lounge.

## Finance and <br> Administration Committee

The Finance and Administration Committee of the Senate is responsible for matters of budget, personnel, equipment purchase and maintenance, facilities use, election guidelines, constitutional amendments and by-law amendments sponsored by the Student Senate.

## Legislative Affairs <br> and Governmental Relations Committee

The Legislative Affairs and Governmental Relations Committee is responsible for coordinating the representation of student viewpoint to local, state and national legislators, governmental officials and policy makers regarding educational issues, and other issues affecting students. Responsibilities include surveying students, formulating position papers, recommending resolutions and other position statements for passage by the Student Senate, and developing advocacy campaigns to affect change. Members of this committee serve as representatives to the statewide Student Senate for California Community Colleges and the United States Student Association (USSA).

## Programs and Services Committee

The Programs and Services Committee is responsible for providing social, cultural, recreational and educational programs and services for students. The Programs and Services Committee is organized into sub-committees which have responsibility for program development in specific areas or for specific events. Sub-committees are formed as determined by the priorities and interests of students. Typical sub-committees are as follows:
Contemporary Entertainment
Speakers and Lectures
Arts and Exhibits
Film and Video
Outdoor Recreation
Cultural Programming
Programs developed or supported by the Programs and Services Committee have included such events as: speeches by U.S. Presidential, Vice-Presidential and Congressional candidates, jazz performances, art shows, acoustic concerts, craft shows, spring festivals, film festivals, video shows, African-American history programs, Cinco de Mayo Festivals, singers, dancers, comedy shows, and a wide variety of lectures on such contemporary topics as nuclear energy, First Amendment freedoms, space technology, U.S. foreign policy, nuclear disarmament, and racism.
The Programs and Services Committee of the Senate is also responsible for the coordination of recreational games, instructor evaluation surveys, carpooling programs, the concessions at various campus events, and the merchant discount program.

## Public Relations Committee

The Public Relations Committee of the Senate is responsible for senate newsletters, press releases to the public media, advertising for student participation in student government, and marketing of student body I.D. cards.

## Volunteer Community Service Committee

The Volunteer Community Service committee is responsible for encouraging and promoting volunteer service and service learning.

## Associated Student Body Card

All students who have completed registration and paid the $\$ 8$ student body fee are entitled to a photo I.D. student body card. After classes have begun, you may obtain your Student Body Card at the Student Activities Office. This photo identification card entitles you to special discounts from $10 \%$ to $40 \%$ off at local businesses, movie theaters, shops and restaurants. On-campus discounts are available at the cosmetology salon and all athletic events. The funds collected from the student body fee help support numerous programs and services on campus including: scholarships, emergency student loans, child care, athletics, guest speakers and concerts. If you would like more information about the student body card benefits, or would like the student body fee reimbursed, please contact the Student Activities Office at 574-614I, before the end of the add/drop period.

## Student Clubs <br> and Organizations

College of San Mateo encourages students to augment their formal education by participating in extracurricular activities and events. Among the opportunities available is the privilege of starting and/or being a member of a formally recognized student club or organization. Each group elects its officers and plans its own program for the semester. The activities of each group depend largely upon the enthusiasm of its membership. Anyone interested in joining or starting a club or organization is welcome to stop by the Student Activities Office (Building 19, Telephone: 574-6I4I) for more information. In order to establish a new organization, there must be a minimum of six interested students, an approved faculty/staff advisor and a constitution meeting college requirements.

The following are current or recently active clubs and organizations. The advisor of each club is also listed as a resource person to contact for more specific information. (This list is subject to change.)

## Academic and Career Oriented

Business Students Association (BSA) Promotes interest in business through speakers and social activities. Advisors: Rosemary Nurre, 574-6493.
Cosmetology Club Provides social activities for cosmetology students and their families. Advisor: Andria Nalls, 574-6509.
Dental Assisting (Epsilon Delta) Provides social activities for dental assisting students and their families. Advisor: Audrey Behrens, 574-62I2.
Floral Design - Students of the American Institute of Floral Design (SAIFD) Provides support and activities for floral design students. Advisor: Wendy Pine, 5746170.

Horticulture Club Provides activities and fund-raisers for scholarships to help students continue their studies in horticulture. Advisor: Matthew Leddy, 574-6217.
Mediate Broadcasting Club To prepare students for a career in the media industry through contact with professionals, social networking activities, hosting film festivals, and career workshops. Advisor: Michelle Brown, 574-6934.
Multicultural Premedical Club Prepares students to transfer to enter the medical profession. Advisor: Modesta Garcia, 574-6190.
Nursing Students Association Provides information, guidance and support for nursing students. Advisor: Janis Ryan, 574-6352.
Science Club Promotes interest in the integrated sciences, provides support services, and encourages social and educational activities for students in the sciences. Encourages students to become teachers. Advisors: Linda Hand, 574-6633 and Barbara Uchida, 574-6603.
Visual Arts Club Encourages student interest and activity in the visual arts - painting, drawing, textiles, etc. Advisor: Rory Nakata, 574-6290.

## Ethnic/Cultural

Filipino-American Multicultural Exchange (FAME) Creates a sense of family while fostering the development of future leaders through the promotion of the Filipino culture. Advisor: Chris Rico, 574-6189.
Fiesta Spanish Club For those that want to learn and improve upon a knowledge of the Spanish language. Advisor: Richard Castillo, 574-6316.
Gay-Straight Alliance Promotes unity and acceptance among individuals of all sexual orientations, and to maintain a positive environment and nurturing atmosphere for those exploring their sexual identity. Advisor: Henry Villareal, 574-6590.
Latinos Unidos Provides encouragement and positive role models to help Chicano/ Latino youth find positive, healthy ways of interacting in the world and moving toward positive change. Advisor: Lorena del Mundo, 574-6I54.
Polynesian Club Encourages an appreciation for Polynesian culture and provides support for Polynesian students. Advisor: John Vehikite, 574-6513.

## Special Interests

Action Group Advocates social change and improvement through club projects on campus and in the community. Advisor: Erin Scholnick, 378-7301 ext. 1906I.
Alpha Gamma Sigma (AGS Honor Society) The CSM Eta chapter began in the I930's and provides students with support in achieving academic goals. Advisor: Timothy Maxwell, 574-6496.
Anime Club Students come together to share interest in anime as an art form. Advisor: Sam Sanchez, 574-6I2I.
Cheerleaders Spirit Squad Promotes spirit campuswide through cheerleading and spirit leading. Advisor: Andreas Wolf, 574-646I.
CSM Toastmasters Provides a supportive environment for students to study and practice the art of public speaking. Advisor: Rudy Ramirez, 574-6372.
Performance Dance Ensemble Anyone who is interested in dance and performing can come and learn about the action behind the scenes of a dance show. 574-646I.
Phi Theta Kappa The CSM Beta Xi Eta Chapter began in 2005 and recognizes student scholarly achievements. Advisor: Jeremy Ball, 574-6638.

## Support

Child Development Center Parents Provides social activities and fund-raisers for children of the Mary Meta Lazarus Children's Center and their parents. Advisor: Louise Piper, 574-6280.

EOPS Club Provides opportunities and activities for EOPS students, including field trips, study sessions and barbecues. Advisor: Ruth Turner, 574-6154 and Warren Shelby, 574-6154.
Transfer Club Provides information and support to students interested in transferring. Advisor: Mike Mitchell, 574-6662.

## Student Activities Office

The Student Activities Office is a drop-in information office located in Building 19 where students are welcome to ask questions regarding any aspect of the College.
Special services provided for students by the Student Activities Office include:

## Student Activities Event Planning

The Coordinator of Student Activities is available to assist campus organizations in the development, planning and approval of special campus programs and events. College policy questions, facilities reservations, security planning, audio visual requests, insurance requirements, health and safety reviews, risk management planning, publicity and other considerations for special events are coordinated through this office.

## Housing Assistance

Dormitories and other types of collegesponsored housing are not offered by College of San Mateo. However, the Student Activities Office maintains up-to-date listings of housing available in the community. The majority of listings are rooms in private homes, but apartments and houses are also available.
Student Government and Club Information Information concerning any aspect of student government, student activities or clubs may be obtained in the Student Activities Office. This office also provides these groups with duplicating and publicity services.

## Student Center Facilities Use

The Student Activities Office is responsible for the supervision of the Student Center Lounge, and other facility use.

## Referral Services

The Student Activities Office maintains current referral listings of services available through the College and community agencies. We can assist students through referrals to the campus Health Center, Psychological Services, Child Development Center, and community agencies for such services as legal assistance, family planning, and women's services.

## Transportation Information

Bus passes, bus tokens, bus and train schedules, maps, and general transportation information is available through the Student Activities Office.

## Campus Posting

All signs, flyers, or similar materials must follow campus regulations regarding time, place and manner of distribution. Copies of these regulations are available in the Student Activities Office.

## Vending Refunds

If campus food vending machines are not vending properly, refunds are available from the Student Activities Office. Game machine vending refunds are available through the Student Activities Office.

## Campus Publications

The following publications are issued by College of San Mateo:
Campus Activities Announcements/Calendar - A publication prepared and distributed by the Student Activities Office periodically announcing activities, new events and items of interest to the faculty and students of the College. Submit items for publication to the Student Activities Office, Building 19.
Class Schedule - A listing and description of courses offered each term (Fall Semester, Spring Semester, Summer Intersession). The publication also includes information on admissions and registration, fees, student services and other related matters.
'Monday Morning Blues' or 'The Verb' - Occasional publications of the Associated Students Senate to inform students of various campus issues and programs and to provide an open forum between students and student leaders.
Planning to Transfer to a University A publication prepared and distributed by the Transfer Center each semester which provides a schedule of transfer related workshops and academic planning sessions with university representatives.
The San Matean - A student newspaper published every other week, serving a twofold purpose of providing news coverage of activities on campus and of giving experience to journalism students.

## Student-Sponsored Events

## Time, Place and Manner

The scope of these regulations extends to events in all campus public forums. For the purposes of this regulation, such events include, but are not necessarily limited to, the presentation of speakers, programs, concerts and dances, solicitation of funds, distribution and posting of material, circulation of petitions, and the sale of materials.
The following regulations are designed to increase students' opportunities to enrich their educational experiences, to protect
constitutional rights of free expression, and to insure that there will be no interference with the instructional program of the college. Violations of the contract and/or the college's Time, Place, and Manner regulations will result in discontinuance of the activity and loss of future privileges.

## A. Distribution of Materials:

The college regulations governing the distribution of printed and manufactured materials is designed to permit maximum freedom of expression and to prevent attempts to coerce or intimidate students into buying or receiving printed materials. Distribution of any material on campus is subject to the approval of the Vice President, Student Services or his/ her designee.
I. Distribution of any material in classrooms is expressly prohibited.
2. Distribution of such material through the college mail services and facilities is permitted only by Recognized Student Organizations and with the approval of the Vice President, Student Services. The nature of the information to be disseminated in this manner should be such that the regularly available channels of campus communication (e.g., posters, flyers, CSM Activities Calendar, San Matean, etc.) cannot be effectively utilized.
3. The distribution or posting of commercial material will not ordinarily be permitted. Specific exceptions must be authorized by the Vice President, Student Services or his/her designee.
4. Materials may not be distributed in any building on campus except for designated areas authorized by the Vice President, Student Services or his/her designee.
5. Tables may be set up in authorized areas of the college by campus organizations and by individuals. Requests must be submitted to the Student Activities Office for approval. Tables will be checked out on an availability basis. Institutional and campus organizations will receive priority use of the tables.
6. Tables must be checked out and returned to the Student Activities Office.
7. Tables must be staffed at all times and a placard identifying the organization must be displayed. Individuals staffing tables must remain behind the tables at all time.
8. Distribution of all materials is to be coordinated with the Coordinator of Student Activities. An information copy of any material to be distributed must bear the name of the sponsor.
9. The collection of signatures for petitions is subject to the same regulations as those which govern the distribution of materials. Such matters as coordination with the Coordinator of Student Activities, identification of the sponsor, and the restrictions as to the areas of circulation, govern the collection of signatures for petitions as well as distribution of materials.

## B. Posting of Materials:

I. All materials to be posted must be dated and stamped by a member of the Student Activities Office staff. Materials will only be stamped if they are presented by a college department or program, a non-profit organization, or a governmental agency. All other materials must indicate their posting date in the upper right-hand corner. Any items not stamped or dated are subject to removal by college staff.
2. College of San Mateo has designated certain areas of the campus and certain bulletin boards as limited public forums. Persons or organizations seeking to distribute materials on campus shall provide a copy of the material to the Coordinator of Student Activities, or his/her designee. The Coordinator of Student Activities will promptly review the proposed distribution and approve it unless the material is libelous, invades the privacy of others, is obscene or pornographic, is pervasively indecent and vulgar, will cause a material and substantial disruption of the proper and orderly operation of the college or college activities, or advertises a product or services not permitted for use under the law. In the event that materials are not approved for distribution, the decision may be appealed to the Vice President, Student Services, whose decision shall be final.
If the material is approved, the individual or organization will be allowed to distribute or post such material at approved locations and times as set forth in these regulations. The approved locations are available from the Coordinator of Student Activities.
3. Materials shall not be distributed in a manner which disrupts any college activity or blocks or impedes the safe flow of traffic within corridors and entrance ways at the college. Persons who distribute such materials shall be responsible for cleaning up such materials thrown on the floor, in college buildings, or on the grounds outside the college.
4. Available space for posting materials is limited at the college. In order to provide
the maximum opportunity for a variety of individuals and organizations to post materials for review by students, the college will remove outdated materials on a regular basis. Posted materials may be removed by college personnel at any time if posted in restricted locations and after I4 days of posting in approved locations. Any document which does not bear a date stamp indicating the first day of posting will be presumed to be more than I4 days old and may be removed. Materials bearing a date stamp may remain on designated bulletin boards for up to I4 days.
5. The number and size of posters or leaflets that any one organization or person may post is subject to limitation by the Coordinator of Student Activities and shall be limited only if the materials are so large or numerous as to infringe on the rights of others to use designated areas.
6. In the event that material is distributed from a table, the table may only be set up in approved locations. The table must be staffed at all times and the table must be removed at the end of each day of distribution of materials. Individuals staffing the tables must stay behind the table.
7. Placement of materials on parked vehicles causes a severe litter problem and is expressly prohibited. (City ordinance code section: Io.40.030)
8. Approved materials may be posted in designated areas of the college authorized by the Vice President, Student Services or his/her designee and on open bulletin boards located throughout the campus. Classroom bulletin boards are intended for instructional usage but may be utilized on a space available basis, subject to Divisional needs and policies. Any materials posted in unauthorized locations, or without being stamped and dated by the Student Activities Office are subject to removal.
9. Materials may not be posted on doors, painted surfaces, or exterior building walls. All other surfaces (e.g., non-classroom bulletin boards, glass surfaces adjacent to doors, etc.) are available for the posting of material on a space available basis. Sponsors are responsible for the removal of their material after a reasonable period of time or once the material becomes obsolete. Any obsolete material may be removed by any member of the college staff.
1o. Permission may be granted to post materials, on a space available basis, to educational institutions or public service agencies.
II. Exceptions to any of the preceding
requirements must be approved in advance by the Coordinator of Student Activities.

## C. Presentation of Programs

I. Public Forums: Certain areas of the college have been designated as public forums and may be used by students, staff and members of the public in a manner consistent with these regulations.
a. Location of Public Forums: Due to campus construction, please see the Office of Student Activities for more information.

## Student Organizations

The general purpose of all student groups as organized, recognized, and approved under the supervision of the college administration shall be in conformity with the provisions of California Education Code and the educational objectives of the College. All student organizations are subject to the regulations of and derive their authority from the California Education Code, the San Mateo County Community College District Board Policy and its Rules and Regulations, and College Regulations, in that order.
Denial of membership in any organization or of participation in any activity on the basis of sex, race, religion, or national origin is specifically prohibited. Membership in secret societies is prohibited.

## Permanent Student Organizations

A. Definition: A recognized student organization is defined as a group which:
r. Operates under the advisorship of a member of the college staff.
2. Maintains in the Student Activities Office a constitution which has been approved by the members of the organization and the Coordinator of Student Activities, and a current list of officers. Membership is limited to registered students at College of San Mateo.
3. Holds meetings regularly which are open to all students and announces its meetings through the Student Activities Office and publications of general circulation on campus.
4. Deposits all organizational funds in a college account as required by the California Education Code and established college procedures.
B. Privileges: The privileges of recognized student organizations include:
r. The use of the name of College of San Mateo.
2. The use of the buildings, grounds, equipment and services of the college when available and officially scheduled.
3. Publicity through appropriate college channels.
4. Appropriate advice and assistance from the Student Activities Office.

## Ad-Hoc Student Organizations

A.Definition: An ad-hoc student organization is defined as a group which:
I. Is organized for a specific and temporary purpose which is compatible with the educational objectives of the college.
2. Operates under the advisorship of a member of the college staff.
3. Files a statement of purpose with the Student Activities Office and a roster of at least six (6) student members.
4. Normally operates for a period not to exceed thirty (30) school days.
5. Is composed entirely of students currently enrolled in the college.
B. Privileges: An ad-hoc student organization will be granted all the privileges of recognized student organizations and must follow the procedural requirements outlined above.

## Campus Facility Use

Student Organizations
Student organizations, as defined above, may request use of college facilities for events and activities.

## A. Procedure for the presentation of programs:

I. Programs intended for members of recognized student organizations require approval from the faculty advisor and the Coordinator of Student Activities.
2. The presentation of programs by recognized student organizations require that the sponsor adhere to the following procedures:
a. In order to obtain authorization to present the program, the sponsor is required to furnish the Coordinator of Student Activities with appropriate details regarding the planned program. The information provided is to include the nature of the program, date and time, anticipated attendance, services needed (e.g., custodial, ushering, security, publicity, audio visual, etc.), equipment required, proposed facility to be utilized and all details regarding admission charges or other funds to be collected in conjunction with the program. Upon review of this data and if the event is approved, the Coordinator of Student Activities will begin the necessary paperwork to reserve the facility and place the event on the Campus Events Calendar. If approval is denied, the Coordinator of Student Activities' decisions in this regard are subject to appeal and
review by the Vice President, Student Services.
b. Program plans must demonstrate that the program will not present or create an undue health or safety risk to students, staff, or the public. The Vice President, Student Services may deny or cancel programs which cannot meet this requirement.
c. Programs must be presented in appropriate authorized areas.
d. Programs will end by i:oo a.m. unless approval to extend the program time is granted by the college President.
3. Sponsors of events which involve professional performers, speakers, artisans, or such may pay these individuals for their services. This rate will be established by agreement between the performer, the sponsor, and the Coordinator of Student Activities prior to the date of the event.
B. Reservation of facilities for meetings or other purposes:
I. The sponsor of an approved program must reserve the desired facility in accordance with established procedures. When necessary, the Coordinator of Student Activities will make the initial determination of the availability of a facility in consultation with the Facilities Reservation Office.:
Facilities available for use are:

## All Classrooms

Choral Room (I37)
Theatre (400)
Amphitheater (Outdoor)
Building I8, Room 206 (I30)
Gymnasium (2000)
Athletic Facilities
Note: Parenthetical figures next to the name of each facility listed above indicate the approximate capacity of the facility.
2. Public facilities and classrooms are normally available for special program use at any hour of the week other than when being used in conjunction with the instructional program of the college subject to the limitation of outdoor sound amplification as stated in \#4 below.
3. Requests for reservations for college facilities by student organizations are to be made through the Student Activities Office. Details of the program being proposed must accompany the request for facilities and be submitted to the Coordinator of Student Activities for review. Once the program plans have been reviewed and the availability of
the facility has been established, the facility reservation will be confirmed with the college Facilities Utilization Clerk through the use of a facilities contract form.
4. Programs must be produced in such a manner so as not to constitute interference with the instructional program. Only at times when classes are not in session may sound amplification equipment be used out of doors. Exceptions to this policy may be granted by the Vice President, Student Services or his/her designee under any of the following specific instructions:
a. The program includes a prominent speaker or presentation of campuswide interest.
b. The program is a response to an imminent or continuing national or local crisis.
c. The program is of campus-wide interest and significance.
Before a request for an exception may be submitted to the Vice President, Student Services, the sponsor of the program must make every effort to schedule the program into authorized facilities during hours when classes are not in session. Sponsors must also verify that it is impossible to do so.

## Off-Campus Organizations

off-campus organizations may request use of college facilities for short-term activities and events. All organizations are required to fill out the necessary paperwork to be on campus.
Short term activities include, but are not limited to, the distribution of materials, making products and/or services available to campus students and staff, and for recruiting volunteers and/or paid employees. Those interested in using campus facilities for short term activities should contact the Student Activities Office at (650) 574-6I4I.
Events include, but are not limited to, all-day workshops, conferences, and social activities not directly targeted at campus students and staff. Such requests are subject to District policies with respect to use of facilities. Those interested in using campus facilities for events should contact the Facilities Reservation Office at (650) 574-6220.

## Bookstore

The CSM Bookstore is located in Building 34, and is open Monday through Thursday from 7:45 a.m. to 7:15 p.m. and Friday from 7:45 a.m. to $3 \mathrm{p} . \mathrm{m}$. when classes are in session.

Summer hours vary. For more information or to purchase books online, visit us at: http://bookstore.collegeofsanmateo.edu.
During the semester, textbooks may be sold back to the Bookstore at wholesale prices if the student presents a college withdrawal slip before the last five weeks of the semester. Summer policy varies. During finals textbooks may be sold back to the Bookstore at up to $50 \%$ of the original purchase price. Discontinued titles are purchased by the Bookstore at wholesale prices. Picture identification is required to sell books back to the Bookstore.
Special orders for books and supplies may be placed with a required deposit. For additional information, please call 574-6366.

## Food Service

## Food Service/Kiosko

The "Kiosko" snack bar is located near Building I6 and is open Monday through Thursday from 7:30 a.m. to 7 p.m.; and Friday from 7:30 a.m. to $2 \mathrm{p} . \mathrm{m}$. when classes are in session. Catering is available for special occasions and meetings by contacting the manager (574-6582).

## Food Service/Drip Coffee

A fresh coffee, juice and snack food service is offered by Drip Coffee on the east side of Building 17. Hours are Monday through Thursday from 7:30 a.m. to I:30 p.m. and 5:30 to 8:30 p.m.; and Friday from 7:30 a.m. to I:30 p.m. For catering, contact the manager at 378-7343.

## Athletics

College of San Mateo participates as a member of the Coast Conference in the following intercollegiate sports: Baseball, Women's Basketball, Men's and Women's Cross-Country, Football, Women's Softball, Men's and Women's Swimming, Men's and Women's Track and Field, and Women's Water Polo. CSM is a member of the Northern California Football Association.

In order to be eligible a student must adhere to the California State Athletic Constitution and Coast Conference eligibility rules and regulations.
The following is a summary of eligibility regulations:
I. In order to be eligible, a student-athlete must be actively enrolled in a minimum of 12 units during the season of sport and 9 of those units must be "academic". Such eligibility is required for non-conference, conference, and postconference participation.
2. To be eligible for the second season of competition, the student-athlete must complete and pass 24 semester units with
a cumulative 2.0 grade point average. These units must be completed prior to the beginning of the semester of the second season of competition. All units must be completed and passed at a regionally accredited post-secondary institution.
3. A student transferring for academic or athletic participation, who has previously participated in intercollegiate athletics at another California Community College, must complete i2 units in residence prior to the beginning of the semester of competition. A maximum of 8 units may be earned during the summer session.
4. In order to continue athletic participation in any sport, the student-athlete must maintain a cumulative 2.0 grade point average in accredited post-secondary course work computed since the start of the semester of first participation.
5. The i2-unit residency rule for previous participants will be waived for a student-athlete who has not competed at a post-secondary institution in the past five years.
6. In meeting the unit requirements, courses in which grades of D, F, or NP were received may be repeated. Under special circumstances, courses that have been completed with a grade of C or better may be repeated; however, the units will not be counted.
Student athletes who plan to transfer prior to receiving an AA degree should meet with their athletic advisor and verify eligibility status for transfer based on past work and test scores from high school.
Those students who wish to seek financial assistance (athletic scholarship) and be eligible for competition must meet minimum NCAA requirements. Students are encouraged to contact the college to which they wish to transfer.
Contact the Athletic Director for more information on athletic eligibility. Phone: 574-6462.
College of San Mateo observes all recruiting regulations of the Commission on Athletics, the governing body of California Community College intercollegiate athletics. In accordance with these regulations, athletic recruitment of any individual residing outside the College's recruiting boundaries is prohibited. Likewise, any student of another California community college, regardless of residence, shall not be athletically recruited. The College of San Mateo recruiting area is composed of the County of San Mateo and the neighboring community college districts that share a common boundary. Student athletes who reside outside the recruiting boundaries of College of San Mateo must make "first contact" with the College. Please call the CSM athletic department at 574-6461 for more information.

## Telephone Directory

| Area Code for College of San Mateo is $\mathbf{6 5 0}$ |
| :--- |
| General Campus Information $574-6161$ |


| A |  |
| :--- | ---: |
| Accounting | $574-6494$ |
| Adapted P.E. | $378-7219$ |
| Administration of Justice | $574-6343$ |
| Admissions and Records | $574-6165$ |
| Dean | $574-6590$ |
| Assistant Registrar | $574-6576$ |
| AA/AS/Certificate Information | $358-6856$ |
| Admissions Information | $574-6165$ |
| Grades/Attendance | $358-6855$ |
| Registration Information | $574-6165$ |
| Transcripts (Outgoing) | $358-6858$ |
| Veterans Assistant | $358-6856$ |
|  | or $358-6858$ |
| Anthropology | $574-6496$ |
| Apprenticeship Program | $574-6177$ |
| Architecture | $574-6268$ |
| Articulation and Research | $574-6196$ |
| Assessment Center | $574-6262$ |
|  | or $574-6175$ |
| Associated Students: | $574-6185$ |
| Advisor | $574-614 \mathrm{I}$ |
|  |  |
| Executive Officers: | $574-6185$ |
| President | or $574-614 \mathrm{I}$ |
|  | $574-6185$ |
| Vice President | or $574-614 \mathrm{I}$ |
|  | $574-6185$ |
| Senate Vice Chairperson | or $574-614 \mathrm{I}$ |
|  | $574-6185$ |
| Secretary | or $574-614 \mathrm{I}$ |
|  | $574-6185$ |
| Finance Director | or $574-614 \mathrm{I}$ |
|  |  |

Committees \& Programs:

| Academic Affairs | $574-6185$ |
| :--- | ---: |
|  | or $574-6 \mathrm{I} 4 \mathrm{I}$ |
| Inter Club Council | $574-6 \mathrm{I} 85$ |
|  | or $574-6 \mathrm{I} 4 \mathrm{I}$ |

Legislative \&
Governmental Relations 574-6185
or 574-614I
Monday Morning Blues 574-6185
or 574-6I4I
Program \& Services
574-6185
or 574-6I4I
Public Relations
574-6185
or 574-6i4I
Associated Student
Bookkeeper/Cashier 574-6589

| L |  | P |  |
| :---: | :---: | :---: | :---: |
| Language Arts Division | 574-6314 | Paleontology | 574-6268 |
| Library | 574-6100 | Parking (see Security) | 574-6415 |
| Loan Desk | 574-6548 | Physical Education/ |  |
| Reference Desk | 574-6232 | Athletics Division | 574-646I |
|  |  | Athletic Trainer | 574-645I |
| M |  | Baseball | 358-6875 |
| Mail Room | 574-6410 | Basketball (women's) | 358-6830 |
| Maintenance (Bldgs. \& Grounds) | 574-6113 | Cross Country | 574-6448 |
| Masterworks Chorale | 574-62IO | Football | 358-6771 |
| Math/Science Division Math Lab | 574-6268 | Softball | 574-6464 |
|  | 574-6540 | Swimming Pool (will reopen in fall 2009) |  |
| Medical Assistance (See Health Center) |  | Swimming Team | 574-6449 |
|  | 574-6396 | Team House | 574-6467 |
| Meteorology | 574-6268 | Track \& Field | 574-6448 |
| Middle College High School | 574-610ı | Water Polo (women's) | 574-6449 |
| Monday Morning Blues | 574-6185 | Philosophy | 574-6496 |
| Multicultural Center | 574-6154 | Photography Lab (Creative Arts) | 574-6292 |
| Music | 574-6494 | Physical Science | 574-6268 |
|  |  | Physics | 574-6268 |
| N |  | Placement Testing | 574-6175 |
| Nursing (Academic) or | 574-6218 | Planetarium | 574-6256 |
|  |  | Political Science | 574-6496 |
|  | 574-6268 | President's Office | 574-6222 |
| 0 |  | Psychology | 574-6496 |
|  |  | Psychological Services |  |
| Oceanography | 574-6268 | Appointments | 574-6396 |
| Online Courses/ |  | Public Relations |  |
| Distance Learning | 524-6933 | \& Marketing Department | 574-623I |
| Operator | 574-616I |  |  |

## R <br> R

| Receptionist/General Line | $574-616 \mathrm{I}$ |
| :--- | :---: |
| Reading Center | $574-6437$ |
| Real Estate | $574-6494$ |
| Recreation/Game Room | $574-6187$ |
|  | or $574-614 \mathrm{I}$ |
| Registrar's Office | $574-6165$ |
| S |  |
| San Matean Newspaper | $574-6330$ |
| Scholarships | $574-6434$ |
| Sculpture | $574-6290$ |
| Security Office | $574-6415$ |
| Social Science/Creative |  |
| Arts Division | $574-6494$ |
| Sociology | $574-6496$ |
| Student Activities | $574-614 \mathrm{I}$ |
| Student Employment | $574-6116$ |
| Student Lounge | $574-614 \mathrm{I}$ |
|  | or $574-6187$ |
| Study Abroad Program | $574-6595$ |
| T |  |
| Business/Technology Division | $574-6228$ |
| Telecourses/Distance Learning | $524-6933$ |
| Testing - Assessment Center | $574-6175$ |
|  | or $574-6262$ |
| Theatre | $574-6191$ |
| Tours - campus | $574-6349$ |
| Transfer Services | $358-6839$ |
| Transition to College | $574-6487$ |
| V |  |

Vice President, Instruction 574-6404 Vice President, Student Services 574-6II8

## W

Writing Center 574-6436

## Academic Policies

## Academic Standards Policy

The Academic Standards Policy of College of San Mateo and the San Mateo County Community College District is based on a cumulative grade point average of $C$ (2.0), the minimum standard required for graduation or transfer. A grade point average of less than 2.0 is considered deficient.

Grade point average (GPA) is determined by dividing the total number of grade points earned by the total number of GPA units.
Academic standing, including determination of probation or dismissal status, is based upon all course work completed at Cañada College, College of San Mateo, and/or Skyline College.

## Probation

A student is placed on academic probation under the following criteria:
I. Academic Probation based on grade point average: A student who has attempted at least i2 semester units, as shown by official records, is placed on academic probation if the student has earned a cumulative grade point average below 2.0.
2. Academic probation based on failure to maintain satisfactory progress: A student who has enrolled in a total of at least i2 semester units, as shown by official records, is placed on academic probation when the percentage of all units in which a student has enrolled for which entries of W, I and NC are recorded reaches or exceeds 50 percent. (See Calendar for deadline dates for withdrawal.)

The two probation criteria described above are applied in such a manner that a student may be placed on probation under either or both systems and subsequently may be dismissed under either or both systems.

## Removal From Probation

A student on academic probation on the basis of grade point average is removed from probation when his/her cumulative grade point average is 2.0 or higher.
A student on academic probation on the basis of failure to maintain satisfactory progress is removed from probation when the percentage of units in this category exceeds 50 percent.

## Dismissal

A student on probation is subject to dismissal if in any two subsequent semesters either or both of the following criteria are applicable:
I. The student's cumulative grade point average is less than I .75 in all units attempted.
2. The cumulative total of units in which the student has been enrolled for which entries of W, I and NC have been recorded reaches or exceeds 50 percent. (See "Withdrawal.")
Normally, a dismissed student must remain out of day and evening classes for one semester before petitioning for reinstatement.
To be considered for reinstatement, a dismissed student must complete a Reinstatement Petition with the assistance of a college counselor. The completed petition is to be submitted to the Office of the Dean of Counseling for review. Reinstatement Petitions are usually reviewed within 72 hours and students are notified by mail of their reinstatement status.

## Academic Renewal Policy

Up to 36 units of substandard course work (i.e., D, F, and NP) within a maximum of two semesters and one summer session which are not reflective of the student's current demonstrated scholastic ability may be alleviated and disregarded in the computation of the grade point average under the following three conditions:
I. A period of at least one year must have elapsed since the course work to be alleviated was completed; and
2. A student seeking alleviation must have met one of the unit/grades benchmarks listed below:

- Completed 9 units of course work with a cumulative grade point average of at least 3.5, or
- Completed i5 units of course work with a cumulative grade point average of 3.0, or
- Completed 2I units of course work with a cumulative grade point average of 2.5, or
- Completed 24 units of course work with a cumulative grade point average of 2.O.

3. The substandard course work to be alleviated must have been taken at Cañada College, College of San Mateo, or Skyline College. However, the course work on which
the application for academic renewal is based may be completed at any college or university accredited by the Western Association of Schools and Colleges or equivalent agency.

To request Academic Renewal, a student must file a formal petition with the Office of Admissions and Records. The petition is available to download from collegeofsanmateo.edu/ forms. When academic course work is alleviated from the computation of the grade point average, the student's permanent record shall be properly annotated in a manner to ensure that all entries are legible, providing a true and complete academic history.

## Attendance Regulations

Students are required to attend the first class meeting of each class in which they register. If they cannot attend, they should notify the instructor in advance. Without prior notification, they may be dropped by the instructor and a waiting student admitted in their place.
Regular attendance in class and laboratory sessions is an obligation assumed by every student at the time of registration. When repeated absences place a student's success in jeopardy, the instructor may drop the student from class.
In all cases it is the instructor's prerogative to determine when absences are excessive. An instructor has the right to drop a student from class when such absences jeopardize the student's opportunity to successfully complete the class work or to benefit from the instruction.
Absence means non-attendance and includes non-attendance for illness or personal emergency. Absences due to a student's participation in a school-sponsored activity are to be considered as excused absences, but it is the student's responsibility to notify the instructor in advance of the absence, and the student is responsible for all work missed. It is noted again that it is the instructor's prerogative to determine when such absences are excessive.

## Open Enrollment

Every course offered at College of San Mateo (unless specifically exempted by legal statute) is open for enrollment and participation by any person who has been admitted to the College and who meets the prerequisites of the course provided that space is available.

## Enrollment Limitations:

## Multiple and Overlapping Enrollments

- A college district may not allow a student to enroll in two or more sections of the same credit course during the same term.
- A college district may not allow a student to enroll in two courses that overlap unless the following requirements are met.
I. The student must provide sound justification other than mere convenience,

2. An appropriate district official must review justification and enrollment for approval,
3. The college must collect documentation that shows how the student made of the hours of overlap under the supervision of the instructor of the course.

Enrollment Limitations:

## Limit of Withdrawals

- Students are limited to receiving no more than four "W"s from the same credit course.
- A "W" shall not be assigned or may be removed if the student withdrew due to discriminatory treatment or retaliation for alleging discriminatory treatment.


## Sequential Courses

A student may not enroll in or receive credit for a course that is lower in a sequence of courses after successful completion of a course that is higher or more advanced. As an example, after successful completion of Spanish I20, a student cannot enroll in a lower course (i.e., Spanish IIO) in the sequence. Also, a student may not enroll in or receive credit for a course taken after successful completion of an equivalent course-e.g., French ini cannot be taken after successful completion of French iio.

## Credit by Examination

Advanced Placement test (AP) and International Baccalaureate Examination (IB) The chart on pages 33-35 shows how College of San Mateo award credits based on the results of the Advanced Placement tests and the International Baccalaureate Examinations. The student is responsible for sending official AP and/or IB results to College of San Mateo and formally requesting from the Admissions and Records Office via a Transcript Evaluation petition, an official review of the results related to the student's associate degree general education requirements, California State University general education certification, and Intersegmental General Education Curriculum (IGETC) certification.

College Level Examination Program (CLEP)
College of San Mateo participates in the College Level Examination Program (CLEP). Such credit may be used toward meeting associate degree general education requirements. The student is responsible for sending official CLEP results to College of San Mateo and formally requesting from the Office of Admissions and Records, a review of the results related to the student's associate degree general education requirements. A maximum of 15 units can be earned - 3 units for each of the tests within the five examinations areas: English Composition, Social Sciences and History, Humanities, Natural Sciences, and College Mathematics. Should students transfer to a university, CLEP credit is granted according to the policy of the transfer institution.

## Credit by Examination for College of San Mateo Courses (CBE)

A currently enrolled student in good standing may be permitted to obtain credit for courses if he/she is especially qualified through previous training or instruction and can demonstrate such qualifications by successfully completing an examination approved by the faculty and dean of the appropriate division and the Office of Instruction. Credit will not be allowed for a course for which credit has previously been granted or for which credit has been earned in a more advanced course in the same sequence. Credit by Examination may not be used in order to improve a grade already received for a course. The department head or division dean will determine if the student possesses special competency and will authorize the administration of examinations. A student may earn up to I2 units through credit by examination to be applied to a vocational certificate or the associate degree. All grades issued upon completion of credit by examination will be used for the calculation of the student's grade point average. A student may challenge a course for credit by examination only one time.

CBE credit is limited to those courses recommended by the academic divisions and approved by the Office of Instruction. A current list of eligible CBE courses is published below.

Business/Technology Division: Accounting 103
Administration of Justice Ioo, IO4
Dental Assisting 716, 73I, 732, 735
Creative Arts/Social Science Division: No classes

Math/Science Division:
Horticulture/Environmental 3II, 312, 315, 320, 327,330, 342
Horticulture/Ornamental 705, 706, 7II, 7I2, 742 All Nursing courses

## Language Arts Division:

No classes
Physical Education Division:
No classes
Credit earned through credit by examination may not be used for meeting unit load requirements for enrollment status, or for programs such as financial aid, athletic eligibility, veterans' benefits, or for graduation residency requirements.

## Academic Review Committee

The Academic Review Committee considers requests for waivers and/or exceptions with respect to academic policies. Inquiries should be directed to the Office of Admissions and Records.

## Course Repetition

## Certain Courses Are Approved for Repetition

The Board of Trustees of San Mateo County Community College District has adopted a policy which permits a student to repeat certain courses/subjects. In these cases, a student may take the course/subject and then repeat the course/subject three times (for a total of four enrollments). These are courses/subjects that have been approved by College of San Mateo Committee on Instruction as "repeatable" because they have increasing levels of student performance or provide significantly different course content each subsequent semester. Such courses/subjects are designated in the college catalog and the Class Schedule as repeatable with the following notation: "To increase competency, may be taken four times." Courses which do not have this designation may not be repeated.

## Course Repetition for the

## Purpose of Grade Alleviation

For the Student Who Has Received a Grade of D, F, or NC/NP
A student who has received a grade of $\mathrm{D}, \mathrm{F}$, or NP in a course taken in the San Mateo County Community College District may repeat the course up to two times for the purpose of grade alleviation. This allows a student a maximum of three attempts to successfully complete the course. The permanent academic record shall be annotated in such a way that all courses attempted remain on the transcript showing a true and complete academic history. Course repetition completed at any college of the San Mateo County Community College District will be honored. In no case will the unit value of a course be counted more than once.

## Extenuating Circumstances

A student who has had three attempts to successfully complete a class, the original attempt plus two repetitions, and received Ds, Fs, Ws, or NC/NP may petition to take the course one additional time only if documentable extenuating circumstances exist that match the dates and times of the courses. Examples of extenuating circumstances are accident, illness, death in the family, evidence of caretaking responsibilities, verifiable disability. Documentation is required to support circumstances that relate specifically to the date of the course.

Course Repetition for the Student Who Has Received a Grade of A, B, C or CR/P
Courses which have been completed with a grade of $\mathrm{A}, \mathrm{B}, \mathrm{C}$ or $\mathrm{CR} / \mathrm{P}$ may be repeated for the purpose of improving the grade or proficiency only in the following two cases. One, the course is documented by the employer as mandated for training requirements as a condition of continued paid or volunteer employment. Two, the official course outline has been updated and the class content has changed substantially.
If a student successfully completed a course (grade of "C" or higher or P ) and a significant length of time has passed (3 or more years), the course may be repeated for subject recency only and the units and grade from the second attempt are not part of the student's grade point average or cumulative units.

## Mandated Training

Requirements and Course Repetition
Course repetition shall be permitted in instances when it is necessary for a student to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. Written verification from the employer is required. Such courses may be repeated for credit any number of times, regardless of whether or not substandard work was previously recorded, and the grade received each time shall be included for purposes of calculating the student's grade point average.
See also Audit Policy on page 13 .

## Guidelines Addressing Cheating and Plagiarism

## Introduction

As the Student Handbook in the College of San Mateo Catalog states, "The principle of personal honor is the basis for student conduct. The honor system rests on the sincere belief that College of San Mateo students are mature and self-respecting, and can be relied upon to act as responsible and ethical members of society."

Although instructors may hope that students will act responsibly and ethically at all times, situations will arise in which it is clear, beyond a reasonable doubt, that a student cheated or plagiarized. The following sections provide guidelines for such situations by providing specific definitions of cheating and plagiarizing, and addressing the related instructor responsibilities, student responsibilities and sanctions.

## Definitions

"Cheating" refers to unauthorized help on an assignment, quiz, or examination as follows: (I) a student must not receive from any other student or give to any other student any information, answers, or help during an exam; (2) a student must not use unauthorized sources for answers during an exam, must not take notes or books to the exam when such aids are forbidden, and must not refer to any book or notes while taking the exam unless the instructor indicates it is an "open book" exam; and (3) a student must not obtain exam questions illegally before an exam or tamper with an exam after it has been corrected.
"Plagiarism" means submitting work that is someone else's as one's own. For example, copying material from a book or other source without acknowledging that the words or ideas are someone else's, and not one's own, is plagiarism. If a student copies an author's words exactly, he or she should treat the passage as a direct quotation and supply the appropriate citation. If someone else's ideas are used, even if it is paraphrased, appropriate credit should be given. Lastly, a student commits plagiarism when a term paper is purchased and/or submitted which he or she did not write.
(Note: the above two definitions are adapted from Tools for Teaching, by Barbara Gross Davis, Jossey-Bass, Inc., 1993, P. 300).

## Instructor Responsibilities

I. At the beginning of every semester, the instructor shall [should] ensure that students understand the above-stated definitions of cheating and plagiarism. Instructors should focus on those aspects of these definitions which will probably be most relevant in their particular courses. Issues of plagiarism will clearly be more relevant in classes which require students to write papers. Issues of cheating will probably be most relevant in classes which use multiple-choice and true-false type questions. Instructors are encouraged to make reference to these guidelines in their course syllabi.
2. The instructor should minimize opportunities for cheating and plagiarizing (e.g., see Toolsfor Teaching, pp. 300-310, or other ap-
propriate sources for specific examples.)
3. Before applying sanctions, the instructor must be able to establish, beyond a reasonable doubt, that the alleged incident actually occurred. For example, a student may admit to cheating or plagiarism, eyewitnesses may corroborate the instructor's account, or an original source of ideas may prove that a student's ideas and/or words are not original. Additionally, instructors must document the details of the alleged incident.
4. The instructor should report the violation to the Vice President, Student Services for disciplinary action.

## Student Responsibilities

Students are expected to complete assignments to the best of their ability without resorting to cheating or plagiarizing, as defined above.

## Sanctions

Among academic sanctions an instructor may choose to utilize are the following:
I. Warn the student, if the infraction is not intentional or flagrant, that any future violation will be dealt with in a more severe manner.
2. Assign the student an " $F$ " grade (no credit) on that exam or assignment. Students should also be warned that a more serious sanction will be applied should another violation occur in the future.

The instructor shall report the violation to the Vice President, Student Services, whose office maintains such information. The instructor should include the following: i) name and identification number of the student, 2) the specific nature of the violation, 3) the date of its occurrence, 4) how the violation was determined, and 5) any additional comments that the instructor wishes to include.
The Vice President will determine the Collegelevel discipline that is appropriate based on the magnitude and severity of other documented reports related to the same student. Note that disciplinary actions are not part of the academic record, and disciplinary actions are not recorded on student transcripts. All disciplinary information is maintained only in the Office of the Vice President, Student Services, and is confidential in nature.

Nothing in these guidelines shall be construed to restrict a student's right to appeal through the appropriate process described in the "Student Grievances and Appeals" section of the college catalog.

## Application of College Board Advanced Placement Tests (AP) and International Baccalaureate Examinations (IB)

The following table shows how College Board Advanced Placement Tests (AP) is applied to the College of San Mateo Associate Degree general education requirements (column 2), California State University units (column 3), California State University General Education (column 4), Intersegmental General Education Transfer Curriculum (column 5), University of California units (column 6). Column 7 shows how International Baccalaureate Exams (IB) are applied to California State University General Education Certification. For AP a student must have a score of 3, 4, or 5 to receive credit. For IB the required score is listed on the table. The student is responsible for sending official College Board Advanced Placement Test results or official International Baccalaureate Exam results to College of San Mateo Admissions and Records Office. Use the Transcript Evaluation Service (available on the College web site "FORMS" page in Admissions and Records) to receive an official record of how AP and IB results are applied to your goals at College of San Mateo.
This table deals only with units and general education credit. College classes taken after AP or IB may duplicate the content of the AP or IB test and, in these cases, the university (or transfer destination) may not award credit for both the course and the AP or IB test. Space does not permit discussion of the range of complexities of this topic. It is important that students majoring in science, math, engineering, or foreign language meet with a counselor or advisor before enrollment to determine how the use of AP credit will affect placement in a course sequence and affect transfer plans.

| Column 1 | Column 2 - AP | Column 3-AP | Column 4 - AP | Column 5 - AP | Column 6 - AP | Column 7 - IB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Advanced Placement Test*** Score of 3, 4 or 5 required | Application of AP to the College of San Mateo Associate Degree General Education requirements | CSU AP Test Credit Minimum semester units earned | CSU AP (12/08 policy update) Of the minimum units earned what is applied to CSU GE Certification | IGETC AP (12/07 policy update) IGETC Certification | UC AP Test Credit General Policy | Application of IB to CSU (5/og Coded Memo AA-2009-11 from CSU) |
| Art History | 3 units Area E5c | 6 units | 3 units Area C1 or C2 | Area 3A or 3B | 8 quarter units |  |
| Art, Studio: <br> Drawing Portfolio <br> 2-D Design <br> Portfolio <br> 3-D Design <br> Portfolio | Not applicable Not applicable <br> Not applicable | 3 units | Not applicable Not applicable <br> Not applicable | Not applicable Not applicable <br> Not applicable | 8 quarter units <br> 8 quarter units <br> 8 quarter units <br> ( 8 unit max for <br> all three tests) |  |
| Biology | 4 units Area E5a (pending) | 6 units | 4 units Areas $\mathrm{B} 2+\mathrm{B} 3$ | Area 5B with Lab | 8 quarter units | IB Biology HL <br> Score of 5 or higher <br> 6 sem units to CSU of which <br> 3 units applied to CSU GE B2 |
| Chemistry | 4 units Area E5a | 6 units | 4 units Areas B1+B3 | Area 5A with Lab | 8 quarter units | IB Chemistry HL Score of 5 or higher 6 sem units to CSU of which 3 units applied to CSU GE B1 |
| Computer Science <br> A <br> Computer Science <br> AB | Not applicable <br> Not applicable | 3 units <br> 6 units | Not applicable <br> Not applicable | Not applicable <br> Not applicable | 2 quarter units <br> 4 quarter units <br> (4 unit max for both tests) |  |
| Microeconomics Macroeconomics | 3 units Area E5b <br> 3 units Area E5b | 3 units <br> 3 units | 3 units Area D <br> 3 units Area D | Area 4 <br> Area 4 | 4 quarter units 4 quarter units | IB Economics HL Score of 5 or higher 6 sem units to CSU of which 3 units applied to CSU GE D |
| English Language \& Comp <br> English Literature \& Comp | 3 units Area 2 a <br> 3 units Area 2a or E5C <br> Either test also meets English competency | 6 units <br> 6 units | 3 units Area A2 <br> 6 units Areas $\mathrm{A} 2+\mathrm{C} 2$ | Area 1A <br> Area 1 A or 3 B | 8 quarter units <br> 8 quarter units <br> ( 8 unit max for both tests) |  |


| Column 1 | Column 2 - AP | Column 3 - AP | Column 4-AP | Column 5 - AP | Column 6 - AP | Column 7 - IB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental Science | 4 units Area E5a (pending) | 4 units | 4 units <br> Tests taken Fall 2009 or earlier may apply to either B1+B3 or B2+B3. <br> After Fall 2009 credits may only apply to B1+B3 | Area 5A with Lab | 4 quarter units |  |
| Comparative Government and Politics | 3 units Area E5b | 3 units | 3 units Area D | Area 4 | 4 quarter units |  |
| US Government and Politics | 3 units Area E5b or Area E1 opt 2, grp 1 | 3 units | 3 units Area D+US2 | Area 4 | 4 quarter units |  |
| History, European | 3 units Area E5b or E5c | 6 units | 3 units Area C2 or D | Area 3B or 4 | 8 quarter units | IB History HL (any region) |
| History, US | 3 units Area E5b or Area E1 opt 2, grp 1 | 6 units | $\begin{aligned} & 3 \text { units Area C2 } \\ & \text { or D } \\ & \text { Plus US-1 } \end{aligned}$ | Area 3B or 4 | 8 quarter units | Score of 5 or higher 6 sem units to CSU of which |
| History, World | 3 units Area E5b or E5c | 6 units | $\begin{aligned} & 3 \text { units Area C2 } \\ & \text { or D } \end{aligned}$ | Area 3B or 4 | 8 quarter units | 3 units applied to CSU GE C2 OR D |
| Human Geography | 3 units Area E5b | 3 units | 3 units Area D | Area 4 | 4 quarter units | IB Geography HL Score of 5 or higher 6 sem units to CSU of which <br> 3 units applied to CSU GE D |
| Languages other than English: <br> Chinese Language and Culture <br> French Language French Literature German Language Italian Language and Culture Japanese Language and Culture <br> Spanish Language Spanish Literature | 3 units Area E5c <br> 3 units Area E5c <br> 3 units Area E5c <br> 3 units Area E5c <br> 3 units Area E5c <br> 3 units Area E5c <br> 3 units Area E5c <br> 3 units Area E5c | 6 units <br> 6 units <br> 6 units <br> 6 units <br> 6 units <br> 6 units <br> 6 units <br> 6 units | 3 units Area C2 <br> 3 units Area C2 <br> 3 units Area C2 <br> 3 units Area C2 <br> 3 units Area C2 <br> 3 units Area C2 <br> 3 units Area C2 <br> 3 units Area C2 | Areas $3 B$ and 6 A <br> Areas 3B and 6A <br> Areas 3B and 6A <br> Areas 3B and 6A <br> Areas 3B and 6A <br> Areas 3B and 6A <br> Areas 3B and 6A <br> Areas 3B and 6A | 8 quarter units <br> 8 quarter units <br> 8 quarter units <br> 8 quarter units <br> 8 quarter units <br> 8 quarter units <br> 8 quarter units <br> 8 quarter units | IB Language A1 HL <br> (any language) <br> Score of 4 or higher <br> 6 sem units to CSU of which <br> 3 units applied to CSU GE C2 <br> IB Language A2 HL <br> (any language) <br> Score of 4 or higher <br> 6 sem units to CSU of which <br> 3 units applied to CSU GE C2 <br> IB Language B HL (any language) Score of 4 or higher 6 sem units to CSU o units applied to CSU GE |
| Latin- Literature <br> Latin - Vergil | 3 units Area E5C <br> 3 units Area E5c (pending) | 6 units 3 units | 3 units Area C2 <br> 3 units Area C2 | Areas 3B and 6A <br> Areas 3B and 6A | 4 quarter units 4 quarter units |  |
| Math - Calculus AB <br> Math - Calculus BC | 3 units Area E2C <br> 3 units Area E2c <br> Application to Associate Degree GE is pending. Either test meets math competency | 3 units <br> 6 units | 3 units Area B4 <br> 3 units Area B4 | Area 2 <br> Area 2 | 4 quarter units 8 quarter units <br> (8 unit max for both tests) | IB Mathematics HL <br> Score of 4 or higher <br> 6 sem units to CSU of which <br> 3 units applied to CSU GE B4 |


| Column 1 | Column 2 - AP | Column 3 - AP | Column 4 - AP | Column 5-AP | Column 6 - AP | Column 7 - IB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Music Theory | 3 units Area E5c | 6 units | 3 units Area C1 | Not applicable | 8 quarter units |  |
| Physics B <br> Physics C <br> (electricity/ magnetism) <br> Physics C (mechanics) | 4 units Area E5a 4 units Area E5a <br> 4 units Area E5a <br> (pending) | 6 units 4 units <br> 4 units | 4 units Area B1+B3 <br> 4 units Area $B 1+B 3$ <br> 4 units Area B1+B3 | Area 5A with Lab Area 5A with Lab <br> Area 5A with Lab | 8 quarter units 4 quarter units <br> 4 quarter units <br> ( 8 unit max for all three tests) | IB Physics HL <br> Score of 5 or higher <br> 6 sem units to CSU of which <br> 3 units applied to CSU GE B1 |
| Psychology | 3 units Area E5b | 3 units | 3 units Area D | Area 4 | 4 quarter units | IB Psychology HL Score of 5 or higher 3 sem units to CSU of which can be applied to CSU GE D |
| Statistics | 3 units Area E2C <br> Test also meets math competency | 3 units | 3 units Area B4 | Area 2 | 4 quarter units |  |
|  |  |  |  |  |  | IB Theatre HL <br> Score of 4 or higher <br> 3 sem units to CSU of which <br> 3 units applied to <br> CSU GE C1 |

6/15/2009


## Instructional Resources

## Library

With its classic exterior and panoramic view of the Bay Area, College of San Mateo Library is an inviting space in which students, faculty, and community users gather for research, study, and lifelong learning.
The reading room on the main floor features spacious reading tables, individual study carrels and comfortable lounge seating. PC and Macintosh computer workstations provide access to the internet and a universe of online resources and databases including access to Ebooks. Productivity software including word processing, database, spreadsheet, graphics, and web authoring programs are also available for student use. Additionally, the CSM Library is a Wi-Fi HotSpot. Laptop users can access the internet and print documents from their computers in the library.

The Reference Desk, reference materials, the Circulation Desk and the Reserve Book Collection are located on the main floor of the library which is on the second floor of building 9. Individual study carrels, lounge seating and additional reading tables are available on the main floor and on the mezzanine level of the library.
Reference materials are for research purposes only and are not permitted to leave the library. The general book collection is located on the mezzanine level. Books in the general collection can be checked out for three weeks and can be renewed for an additional three weeks either in person, by phone, or via the internet.

The Reserve Book Collection consists primarily of supplementary materials that classroom instructors have placed in the library to support students taking their courses. Holdings may include course textbooks, supplementary books, journal and magazine articles and in some cases, tests and quizzes from prior semesters. Normally reserve materials are for Library use only and can only be checked out for a maximum of 2 hours at a time.

The CSM Library owns 71,000 volumes of print books and receives more than 250 print journals, magazines and newspapers. Current issues of journals, newspapers and magazines are on display near the Circulation Desk. Past issues of periodicals can be checked out from the Circulation Desk.

Additionally, hundreds of journals, newspapers, magazines and special subject databases are available online through the Library's webpage. Ebooks and most of the library's online databases can be accessed from home 24 hours a day. Videos of CSM telecourses are available for limited home check out and inlibrary viewing.

As a CSM student you can request that library books, periodicals, videos, CDs and DVDs owned by the Skyline or Cañada College libraries (except Reserve and Reference Materials) be sent to the CSM Library for your use. Requested items are placed on hold at our circulation desk under the requester's name. Hold fees are waived for requested items that are picked up at the CSM Library.

The College of San Mateo Library is a member of the Peninsula Library System (PLS). PLS is a consortia of 32 public libraries in the city and county of San Mateo and the 3 college libraries of the San Mateo County Community College District. Through Interlibrary Loan (ILL) all PLS library card holders can borrow materials from the combined collection of over 2.5 million items owned by the thirty five PLS libraries. Patrons can request that library books, periodicals, videos, CDs, and DVDs be delivered to and returned to the CSM Library or any other PLS member library.
Through nationwide and international Interlibrary Loan agreements, CSM library patrons can also request to borrow items from many other public libraries as well as private and public college and university libraries around the country and around the world.

A CCTV and computer workstation installed with assistive technology are available to facilitate access to instructional materials for students who are challenged by visual or auditory impairments and learning disabilities. The Library also provides additional support via a TTY device and email reference service.

Information and materials of significant historical value and interest to the College of San Mateo and the San Mateo County Community College District are housed in the Library's Archives. The College of San Mateo's Photograph Library Project (PHLIP) includes thousands of photographs of students, faculty, staff, and events that document over 82 years of the college's history.
Since 1987 the CSM Library has been a Federal Depository Library. We receive a well-rounded collection of important government resources and documents that have been published by the United States Government Printing Office.

Basic information about Library services, policies, resources, classes, programs and current hours is available at the Library's web site (collegeofsanmateo.edu/library).

## KCSM TV and FM

KCSM TV and FM are Bay Area public broadcasting stations licensed to the college district and operated by College of San Mateo. CSM has the only professional TV and FM stations with educational licenses in Northern California. KCSM TV broadcasts on PBS Channel 43 and cable Channel I7 and KCSM radio broadcasts on 91.I on the FM band.

Studios for both KCSM TV and FM are located on the lower floor of the Library building. The TV station's transmitter is located on Mount Sutro. In addition to its regular broadcast schedule, KCSM-TV broadcasts a wide range of credit courses. These distance learning courses allow students to view the lecture portion of the classes at home on television. Usually three on-campus sessions are included as part of a telecourse. Telecourses carry full college credit and are transferable to many four-year colleges. For more information visit the web site at collegeofsanmateo.edu/dl.

## Student Services

## Administration

Vice President, Student Services
Jennifer Hughes
Dean, Articulation and Research
John J. Sewart
Dean, Counseling, Advising and Matriculation Marsha K. Ramezane

Dean, Enrollment Services
Henry B. Villareal
Director, Student Support
Danita Scott-Taylor

## Programs and Services

Assessment
Chris Rico
Assistant Registrar
Arlene Fajardo
Assistive Technology Specialist
Carolyn Fiori
Basic Skills Support
Krystal Romero
Career Counseling/Student Employment Eileen O'Brien

Child Development Center, Coordinator
Louise Piper
Cooperative Work Experience Education Steve Cooney
Counseling Services
Gary Booker
Disabled Students Programs and Services Danita Scott-Taylor
Financial Aid Director
Claudia Menjivar
Health Services
Sharon Bartels
High School Relations
Steve Morehouse
International Student Counselor
Martin Bednarek
Internship Program
Eileen O'Brien
Learning Disabilities Specialist TBA
Multicultural Center
Danita Scott-Taylor
Extended Opportunity Programs
and Services (EOPS)
Danita Scott-Taylor
Psychological Services
Makiko Ueda
Student Activities Coordinator
Aaron Schaefer
Transfer Service
Mike Mitchell
Aisha Upshaw

## Counselors and Faculty Advisors Counseling Faculty

Counselors at College of San Mateo are "generalists" and assist students with educational goals that include transfer, associate degrees, and/or certificates and are able to assist with all major areas. More specifically, counseling faculty i) help students set educational goals, 2) provide academic planning and monitoring assistance, 3) create student educational plans for students, 4) help students evaluate academic readiness and plan coursework to build skills, 5) teach students skills and strategies to enhance academic success, and 6) work with students to resolve personal concerns that interfere with the ability to succeed in college.

All Majors, General Education, Transfer
Sylvia Aguirre-Alberto
Kitty Brown
Arnett Caviel
Jacqueline Gamelin
Modesta Garcia
Aisha Upshaw
Mary Valenti
Administration of Justice Program
Jacqueline Gamelin
Business and Accounting Majors
Jacqueline Gamelin
Bilingual Counselors (Spanish)
Sylvia Aguirre-Alberto
Modesta Garcia
Career Counselor
Eileen O'Brien
CalWORKS Program
Ruth Turner
CARE Program
Ruth Turner
Dental Hygiene Program
Modesta Garcia
Disabled Student Services/
Transition to College
Kevin Sinarle
EOPS Counselors
Sylvia Aguirre-Alberto
Arnett Caviel
Ruth Turner
Kitty Brown
Multicultural Center Counselors
Sylvia Aguirre-Alberto
Kitty Brown
Nursing Program
Mary Valenti
Transfer Services
Aisha Upshaw
Veterans' Program
Dean Chowenhill

Faculty Advisors
Faculty Advisors at College of San Mateo provide advising assistance that is major specific. Each faculty advisor specializes in the area(s) identified below. Faculty advisors I) assist students with major specific information related to CSM certificates and associate degrees, 2) provide information about educational and personal requirements in specific major areas, 3) provide major specific academic planning assistance to students completing certificates, associate degrees, and university transfer, 4) create personalized student educational plans for students, and 5) help students evaluate academic readiness and plan coursework to build skills.
Advisors by Instructional Division:
Business and Technology Division Rick Ambrose

Coastside/Half Moon Bay Location David Danielson

Mathematics and Science Division Laura Demsetz

Advisors by Majors or Programs:
Accounting and Business Majors
Rick Ambrose
Architecture, Engineering, Computer
Science, Math, Science Majors
Laura Demsetz
Athletics
Larry Owens
Bret Pollack
Athletic Advisors specialize in athletic eligibility requirements
(See a College Counselor if you are looking for a major that does not appear in the categories listed above.)

## Assessment Center Services

Using Placement Test Results to Meet Course Prerequisites
Placement test results, for the purpose of course placement and prerequisite skill level, are valid for two years only.

Using Placement Test Results to Meet Associate Degree Competency Requirements in English and/or Mathematics
Placement test results may be used to meet English and/or mathematics competency requirements for the associate degree. Test results, for this purpose, remain valid even if there is a break in attendance. However, test results must meet the associate degree competency requirements of the catalog year in which the degree is based.

## Placement Testing

The Assessment Center, located in Building I, Room I30, conducts the college placement testing program which includes English, Reading, ESL, and Mathematics testing components. There is no charge for placement testing. Computerized testing is offered year round by appointment to students who have completed a College of San Mateo Admissions Application, have a CSM student identification number, present an approved photo identification (e.g., driver's license, passport, credit card with photo), and plan to attend College of San Mateo. Placement test results are posted on students' Web SMART accounts under Student Records/Placement Test Results.

Placement tests are required for all students who plan to enroll at College of San Mateo to complete a vocational certificate, an associate degree, transfer to a university, or for students who are undecided but considering one of the aforementioned goals. Also, placement tests are required to enroll in English, ESL, reading, and mathematics, and other courses that have math or English prerequisites.

Placement tests are designed to measure current academic readiness in English, reading, and mathematics. Students are advised to work with counselors to discuss test results, educational goals, and other relevant information so that counselors can assist students to develop student educational plans.

## Placement Test Retest

English/reading, ESL, mathematics: If a student does not accept the placement results, he/she may retake the placement test one additional time within a two year period.

## Special Accommodations for Placement Tests

The Assessment Center is able to provide extended test time to students who request it, and is wheelchair accessible. Students requiring placement tests in alternate formats, must contact the Disability Resource Center (Bldg I6, Room I50) at 574-6438 or 574-6433.

## Placement Test Waivers

Placement tests may be waived for students who have successfully completed English and/ or mathematics coursework at another accredited college or university in the United States. For more information view the Prerequisite Equivalency Petition at collegeofsanmateo. edu/forms or go to the Assessment Center, Building I, Room I3O

## Ability to Benefit Test

The Ability to Benefit Test is required for those students who do not possess a high school diploma, GED Certificate or High School Proficiency Certificate and want to apply for federal financial aid. The Ability to Benefit test is administered by the Assessment Center, located in Building I, Room I30. There is no charge for testing. The ATB test is offered year-round by appointment to students who have completed a College of San Mateo Admissions Application and an application for Financial Aid. Photo identification is required prior to taking the test. The College of San Mateo uses ASSET Test for Writing Skills Test, Reading Skills Test and Numerical Skills Test. In addition, the College of San Mateo uses CELSA for English Language Skills Test. The Ability to Benefit Test is a pass or fail instrument. Once the student passes the test, the Assessment Center provides the Financial Aid Office test results and the application for financial aid can then be processed. Students who fail the test may retake the test after 30 days.

## CARE Program

The CARE Program (Cooperative Agencies Resources for Education) is the combined effort of the College of San Mateo and the Human Services Agency

The goals of the CARE program are to assist single parents receiving CalWORKS (formerly known as AFDC) to increase their educational skills, become more confident and self-sufficient, and move from welfare to independence. Support services include: child care, transportation, tutoring, peer advising, parenting workshops, books and supplies.

For more information, contact Ruth Turner in the EOPS Office, Building 20, Room IO7 (574-6I54).

## Career Services Center

Located in Building I, Room 213, career services consists of career assessment, student employment, career counseling, resource information, career focused course selections, the WIN Internship Program, and career events and activities. Through use of career services, students find assistance as they explore and select college majors, career options, and search for employment. For more information visit Career Services or call (650)574-6II6 or visit the web site at collegeofsanmateo.edu/careet.

## Career Self Assessment

Career assessment services offer students measures to assess occupational interests, personality, values and skills that are reviewed with and interpreted by career counselors. The combination of test scores and interest patterns create profiles unique to each person that are helpful with the process of exploring college majors and career options. Self assessment measures are available by enrolling in several Career and Life Planning courses (CRER) - CRER I2O College and Career Success (3 units) , CRER 123 Career Exploration for Student Success (I unit), or CRER I26 Career Choices I: Career Assessment (. 5 unit). There is a charge for some assessment measures.

## Student Employment

Student Employment services assist students and alumni with the process of finding work. Part-time work, internships, and professional job listings are available for review and follow up through CSM JobLinks, our no charge on-line job posting service. In addition, the Center provides current information about career descriptions, salary information, and employment outlook for specific jobs through EUREKA career information system, California Occupational Outlook, and O*NET. Job seekers are encouraged to enroll in CRER I27 Career Choices II: Job Search Strategies (. 5 units). This course is an 8 hour experience designed to assist students to acquire effective job search skills.

## WIN (Work Intern Network) Internship Program

WIN assists students who have completed coursework in their major with securing work experience through internship opportunities.

## Career Activities

Career Services offers a number of activities to assist students and members of the community to gather information about jobs, career development, industry information, and the like. Typically general and targeted job fairs are offered throughout the year, as well as career events and activities.

## Child Development Center

The Mary Meta Lazarus Child Development Center, located at the east end of the science building overlooking the Bay, provides a comprehensive child development program as a service to assist students who have young children ages $21 / 2$ through 5 . The Center is open from 7:30 a.m. to 5 p.m. Monday through Friday. Currently, tuition fees for children $2^{1 / 2}$ years to 3 years old are: part-time (less than 5 hrs. per day) $\$ 45$ per day; full-time ( 5 hrs. or more) $\$ 55$ per day. Tuition fees for children 3 to 5 years old are: part-time $\$ 38$ per day; full-time $\$ 43$ per day. In addition, there is a \$50 registration fee each semester. All fees are subject to change. Some families may be eligible for financial assistance for child care. Eligibility is determined by family's gross monthly income, number in the family and family's need for child care services. Priority is given to low-income students. For information, contact Louise Piper in the Child Development Center, Building 33, 574-6279 or visit collegeofsanmateo.edu/calworks.

## Counseling and Educational Services

The College of San Mateo offers integrated services in the areas of academic, transfer, and career counseling. Available to all students, counseling services are designed to: i) help students make decisions and set educational and career goals; 2) provide academic program planning to complete vocational certificate, associate degree, and/or university transfer requirements; 3) assist students to evaluate current academic readiness and plan course work to build skills; 4) acquaint students with campus services and resources; and 5) teach students about important skills, strategies, and techniques to enhance classroom, academic, and personal success.
Students may access services through Counseling Services, Building i, Room 207, 574-6400. The counseling staff make appointments for students and facilitate drop-in counseling services.

Personal counseling is available to all registered students through the Office of Psychological Services. Staff trained in personal counseling help students develop their full potential and obtain maximum benefit from their college experience. When appropriate, students may be referred to other offices for specialized assistance. Appointments for special services may be made in person, by telephone, through a counselor/advisor, or through the Student Health Center, Building I, Room 226 (574-6396).

## Disabled Student Services

Students entering college with disabilities who need assistance should contact staff for a pre-enrollment interview to determine support services needed. The Disability Resource Center provides counseling, note taking, reader services, special parking permits, assistance with classroom access, orientation to the campus, test accommodations, and referral to campus resources. For more information contact the Disability Resource Center, Building I6, Room 150, 574-6438 (voice); 358-6803 (TTY).

The Learning Disabilities Assessment Center offers students with possible learning disabilities individual educational assessment, support services, and assistance with educational planning. Students who suspect or know they have a learning disability can contact the staff to schedule an appointment. Diagnostic testing may be administered to develop an educational plan for academic success. Support services may include tutoring, study skills, test-taking assistance, books on tape, and liaison with instructors and counselors. For more information contact the Learning Disability Assessment Center in Building I6, Room I50 (574-6433).
The Assistive Technology Center offers assistance with computer access on campus and specialized training in the use of hardware and software appropriate to a particular student's disability. For more information contact Carolyn Fiori in Building I6, Room I5I (574-6432).
Adapted Physical Education classes are designed to help improve a student's level of physical fitness. Based on an individual assessment, a program is developed to fit the student's special needs. Further information is available from Shana Kudo (378-72I9), Adapted Physical Education, Gymnasium, Building 8, Room IO9A

The Transition to College Program provides educational support for students with psychological disabilities. The program offers disability-related counseling, academic advising, special emphasis classes, peer support groups, and liaison with community providers. Contact the Transition to College Office at 574-6487 or 574-6642.

## Extended Opportunity Programs and Services (EOPS)

Funded by the State of California and the San Mateo County Community College District, EOPS is an exclusive support service available for full-time students who are determined by EOPS staff to be in need of additional services in order to successfully pursue their educational and vocational goals. Among the more notable benefits offered are i) transfer application fee waivers, 2) book service, and 3) additional counseling and tutoring time and informational opportunities in the form of workshops, correspondence and college field trips.
In order for a student to be considered for the EOPS program, the following criteria must apply: i) full-time (i2 units) enrollment, 2) qualification to receive the Board of Governors Enrollment Fee Waiver (BOGW), 3) completion of fewer than 70 college-level units, and 4) meet the educational and low income definition as determined by the EOPS guidelines.

Interested students should visit the EOPS office located in Building 20, Room Io7, or call 574-6I54. Office hours are Monday through Friday, 8 a.m. to $4: 30$ p.m and evenings by appointment.


## Health Services

In the CSM Health Services Center, the college nurse provides: emergency care and first aid; consultation on health problems; referrals to psychologists, physicians, and health or social agencies; drug and alcohol counseling and referral; arrangements for emergency transportation; health screenings for blood pressure, hearing, vision, TB, pregnancy, and strep; anonymous HIV counseling and testing; nutrition and stress counseling; and immunizations. Additional physician services available by appointment include: physicals, lab work and prescription medications. Emergency accident insurance coverage is in effect when students are on campus or attending college-sponsored events. Low-cost medical and dental insurance is available for purchase.

For office hours and more information, visit the Health Services Center (Bldg. I, Room 226, 574-6396) or go to collegeofsanmateo.edu/ healthcenter.

## Insurance

The College provides limited accident and emergency illness insurance coverage to its students while they are on campus or at a College-sponsored event.

Voluntary medical \& dental insurance may be purchased by students who are not covered by their own or parents' policies. Application and claim forms are available in the Health Center.

## Language Arts Centers

Located on the second floor of Building 18, the Language Arts centers provide learning assistance for CSM students.

The English $8 \mathbf{o o}$ Lab serves students enrolled in ENGL 828, 838 and 848. (Building 18, Room IO2; 574-6539).
The Foreign Language Center offers students enrolled in American Sign Language, Mandarin Chinese, French, German, Italian, Japanese, and Spanish an opportunity to meet with foreign language faculty on a one-on-one basis and to practice conversation in an informal atmosphere. Videos, DVDs, dictionaries, textbooks, other printed materials, and computers providing Internet access and loaded with language-learning software are available. (Building I8, Room II2; 574-6346).

The Reading and ESL Center offers individualized diagnosis of reading skills; instruction in improving comprehension, vocabulary, and reading speed; and reinforcement of phonics and spelling skills. (Building 18, Room IOI; 574-6437)

The Speech Lab offers one-on-one, individualized attention for students enrolled in Speech Communication courses. Students receive assistance in topic selection and development, outlining, delivery, and critiquing of presentations. Video taping and playback of speeches are available for students requesting instructor feedback. Speech books, journals, videos, CDs, and computers are available as resources. (Building I8, Room IIO; 574-6257)
The Writing Center offers diagnosis in writing skills; tutorial instruction in grammar, sentence structure, and essay composition; tutorial assistance in composing papers for a CSM class; and assistance in completing assignments from any CSM English class. (Building I8, Room IO4; 574-6436)

## Multicultural Center

The Multicultural Center is part of the general campus counseling program which is open to serve all students, regardless of background. The program's emphasis is the recruitment and sustained enrollment of students who seek to continue their educational opportunities while improving language skills and overcoming social and/or economic disadvantages. The staff is made up of full-time bicultural and/or bilingual certificated counselors and support personnel. To facilitate students' successful participation, the center offers academic advising and personal counseling and other student services in a supportive and culturally enriching environment. The Center is located in Building 20, Rooms II2 and II3 (574-6154).

## Psychological Services

Psychological Services offers free confidential individual counseling to students at College of San Mateo. Counseling regarding crisis, stresses, personal issues and decisions enables students to continue successfully in college. Referrals to other on- and off-campus resources are also available. Appointments may be made through the Health Center, Building I, Room 226, or by calling 574-6396.
Additionally, Psychological Services provides special supports to students with psychological disabilities through the Transition to College program. (Building I5, Room I27, 574-6487).

## Scholarships

The San Mateo County Community Colleges Foundation is a nonprofit tax-exempt corporation which exists to broaden the educational opportunities of students. Established in 1967, The Foundation provides scholarships and short term loans to help students achieve their goals.
The Foundation awards many thousands of dollars in scholarships each year which assist hundreds of students at the District's three Colleges. In addition, a number of outside organizations award scholarships directly to College of San Mateo students, bringing the annual total of awards at this College to more than \$200,ooo.

Contributions to The Foundation are received from many sources: individuals, businesses, civic groups, community organizations and other foundations. Some are memorials while others are endowments or given to establish specific scholarship funds.
Many gifts are intended for direct transmittal to student recipients. Some contributions specify who is to receive the assistance (field of study, based on merit or financial need, type of student - two-year transferring, re-entry, etc.); others specify the College at which the award is to be made. Some leave both the recipient and the College to the discretion of The Foundation, in which case funds are allocated to the Colleges in proportion to the number of full-time students. Awards are made at each College by a scholarship committee.

CSM students who have completed at least I2 graded College of San Mateo college units and who have maintained a cumulative G.P.A. of 2.75 or above are encouraged to apply. Both students returning to and transferring from CSM are eligible. These scholarships are awarded to students in a wide variety of majors. Scholarships are awarded on the basis of academic achievement and are, for the most part, not need-based. In addition, a number of local and national organizations offer scholarships to CSM students. Eligibility requirements vary widely and require applications. CSM Scholarship applications are available the beginning of November and due by the beginning of February. For specific dates and additional information contact the Scholarship Office, Building I, Room 155 (574-6434), collegeofsanmateo.edu/scholarships.

## Transfer Services

Located within the Transfer, College/Career Planning, and Student Success Center in Bldg. I, Room II5, transfer services provide important services to assist students in planning for transfer to a four-year college or university. Information and workshops are offered on transfer requirements, transfer planning, writing the application essay, choosing a college, and completing transfer admission applications. Transfer Services also schedules representatives from other universities and colleges, including UC, CSU and private universities, to meet with students on a regular basis. CSM has Transfer Admission Agreements with a number of four-year institutions which can guarantee transfer admission. For more information call 358-6839.

## Transition to College

The Transition to College program offers students with psychological disabilities the following services: academic advising, disability-related counseling, peer counseling, assistance with registration and financial aid applications, liaison with instructors and community providers, and specialized instruction. Specialized instruction consists of classes designed to provide college and career orientation, academic and social skills development, disabilities management, and student success strategies. For more information, contact the Transition to College Office (574-6487 or 574-6642).


## College of San Mateo Placement Tests

- ACCUPLACER - Reading comprehension and sentence structure (Computerized Placement Tests) (The College Board)
- Compass Mathematics Test - Internet Version (ACT)
- Compass ESL Test

Interpreting placement test results. Placement tests are intended to measure skills which research has shown to be closely related to academic success. In combination with other measures, test results represent student strengths and capabilities. Students are advised to discuss placement results with a counselor/advisor so that they can assist them to develop an educational plan.

Refer to the course listing in this catalog for titles, descriptions and prerequisites for the courses in the following placement charts. Students are encouraged to consult with a counselor/advisor regarding course selection and planning.

## Alternate tests used for test waiver and/or credit:

The English test requirement will be waived, and eligibility for English 100 received, for students with a minimum score on one of the following tests:

| Test $\quad$ Minimum Score |  |
| :--- | ---: |
| *SAT Critical Reading | 580 |
| *SAT Writing Subject Test | 660 |
| ACT English Usage Test | 23 |
| CSU English Placement Test | 150 |
| AP English Language and |  |
| Composition Test | 3,4, or 5 |
| AP English Literature and |  |
| Composition Test | 3,4, or 5 |

* Test taken prior to the use of the new SAT Reasoning Test.


## College of San Mateo Course Placement Guides

## English Course Placement Guide

English course placements are based on a combination of two test scores: Reading Comprehension and Sentence Skills. Scores in parentheses represent scale scores for the computerized English test. Placements are listed below.

| If you have a | and a Sentence | Take the following |
| :---: | :---: | :---: |
| Reading score of: | Skills score of: | English and Reading course(s): |
| o to 8 (o to 27). | All scores. | Take READ 812 first |
| 9 to 14 (28 to 41) | All scor | Take READ 825 first; the following semester take ENGL 828 |



More detailed information on the determination of English course placements is available in the Office of Testing Services (Building i, Room I30) during day hours, and in the Counseling Services (Building I, Room 207) on Monday - Thursday evenings.

## COMPASS ESL (English as a Second Language) Test (ACT) - Internet Version

These scores represent scale scores for the computerized ESL test. Placements are listed below.

If you took SMCCCD Assessment: and scored: You can take the following ESL course(s):

| ESL Grammar/Usage | REVISED SCORES |  |
| :---: | :---: | :--- |
| Pre-Level 1 | $1-28$ | READ 807/ESL 895 |
| Level 1 | $29-41$ | ESL 825 |
| 2 | $42-65$ | ESL 826 |
| 3 | $66-80$ | ESL 827 |
| 4 | $81-94$ | ESL 828 |
| 5 | $95-99$ | ESL 400 |


| ESL Listening |  |  |
| :---: | :---: | :--- |
| Pre-Level 1 | $1-45$ | READ 807 |
| Level 1 | $46-58$ | ESL 845 |
| Level 2 | $59-68$ | ESL 846 |
| Level 3 | $69-76$ | ESL 847 |
| Level 4 | $77-99$ | ESL 848 or SPCH 855 |


| ESL Reading |  |  |
| :---: | :---: | :--- |
| Pre-Level 1 | 1-49 | READ 807/ESL 895 |
| Level 1 | $50-60$ | ESL 855 |
| Level 2 | $61-72$ | ESL 856 |
| Level 3 | $73-85$ | ESL 857 |
| Level 4 | $86-99$ | *Take the Native Speaker Reading Test (paper <br> \& pencil) |

Caveat: These scores are subject to change in the future.

## Reading Course Placement Guide

| If you have a Reading | It is recommended that you take |
| :--- | :--- |
| Comprehension Score of: | the following Reading course(s): |



## COMPASS Mathematics Test (ACT) - Internet Version

These scores represent scale scores for the placement domain and not the initial domain. Placements are listed below.

| If your took SMCCCD Assessment: | and Scored: | You can take the following Math course(s): |
| :---: | :---: | :---: |
| Pre-Algebra | I to 40 | MATH 8iI |
| Pre-Algebra | 4I to 100 | MATH 802 or MATH 8II |
| Algebra. | . I to 25 | MATH iif |
| Algebra. | 26 to 45 | MATH iIo or III |
| Algebra. | .46 to Ioo. | MATH I2O or 122 |
| College Algebra. | . I to 45 | MATH I2O or 122 |
| College Algebra. | 46 to ioo. | MATH I25, 130, I45, 200, or 241 |
| Trig | $\begin{aligned} & \ldots \text { I to } 45 \ldots \\ & \\ & \\ & \\ & \\ & \\ & \\ & 24 \mathrm{or} 24 \mathrm{I} \\ & \text { takin } \end{aligned}$ | MATH I25, 130, 145, 200, 222, 23I, d after completion of MATH ible for MATH 242 without ATH I3O) |

Trig . . . . . . . . . . . . . . . . . . . . . . . . 46 to IOO. . . . . MATH 25I
Refer to the Description of Courses section of this catalog for titles, descriptions, and prerequisites for the courses listed in the Placement Guide above. Students are encouraged to consult with a counselor/advisor regarding course selection and planning.

## Alternate tests used for test waiver and/or credit:

The Mathematics test requirement will be waived for students with a minimum score on one of the following tests:
Test Minimum Score

AP Calculus AB 3, 4, or 5
AP Calculus BC 3, 4, or 5
See pages 33-35 for more information regarding AP credit.

## Transfer Planning

College of San Mateo can help students plan an educational program at CSM which will prepare them to transfer to the University of California, California State University or a private college or university to earn a bachelor's degree. Students are encouraged to meet regularly with a CSM counselor and use the resources of CSM's Transfer Services to develop an educational plan which will assure a smooth transition to the transfer institution of their choice. While completing transfer requirements, students may also want to earn units toward an Associate in Arts or Associate in Science degree at CSM. With careful planning, both objectives can be reached by taking essentially the same set of transferable courses.

## Transfer of Credit

Students planning to transfer can complete their freshman and sophomore level of transfer classes at College of San Mateo and transfer to the baccalaureate institution with junior standing. Students must complete a minimum of 60 transferable semester units in order to transfer as juniors. Typically, students must complete units that apply to an approved general education pattern and lower division major preparation as transfer preparation.

## CSM Transfer Services

collegeofsanmateo.edu/transfer
CSM's Transfer Services provides information and offers workshops on choosing a college, transfer admission requirements, completing transfer admission application forms and writing the application essay. Transfer Services staff can provide details about special Transfer Admission Guarantees that CSM has developed with a number of four-year UC and private institutions which can guarantee students transfer admission.
Students with a clear transfer objective stand the best chance of meeting requirements in a timely manner. They can make the best use of their time and course work by deciding on a transfer institution and major as soon as possible. Students unable to make these decisions when they enter College of San Mateo may follow a general transfer pattern of courses while taking advantage of Transfer Services resources in making transfer plans.

Once students choose a major and the university to which they plan to transfer, they should use www.assist.org, an online student transfer information system, to see how courses completed at College of San Mateo are applied when transferring to a university. This web site also lists courses required for majors.. Transfer Services staff and CSM counselors can assist students in planning for transfer, and four-year university representatives often visit CSM to meet with students interested in transferring to their institutions. It is wise for students to consult the catalog of the university to which they plan to transfer to become familiar with specific transfer admission requirements. Many college and university catalogs are available for reference both in the Transfer Services Office and online. Students may also write directly to the admissions office of the institution to obtain an information bulletin which outlines requirements for admission as a transfer student.
Transfer Services is located in Building I, Room II5. Call 358-6839 for hours of operation.

## Requirements for <br> Transfer Students

A student can transfer from College of San Mateo to a four-year college or university as a junior without loss of time or credits by completing the following:
I. Lower Division Preparation for the Major These courses provide the necessary background to prepare the transfer student to enter the major as a junior. Use www.assist. org for this information.
2. General Education Requirements (Sometimes called "Breadth Requirements") These are the courses required to obtain a bachelor's degree regardless of major. Courses in writing, critical thinking, sciences, humanities and social sciences are included in general education.
3. Electives

Upon completion of major and general education requirements, elective courses can be taken to bring the total number of transferable units to the required 60 units for transfer to UC and CSU.

## Certification of General Education

College of San Mateo will verify the completion of lower division general education requirements for transfer to the University of California (IGETC) or the California State University (CSU GE) systems. Certification of partial completion of general education requirements is available for students transferring to a CSU campus who are unable to complete all requirements before transferring. Partial certification may be available to selected UC campus as well.
Students who transfer without certification will be required to meet the general education requirements of the specific UC or CSU campus to which they transfer. Meeting these local requirements usually necessitates taking additional courses following transfer. The Intersegmental General Education Transfer Curriculum (IGETC) meets the requirements of both the UC and CSU systems.

## Transfer Admission Procedures

Students should take the following steps in applying for admission as a transfer student to a four-year college or university:
I. Request an application from the Admissions Office of the transfer institution approximately one year in advance of planned transfer. Applications for the University of California and the California State University are available online at the following web sites:

## UC applications

www.ucop.edu/pathways
CSU applications
www.csumentor.edu
2. Submit completed application during the specified filing period. Students are discouraged from sending them early as they will not be accepted before the initial filing date.
3. If an entrance exam (SAT, ACT) is required for transfer admission, register for the exam as soon as possible, and at least six months in advance of transfer.
4. Submit a request to the CSM Office of Admissions and Records to have a transcript of your academic record sent to the transfer institution at the time(s) specified by that institution. Transcripts must be requested well in advance of the date required. Four-year colleges and universities will also require transcripts of work completed at all other educational institutions.

## Transcript Evaluation and Course Substitution Service

Students are strongly advised to use the transcript evaluation and course substitution service to determine how course work from other colleges/ universities can be incorporated into their transfer planning.

The Transcript Evaluation Service is available to currently enrolled students who are registered for and/or have completed a total of 6 units at CSM, Cañada, or Skyline College. A transcript evaluation provides important information to the student and counselor about how course work completed at other colleges and universities will be applied to the following CSM educational goals.
I. California State University General Education Certification - CSU GE
2. Intersegmental General Education Transfer Curriculum - IGETC Certification
3. College of San Mateo Associate Degree General Education requirements
4. College of San Mateo Major or Certificate requirements

Detailed instructions for students on how to use this service can be found on the CSM Forms web site at collegeofsanmateo.edu/ forms.

## California State University

The California State University offers instruction to undergraduate and master's degree students in the liberal arts and sciences, applied fields, and professions, including teaching. Nearly i,500 degree programs in 240 subject areas are offered. CSU assigns high priority to California community college transfer students who have completed the first two years of their baccalaureate program, including those applying for impacted programs.

The California State University has twentythree campuses: Bakersfield, California Maritime Academy, Channel Islands, Chico, Dominguez Hills, Fresno, Fullerton, East Bay (Hayward), Humboldt, Long Beach, Los Angeles, Monterey Bay, Northridge, Pomona, Sacramento, San Bernardino, San Diego, San Francisco, San Jose, San Luis Obispo, San Marcos, Sonoma and Stanislaus.

## University of California

The University of California offers bachelor's, master's and doctoral degree programs in a broad array of subject areas. Last year, more than 6,000 students transferred from California's community colleges to the University, and more than one-fifth of UC's bachelor degrees were awarded to students who started out at a community college. The University is encouraging even more community college students to take this step in the coming years.

The University of California has a long-established relationship with College of San Mateo and has developed several special programs to help community college students with the transfer process. The University's articulation agreements with CSM make it possible for prospective transfer students to select appropriate courses. Community college students receive priority consideration for transfer admission. The Intersegmental General Education Transfer Curriculum allows prospective transfer students to satisfy the lower division breadth/general education requirements of any UC campus before transferring.

While all of the campuses have similar requirements for undergraduate admission, they differ in size, enrollment, and in academic programs offered. In addition, the campuses vary in styles of campus life, with student populations reflecting a variety of cultures from the United States and abroad. The University of California includes nine general campuses: Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, Santa Barbara, and Santa Cruz. A tenth campus in San Francisco offers graduate and professional programs in the health sciences.

## California Independent Colleges and Universities

There are more than 300 privately supported (or independent) degree-granting colleges and universities in California. Independent institutions enroll about one-quarter of all students attending four-year colleges and universities in California. The most distinctive feature of California's accredited independent colleges and universities is their diversity of character, academic emphasis, and programs. They include both religious and secular institutions, non-profit and profit-making institutions, and professional schools that offer only a single occupational specialty as well as universities offering a full array of bachelor's, master's, and doctoral degree programs.

When choosing from among the privately supported colleges and universities in California, you may wish to review the type of certification a particular institution has received. Note: In selecting a California independent college or university, students are advised to give first priority to those institutions which are fully accredited by the Western Association of Schools and Colleges. If you would like more information about the certification process as specified in California's Education Code, please contact the California Postsecondary Education Commission at (916) 445-IOOO.

## CSM Courses <br> Transferable to CSU

The following courses are designated by CSM as appropriate for baccalaureate credit and are accepted by all California State Universities as applicable toward a baccalaureate degree.
Use www.assist.org as the most reliable resource to determine how course credit earned at College of San Mateo can be applied when transferred to the CSU system and individual colleges within the system.

Accounting IOO, IO3, I2I, I3I, I44, I45, I6I, I62, I63, I64, I65, I7I, I72, I73, I75, I76, 64I, 665, 680-689, 690
Administration of Justice IOO, IO2, IO4, IO6, IO8, I2O, I45, I53, I85, 64I, 680689, 690, 780
American Sign Language III, II2, I2I, 122, 680-689, 690
Anthropology i10, 180, 350, 370, 680689, 690
Architecture 100, $120,140,155,165,210$, 220, 230, 240, 64I, 666, 680-689, 690
Art IOO, IOI, IO2, IO3, IO4, I24, 201, 202, 206, 207, 214, 223, 224, 225, 226, 231, 232, 236, 245, 246, 301, 315, 350, 351, 352, 353, $354,355,360,365,366,374,38 \mathrm{I}, 405,406$, 4II, 4I2, 64I, 665, 680-689, 690
Astronomy ioo, IOI, IO3, II5, I25, 680-689, 690
Biology IOO, IO2, IIO, I23, I26, I27, I28, I30, I45, 184, 195, 210, 220, 230, 240, 250, 260, 64I, 666, 675, 680-689, 690
Broadcasting i10, 210, 220, 230, 240, 310, 312, 316, 320, 410, 420, 450, 680-689, 690
Business IOO, IOI, II5, I25, I3I, 150, 180 , 201, 295, 315, 316, 317, 326, 352, 353, 354, 355, 356, 40I, 64I, 680-689, 690
Business Applications-Windows IO5,
II4, 115, 204, 205, 214, 215, 313, 323, 383,
384, 4I5, 4I6, 450, 45I, 464, 475, 477, 530, 534, 535, 680-689
Career and Life Planning IO4, IO5, IO7, IO8, II2, I20, I2I, I22, I23, I26, I27, I38, I40, 142, 301, 305, 680-689
Chemistry 192, 210, 220, 23I, 232, 250, 410, 420, 680-689, 690
Chinese III, II2, I2I, I22, I3I, I32, I34, I40, 2OI, 2II, 2I2, 680-689, 690
Computer and Information Science IIO, III, II2, II3, I25, I5I, 254, 255, 256, 278, 279, 312, 313, 362, 363, 364, 377, 379, 380, 390, 488, 489, 490, 491, 492, 64I, 680-689, 690
Consumer Arts and Science 3IO, 64I, 680-689, 690

Cooperative Education 640, 64I, 647
Dance II7, I2I, I3I, I32, I4I, I43, I5I, I52, 153, I6I, I67, 195, 400, 680-689
Digital Media IOO, IOI, IO2
Drafting Technology iio, I20, I2I, I22, I23, I24, I30, I40, 64I, 680-689, 690 Economics ioo, 102, 123, 680-689, 690 Electronics i10, I3I, 133, 144, 201, 202, 215, 216, 231, 232, 262, 275, 282, 290, 310, 320, 332, 360, 362, 370, 42I, 422, 424, 44I, 442, 444, 64I, 680-689, 690
Engineering 100, 210, 215, 230, 240, 260, 270, 64I, 680-689, 690
English IOO, IO2, IIO, I6I, I62, 163, I65, 680-689, 690
English as a Second Language 400
Ethnic Studies 10I, 102, 150, 15I, 152, 26I, 262, 265, 288, 300, 350, 35I, 360, 440, 585, 680-689, 690
Film ioo, IIO, I20, I2I, 153, 200, 215 , 680-689, 690
Fire Technology 64I, 680-689, 690, 705, 714, 715, 720, 725, 730, 740, 745, 748
French iio, III, II2, II5, II6, II7, II8, I2O, I2I, I22, I3O, I3I, I32, I4O, 680-689, 690 Geography ioo, ino, 150, 680-689, 690 Geology IOO, IOI, 2IO, 680-689, 690
German iio, III, II2, I20, I2I, I22, I30, I3I, I32, I4O, 680-689, 690
Graphics II5, II6, I35, I40, I50, I5I, I60, 16I, 170, 235, 242, 255, 260
Health Science IOO, II2, II3, II4, II9, I25, 64I, 680-689, 690
History IOO, IOI, IO2, 20I, 202, 260, 3IO, 315, 350, 680-689, 690
Horticulture 31I, 312, 315, 325, 326, 327, 330, 342, 350, 400, 40I, 404, 405, 415, 417, 4I9, 42I, 422, 425, 426, 427, 428, 429, 64I, 680-689, 690, 705, 706, 709, 7II, 7I2, 742
Human Services ioo, IIO, I15, I30, I50, 15I, 262, 264, 680-689, 690
Humanities IOI, IO2, III, II4, I25, I3I, 133, I40, 675, 676, 680-689, 690
Italian IIO, III, II2, II5, II6, II7, II8, I2O, I2I, I22, 680-689, 690
Japanese iio, III, II2, I2O, I2I, I22, 680-689, 690
Journalism iıо, 120, 300, 641, 680-689, 690
Library Studies ioo, I05, IO7, IIO, 665, 680-689
Literature IOI, 105, 113, 15I, 20I, 202, 220, 23I, 232, 263, 275, 430, 680-689, 690 Machine Tool Technology 200, 64I, 680-689, 690, 70I, 702, 750, 755, 760
Management IOO, 215, 220, 235, 265, 64I, 680-689, 690

Manufacturing and Industrial Technology ioo, 120, I30, 64I, 680-689, 690 Mathematics $125,130,145,147,200,222$, 24I, 242, 25I, 252, 253, 268, 270, 275, 680-689, 690
Meteorology ioо, ioi, 680-689, 690 Military Science 680-689
Multimedia/Web Design IOI, IO2, II3, 172, 177, 184, 187, 192, 253, 274, 279, 282, 292, 297, 317, 387, 392, 680-689, 690 Music Ioo, IOI, IO2, IO3, IO4, I3I, I32, I33, 134, 202, 240, 250, 275, 290, 291, 292, 293, 301, 302, 303, 304, 371, 372, 373, 374, 4OI, 402, 403, 404, 430, 45I, 452, 465, 470, 665, 680-689, 690
Nursing 2II, 212, 22I, 222, 23I, 232, 24I, 242, 264, 265, 6IO, 615, 620, 630, 64I, 666, 680-689, 690
Oceanography ioo, ioi, 680-689, 690
Paleontology iio, ini, 680-689, 690
Philosophy 100, 103, 244, 300, 680-689, 690
Physical Education All classes in the following series: 100-199, 200-299, 300-399, 400-499, 600-699
Physical Science 676, 680-689, 690
Physics IOO, IOI, I26, I27, I28, 210, 2II, 220, 22I, 250, 260, 270, 680-689, 690 Political Science IOO, IIO, I20, I30, I50, 200, 210, 212, 215, 250, 310, 680-689, 690 Psychology 100, IO5, IO8, IIO, I2I, 200, 2OI, 220, 225, 300, 410, 675, 680-689, 690
Reading 400, 405, 412, 415, 454, 455, 680-689
Real Estate ioo, IO5, IIO, I2I, I3I, I4I, 200, 215, 220, 64I, 680-689
Social Science III, 220, 22I, 301, 302, 304, 307, 308, 310, 314, 315, 316, 318, 319, 321, $382,383,384,385,386,680-689,690$ Sociology ioo, IO5, IIO, I4I, 200, 340, 680-689, 690
Spanish IIO, III, II2, II5, II6, II7, II8, I2O, I2I, I22, I30, I3I, I32, I4O, I6I, I62, 25I, 680-689, 690
Speech Communication IOO, III, II2, 120, 140, 150, 180, 680-689, 690 Welding Technology iio, III, I2O, I2I, 2IO, 2II, 220, 22I, 250, 300, 350, 64I, 680-689, 690

## CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION (CSU GE) WORKSHEET

## BECAUSE OF PERIODIC REVISION OF TRANSFER REQUIRMENTS, USE WWW.ASSIST.ORG FOR THE MOST CURRENT CSU GE INFO

Completion of CSU GE permits a student to transfer from College of San Mateo to any campus of the California State University System (CSU) without having to take additional lower-division general education after transfer. A maximum of 39 units of the total 48 general education units required by CSU can be completed at College of San Mateo. The remaining nine units must be in upper division of the degree granting institution. Of the 39 units taken at College of San Mateo, no more than 30 units can be certified in Areas B, C, D, and E. Courses in Area A and B4 must be completed with a grade of C or higher (C- grades are not acceptable). Courses used to satisfy the American Institutions requirement may also be applied to the completion of Area D. Students who have completed coursework at colleges or universities outside of the San Mateo County Community College District but within the United States should use the CSM Transcript Evaluation Service within the first semester of attendance to determine how prior coursework can be applied to CSU GE certification.

Meet with a counselor to discuss transfer all requirements - major, units, GPA, and general education pattern. To ensure a smooth transfer process, work with a counselor to develop a comprehensive Student Educational Plan (SEP) that maps out courses needed to meet your goal. Each semester meet with a counselor to review your SEP, track progress, and make modifications to the SEP as needed.

| Area A: Communication Skills and Critical ThinkingOne course required from each subsection. Grades of " C " or better required in Area A coursework. 9 units required |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Ai Oral Communication SPCH Ioo, 120, I40, 150 | A2 Written Communication |  | itical Th <br> IIO, 165 | king <br> IL 103 SOSC ini |  |
| Area B: Natural Science and Mathematics |  |  |  |  | 9 units required |
| One course from Physical Science, Life Science, \& Math Concepts. Must include one lab course identified by *. |  |  |  |  |  |
| Bi Physical Science |  | B2 Life Science | B4 Math ConceptsCIS 278 ECON 123, MATH 125, 130, |  |  |
| ASTR IOO, IOI $^{*}(\mathrm{I})$, $103^{*}(\mathrm{I})$, I15, I25 CHEM $21 \mathrm{O}^{*}$, 220*, 231, 232, 250*, 410* GEOG ioo GEOL Ioo, |  | BIOL Ioo, 102, 110*, 130 |  |  |  |
|  |  | I45, 184, $195^{*}(\mathrm{I}), 210^{*}$, 2 |  | CIS 278 ECON 123, MATH 125,130,I45, 147, 200, 222, 241, 242, 251, 252, |  |
| 220**(I), 2310* METE IOo, IOI*(I) OCEN Ioo, IOI* ${ }^{*}$ (I) |  | $240^{*}, 250^{*}, 260^{*}, 675$ | , $10{ }^{*}(\mathrm{I})$ | 253, 268, 270, 275, PSYC 12 I |  |
| PALN $110, \mathrm{III}^{*}(\mathrm{I}), \mathrm{PHYS}$ Ioo, $10 \mathrm{I}^{*}(\mathrm{I}), 210^{*}, 250^{*}$ |  | PALN $\mathrm{IIO}, \mathrm{III}{ }^{*}(\mathrm{I})$ PSYC |  |  |  |
| *B3 Lab Courses identified with an "*" |  | (B4-Must complete with a grade of "C" or better) |  |  |  |
| Area C: Arts, Literature, Philosophy \& Languages |  |  |  |  | 9 units required |
| Chose at least one course from the Arts and at least one course from the Humanities. Courses must be from at least two disciplines. |  |  |  |  |  |
| Ci Arts |  | C2 Humanities - continued |  |  |  |
| ARCH Ioo ART Ioo, IOI, 102, 103, 104, 124, 207, 350, 351 HUM ETHN 288, 585 FILM 100, 110, 120, 121, 200, 215 ITAL |  |  | III, II4, I | 131, 133, 140, 676 |  |
|  |  |  | 112, 121, 122 | JAPN IIO, III, II2, |  |
| HUM 114 MUS Ioo, 202, 240, 250, 275 |  | I20, I2I, I22 LIT IOI, IO5, II3, 15I, 201, 202, 220, 231, 232, 275, 430 PHIL 100, 244, 300 |  |  |  |
| C2 Humanities <br> SPAN |  |  | II2, 120, 12 | 122, 130, 131, |  |
| ANTH I80 ASL I2I, I22 CHIN III, II2, I2I, I22, I3I, I32 I32, I40, 16I, I62, 251 SPCH III, II ENGL I6I, 162, I63 ETHN 265, 350, 351, 440 FILM 153 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| GERM ${ }_{\text {IIO, }}$, III, II2, I20, 121, 122, 130, 131, 132, I40 |  |  |  |  |  |
| Area D: Social, Political, \& Economic Institutions 9 units required |  |  |  |  |  |
| 9 units of coursework from Area D in at least two disciplines. You may select any courses from Area D below. If you select one course from Group i, Group 2, and Group 3 you will meet general education requirements for Area D and CSU graduation requirements in American History and Institutions and State and Local Government at all CSU campuses except Chico. |  |  |  |  |  |
|  |  |  |  |  |  |
|  $225,300,410,675$ SOCI 100, 105, 110, I4I, 200, 340 SPCH 120 |  |  |  |  |  |
| Group i US HISTORY HIST IO2, 20I, 202, 260 | Group 2 US CONSTITUTION *PLSC 200 (meets both Group 2 \& Group 3) |  | Group 3 CA STATE \& LOCAL GOV |  |  |
|  | PLSC 210, 212, 215, 250 | both Group 2 \& Group 3) , 250 | *PLSC 200 (meets both Group 2 \& Group 3)ETHN IOI, 102 HIST 3 Io PLSC 200, 310 SOCI 200 |  |  |
| Area E: Lifelong Understanding \& Self Development |  |  |  |  | 3 units required |
|  |  |  |  |  |  |

## Intersegmental General Education Transfer Curriculum (IGETC)

## Standards, Policies, and Procedures

Students are advised to use the information below in consultation with a community college counselor.
Completion of the IGETC will permit a student to transfer from a California Community College to a California State University or University of California campus generally without the need, after transfer, to take additional lower-division, general education courses to satisfy campus general education requirements. It is strongly recommended that students complete IGETC prior to transfer. Advantages of completing IGETC include more flexibility in class selection at the university and timely progress to degree completion. All UC and CSU campuses will accept the completed IGETC to satisfy all lower division general education requirements. However, individual colleges or majors within a CSU or UC campus may not accept IGETC for meeting general education. A list of those UC colleges and majors is found on the following web site: www.universityofcalifornia.edu/educators/counselors/adminfo/transfer/advising/ igetc.html.
Students transferring to a CSU with a completed IGETC will still need to complete 9 semester units of upper division general education and may be held to other campus specific graduation requirements outside of general education and major coursework.
Completion of IGETC is not an admissions requirement or admission guarantee for transfer, nor is it the only way to fulfill lowerdivision general education requirements prior to transfer. For student applying only to the CSU system, the CSU GE pattern is a better choice. For the UC system, each school and college at every campus has its own set of requirements, accounting for more than 40 general education patterns within the UC system. Using IGETC is often the better option, especially for those applying to more than one UC campus or for students applying both to CSU and UC campuses. Engineering students and students completing majors that have high lower division unit requirements are advised to focus on completing the premajor requirements while meeting minimum admissions requirements and to speak with a community college counselor.

It is the student's responsibility to request IGETC Certification. A student may be IGETC certified if he/she has completed coursework at the California Community College(s) without regard to current enrollment status or number of units accrued at a CCC. The last CCC attended for a regular (fall or spring) semester/quarter provides the certification upon request.
Students who enroll at a UC or CSU campus, then leave and attend a community college, and subsequently return to a different UC or CSU campus may use IGETC. Students who initially enroll at a UC or CSU campus, then leave and attend a community college, and subsequently return to the same campus are considered "readmits" and cannot use IGETC. Questions should be directed to the specific UC or CSU campus.
Foreign courses may be applied to IGETC if the foreign institution has United States regional accreditation and if the certifying community college carefully evaluates coursework equivalency. All other foreign coursework cannot be applied to IGETC. However, IGETC allows eligible foreign coursework completed at a non-US institution to be applied to Area 6. College Board Advanced Placement Exams (AP) may be applied to IGETC as noted by the chart on page 52.
A course must have a minimum unit value of 3 semester or 4 quarter units to meet IGETC requirements. A minimum "C" grade is required in each college course for IGETC. Web site www.ASSIST.org identifies how coursework completed at any California Community College is applied to IGETC certification. Courses from all other United States regionally accredited institutions are carefully reviewed for equivalency (course content, prerequisites, texts, units), and placed, if approved, in the same subject areas as those for the community college completing the certification. Usually, IGETC Area IB is not met with courses completed outside of the California Community College system since few courses meet the specific composition and critical thinking components unique to this requirement.
Full certification is defined as successfully completing all IGETC area courses required by the specific transfer system (UC or CSU). Partial certification is defined as completing all but two courses on the IGETC pattern. The student petitions for certification and the complete or partial certification is sent by the CCC to the UC or CSU. It is the responsibility of the UC or CSU campus to inform a student that has submitted a partial certified IGETC of the specific timelines, conditions, and
courses needed to complete the IGETC. The UC or CSU is then responsible for verifying that the missing IGETC course(s) have been completed.
Area 6, Language Other Than English (LOTE), competence may be demonstrated through one of the following mechanisms and official documentation is required.
I. Satisfactory completion to two years of high school coursework of the same language other than English, with a grade of C or better in each course.
2. Completion of an coursework approved to meet competency listed on the community college IGETC pattern under area 6 .
3. Satisfactory completion, with C grades or better, of two years of formal schooling at the sixth grade level or higher in an institution where the language of instruction is not English.
4. Satisfactory score on the SATII: Subject Test in languages other than English. Before May 1995 use the first score and if taken after May 1995 use the 2nd score:
Chinese with listening: 500/520
Hebrew (Modern): 500/470
Korean/Korean with listening: /500
French/French with listening: 500/540
Italian: 500/520
Latin: 500/530
German/German with listening: 5000/510
Japanese with listening: 500/510 Spanish/Spanish with listening: 500/520
5. Satisfactory score, 3 or higher, in the College Board Advanced Placement examinations in languages other than English.
6. Satisfactory score, 5 or higher, in the International Baccalaureate Higher Level Examinations in language other than English.
7. Language other than English " O " level exam with grade of $\mathrm{A}, \mathrm{B}$, or C .
8. Language other than English International "A" Level exam with a score of 5,6 , or 7
9. Seventh and eighth grade courses with grades of C or higher MAY be considered if the courses are approved as comparable in content to those offered at the high school and the student begins the same language in high school at a higher level.

## UC Transfer Admission Minimum Requirements

To be eligible for admission to UC as a transfer student, the following minimum criteria must be met.
I. Complete 60 units of UC transferable college credit with a GPA of at least 2.4 and no more than I4 units taken Pass/No Pass.
2. Complete two approved transferable college courses in English composition, 6 semester units.
3. Complete one approved transferable college course in mathematical concepts and quantitative reasoning, 3 semester units.
4. Complete four approved transferable college courses chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, and the physical and biological sciences, i2 semester units.

## Transfer Selection Criteria

When the number of applicants to a particular campus or major exceeds the number of available spaces, as is often the case, the campus has to choose among qualified students. In this case, the minimum requirements will not result in admissions, and the campus looks at "selection" criteria. Selection criteria includes completion of lower division major requirements, achieving a grade point average higher than 2.4 and that is competitive with other high achieving applicants, and completing lower division general education requirements. In addition, some colleges and majors have specific GPA requirements for certain courses, or other unique requirements associated with the college or major. Finally, using a process called comprehensive review, admission officers look beyond the required coursework and grades to evaluate applicants' academic achievements in light of opportunities available to them and the capacity each student demonstrates to contribute to the intellectual life of the campus. More information is usually available on www.assist.org and the university web site.

## CSM Courses

## Transferable to <br> All University of California Campuses

At the time of printing, 2009/20IO information was not available. Below is the 2008/2009 UC course list. View www.assist.org to see the 2009/20IO UC transferable course list

Use ASSIST (www.assist.org) as the most reliable resource to determine how course credits earned at one California public college or university can be applied when transferred to another. ASSIST is the official repository of articulation for California's public colleges and universities and provides the most accurate and up-to-date information about student transfer in California. At the ASSIST site, select College of San Mateo, then select UC Transferable course for the correct and up-to-date list of UC transferable courses. Check curriculum for accurate notations of class limitations or comments.

Accounting I2I*, $13 I^{*}$, I 6 I

* Note: Credit limited to 4 units

Administration of Justice IOO, IO2, IO4, IO8
American Sign Language III, II2*, I2I, I22

* Note: Corresponds to two years of high school study.

Anthropology ino, 180, 370
Architecture 100*, 120 *, $140^{*}$, 220*
*Any or all of these courses combined: maximum credit, i8 semester units per UC
Berkeley's College of Environmental Design.
Art IOI, IO2, IO3, IO4, I24, 2OI, 202, 206, 207, 2I4, 223, 224, 225, 226, 23I, 232, 3OI, 3I5, 35I, 352, 353, 365, 38I, 4O5, 406, 4II, 412

Astronomy IOO, IOI, IO3, I15, I25
Biology IOO\#, IO2, IIO, I30*, I45+, 184,
195, 210, 220+, 230, 240, 250*, 260*
\# Note: No credit for BIOL ioo if taken after BIOL iio.

* Note: BIOL I30, 250 and 260 combined the maximum UC credit is two courses.
+ Note: No credit for BIOL I45 if taken after BIOL 220.

Business IOO, 201
Career and Life Planning IO5, I2O
Chemistry 192*, 210, 220, 231, 232, 250

Chinese III* and $1122^{*}$, $\mathrm{I} 2 \mathrm{I}+$, $\mathrm{I} 22+$, $\mathrm{I} 3 \mathrm{I}^{\wedge}$,
132^, I4O

* Note: ili and iI2 combined are equivalent to semester i.
+ Note: I2I and I22 combined are equivalent to semester 2 or i22 corresponds to two years of high school study.
$\wedge$ Note: I3I and I32 combined are equivalent to semester 3.
Computer and Information Science iIO, III, I25, 255, 256, 278, 279


## Consumer Arts and Science 3IO

Dance iif, I2I, I3I, I32, I4I, I43, I5I, I53,
16I, 167, 195
Drafting I2I
Economics IOO, IO2, 123*

* Note: ECON I23, MATH 200, and/or PSYC I2I combined the maximum credit is one course.
Engineering 100, 210, 215, 230, 240, 260, 270
English Ioo, IIO, 16I, 162, 163, 165
English as a Second Language 400
Ethnic Studies IOI, 102, 150, $151^{*}$, 152 , 26I, 262, 265, 288, 300, 350, 35I, 360, 440, 585
* Note: Credit limited to either ETHN I5I or SOCI I4I.
Film ioo, 120, 12I, 200, 215
French iIo*, III* and II2*, I2O, I2I+, I22+, I30^, $13 \mathrm{I}^{\wedge}$, I32^, 140
* Note: III and II2 combined are equivalent to iio.
+ Note: 12 I and I 22 combined are equivalent to I2O, I2O or I22 correspond to two years of high school study.
$\wedge$ Note: I3I and I32 combined are equivalent to 130 .
Geography ioo, ino, 150
Geology 100 *, $10{ }^{*}$ *, 210*
* Note: Combined credit for GEOL Ioo, IOI and 2Io limited to 4 units.

German IIO*, III* and II2*, I2O+, I2I+, I22+, $130^{\wedge}$, $13 \mathrm{I}^{\wedge}$, $132^{\wedge}$, I 40

* Note: III and II2 combined are equivalent to ino.
+ Note: I2I and I22 combined are equivalent to I2O, I2O or 122 correspond to two years of high school study.
$\wedge$ Note: I3I and I32 combined are equivalent to I30.
Health Science ioo

History IOO, IOI, 102*, 201*, 202*, 260, 310, 350

* Note: No credit for HIST IO2 if taken after HIST 20I/202 taken.


## Horticulture 3II, 312

Humanities IOI, IO2, III, II4, I25, I3I, I33
Italian IIO*, III * and II2*, I2O+, I2I+, I22+

* Note: III and iI2 combined are equivalent to iro.
+ Note: I2I and I22 combined are equivalent to I2O, I2O or I22 correspond to two years of high school study.

Japanese $110^{*}$, III* and $112^{*}$ and I2O+, I2I+, I22+

* Note: III and iI2 combined are equivalent to iio.
+ Note: 12 I and I22 combined are equivalent to I2O, I2O or I22 correspond to two years of high school study.


## Journalism IIO

Library Studies IO5, IOO, IIO
Literature IOI, IO5, II3, 15I, 20I, 202, 220, 23I, 232, 430
Mathematics $125,145,147,200^{*}, 222$, 24I $+, 242+, 25 \mathrm{I}+, 252+, 253+, 268,270,275$

* Note: MATH 200, ECON I23 or PSYC I2I combined maximum credit one course.
+ Note: MATH 24 I and 242 and 25I, 252, 253 combined maximum credit one series.


## Meteorology ioo, IOI

Music IOO*, IOI, IO2, IO3, IO4, I3I, I32, I33, I34, 202, 240, 250, 275, 301, 302, 303, 304, 371, 372, 373, 374, 4OI, 402, 403, 404, 430, 45I, 452, 470

* Note: No credit for MUS. ioo if taken after MUS. IOI or I3I.

Oceanography ioo, IOI
Paleontology iio, iII
Philosophy IOO, IO3, 244, 300
Physical Education All classes in the following series: 100-199*, 200-299*, 300-399*

* Note: Credit limited to 4 units.

Physics 100*, 10I*, 210+, 2II, 220+, 22I, $250+$, 260+, 270+

* Note: No credit for Ioo/Ior if taken after PHYS 2 IO or 250.
+ Note: 210, 220 and 250, 260, 270 combined maximum credit one series.

Political Science IOO, IIO, 130, 150, 200*,

210*, 212*, 215, 250, 260

* Note: Credit limited to either PLSC 200, 2IO, or 2 I2.
Psychology IOO, IO5, IIO@, I2I*, 200+, 20I+, 220, 225, 300, 4IO
* Note: Credit limited to only one of the following courses: ECON I23, MATH 200, or PSYC I2I.
@ Note: Credit limited to either PSYC ino or SOCI IIo.
+ Note: Credit limited to either PSYC 200 or 20 I.


## Social Science III

Sociology 100, IO5, IIO+, I4I*, 200, 340

* Note: Credit limited to either ETHN I5I or SOCI I4I.
+ Note: Credit limited to either SOCI IIO or PSYC iio.

Spanish IIO*, III* and II2* and I2O+, I2I+, I22+, I30^, I31^, I32^, I40, I6I, I62, 251

* Note: III and II2 combined are equivalent to iro.
+ Note: I2I and I22 combined are equivalent to I2O, I2O or 122 correspond to two years of high school study.
$\wedge$ Note: I3I and I32 combined are equivalent to 130.

Speech Communication IOO, III, II2, I2O, I40, I5O

## SPECIAL NOTE:

The following courses may be transferable, contingent upon a review of the course outline by a UC campus:

680-689 - Selected Topics
690 - Special Projects

## WHEN TO APPLY FOR ADMISSION TO THE UNIVERSITY OF CALIFORNIA AS A TRANSFER STUDENT

To ensure that you will be considered for admission to the UC campus you want to attend, you must file your online* application for admission during the appropriate filing period. You may apply to any number of the ten undergraduate campuses using a single application. For further transfer information, visit Transfer Services (Building I, Room iI5; 358-6839) or CSM's Transfer web site at: collegeofsanmateo.edu/transfer. UC transfer information is available online at: www.ucop.edu/pathways.
*Note: Apply for admission at: www.universityofcalifornia.edu/apply. For students who do not have easy online access, the application can be downloaded from the Web at: www.universityofcalifornia.edu/admissions/download.


## INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM. (IGETC) WORKSHEET

Because of periodic revision of transfer requirements, use WWW.ASSIST.ORG for the most current IGETC info
The IGETC permits students to transfer from College of San Mateo to any campus of the California State University (CSU) or University of California (UC) systems without having to take additional lower-division general education after transfer. Completion of the IGETC is not a requirement for transfer to CSU or UC, nor is it the only way to fulfill lower division general education requirements. The IGETC does not guarantee admission to any CSU or UC campus. The IGETC does not meet the American History and Institutions requirement at CSU and UC campuses. All courses applied to IGETC must be completed with a grade of C or higher (C- grades are not acceptable). Students who have completed coursework at colleges or universities outside of the San Mateo County Community College District but within the United States should use the CSM Transcript Evaluation Service within the first semester of attendance to determine how prior coursework can be applied to IGETC certification.
Meet with a counselor to discuss all transfer requirements - major, units, GPA, and general education pattern. To ensure a smooth transfer process, work with a counselor to develop a comprehensive Student Educational Plan (SEP) that maps out courses needed to meet your goal. Each semester meet with a counselor to review your SEP, track progress, and make modifications to the SEP as needed.

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AREA I - ENGLISH COMMUNICATION
6-9 semester units required
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CSU - Three courses required, one from each group below. UC - Two courses required, one from Group A \& B.
Group A-3 units: English Composition ENGL ioo
Group B-3 units: Critical Thinking-English Composition ENGL iio, i65 SOSC iif
Group C-3 units CSU only: Oral Communication SPCH ioo, 120, 140, 150
AREA 2 - MATHEMATICAL CONCEPTS \& QUANTITATIVE REASONING
3 semester units required
ECON 123 MATH I25, I45, I47, 200, 222, 24I, 242, 25I, 252, 253, 268, 270, 275 PSYC I2I
AREA 3 - ARTS \& HUMANITIES 9 semester units required
3 courses, with one from Group A: Arts and one from Group B: Humanities and one from either Group A or B.
Group A: Arts
ART IOI, IO2, IO3, IO4, I24 ETHN 288, 585 FILM IOO, I2O, I2I, 2OO, 2 I5 MUS IOO, 2O2, 240, 250, 275
Group B: Humanities
CHIN I3I, I32 ETHN 265, 350, 35I, 440 FREN I30, I3I, I32, I40 GERM I30, I3I, I32, I40 HIST IOO, IOI, IO2 HUM IOI, IO2, III, II4, I25, I3I, I33
LIT IOI, IO5, II3, I5I, 2OI, 202, 220, 23I, 232, 430 PHIL IOO, 244, 300 SPAN I3O, I3I, I32, I40, I6I, I62, 25 I

AREA 4 - SOCIAL \& BEHAVIORAL SCIENCES
9 semester units required
3 courses selected from at least two disciplines
ANTH IIO, I80, 370 ECON IOO, IO2 ETHN IOI, IO2, I50, 15I, 152, 26I, 262, 300, 35I, 360, 440 GEOG IIO, I50 HIST 20I, 202, 260, 3IO, 350 JOUR IIO PLSC IOO, IIO, 130, 150, 200, 210, 212 215, 250 PSYC IOO, IO5, IIO, 200, 201, 220, 225, 300, 4IO SOCI IOO, IO5, IIO, 14I, 200, 340

## AREA 5 - PHYSICAL \& BIOLOGICAL SCIENCES

7 semester units required
2 courses, one from Group A Physical Science and one from Group B Biological Science; One course must have a lab indicated by (*)

## Group A: Physical Science

ASTR IOO, IOI*(I), $103^{*}(\mathrm{I})$, II5, I25 CHEM 210*, 220*, 231*, 232*, 250* GEOG IOO GEOL IOO, IOI*(I), 210* METE IOO, IOI*(I) OCEN IOO, IOI*(I) PALN IIO, III*(I) PHYS IOO, IOI*(I), 210*, 220*, 250*, 260*, 270*

## Group B: Biological Science

BIOL Ioo, IO2, $110^{*}$, I45, $184,195^{*}(\mathrm{I}), 210^{*}, 220^{*}, 230^{*}, 240^{*}, 250^{*}, 260$ PALN $1 i 0$, III*( I$)$ PSYC 220
AREA 6 - LANGUAGE OTHER THAN ENGLISH - LOTE (UC requirement only)
View the college catalog for a complete list of options to satisfy Area 6. Be advised, if your native language is not English, courses in your native language will not be accepted by the UC system.
May be fulfilled by two years of one foreign language in high school with a grade of C or higher. You must furnish official high school transcripts for IGETC certification. Language Other Than English fulfilled at $\qquad$ High School. Language Courses that appear in both Area 6 and Area 3B can be used to certify both areas.
ASL II2, I2I, I22 CHIN I22, I3I, I32, I4O FREN I2O, I22, I30, I3I, I32, I4O GERM I2O, I22, I30, I3I, I32, I4O ITAL I2O, I22 JAPN I2O, I22 SPAN I2O, I22, I30, I3I, I32, I40, I6I, I62, 25 I

CSU GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION \& AMERICAN IDEALS (CSU REQUIREMENT ONLY)
Not part of IGETC; may be completed prior to transfer. One course from each group except PLSC 200 meets two groups.
Group 3 CA STATE \& LOCAL GOV
HIST IO2, 20I, 202, 260
*PLSC 200 (meets both Group 2 \& Group 3)
PLSC 2IO, 2I2, 2I5, 250
*PLSC 200 (meets both Group 2 \& Group 3) ETHN IoI, IO2 HIST 3Io PLSC 3Io SOCI 200

## TRANSFER TO PRIVATE COLLEGES AND UNIVERSITIES

## Private Colleges/Universities with CSM-Specific Transfer Agreements

The following institutions have identified specific CSM courses that students should take in preparation for transfer.

Academy of Art University
Homepage: www.academyart.edu
CSM Information:www.academyart.edu admissions/transfer.html

Azusa Pacific University
Homepage: www.apu.edu
CSM Information: Contact Azusa Pacific University
Biola University
Homepage: Www.biola.edu
CSM Information: Contact Biola University
California College of the Arts
Homepage: www.cca.edu/index.php
CSM Information:www.cca.edu/
admissions/articulation/index.php
Chapman University
Homepage: www.chapman.edu
CSM Information:Www.chapman.edu
RegOffice/OC/transferCourses.asp
Cogswell Polytechnical College
Homepage: www.cogswell.edu
CSM Information: Contact Cogswell
Polytechnical College
Golden Gate University
Homepage: www.ggu.edu
CSM Information: www.ggu.edu/
admissions and costs/admissions undergraduated
undergraduate transfer/articulation references
Menlo College
Homepage: www.menlo.edu
CSM Information: Contact Menlo College
Mills College
Homepage: www.mills.edu
CSM Information: Contact Mills College
National University
Homepage: www.nu.edu
CSM Information:Www.nu.edu/Admissions,
Undergraduate/TransferInformation.cfm
Notre Dame de Namur University
Homepage: www.ndnu.edu
CSM Information: Contact Notre Dame de Namur University
Saint Mary's College of California
Homepage: www.stmarys-ca.edu
CSM Information: Contact Saint Mary's
College of California

Santa Clara University
Homepage: www.scu.edu
CSM Information: Contact Santa Clara University

## University of San Francisco

Homepage: www.usfca.edu
CSM Information: Www.usfca.edu/acadserv
admission/transfer/articulation.html
University of Southern California
Homepage: www.usc.edu
CSM Information: Contact University of Southern California

University of the Pacific
Homepage: www.uop.edu
CSM Information: Contact University of the Pacific

## Other Colleges and Universities

Students planning to transfer to the following private colleges and universities are advised to follow the IGETC-UC pattern of lowerdivision coursework. Please note that this is only a partial listing of four-year colleges and universities that welcome California Community College transfer applicants. In all cases, students interested in transfer are advised to follow the IGETC-UC pattern.
Alliant International University (United States International University) Homepage: www.alliant.edu

Art Institute of California - San Francisco
Homepage: www.aisf.artinstitutes.edu
American Academy of Dramatic Arts
Homepage: www.aada.org
Art Center College of Design
Homepage: www.artcenter.edu
California Baptist University
Homepage: www.calbaptist.edu
California Institute of the Arts
Homepage: www.calarts.edu
California Institute of Technology
Homepage: Www.caltech.edu
California Lutheran University
Homepage: www.clunet.edu
Charles R. Drew University of Medicine \& Science
Homepage: www.cdrewu.edu
Claremont McKenna College
Homepage: www.claremontmckenna.edu
Cleveland Chiropractic College
Homepage: www.clevelandchiropractic.edu
Concordia University
Homepage: www.cui.edu

DeVry University
Homepage: www.devry.edu
Dominican College of San Rafael
Homepage: www.dominican.edu
Embry-Riddle Aeronautical University
Homepage: www.ec.erau.edu
Fashion Institute of Design Homepage: www.fidm.edu

Fresno Pacific University
Homepage: www.fresno.edu
Harvey Mudd College
Homepage: www.hmc.edu
Hawaii Pacific University
Homepage: www.hpu.edu
Holy Names University
Homepage: www.hnu.edu
Hope International University
Homepage: www.hiu.edu
Humphreys College
Homepage: www.humphreys.edu
John F. Kennedy University
Homepage: www.jfku.edu
La Sierra University
Homepage: www.lasierra.edu
Loma Linda University
Homepage: www.llu.edu
Loyola Marymount University
Homepage: www.lmu.edu
Marymount College
Homepage: www.marymountpv.edu
The Master's College
Homepage: www.masters.edu
Mount St. Mary's College
Homepage: www.msmc.la.edu
New Mexico Institute Mining and Technology
Homepage: www.nmt.edu
Occidental College
Homepage: www.oxy.edu
Otis College of Art and Design
Homepage: www.otis.edu
Pacific Oaks College
Homepage: www.pacificoaks.edu
Pacific Union College
Homepage: www.puc.edu
Palmer College
Homepage: www.palmer.edu

Patten College
Homepage: www.patten.edu
Pepperdine University
Homepage: www.pepperdine.edu
Pitzer College
Homepage: www.pitzer.edu
Point Loma Nazarene University
Homepage: www.pointloma.edu
Pomona College
Homepage: www.pomona.edu
Presidio World College
Homepage: www.presidioworldcollege.org
Samuel Merritt College
Homepage: www.samuelmerritt.edu
San Diego Christian College
Homepage: www.sdcc.edu
San Francisco Art Institute
Homepage: www.sfai.edu
San Francisco Conservatory of Music Homepage: www.sfcm.edu

Scripps College
Homepage: www.scrippscol.edu
Simpson University
Homepage: www.simpsonuniversity.edu
Stanford University
Homepage: www.stanford.edu

Thomas Aquinas College
Homepage: www.thomasaquinas.edu
University of Judaism
Homepage: www.uj.edu
University of La Verne
Homepage: www.ulv.edu
University of Phoenix/Northern California Homepage: www.phoenix.edu/northcal

University of Redlands
Homepage: www.redlands.edu
University of San Diego
Homepage: www.sandiego.edu
Vanguard University of Southern California
Homepage: www.vanguard.edu
Westmont College
Homepage: Www.westmont.edu
William Jessup University
Homepage: www.jessup.edu
Whittier College
Homepage: www.whittier.edu
Woodbury University
Homepage: www.woodbury.edu


## University of California

Thefollowing isalisting of contactinformation for the individual campuses comprising the UniversityofCaliforniasystem.Forinformation about the UC system in general, visit www.ucop.edu.

## Berkeley

University of California
Berkeley, CA 94720-1500
(5IO) 642-6000
www.berkeley.edu

## Davis

University of California
One Shields Avenue
Davis, CA 95616-8558
(530) 752-IOII
www.ucdavis.edu

## Irvine

University of California
Irvine, CA 92697
(949) 824-50II
www.uci.edu
$\underline{\text { Los Angeles }}$
University of California
Los Angeles, CA 90095-I405
(3IO) 825-432I
www.ucla.edu

## Merced

University of California
5200 N. Lake Rd.
Merced, CA 95344
(209) 724-4400

WWW.ucmerced.edu
Riverside
University of California
Riverside, CA 92521
(95I) 827-IOI2
www.ucr.edu

## San Diego

University of California
La Jolla, CA 92093-0005
(858) 534-3135
www.ucsd.edu

## San Francisco

University of California
San Francisco, CA 94I43-0402
(415) $476-9000$
www.ucsf.edu
Santa Barbara
University of California
Santa Barbara, CA 93IO6
(805) 893-8000
www.ucsb.edu
Santa Cruz
University of California
i156 High Street
Santa Cruz, CA 95064
(83I) 459-0III
WWW.ucsc.edu

## California State University (CSU)

The following is alisting of contactinformation for the individual campuses comprising the California State University system. Systemwide information is availableat:www.calstate. edu.

California State University, Bakersfield 900i Stockdale Highway
Bakersfield, CA 933II-IO99
(66I) 654-2782
www.csub.edu
California State University, Channel Islands
One University Drive
Camarillo, CA 93012
(805) 437-8520
www.csuci.edu
California State University, Chico
400 W. First Street
Chico, CA 95929-0722
(530) 898-4636
www.csuchico.edu
California State University, Dominguez Hills
Iooo East Victoria Street
Carson, CA 90747
(3IO) 243-3696
www.csudh.edu
California State University, East Bay 25800 Carlos Bee Blvd.
Hayward, CA 94542-3035
(510) 885-3000
www.csueastbay.edu
California State University, Fresno
5150 North Maple Avenue
Fresno, CA 93740-0057
(559) 278-4240
www.csufresno.edu
California State University, Fullerton 800 North State College Boulevard Fullerton, CA 92834-6900
(7I4) 278-20II
www.fullerton.edu

Humboldt State University
I Harpst Street
Arcata, CA 9552I-4957
(707) 826-4402
vww.humboldt.edu
California State University, Long Beach I250 Bellflower Blvd.
Long Beach, CA 90840-0io6
(562) 985-4III
www.csulb.edu
California State University, Los Angeles
5151 State University Drive
Los Angeles, CA 90032-8530
(323) 343-3000
www.calstatela.edu
California Maritime Academy
200 Maritime Academy Drive
PO Box 1392
Vallejo, CA 94590
(707) 654-IOOO
www.csum.edu
California State University, Monterey Bay
ioo Campus Center Drive
Seaside, CA 93955-80oI
(831) 582-5100
csumb.edu
California State University, Northridge
I8iII Nordhoff Street Northridge, CA
91330-8207
(818) 677-1200
vww.csun.edu
California State Polytechnic University, Pomona
380i West Temple Ave.
Pomona, CA 91768-4003
(909) 869-7659
www.csupomona.edu
California State University, Sacramento
6000 J Street
Sacramento, CA 95819-6048
(916) 278-60II

WWW.csus.edu

California State University, San Bernardino
5500 University Parkway
San Bernardino, CA 92407-2397
(909) 537-5000
www.csusb.edu
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-7455
(619) 594-5200
www.sdsu.edu
San Francisco State University I600 Holloway Ave.
San Francisco, CA 94I32-4002
(4I5) 338-IIII
Www.sfsu.edu
San Jose State University
One Washington Square
San Jose, CA 95192-0009
(408) 924-1000
www.sjsu.edu
California Polytechnic State University, San Luis Obispo
San Luis Obispo, CA 93407
(805) 756-IIII
www.calpoly.edu
California State University, San Marcos
333 S. Twin Oaks Valley Road
San Marcos, CA 92096-oooi
(760) 750-4848
www.csusm.edu
Sonoma State University
I8oi East Cotati Ave.
Rohnert Park, CA 94928-3609
(707) 664-2880
www.sonoma.edu
California State University, Stanislaus
8or West Monte Vista Ave.
Turlock, CA 95382
(209) 667-3122
www.csustan.edu

## A.A./A.S. Degree Requirements

The awarding of an Associate Degree is intended to represent more than an accumulation of units. It is to symbolize a successful attempt on the part of the college to lead students through patterns of learning experiences designed to develop certain capabilities and insights. Among these are the ability to think and to communicate clearly and effectively both orally and in writing; to use mathematics; to understand the modes of inquiry of the major disciplines; to be aware of other cultures and times; to achieve insights gained through experience in thinking about ethical problems; and to develop the capacity for self-understanding. In addition to these accomplishments, the student shall possess sufficient depth in some field of knowledge to contribute to lifetime interest.

Graduation from College of San Mateo with the Associate in Arts or Science degree is based upon the completion of 60 units of lower-division college-level work, including the requirements A through E listed on pages 64 and 65. A student pursuing an Associate Degree must declare a major field of study. The major is comprised of specific courses within a discipline or related discipline as specified by the appropriate division and recorded in the college catalog. A list of College of San Mateo degree programs, with courses and units required for each major, can be found in the catalog on pages 64 through i24. A minimum of 18 units must be completed in a major. Some majors require more than i8 units. A student must pass all required major courses with a grade of "C" or higher, and complete at least 12 units of the required major courses in residence at College of San Mateo. A maximum of 12 units from courses in which the student has elected a Pass/No Pass option may be applied toward an Associate degree. An application for the degree must be filed in the Office of Admissions and Records during the last semester of attendance (refer to calendar for the college year for deadline).

## Philosophy of General Education

Central to an Associate Degree, General Education is designed to introduce students to the variety of means through which people comprehend the modern world. It reflects the conviction of colleges that those who receive their degrees must possess in common certain basic principles, concepts and methodologies both unique to and shared by the various disciplines. College educated persons must be able to use this knowledge when evaluating and appreciating the physical environment, the culture, and the society in which they live. Most importantly, General Education should lead to better self-understanding.

## Student Catalog Rights

A student remaining in continuous attendance at Cañada College, College of San Mateo and/or Skyline College may, for purposes of graduation, elect to meet the requirements in effect at the college from which the student will graduate either at the time the student began such attendance or any subsequent year of continuous enrollment.

For the purpose of this policy, "continuous enrollment" means attendance through at least the fourth week of instruction in either a fall or spring semester in each calendar year. Absence to attend another accredited college or university shall not be considered an interruption in attendance if the absence does not exceed one year. Catalog rights cannot supersede any State or Federal regulation or requirement in effect at the time of graduation.

## Additional Associate Degrees and Certificates

A student may earn multiple Associate Degrees and Certificates from College of San Mateo. Each additional degree and Certificate of Achievement will be posted to the student's academic record and the student will receive diplomas for each degree and Certificate of Achievement earned. For additional degrees and certificates any course used to meet the prescribed graduation requirements may count toward more than one degree and certificate. Courses used for one major may be used to meet requirements for additional majors. Courses used to meet the competency requirements and general education requirements for the first degree may be used to fulfill these requirements for additional degrees, provided the student has maintained "continuous enrollment" (see Graduation Requirements and Student Catalog Rights). If a break in enrollment occurs, a student must comply with the competency, general education, and major requirements in effect at the time the student resumes attendance or those in effect in subsequent years of the student's enrollment.

## Occupational Programs

Specialized occupational programs are offered in more than fifty occupational fields (see listing on page 66) for students planning to prepare for gainful employment. All occupational programs are carefully developed by advisory committees composed of college staff and selected representatives from the business and industrial community.

These programs are designed to develop personal and technical competencies necessary for successful employment and job advancement.

## Two-Year Occupational Programs: AA or AS Degree

Most two-year programs lead to an Associate in Arts or Associate in Science degree. Many of the units earned in occupational programs are accepted by four-year colleges as meeting certain requirements.

## Certificate Programs

Certificates are awarded upon successful completion of selected occupational programs and upon application to the Office of Admissions and Records. Some certificates require less than two years of full-time study. To be eligible for a certificate, a student must pass all required certificate courses with a grade of C or higher, unless specified otherwise (see specific program) a maximum of 6 units from courses in which the student has elected a Pass/No Pass option may be applied toward a certificate. At least $50 \%$ of the units required for a certificate must be taken at College of San Mateo.
Certificate requirements for an individual student are those listed in the College of San Mateo Catalog of the year in which the student begins studies at CSM. Those requirements may be followed throughout the student's course of study. However, if a break in attendance occurs before the certificate is earned, the certificate requirements shall become those listed in the College Catalog which is current at the time studies are resumed.
Certificates may be earned through day or evening part-time or full-time enrollment.

## Certificates of Achievement

The higher of the two levels of certificates, Certificates of Achievement, are awarded upon successful completion of i8 units or more in designated courses. These certificates appear on transcripts.

## Certificates of Specialization

Certificates of Specialization are awarded upon successful completion of designated courses (fewer than 18 units, not state approved) in a specific discipline. Some Certificates of Specialization can be earned in eight- or sixteen-week accelerated programs that prepare students for entry-level positions. These certificates do not appear on transcripts.

## Program Planning and Enrollment Management

Students enrolling at College of San Mateo should plan a program of study that will meet their educational and career goals. All enrolled students have access to counseling
services and should consult with a counselor early in the educational process for guidance and academic planning assistance. Students often have multiple goals and plan to complete a college certificate, an Associate degree, and/or transfer to a university to complete a Baccalaureate degree.
If in the course of enrollment at College of San Mateo, students find it advisable to change their program of study or educational goal, they may do so. These changes should be discussed with a counselor and students should be aware that any changes may result in extending the time necessary to fulfill the certificate or degree or transfer requirements. Ultimately, students maintain full responsibility for planning their educational programs and for their enrollment management.
Students are responsible to maintain current and accurate information in their WebSMART accounts and update personal contact information, educational goal information, manage registration and enrollment, retrieve grades and placement test results, and monitor academic standing.


# Associate in Arts/Science Degree Requirements 

## A-RESIDENCE

A minimum of 12 units must be completed at College of San Mateo. Also note information under MAJOR.
B—SCHOLARSHIP
A minimum grade point average of 2.0 is required in all degree applicable coursework.

## C-COMPETENCY REQUIREMENTS

## 1: Math/Quantitative Reasoning - Math 120 Intermediate

 Algebra Basic CompetencyThis competency requirement may be satisfied with any of the following:
a. Completion of the SMCCCD mathematics placement test with results that indicate eligibility for a math course higher than Math 120
b. A grade of C or higher in Math 120 or in both Math 122 and Math 123
c. A score of 3, 4 or 5 on one of the following College Board Advanced Placement Test (AP): Calculus AB, Calculus BC, Statistics
d. A grade of $C$ or higher in a course equivalent to Math 120 taken outside of the SMCCCD*
e. A grade of $C$ or higher of a course with a prerequisite of intermediate algebra or higher*

## 2: English - English 100 Basic Competency

This competency requirement may be satisfied with any of the following:
a. A grade of $C$ or higher in English 100
b. A score of 3,4 , or 5 on one of the following College Board Advanced Placement Test (AP): English Language and Composition, English Literature and Composition
c. A grade of C or higher in a course equivalent to English 100 taken outside of the SMCCCD*
*Courses taken outside of the SMCCCD must be completed at a college or university in the United States with SMCCCD approved accreditation. The student must seek course approval and provide verification of course equivalency using the CSM Prerequisite Equivalency Petition or the Official Transcript Evaluation process.

## D-MAJOR

Major requirements are a minimum of 18 units, 12 of which must be taken in residence at College of San Mateo, from the list of courses required for the major in the catalog. Some majors require more than 18 units. A grade of $C$ or higher is required for each course required for the major. A student may earn multiple degrees at College of San Mateo. Courses used to meet one major may be used to meet requirements for additional majors.

## E-GENERAL EDUCATION

## 1: American History and Institutions, CA State and Local Government

This requirement may be met by completing one of the three options below:
Option 1: by completing PLSC 200
Option 2: completing one of the options in group 1 and one course in group 2 as noted below:

```
Group 1: American History and Institutions
            (U.S. History, US Constitution)
    - PLSC 210, 212, 215, 250, or 26o, OR
    - HIST }100\mathrm{ and 102; or HIST }101\mathrm{ and 102; or HIST }201\mathrm{ and 202;
    OR
    - HIST 201 OR 202 plus either HIST 26o or 350
```

(U.S. History, US Constitution)

- PLSC 210, 212, 215, 250, or 260, OR

OR

- HIST 201 OR 202 plus either HIST 260 or 350

```
Group 2: California State and Local Government
(California Institutions)
    One course from the following selections:
    PLSC 310; HIST 315, 310; SOCI 200;
    ETHN 101, }10
```

Option 3: complete the U.S. History \& American Ideals, U.S. Constitution, California State and Local Government requirement as approved by CSU to meet the CSU graduation requirement at a California Community College or a California State University campus.

NOTE: Courses used to satisfy the American and CA History and Government requirements through Option 1, 2, or 3, may not be used to satisfy the E5b Social Science general education requirements.
2: Language and Rationality (6-9 units)
While a course might appear in more than one general education requirement, it may not be counted more than once for these purposes.
a. English Composition: 3 units - select one of the following courses:

ENGL 838, 848, 100 , or ESL 400 (If English 100 or ESL 400 is used for areas $2 a$ and 2 C , you must select a different course to meet area 2 b )
b. English, Literature, Speech Communication: 3 units - select one of the following courses:
(Courses marked with an asterisk $\left(^{*}\right)$ can also be used to meet $2 c$ which allows you to complete $2 a, 2 b$, and $2 c$ with 6 units of coursework)
ENGL 100*, 110*, 135*, 161-163, 165*; ESL 400*; LIT 101*, 105*, 113*, 151*, 201*, 202*, 220*, 231*, 232*, 275*, 277*, 430*;
SPCH 100*, 111, 112, 120*, 140*, 150, 180, 855 (for non-native speakers)

## E—GENERAL EDUCATION (CONTINUED)

c. Communication and Analytical Thinking: 3 units - select one of the following courses:
(Courses marked with an asterisk (*) can also be used to meet $2 b$ which allows you to complete $2 a, 2 b$, and $2 c$ with 6 units of coursework) BUS 295, 401; CIS 110, 125, 254, 255, 278, 292; DGME 102; ECON 123; ENGL 100*, 110*, 135*, 165*; ESL 400*; LIT 101*, 105*, 113*, 151*, 201*; LIT 202*, 220*, 231*, 232*, 275*, 277*, 430*; MATH 120, 125, 130, 147, 200, 222, 241, 251; PHIL 103, 200; SOSC 111; SPCH 100*, 120*, 140*
Courses that are used to meet Area $2 a, 2 b$, and/or $2 c$ cannot be used to satisfy other general education requirements.
3: Health Science (2 units)
Two units of Health Science are required (HSCI 100 [2 units]; or two units from HSCI 119 or 125; or two classes selected from HSCI 112, 113, 114). One unit of CA\&S 310 may be used in lieu of HSCI 113. The requirements may be waived for veterans of the U.S. Armed Forces with one or more years of active service and for nursing students who complete NURS 211, 212, 221, and 222 , or equivalent, with a grade of $C$ or higher.

4: Physical Education (1-4 units)
Students must complete two activity courses in Physical Education or Dance. Lecture courses in Physical Education will not satisfy this requirement. In accordance with policy adopted by the Board of Trustees, this requirement may be waived for students in any of the following categories: $\mathbf{a}$. Graduates of accredited community colleges or other accredited colleges and universities; $\mathbf{b}$. Veterans of the U.S. Armed Forces with one or more years of active service; c. Persons excused for medical reasons. Approved medical waiver must be filed in the Office of Admissions \& Records.

5: Additional General Education Requirements (12 units)
Of the following four areas, $a, b, c, d, 12$ units are required. The major may satisfy one area. If so, the 12 units would be selected from the remaining three areas with at least 3 units from each.
a. Natural Science: at least 3 units

ASTR 100, 101, 103, 115, 125; BIOL 100, 102, 110, 130, 145, 184, 195, 210, 220, 230, 240, 250, 260, 666, 675; CA\&S 310, CHEM 192, 210, 220, 231, 232, 410, 420; ELEC 110; GEOG 100; GEOL 100, 101, 210; HORT 311, 312, 350; HUM 127-128 (When both HUM 127 and 128 are taken, 3 units will meet the Natural Science requirement and 3 units are allowed toward the Humanities requirement.); MANU 100; METE 100, 101; OCEN 100, 101; PALN 110, 111; PHYS 100, 101, 210, 220, 250, 260, 270; PSCI 676; PSYC 220.
Majors fulfilling Area E5A: Chemistry, Dental Assisting, Geological Sciences, Horticulture, Life Sciences, Physical Science, Physics
b. Social Science: at least 3 units

ANTH 110, 180, 350, 370; BCST 110; BUS 100, 101, 102, 125; DGME 100; ECON 100, 102; ETHN 101, 102, 150, 151, 152, 261, 262, 265, 300, 360, 440; GEOG 110, 150; HIST 100, 101, 102, 201, 202, 260, 310, 315, 350; HMSV 100, 115, 120, 130, 150, 151; PLSC 100, 110, 120, 130, 150, 200, 210, 212, 215, 250, 310; PSYC 100, 105, 108, 110, 200, 201, 220, 225, 300, 410, 675; SOSC 220, 221, 310, 382-386; SOCI 100, 105, 110, 141, 200, 340.

Majors fulfilling Area E5B: Ethnic Studies, Social Science
c. Humanities: at least 3 units

ARCH 100; ART 100, 101, 102, 103, 104, 124, 350, 351; ASL 111, 112, 121, 122; CHIN 111, 112, 121, 122, 131, 132, 134; 140, 211, 212; ENGL 110; ETHN 288, 350, 351, 440, 585; FILM 100, 110, 120, 121, 200, 215; FREN 110, 111, 112, 115, 116, 117, 118, 120, 121, 122, 130, 131, 132, 140; GERM 110, 111, 112, 120, 121, 122, 130, 131, 132, 140; HUM 101, 102, 111, 114, 125, 131, 133, 140, 676; ITAL 110, 111, 112, 115, 116, 117, 118, 120, 121, 122; JAPN 110, 111, 112, 120, 121, 122; LIT 101, 105, 113, 151, 153, 201, 202, 220, 231, 232, 277, 430; MUS 100, 202, 240, 250, 275; PHIL 100, 244, 300; SPAN 110, 111, 112, 115, 116, 117, 118, 120, 121, 122, 130, 131, 132, 140, 161, 162, 251; SPCH 111, 112.
Majors fulfilling Area E5C: Art, English, Film History, French, German, Humanities, Music, Spanish, Speech Communication
d. Career Exploration and Self-Development: at least 3 units

ADMJ 100; ARCH 666; BIOL 126, 127, 128, 666; BCST 110; BLDG 700; BUS 201, 315, 316, 317; BUSW series; CRER 104, 105, 106, 107, 108, 112, 120, 121, 122, 123, 126, 127, 138, 140, 142, 301, 305; CIS 110; COOP 640, 641; DENH 200; DGME 101; DRAF 120; ENGR 100; FIRE 715; GRA 150, 160; HORT 400; HMSV 100; JOUR 110; LIBR 100, 105, 107, 110; MANU 130; MGMT 100; MULT 102; NURS 666; PHYS 126, 127, 128; R.E. 100; SOSC 301; SPFI 701; SPCH 100, 120, 140, 150; WELD 300, 350.
Majors fulfilling Area E5d : Acctg,, Admin. of Justice, Alcohol/Other Drug Studies, Archit., Broadcast Q Electronic Media, Bldg Inspection, Bus. Info. Processing, CIS, Cosmetology, Drafting., Electrical, Electronics, Engineering, Filmmaking, Sprinkler Fitter, Fire Tech., Graphics, Horticulture, Human Ser., Journalism, Life Sci, Biotech., Mgmt, Math, Multimedia, Nursing, Real Estate, Welding Tech.

## F-ELECTIVES

All degree applicable courses not included in the major requirements or used to meet G.E. requirements are considered electives.

# A.A./A.S. Degree and Certificate Programs at CSM 

| AA/AS Degree Certificate $\qquad$ | AA/AS Degree Certificate $\qquad$ | AA/AS Degree Certificate $\qquad$ |
| :---: | :---: | :---: |
| ACCOUNTING | CAREER \& LIFE PLANNING . | GRAPHICS |
| Accounting Assistant | College Peer Advisor | HORTICULTURE. |
| CPA Exam Preparation: Finance | Leadership for Service | Floristry |
| Accounting and Auditing | CHEMISTRY | Landscape/Construction Design |
| CPA Exam Preparation: Business | COMPUTER AND | Landscape Management |
| Environment and Regulation. | INFORMATION SCIENCE | Nursery Management |
| Enrolled Agent Exam Preparation | Computer \& Network Forensics | HUMANITIES |
| Tax Preparer I. | Computer Science Applications . | HUMAN SERVICES. |
| Tax Preparer II | Computer Support Specialist . . . | Community Health Worker |
| ADMINISTRATION OF JUSTICE | Network Support. . . . . . . . . . | Family Development |
| Basic Police Academy . . . . . . . . . . . . | PC Hardware \& System Support | Peer Support Services |
| ALCOHOL AND OTHER | C++ Programming. | Psychosocial Rehabilitation (PSRC) . . |
| DRUG STUDIES | Computer Forensics | INTERDISCIPLINARY STUDIES. |
| ARCHITECTURE. | Internet Programming | Intercultural Studies. |
| ART: COMMERCIAL. | Java Programming. . . . . . . . | Contemporary Issues . . . . . . . . . . . . . |
| ART: FINE ARTS | Network Security Specialist | Science \& Society |
| Drawing. | COSMETOLOGY | JOURNALISM |
| General Studio Art. | DENTAL ASSISTING. | LIFE SCIENCES . |
| Painting. | DRAFTING/CAD | Biological |
| Printmaking. | Computer Aided Design. | Biotechnology |
| ART: PHOTOGRAPHY | ELECTRONICS TECHNOLOGY . | General |
| BROADCAST AND | Electronics Assembly . | Medical. |
| ELECTRONIC MEDIA. | General Electronics | Pre-Nursing |
| Broadcast Audio | Industrial Electronics | MANAGEMENT |
| Television Producing | Microcomputer Systems | Business Management. |
| Lighting. . . . . . . . . | Network Cabling Specialist . . . . . . | Marketing Management |
| On-Air . | Wireless Communication Systems | Retail Management |
| Editing. | ENGINEERING TECHNOLOGY | Human Resources Management |
| Television Production | Electronics | Project Management |
| BUILDING INSPECTION | General | MATHEMATICS. |
| TECHNOLOGY | ENGLISH | MULTIMEDIA |
| BUSINESS. | ETHNIC STUDIES | Digital Audio |
| Business Administration, | FILM | Digital Video |
| Option I (non-transfer) | FIRE TECHNOLOGY | Web Design. |
| Business Administration, | FOREIGN LANGUAGES | MUSIC. |
| Option 2 (transfer) | American Sign Language . | Electronic Music . |
| Insurance - Property and Casualty | Chinese (Mandarin) | NURSING |
| Merchandising (General). | French. | PHYSICAL SCIENCE |
| Merchandising (Management) . | Italian | PHYSICS |
| Microcomputer/Database \& Spreadsheet | Japanese | REAL ESTATE |
| Office Assistant I | Spanish........................... | SOCIAL SCIENCE |
| Office Assistant II | GEOLOGICAL SCIENCES. . . . . . . . . . . . | SPEECH COMMUNICATION |
| + | GLOBAL STUDIES | UNIVERSITY TRANSFER . |

For information regarding CSM transfer programs, please refer to the next page, "CSM Transfer Opportunities: Subject Areas \& Majors." In addition, meet with a CSM counselor/advisor and use the resources of the CSM Transfer Services Office to develop an educational plan leading to transfer in your specific area of study.

## CSM Transfer Opportunities: Subject Areas and Majors

College of San Mateo enables students to complete lower-division preparation (i.e., the first two years of the baccalaureate degree) in the following subject areas and majors offered at California's public and private universities, including all campuses of the University of California (UC) and the California State University (CSU). Upon completion of lower division requirements, CSM students are eligible for transfer admission to colleges and universities that offer these programs and majors. The following is only a partial list. For more information about transfer majors, please visit collegeofsanmateo.edu/transfer or www.cpec.ca.gov/CollegeGuide/CollegeGuide.asp.

Biological \& Life Sciences
Aquatic Biology
Biotechnology
Cell Biology
Developmental Biology
Ecology
Ecosystems
Entomology
Genetics \& Plant Biology
Horticulture
Integrative Biology
Kinesiology
Marine Biology
Microbiology
Molecular \& Cell Biology
Neurobiology \& Physiology
Neuroscience
Plant Sciences
Zoology
Business \& Public Administration
Accounting
Agricultural Business
Business Administration
Business Economics
Healthcare Management
Hotel \& Restaurant Management
Information Systems
Management
Marketing
Marketing \& Wine Business Strategies
Public Administration
Recreation Administration
Taxation

## Communication

Broadcast and Electronic Media
Communication Studies
Film
Interpersonal Communication
Journalism
Mass Communication
Public Relations
Radio-Television
Technical \& Professional Writing
TV, Film \& Media Production
Computer Science,
Engineering \& Technology
Aeronautical Science \& Engineering
Aerospace Engineering
Architecture
Artificial Intelligence
Biomedical Engineering
Chemical Engineering
Civil Engineering
Computer Science
Computer Engineering
Construction Management
Electrical Engineering
Fire Protection Administration Industrial Design
Manufacturing Technology
Marine Transportation
Materials Science \& Engineering
Mechanical Engineering
Software Systems

Environmental Studies \& Agriculture
Animal Science
Botany \& Plant Sciences
Earth \& Environmental Sciences
Environmental Sciences
Fisheries
Forestry
Horticulture
Resource Management
Soil \& Water Science
Wildlife \& Conservation Biology

## Ethnic \& Area Studies

African American Studies
American Studies
Asian American Studies
Asian Studies
Celtic Studies
Chicano Studies
Chinese Studies
Global Cultures
Japanese Studies
Jewish Studies
Latin American Studies
Middle Eastern Studies
Native American Studies
Russian Studies
World Cultures
Health Professions,
Education \& Counseling
Alcohol \& Drug Studies
Child Development
Counseling
Dental Hygiene
Education
Gerontology
Nursing
Nutritional Sciences
Rehabilitation Counseling
Special Education
Speech Pathology
Teaching ESL
Humanities, Art \& Foreign Languages
Art
Art History
Arts Management
Classical Civilizations
Comparative Literature
Dance
Design/Media Arts
Dramatic Art
English
Ethnomusicology
Film \& Digital Media
Humanities
Linguistics
Medieval Studies
Music
Music History
Philosophy
Photography
Religious Studies
Renaissance Studies

Rhetoric
Sculpture
Studio Art
Chinese
French
German
Italian
Japanese
Spanish
Mathematics \& Physical Sciences
Astrophysics
Chemistry
Earth \& Planetary Science
Earth Systems Science
Fiber \& Polymer Science
Financial Mathematics \& Statistics
Geology/Geological Sciences
Geophysics
Mathematics
Paleobiology
Pharmacological Chemistry
Physics
Statistics
Pre-Professional
Pre-Chiropractic
Pre-Dentistry
Pre-Law
Pre-Medicine
Pre-Optometry
Pre-Pharmacy
Pre-Physical Therapy
Pre-Veterinary
Social Sciences
Administration of Justice/Criminology
Anthropology
Archeology
Cognitive Science
Economics
Geography
History
Human Development
Human Sexuality
Law \& Society
Liberal Studies
Multicultural Studies
Peace \& Conflict Studies
Political Science
Psychology
Public Policy
Social Welfare
Sociology/Social Science
Women's Studies

## ACCOUNTING

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

```
University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities
For students who wish to transfer as a Business Administration major, refer to Business on page 72.
```

AA Associate in Arts Degree
Accounting ..... 60 units
CA Certificate of Achievement
Accounting ..... 22 units
CS Certificates of Specialization
Accounting Assistant. ..... 8.5 units
Financial Accounting and Auditing ..... 14 units
CPA Exam Preparation: Business Environment and Regulation . . . . . . . . 13.5 units
Tax Preparer I ..... 8.5 units
Tax Preparer II ..... 14.5 units

## Recommended high school preparation

Coursework in Mathematics, English, and use of microcomputers, including spreadsheet and word processing applications.

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for Business and Accounting for the California State University and the University of California systems. For independent or out-ofstate colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Accounting

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: minimum 22 semester units

A grade grade of "C" or higher is required for each course applied to the major.

Complete 16 units listed below
ACTG 100 Accounting Procedures. . . . . . . . . . . . . . . . . . . . . 3 units
ACTG 103 Ten Key Skills . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . o. 5 unit
ACTG 121 Financial Accounting . . . . . . . . . . . . . . . . . . . . . . 4 units
ACTG 131 Managerial Accounting . . . . . . . . . . . . . . . . . . . . 4 units
ACTG 144 QuickBooks Set up and Services . . . . . . . . . . . . . 1.5 units
ACTG 145 QuickBooks Payroll and Merchandising . . . . . . . 1.5 units
BUSW 415 Spreadsheet I . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.5 units
Plus, select a minimum of 6 units from the following courses:
ACTG 161 Intermediate Accounting I....................... 4 units
ACTG 162 Intermediate Accounting II. . . . . . . . . . . . . . . . . . 4 units
ACTG 163 Auditing . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ACTG 164 Governmental and Nonprofit Accounting. . . . . . 3 units
ACTG 165 Cost Accounting. . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ACTG 171 Individual Income Taxes . . . . . . . . . . . . . . . . . . . 3 units
ACTG 172 Business Income Taxes . . . . . . . . . . . . . . . . . . . . . 3 units
ACTG 173 Trust, Estate, Gift Taxes . . . . . . . . . . . . . . . . . . . . . 1.5 units
ACTG 175 Volunteer Income Tax Assistance . . . . . . . . . . . . . 2 units
ACTG 176 Enrolled Agent Exam Preparation . . . . . . . . . . . . . 3 units
BUS 100 Contemporary American Business . . . . . . . . . . . 3 units
BUS 201 Business Law I . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 295 Computer Systems in Business . . . . . . . . . . . . . . 4 units

## CA Accounting

## Minimum 22 semester units

Complete major requirements listed under Associate in Arts - Major in Accounting. A grade of "C" or higher is required for each course applied to the certificate.

## CS Accounting Assistant <br> 8.5 semester units

A grade of "C" or higher is required for each course applied to the certificate.


ACTG 103 Ten Key Skill . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 0.5 unit
ACTG 144 QuickBooks: Set Up and Service. . . . . . . . . . . . . 1.5 units
ACTG 145 QuickBooks: Payroll and Merchandising. . . . . . . 1.5 units
BUSW 415 Spreadsheet I . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.5 units
CRER 127 Career Choices: Job Search. . . . . . . . . .. . . . . . . . 0.5 unit

## CS CPA Exam Preparation: Financial Accounting and Auditing 14 semester units

A grade of "C" or higher is required for each course applied to the certificate.

```
ACTG 161 Intermediate Accounting I. . . . . . . . . . . . . . . . 4 units
ACTG 162 Intermediate Accounting II. . . . . . . . . . . . . . . . . 4 units
ACTG 163 Auditing . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . }3\mathrm{ units
ACTG 164 Governmental and Nonprofit Accounting. . . . . }3\mathrm{ units
```


## CS CPA Exam Preparation: Business Environment and Regulation 13.5 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.

| ACTG 165 Cost Accounting | S |
| :---: | :---: |
| ACTG 171 Individual Income Taxes | . 3 units |
| ACTG 172 Business Income Taxes | 3 units |
| ACTG 173 Trust, Estate, Gift Taxes. | 1.5 units |
| BUS 201 Business Law | 3 units |

## CS Tax Preparer I

## 8.5 semester units

A grade of "C" or higher is required for each course applied to the certificate.
ACTG 100 Accounting Procedures. ..... 3 units
ACTG 103 Ten Key Skills ..... 0.5 unit
ACTG 171 Individual Income Taxes ..... 3 units
BUSW 415 Spreadsheet I ..... 1.5 units
CRER 127 Career Choices: Job Search ..... 0.5 unit

## CS Tax Preparer II

## 15.5 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.

ACTG 103 Ten Key Skills . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . o. 5 unit
ACTG 121 Financial Accounting . . . . . . . . . . . . . . . . . . . . . . . 4 units
ACTG 144 QuickBooks: Set-up and Service Business . . . . . . . OR
ACTG 145 QuickBooks: Payroll \& Merchandising Business 1.5 units

ACTG 171 Individual Income Taxes . . . . . . . . . . . . . . . . . . . . 3 units
ACTG 172 Business Income Taxes . . . . . . . . . . . . . . . . . . . 3 units
ACTG 173 Trust, Estate, Gift Taxes . . . . . . . . . . . . . . . . . . . . . 1.5 units
BUSW 415 Spreadsheet I . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.5 units
CRER 127 Career Choices: Job Search
0.5 unit

## CS Enrolled Agent Exam Preparation

14.5 semester units

A grade of "C" or higher is required for each course applied to the certificate.

| ACTG 121 Financial Accounting |
| :---: |
| ACTG 171 Individual Income Taxes |
| ACTG 172 Business Income Taxes |
| ACTG 173 Trust, Estate, Gift Taxes . |

Plus two units of Enrolled Agent Exam Prep I and one unit of Enrolled Agent Exam Prep II.

## ADMINISTRATION OF JUSTICE

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AS Associate in Science Degree <br> Administration of Justice 60 units

## CA Certificate of Achievement

Administration of Justice $\qquad$
Regular Basic Course Standard Format 22 units

## PT POST (California Commission on Peace Officer Standards and Training) Certification

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. Transfer majors may be listed as Administration of Justice, Criminal Justice, Criminology, Law and Society, or other listings. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AS Major in Administration of Justice

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{2 7}$ semester units

A grade of " C " or higher is required for each course applied to the major.
ADMJ 100 Introduction to Criminal Justice. . . . . . . . . . . . 3 units
ADMJ 102 Principles and Procedures of the Justice System

3 units
ADMJ 104 Introduction to Criminal Law ................ 3 units
ADMJ 106 Legal Aspects of Evidence . . . . . . . . . . . . . . . . . 3 units
ADMJ 108 Community Relations/Multi-Cultural Policy Issues.
.3 units
ADMJ 710 Police Report Writing . . . . . . . . . . . . . . . . . . . . . 3 units
Plus 9 units selected from one of the six groups listed below. All 9 units must be within the same group.

```
Group 1: ADMJ 120, 153, 185, SOSC 301, }30
Group 2: ACTG 100, 121, ECON 100, 102,
    ECON 123 OR MATH 200
```

Group 3: PSYC 225, SOCl 105, 141, 200, PSYC 300 OR SOCI 300
Group 4: ETHN 150, 151, ANTH 105, 110, 120, GEOG 110
Group 5: SPCH 120, 140, 150
Group 6: CIS 479, 488, 489, 490, 491

## CA Administration of Justice

27 semester units
A grade of "C" or higher is required for each course applied to the certificate.

Complete major requirements listed under Associate in Science:
Major in Administration of Justice Option 1.

## CA Regular Basic Course Standard Format 22 semester units

A grade of " C " or higher is required.
ADMJ 145 Basic Police Academy
22 units
This 880 hour course is certified by the California Commission on Peace Officers Standards and Training to meet the statutory basic training requirements.

## PT POST (California Commission on Peace Officers Standards and Training) Certification

These courses comply with training regulations set forth by POST. Upon successful completion of each of the following courses, the student will receive a certificate of completion.

## PC 832 Training Courses

ADMJ 771 PC 832: Arrest and Control Training. . . . . . . . . . . 3 units
ADMJ 775 PC 832: Firearms Training. . . . . . . . . . . . . . . . . . . 0.5 unit
Regular Basic Course Modular Format
ADMJ 780 Regular Basic Course Module III. . . . . . . . . . . . . 9.5 units
ADMJ 781 Regular Basic Course Module II................ . . 13 units

## ALCOHOL AND OTHER DRUG STUDIES

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program<br>60-70 transferable units<br>California State University<br>University of California<br>Independent Colleges and Universities

## AA Associate in Arts Degree

Alcohol and Other Drug Studies. . . . . . . . . . . . . 60 units

## CA Certificate of Achievement

Alcohol and Other Drug Studies. . . . . . . . . . . . . 36 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. Related transfer majors may be listed under several different areas such as, but not limited to, Health, Sociology, and Psychology. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Alcohol and Other Drug Studies

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{3 6}$ semester units

A grade of " C " or higher is required for each course applied to the major.


Plus 6 units selected from the following courses:
PSYC 100 General Psychology . . . . . . . . . . . . . . . . . . . . . . . . 3 units
PSYC 410 Abnormal Psychology . . . . . . . . . . . . . . . . . . . . . . 3 units
SOCI 100 Introduction to Sociology . . . . . . . . . . . . . . . . . . . 3 units
Plus 3 units selected from the following courses:
SOSC 310 Special Population Groups in Alcohol
and Other Drug Studies .................... 3 units
SOSC 318 Domestic Violence and AOD Issues . . . . . . . . . . 3 units
SOSC 321 Adolescent Alcohol \& Other Drug
Prevention, Treatment, Recovery
3 units

## CA Alcohol and Other Drug Studies

36 semester units
Complete major requirements listed under Associate in Arts: Major in Alcohol and Other Drugs Studies. A grade of "C" or higher is required for each course applied to the certificate.

This certificate program conforms to the Proposed Guidelines for Alcohol and Other Drug Studies Programs within Higher Education prepared for the California State Department of Alcohol and Drug Programs and meets the accreditation standards set forth by the California Association for Alcohol/Drug Educators (CAADE).

## AMERICAN SIGN LANGUAGE

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

```
University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities
```


## CS Certificate of Specialization

American Sign Language<br>$\qquad$

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## CS American Sign Language

## 12 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.

```
ASL 111 Elementary American Sign Language I . . . . . . . . . 3 units
ASL }112\mathrm{ Elementary American Sign Language II . . . . . . . . }3\mathrm{ units
ASL }121\mathrm{ Advanced Elementary American
    Sign Language I . . . . . . . . . . . . . . . . . . . . . . . . . }3\mathrm{ units
ASL }122\mathrm{ Advanced Elementary American
    Sign Language II. . . . . . . . . . . . . . . . . . . . . . . . . . }3\mathrm{ units
```

In special circumstances, the Dean of Language Arts may approve the limited use of other courses in the same language (such as those numbered 680 or taken at Skyline or Cañada Colleges). In rare circumstances, the Dean may approve using a course in another discipline if its content is closely related to the language studied.

## ANTHROPOLOGY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

```
University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities
```


## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. Transfer majors may be listed as Anthropology or other listings. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## ARCHITECTURE

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California Independent Colleges and Universities

## AS Associate in Science Degree

Architecture . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 60 units

## Recommended high school preparation:

Coursework in Art, Mathematics (four years), Mechanical Drawing, English

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for Architecture, Architectural Engineering, or Landscape, City, and Regional Planning for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AS Major in Architecture

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{2 7}$ semester units

A grade of " $C$ " or higher is required for each course applied to the major.
ARCH 100 Survey of Contemporary Architecture . . . . . . . 3 units
ARCH 120 Architecture and Design Drawing 1: Drawing and Visual Thinking $\qquad$
ARCH 140 Architecture and Design Drawing 2 . . . . . . . . . 2 units
ARCH 155 Architecture, Technology, and Building 1: Construction Materials and Methods. . . . . . . . . 2 units
ARCH 165 Architecture, Technology, and Building 2: Construction Processes and Systems. .2 units
ARCH 210 Design I: Intro to Architecture, Environmental
Design and the Design Process. . . . . . . . . . . 4 units
ARCH 220 Design II: Architecture: Design,
Form \& the Built Environment . . . . . . . . . . . . . 4 units
ARCH 230 Design III: Visioning and Building Architecture. . . . . . . . . . . . . . . . . . . . . 4 units
ARCH 240 Design IV: Visioning Place and Community 4 units

## ART

Meet with a CSM counselor to discuss how to achieve
academic goals and to develop a comprehensive student
educational plan (SEP).
University Transfer Program
60- 70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree

Art: Commercial. . . . . . . . . . . . . . . . . . . . . . . . . . . 60 units
Art: Fine Arts Option 1: Drawing . . . . . . . . . . . . . 60 units
Art: Fine Arts Option 2: General Studio Art . . . . 60 units
Art: Fine Arts Option 3: Painting . . . . . . . . . . . . . 60 units
Art Fine Arts Option 4: Printmaking . . . . . . . . . . 60 units
Art: Photography . . . . . . . . . . . . . . . . . . . . . . . . . . 60 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for Art and Art History for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Art: Commercial

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{2 4}$ semester units

A grade of "C" or higher is required for each course applied to the major.
ART 201 Drawing and Composition I . . . . . . . . . . . . . . . . . 3 units
ART 202 Drawing and Composition II. . . . . . . . . . . . . . . . . . 3 units
ART 206 Figure Drawing and Portraiture . . . . . . . . . . . . . . . 3 units
ART 207 Life Drawing. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ART 214 Color . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ART 301 Design . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
GRA 150 Adobe Illustrator for Print \& Web Design I. . . . . . 3 units
GRA 160 Adobe Photoshop for Print \& Web Design I. . . . . . 3 units

## AA Major in Fine Arts Option 1: Drawing

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 33 semester units

A grade of "C" or higher is required for each course applied to the major.
ART 101 Art \& Architecture from the Ancient World to Medieval Times. ..... OR
ART 102 Art \& Architecture of Renaissance and Baroque Europe ..... OR
ART 124 Old Masters' Aesthetics and Techniques. ..... 3 units
ART 103 Art of Europe and America from the Rococo to the Present ..... OR
ART 104 Art of the 20th Century ..... 3 units
ART 201 Drawing and Composition I ..... 3 units
ART 202 Drawing and Composition II. ..... 3 units
ART 206 Figure Drawing and Portraiture ..... 3 units
ART 207 Life Drawing. ..... 3 units
ART 214 Color ..... 3 units
ART 223 Oil Painting I. ..... 3 units
ART 301 Design ..... 3 units
Plus, repeat the following courses:
ART 206 Figure Drawing and Portraiture ..... 3 units
ART 207 Life Drawing ..... 3 units
AA Major in Fine Arts Option 2: General Studio ArtComplete General Education and other requirements listed for theAssociate degree and
Major requirements: $\mathbf{3 0}$ semester units
A grade of "C" or higher is required for each course applied to themajor.
ART 101 Art \& Architecture from the Ancient World to Medieval Times. ..... OR
ART 102 Art \& Architecture of Renaissance and Baroque Europe ..... OR
ART 124 Old Masters' Aesthetics and Techniques ..... 3 units
ART 103 Art of Europe and America from the Rococo to the Present ..... OR
ART 104 Art of the 20th Century ..... 3 units
ART 201 Drawing and Composition I ..... 3 units
ART 202 Drawing and Composition II. ..... 3 units
ART 206 Figure Drawing and Portraiture ..... 3 units
ART 207 Life Drawing ..... 3 units
ART 214 Color ..... 3 units
ART 223 Oil Painting I. ..... 3 units
ART 301 Design. ..... 3 units
ART 405 Sculpture I ..... 3 units

## AA Major in Fine Arts Option 3: Painting

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 33 semester units

A grade of "C" or higher is required for each course applied to the major.
ART 101 Art \& Architecture from the Ancient World to Medieval Times ..... OR
ART 102 Art \& Architecture of Renaissance and Baroque Europe ..... OR
ART 124 Old Masters' Aesthetics and Techniques ..... 3 units
ART 103 Art of Europe and America from the Rococo to the Present ..... OR
ART 104 Art of the 20th Century ..... 3 units
ART 201 Drawing and Composition I ..... 3 units
ART 202 Drawing and Composition II. ..... 3 units
ART 206 Figure Drawing and Portraiture ..... 3 units
ART 207 Life Drawing. ..... 3 units
ART 214 Color ..... 3 units
ART 223 Oil Painting I. ..... 3 units
ART 224 Oil Painting II. ..... 6 units
ART 301 Design ..... 3 units
AA Major in Fine Arts Option 4: Printmaking

Complete General Education and other requirements listed for the Associate degree and
Major requirements: $\mathbf{2 4}$ semester units
A grade of " C " or higher is required for each course applied to themajor.
ART 101 Art \& Architecture from the Ancient World to Medieval Times ..... OR
ART 102 Art \& Architecture of Renaissance and Baroque Europe ..... OR
ART 124 Old Masters' Aesthetics and Techniques ..... 3 units
ART 103 Art of Europe and America from the Rococo to the Present ..... OR
ART 104 Art of the 20th Century ..... 3 units
ART 201 Drawing and Composition I ..... 3 units
ART 202 Drawing and Composition II. ..... 3 units
ART 206 Figure Drawing and Portraiture. ..... 3 units
ART 207 Life Drawing ..... 3 units
ART 214 Color ..... 3 units
ART 301 Design . ..... 3 units

## AA Major in Art: Photography

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 21 semester units

A grade of " C " or higher is required for each course applied to the major.


## Art History University Transfer Program

Most Career opportunities in Art History require a B.A. or an advanced degree. Students can fulfill lower division major and general education courses at the community college to facilitate transfer to a university to major in Art History. Use Project Assist (www.assist. org) to identify lower division major preparation required for transfer. Typically Art Histroy major requirements include such courses as ART 101,102,103, 104, 201, 301, History courses, and courses in Foreign Languages.

## BROADCAST AND ELECTRONIC MEDIA

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree

Broadcast and Electronic Media
Option 1: Television Production . . . . . . . . . . . . . . 60 units
Option 2: Broadcast Audio . . . . . . . . . . . . . . . . . . 60 units
Option 3: Television Producing. . . . . . . . . . . . . . . . 60 units

## CA Certificate of Achievement

Broadcast and Electronic Media
Option 1: Television Production . . . . . . . . . . . . . . 33 units
Option 2: Broadcast Audio . . . . . . . . . . . . . . . . . . 32.5 units
Option 3: Television Producing. . . . . . . . . . . . . . . 30 units


## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for Broadcast and Electronic Media for the California State University and the University of California systems. Research related majors in Mass Communication, Journalism, Radio and Television, and Film and Television. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Broadcast and Electronic Media Option 1: Television Production

Complete General Education and other requirements listed for the Associate degree and


## CA Broadcast and Electronic Media Option 1: Television Production

 33 semester unitsComplete major requirements listed under Associate in Arts:Major in Broadcast and Electronic Media Option 1: Television Production. A grade of " $C$ " or higher is required for each course applied to the certificate.

## AA Major in Broadcast and Electronic Media Option 2: Broadcast Audio

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{3 2 . 5}$ semester units

A grade of " C " or higher is required for each course applied to the major.
BCST 110 Media in Society . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
BCST 210 Television Studio Techniques (replaces 231) . . . 3 units
BCST 420 Advanced Audio Operations (replaces 132) . . . 3 units
MULT 184 Digital Video (replaces 180/181) . . . . . . . . . . . . 3 units
MULT 192 Digital Audio (replaces 190/191) . . . . . . . . . . . . . 3 units
MULT 292 DVD Studio Pro (replaces 290/291). . . . . . . . . . . 3 units
MULT 297 Pro Tools LEI (replaces 295/296) . . . . . . . . . . . . . 3 units
MULT 317 Digital Recording Studio (replaces 315/316) . . . . . . 3 units
MULT 387 Digital Video Workflow (replaces 385/386) . . . . . 3 units
MUS 292 Sound Creation: Sampling and Synthesis . . . . . 3 units
MUS 293 Audio for Visual Media . . . . . . . . . . . . . . . . . . . . . 2.5 units
Strongly Recommended: BCST 450 (replaces 244)

## CA Broadcast and Electronic Media Option 2: Broadcast Audio 32.5 semester units

Complete major requirements listed under Associate in Arts: Major in Broadcast and Electronic Media Option 2: Broadcast Audio. A grade of " $C$ " or higher is required for each course applied to the certificate.

## AA Major in Broadcast and Electronic Media Option 3: Television Producing

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{3 0}$ semester units

A grade of " C " or higher is required for each course applied to the major.
BCST 110 Media in Society . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
BCST 210 Television Studio Techniques (replaces 231) . . . 3 units
BCST 220 Broadcast Writing (replaces 194) . . . . . . . . . . . . . 3 units
BCST 316 Producing for Media (replaces 237) . . . . . . . . . . . 3 units
BCST 320 Digital Television Field Production (replaces 241) . . . . . . . . . . . . . . . . . . . 3 units

MGMT 265 Project Management . . . . . . . . . . . . . . . . . . . . 3 units
MULT 184 Digital Video (replaces 180/181) . . . . . . . . . . . . . 3 units
MULT 192 Digital Audio (replaces 190/191) . . . . . . . . . . . . . 3 units
MULT 292 DVD Studio Pro (replaces 290/291). . . . . . . . . . . 3 units
MULT 387 Digital Video Workflow (replaces 385/386) . . . . . . 3 units
Strongly Recommended: BCST 450 (replaces 244)

## CA Broadcast and Electronic Media Option 3: Television Producing 30 semester units

Complete major requirements listed under Associate in Arts:Major in Broadcast and Electronic Media Option 3: Television Producing. A grade of "C" or higher is required for each course applied to the certificate.

## CS Lighting

## 15 semester units

A grade of "C" or higher is required for each course applied to the certificate.

BCST 210 Television Studio Techniques (replaces 231) . . . . . . 3 units
BCST 310 Studio Lighting Techniques. . . . . . . . . . . . . . . . . . 1.5 units
BCST 312 Field Lighting Techniques . . . . . . . . . . . . . . . . . . 1.5 units
BCST 320 Digital Television Field Production (replaces 241) .3 units
MULT 184 Digital Video (replaces 180/181) ................ 3 units
MULT 192 Digital Audio (replaces 190/191) . . . . . . . . . . . . . 3 units

## cs On-Air

16 semester units
A grade of "C" or higher is required for each course applied to the certificate.

```
BCST 210 Television Studio Techniques (replaces 231) . . . . . 3 units
BCST 220 Broadcast Writing (replaces 194)............... . . units
BCST 230 On-Air Talent (replaces 120) . . . . . . . . . . . . . . . }3\mathrm{ units
BCST 240 Directing Talent.................................. . unit
SPCH 100 Public Speaking.................................... . . units
SPCH 111 Oral Interpretation I . . . . . . . . . . . . . . . . . . . . . . }3\mathrm{ units
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## CS Editing

15 semester units
A grade of " $C$ " or higher is required for each course applied to the certificate.

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BCST 210 Television Studio Techniques (replaces 231). . . . . . OR
BCST 320 Digital Television Field
    Production (replaces 241)
    . . . . . . . . . . . . . . . . . . }3\mathrm{ units
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MULT 184 Digital Video (replaces 180/181) . . . . . . . . . . . . . 3 units
MULT 187 Final Cut Pro (replaces 182/183). . . . . . . . . . . . . . 3 units
MULT 192 Digital Audio (replaces 190/191) . . . . . . . . . . . . . 3 units
MULT 282 After Effects (replaces 280/281) . . . . . . . . . . . . . 3 units

## BUILDING INSPECTION TECHNOLOGY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## AS Associate in Science Degree <br> Building Inspection <br> 60 units <br> CA Certificate of Achievement <br> Building Inspection <br> 34-35 units

## AS Major in Building Inspection

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 34-35 semester units

A grade of "C" or higher required for each course applied to the major.
BLDG 700 Introduction to Building Code. ................. 3 units
BLDG 710 Non-Structural Provisions of the Uniform Building Code . . . . . . . . . . . . . . . . . 3 units
BLDG 720 Electrical Inspection I............................ . . 3 units
BLDG 725 Electrical Inspection II. . . . . . . . . . . . . . . . . . . . . . . 3 units
BLDG 730 Plumbing Inspection. . . . . . . . . . . . . . . . . . . . . . 3 units
BLDG 735 ADA Building Requirements. . . . . . . . . . . . . . . . 3 units
BLDG 740 Mechanical Code................................... 3 units
BLDG 750 Structural Provisions of Uniform
Building Code ................................. 3 units
BLDG 760 Energy Regulations. . . . . . . . . . . . . . . . . . . . . . . 3 units
BLDG 775 Introduction to Residential
Dwelling Inspection Technology 3 units

Plus,
ENGL 838/848 or higher 4-5 units

Suggested electives:
BLDG 790; COOP 641; MGMT 235, 265; PHYS 100

## CA Building Inspection

## 34-35 semester units

Complete major requirements listed under Associate in Science: Major in Building Inspection. A grade of "C" or higher is required for each course applied to the certificate.

## BUSINESS

```
Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).
```


## University Transfer Program

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60-70 transferable units
California State University
University of California
Independent Colleges and Universities
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## AA Associate in Arts Degree

Business Administration,
Option 1 (Non-transfer program).............. . . 60 units
Business Administration,
Option 2 (Transfer program).................... . 60 units
Business: Insurance - Property and Casualty ... 60 units
Business: Merchandising - Management. . . . . . 60 units
Business Information Processing
Option 1: Microcomputer/Office Assistant . . . . . 60 units
Option 2: Microcomputer/Database and
Spreadsheet Functions ............ . 60 units

CA Certificate of Achievement
Business: Insurance - Property and Casualty ... 32 units
Business: Merchandising - General . . . . . . . . . . . 21 units
Business: Merchandising - Management . . . . . . 24-25 units
Business Information Processing
Option 1: Microcomputer/Office Assistant . . . . . 23-24.5 units
Option 2: Microcomputer/Database and Spreadsheet Functions $\qquad$ 24 units

## CS Certificates of Specialization

Insurance: Property and Casualty . . . . . . . . . . . . . . 12 units
Office Assistant I . . . . . . . . . . . . . . . . . . . . . . . . . . 8-9.5 units
Office Assistant II. . . . . . . . . . . . . . . . . . . . . . . . 11 units

## Recommended high school preparation:

Coursework in Mathematics, English, Accounting, and use of microcomputers, including spreadsheet and word processing applications.

## AA Major in Business Administration, Option 1 (Non-transfer)

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 24-26 semester units

A grade of "C" or higher is required for each course applied to the major.

ACTG 100 Accounting Procedures
3 units. . OR

ACTG 121 Financial Accounting. . . . . . . . . . . . . . . . . . . . . . 4 units
BUS 100 Contemporary American Business .............. 3 units
BUS 101 Human Relations I. . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 115 Business Mathematics . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 201 Business Law I......................................... . 3 units
BUS 401 Business Communications ........................ 3 units
BUS 295 Computer Systems in Business ...... . 4 units. . OR
CIS 110 Introduction to Computer and Information Science 3 units

Plus, select 3 units from a BUSW series

## AA Major in Business Administration, Option 2 (Transfer Program)

Complete General Education and other requirements listed for the Associate degree and

Major requirements: 20-24 semester units
A grade of "C" or higher is required for each course applied to the major.
ACTG 121 Financial Accounting . . . . . . . . . . . . . . . . . . . . . . . 4 units
ECON 100 Principles of Macroeconomics ................. 3 units
ECON 102 Principles of Microeconomics . . . . . . . . . . . . . . . 3 units
ECON 123 Business Economic Statistics . . . . . . . . . . . . . . . . OR
MATH 200 Statistics.......................................... . 4 units
Plus, select 6-10 units from the following courses:
ACTG 131 Managerial Accounting . . . . . . . . . . . . . . . . . . . . 4 units
BUS 100 Contemporary American Business .............. 3 units
BUS 201 Business Law I.................................... . . 3 units
BUS 295 Computer Systems in Business . . . . . . . . . . . . . . . 4 units
MATH 125 Elementary Finite Math . . . . . . . . . . . . . . . . . . . . 3 units
MATH 241 Applied Calculus 1. . . . . . . . . . . . . . . . . . . . . . . . . 5 units
MATH 251 Calculus with Analytic Geometry I . . . . . . . . . . . 5 units

## AA Major in Business: Insurance - Property and Casualty <br> Complete General Education and other requirements listed for the Associate degree and <br> Major requirements: $\mathbf{3 2}$ semester units <br> A grade of " C " or higher is required for each course applied to the major. <br> ACTG 121 Financial Accounting . . . . . . . . . . . . . . . . . . . . . . 4 units <br> BUS 100 Contemporary American Business . . . . . . . . . . 3 units <br> BUS 201 Business Law I . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units <br> BUS 295 Computer Systems in Business . . . . . . . . . . . . . . 4 units <br> BUS 352 Introduction to Insurance . . . . . . . . . . . . . . . . . . . . 1 unit <br> BUS 353 Property and Liability Insurance Principles. . . . . . 3 units <br> BUS 354 Personal Insurance . . . . . . . . . . . . . . . . . . . . . . . . . 3 units <br> BUS 355 Commercial Insurance . . . . . . . . . . . . . . . . . . . . . 3 units <br> BUS 356 Code and Ethics . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 unit <br> BUS 401 Business Communications . . . . . . . . . . . . . . . . . . . 3 units <br> COOP 641 Cooperative Work Experience Education. . . . . . . 1 unit <br> BUSW 415 Spreadsheet I Using Excel for Windows. . . . . . . 1.5 units <br> BUSW 416 Spreadsheet II Using Excel for Windows . . . . . . 1.5 units <br> CA Business: Insurance Property and Casualty <br> 32 semester units <br> Complete major requirements listed under Associate in Arts - Major in Business Insurance - Property and Casualty. A grade of "C" or higher is required for each course applied to the certificate.

## CS Insurance: Property and Casualty

## 12 semester units

A grade of "C" or higher is required for each course applied to the certificate.
BUS 352 Introduction to Insurance . . . . . . . . . . . . . . . . . . . . 1 unit
BUS 353 Property and Liability Insurance Principles. . . . . . 3 units
BUS 354 Personal Insurance . . . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 355 Commercial Insurance. . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 356 Code and Ethics . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 unit
COOP 641 Cooperative Work Experience Education . . . . . . . 1 unit

## CA Business: Merchandising-General

 21 semester unitsA grade of " $C$ " or higher is required for each course applied to the certificate.
BUS 100 Contemporary American Business . . . . . . . . . . . 3 units
BUS 101 Human Relations I . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 115 Business Mathematics . . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 180 Marketing. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
COOP 641 Cooperative Work Experience Education . . . . . . . 6 units
Plus, select 3 units from any of the Business Management courses.

## AA Major in Business Merchandising - Management

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 24-25 semester units

A grade of " C " or higher is required for each course applied to the major.
BUS 100 Contemporary American Business . . . . . . . . . . 3 units
BUS 101 Human Relations I . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 115 Business Mathematics . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 170 Salesmanship Fundamentals . . . . . . . . . . . . . . . . 3 units
BUS 180 Marketing. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
COOP 641 Cooperative Work Experience Education . . . . . . . 6 units
ACTG 100 Accounting Procedures. . . . . . . . . . . . 3 units . . OR
ACTG 121 Financial Accounting . . . . . . . . . . . . . . . . . . . . . . 4 units

## CA Business: <br> Merchandising - Management 24-25 semester units

Complete major requirements listed under Associate in Arts - Major in Business Merchandising (Management). A grade of "C" or higher is required for each course applied to the certificate.

## AA Major in Business Information Processing Option 1: Microcomputer/ Office Assistant

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 23-24.5 semester units

A grade of " C " or higher is required for each course applied to the major.
BUS 101 Human Relations I.................................. . 3 units
BUS 115 Business Mathematics............................... 3 units
BUS 315 Keyboarding I........................... . . 3 units. . OR
BUS 317 Micro/Keyboarding: Skillbuilding. . . . . . . . . . . . . . 1.5 units
BUS 326 Electronic Filing and Records Management...... 1.5 units
BUS 401 Business Communication. . . . . . . . . . . . . . . . . . . 3 units
BUSW 105 Introduction to Microcomputers ............... 1.5 units
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . . . . . . 1.5 units
BUSW 214 Word Processing I Using WORD for Windows. . 1.5 units

BUSW 215 Word Processing II Using WORD for Windows . 1.5 units
BUSW 383 Business Presentations Using
Power Point for Windows 1.5 units

BUSW 415 Spreadsheet I Using Excel for Windows. . . . . . . 1.5 units BUSW 530 Introduction to Internet
.1 .5 units
CRER 127 Career Choices: Job Search 0.5 unit

## CA Business Information <br> Processing Option 1: Microcomputer/Office Assistant <br> 23-24.5 semester units

Complete major requirements listed under Associate in Arts - Major in Business: Business Information Processing Option 1 Microcomputer/ Office Assistant. A grade of "C" or higher is required for each course applied to the certificate.

## AA Major in Business Information Processing Option 2: Microcomputer/ Data Base and Spreadsheet Functions

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{2 4}$ semester units

A grade of " C " or higher is required for each course applied to the major.
ACTG 100 Accounting Procedures.
.3 units
ACTG 144 Quick Books: Set-up and Service Business .... 1.5 units
ACTG 145 Quick Books: Payroll and Merchandising. ...... 1.5 units
BUS 100 Contemporary American Business .............. 3 units
BUS 115 Business Mathematics . . . . . . . . . . . . . . . . . . . . . . 3 units
BUSW 105 Introduction to Microcomputers .............. . 1.5 units
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . . . . . . 1.5 units
BUSW 214 Word Processing Using
WORD for Windows . . . . . . . . . . . . . . . . . . . . . . 1.5 units
BUSW 415 Spreadsheet I Using Excel for Windows. . . . . . . 1.5 units
BUSW 416 Spreadsheet II Using Excel for Windows . . . . . . 1.5 units
BUSW 464 Database Management Fundamentals Using Access for Windows
.3 units
BUSW 530 Introduction to the Internet
1.5 units

## CA Business Information Processing Option 2: Microcomputer/Data Base and Spreadsheet Functions

24 semester units
Complete major requirements listed under Associate in Arts - Major in Business: Business Information Processing Option 2 Microcomputer/Data Base and Spreadsheet Functions. A grade of "C" or higher is required for each course applied to the certificate.

## CS Office Assistant I <br> 8-9.5 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.
BUS 317 Micro/Keyboarding: Skillbuilding ................ 1.5 units
BUS 316 Keyboarding II ........................ . 3 units . . OR
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . . . . . . . 1.5 units
BUSW 214 Word Processing Using WORD for Windows . 1.5 units
BUSW 415 Spreadsheet I Using EXCEL for Windows....... 1.5 units
BUSW 530 Introduction to the Internet. . . . . . . . . . . . . . . . 1.5 units
CRER 127 Career Choices: Job Search . . . . . . . . . . . . . . . . . . 0.5 unit

## cs Office Assistant II

## 11 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.
BUS 317 Micro/Keyboarding: Skill building . . . . . . . . . . . . . 1.5 units
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . . . . 1.5 units

BUSW 214 | Word Processing I Using |
| :--- |
| WORD for Windows . . . . . . . . . . . . . . . . . . . . . 1.5 units |

BUSW 215 Word Processing II Using
WORD for Windows . . . . . . . . . . . . . . . . . . . . 1.5 units

## CAREER AND LIFE PLANNING

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## CS Certificates of Specialization <br> Leadership for Service. 6 units <br> College Peer Advisor . 6 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for Psychology with a Career Planning emphasis for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## CS Leadership for Service

6 semester units
A grade of " $C$ " or higher is required for each course applied to the certificate.

Select 3 units from the following courses:

| SPCH 100 Public Speaking | its |
| :---: | :---: |
| SPCH 120 Interpersonal Communications | 3 units |
| SPCH 140 Small Group Communication. | . 3 units |
| SPCH 150 Intercultural Communication. | 3 units |
| Select 3 units from the following courses: |  |
| SOCI 100 Introduction to Sociology | .3 units |
| SOCI 105 Social Problems. | . 3 units |
| SOCI 141 Race and Ethnic Relations | . 3 units |
| SOCI 200 Urban Sociology. | . 3 units |
| SOCI 300 Social Psychology | . 3 units |
| PSYC 100 General Psychology | . 3 units |
| YC 300 Social Psychology |  |

## CS College Peer Advisor <br> 6 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.
Select 3 units from the following courses:
CRER 120 College and Career Success $\qquad$ OR
CRER 121 Planning for Sudent Success . . . . . . . . . . . . . . . . 1 unit AND
CRER 122 Strategies for Achieving Education Success . . . . 1 unit AND
CRER 123 Career Exploration for Sudent Success1 unit
Plus:
CRER 104 Transfer Essentials and Planning. .............. . 0.5 unit
CRER 107 Introduction to Choosing a College Major ...... 0.5 unit
CRER 108 Achieving an Associate Degree and/or Vocational Certificate ................... . o. 5 unit

## CHEMISTRY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AS Associate in Science Degree <br> Chemistry <br> 60 units

## Recommended high school preparation:

Coursework in Chemistry, Biology, Physics, Mathematics

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AS Major in Chemistry

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 24-25 semester units

A grade of "C" or higher is required for each course applied to the major.
CHEM 210 General Chemistry I. . . . . . . . . . . . . . . . . . . . . . . 5 units
CHEM 220 General Chemistry II . . . . . . . . . . . . . . . . . . . . . . 5 units
CHEM 231 Organic Chemistry I . . . . . . . . . . . . . . . . . . . . . . . 5 units
CHEM 232 Organic Chemistry II ............................. . . 5 units
PHYS 210/211 General Physics I /
Calculus Supplement. . . . . . . . . . 5 units. . OR
PHYS 250 Physics with Calculus ............................ 4 units

## CHINESE

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California Independent Colleges and Universities

## CS Certificates of Specialization

Chinese . 12 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## CS Chinese

## 12 semester units

A grade of "C" or higher is required for each course applied to the certificate.

Select 12 units from the following courses:
CHIN 111 Elementary Chinese I . . . . . . . . . . . . . . . . . . . . . . 3 units
CHIN 112 Elementary Chinese II . . . . . . . . . . . . . . . . . . . . . 3 units
CHIN 121 Advanced Elementary Chinese I . . . . . . . . . . . . . . 3 units
CHIN 122 Advanced Elementary Chinese II . . . . . . . . . . . . . 3 units
CHIN 131 Intermediate Chinese I. . . . . . . . . . . . . . . . . . . . . . 3 units
CHIN 132 Intermediate Chinese II. . . . . . . . . . . . . . . . . . . . . 3 units
CHIN 134 Basic Chinese Writing Skills Online . . . . . . . . . . 3 units
CHIN 140 Advanced Intermediate Chinese . . . . . . . . . . . . . 3 units
CHIN 201 Chinese Character Writing for Beginners . . . . . . 1 unit
CHIN 211 Colloquial Mandarin Chinese I, Elementary . . . . . . 3 units
CHIN 212 Colloquial Mandarin Chinese II, Elementary. . . . . 3 units
In special circumstances, the Dean of Language Arts may approve the limited use of other courses in the same language (such as those numbered 680 or taken at Skyline or Cañada Colleges). In rare circumstances, the Dean may approve using a course in another discipline if its content is closely related to the language studied.

## COMPUTER AND INFORMATION SCIENCE

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AS Associate in Science Degree

Computer and Information Science. . . . . . . . . . 60 units
Computer and Network Forensics . . . . . . . . . 60 units
Computer Science Applications
and Development . . . . . . . . . . . . . . . . . . 60 units
Computer Support Specialist
Option 1 Network Support . . . . . . . . . . . . . . . 60 units
Computer Support Specialist
Option 2 PC Hardware and System Support. . . . . 60 units

## CA Certificate of Achievement

Computer and Network Forensics 31.5 units

Computer Science Applications and Development 30 units

## Computer Support Specialist

Option 1 Network Support
28.5 units

Computer Support Specialist
Option 2 PC Hardware and System Support. . . . . 31 units

## CS Certificates of Specialization

| C++ Programming | 8 units |
| :---: | :---: |
| CIS Network Security Specialist | 7.5 units |
| Computer Forensics. | 13.5 units |
| Internet Programming | 16 units |
| Java Programming . | 8 units |

## Recommended high school preparation:

Coursework in Mathematics, Computer Programming, English, Business, Electronics.

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for Computer and Information Science for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AS Major in Computer and Information Science

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{3 1}$ semester units

A grade of " C " or higher is required for each course applied to the major.
CIS 255 (CS1) Programming Methods: Java OR

CIS 278 (CS2) Programming Methods: C++. . . . . . . . . . . . . 4 units
CIS 256 (CS2) Data Structures: Java OR
CIS 279 (CS2) Data Structures: C++ . . . . . . . . . . . . . . . . . . . 4 units
MATH 251 Calculus with Analytic Geometry I . . . . . . . . . . . 5 units
MATH 252 Calculus with Analytic Geometry II . . . . . . . . . . 5 units
ENGL 100 Composition and Reading . . . . . . . . . . . . . . . . . . 3 units
Plus, select 4 or more units from CIS courses numbered 110 or higher Plus, select 6 or more units from MATH 253, 268, 270, 275; PHYS 250.

## AS Major in Computer and Network Forensics

Complete General Education and other requirements listed for the Associate degree and


## CA Computer and Network Forensics

## 31.5 semester units

Complete major requirements listed under Associate in Science Major in Computer and Network Forensics. A grade of "C" or higher is required for each course applied to the certificate.

## AS Major in Computer Science Applications and Development

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{3 0}$ semester units

A grade of " C " or higher is required for each course applied to the major.
CIS 110 Introduction to Computer
and Information Science. . . . . . . . . . . . . . . . . . . . . . 3 units
CIS 151 Networks and Digital Communications . . . . . . . . . 3 units
CIS 254 Introduction to Object-Oriented Program Design

4 units
CIS 255 (CS1) Programming Methods: Java . . . . . . . . . . . . . OR
CIS 278 (CS2) Programming Methods: C++. . . . . . . . . . . . . 4 units
CIS 256 (CS2) Data Structures: Java . . . . . . . . . . . . . . . . . . . OR
CIS 279 (CS2) Data Structures: C++ . . . . . . . . . . . . . . . . . . . 4 units
Plus, select 8 units from the following courses:
CIS 278 (CS2) Programming Methods: C++. . . . . . . . . . . 4 units (if not used above)
CIS 255 (CS1) Programming Methods: Java . . . . . . . . . . . . . 4 units (if not used above)
CIS 256 (CS2) Data Structures: Java . . . . . . . . . . . . . . . . . . 4 units (if not used above)
CIS 279 (CS2) Data Structures: C++ . . . . . . . . . . . . . . . . . . 4 units (if not used above)
CIS 312 UNIX Operating Systems I. .1 unit
CIS 313 UNIX Operating Systems II . . . . . . . . . . . . . . . . . . . . . 1 unit
CIS 362 Enterprise Database Management . . . . . . . . . . . . . 4 units
CIS 391-398 Visual Studio.NET . 2 units each

Plus, select 4 units from the following courses
CIS 377 Internet Programming: JavaScript/HTML . . . . . . . . 2 units
CIS 379 Internet Programming: XML . . . . . . . . . . . . . . . . . . 3 units
CIS 380 Internet Programming: PHP . . . . . . . . . . . . . . . . . 3 units
CIS 390 Internet Programming: Perl. . . . . . . . . . . . . . . . . . . 2 units
or other Internet programming courses.

## CA Computer Science Applications and Development zo semester units

Complete major requirements listed under Associate in Science Major in Computer Science Applications and Development. A grade of "C" or higher is required for each course applied to the certificate.

## AS Major in Computer Support Specialist Option I: Network Support

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{2 8 . 5}$ semester units

A grade of " C " or higher is required for each course applied to the major.
CIS 110 Introduction to Computer $\quad$ and Information Science. . . . . . . . . . . . . . . . . . . . . 3 units

CIS 151 Networks and Digital Communications . . . . . . . . . 3 units
CIS 125 Visual Basic I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OR
CIS 254 Introduction to
Object-Oriented Program Design . . . . . . . . . . . . . 4 units
ELEC 110 Introduction to Fundamentals of Electronics. . . . . . . . . . . . . . . . . 3 units

ELEC 215 Introduction to PC Hardware. . . . . . . . . . . . . . . . 3 units
CIS 312 UNIX Operating Systems I. . . . . . . . . . . . . . . . . . . . . 1 unit
CIS 313 UNIX Operating Systems II . . . . . . . . . . . . . . . . . . . . . 1 unit
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . . . . . . . 1.5 units
Plus, select 9 units from the following courses:
CIS 479 Network Security Fundamentals. . . . . . . . . . . . . . 3 units
CIS 489 Computer Forensics . . . . . . . . . . . . . . . . . . . . . . . . 3 units
CIS 490 Computer Forensics:
Network Analysis and Defense $\qquad$
CIS 491 Computer Forensics: Search and Seizure 3 units

## CA Computer Support Specialist Option I: Network Support

27.5-28.5 semester units

Complete major requirements listed under Associate in Science Major in Computer Support Specialist Option I Network Support. A grade of " $C$ " or higher is required for each course applied to the certificate.

## AS Major in Computer Support Specialist Option 2: PC Hardware and System Support

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 31 semester units

A grade of " C " or higher is required for each course applied to the major.
CIS 110 Introduction to Computer
and Information Science. . . . . . . . . . . . . . . . . . . . . 3 units

CIS 151 Networks and Digital Communications . . . . . . . . . . 3 units
CIS 125 Visual Basic I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OR
CIS 254 Introduction to Object-Oriented
Program Design
4 units

ELEC 110 Introduction to Fundamentals
of Electronics
3 units

ELEC 215 Introduction to PC Hardware. . . . . . . . . . . . . . . . 3 units
ELEC 216 PC Troubleshooting and System Maintenance .3 units

Plus, select 3 units from the following courses:
CIS 312 UNIX Operating Systems I, . 1 unit

CIS 313 UNIX Operating Systems II . . . . . . . . . . . . . . . . . . . . 1 unit
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . . . . . . . 1.5 units
BUSW 115 Windows Fundamentals II . . . . . . . . . . . . . . . . . 1.5 units
Plus, select 9 units from the following courses:
ELEC 131 Copper-Based Network
Cabling Fundamentals . . . . . . . . . . . . . . . . . . . . . 4.5 units

AND
ELEC 133 Fiber Optic Network
Cabling Fundamentals . . . . . . . . . . . . . . . . . . . . . . 2 units
ELEC 231 Basic Applied Electronic Mathematics . . . . . . . . . 2 units AND

ELEC 232 Advanced Electronics Mathematics . . . . . . . . . . . 1 unit
ELEC 201 D.C. Electronics 3 units

AND
ELEC 202 A.C. Electronics. . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ELEC 262 Digital Electronics . . . . . . . . . . . . . . . . . . . . . . . . . 4 units

## CA Computer Support Specialist Option 2: PC Hardware and System Support

 31 semester unitsComplete major requirements listed under Associate in Science Major in Computer Support Specialist Option 2 PC Hardware and System Support. A grade of "C" or higher is required for each course applied to the certificate.

## CS C++ Programming

## 8 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.
CIS 278 (CSI) Programming Methods: C++.
4 units
CIS 279 (CS2) Data Structures: C++......................... . . 4 units

## CS CIS Network Security Specialist

## 7.5 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.

$$
\begin{aligned}
& \text { CIS } 479 \text { Network Security Fundamentals. . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { CIS } 488 \text { Firewalls and Network Security . . . . . . . . . . . . . . . } 1.5 \text { units } \\
& \text { CIS } 489 \text { Computer Forensics . . . . . . . . . . . . . . . . . . . . . . } 3 \text { units }
\end{aligned}
$$

## CS Computer Forensics

## 13.5 semester units

A grade of "C" or higher is required for each course applied to the certificate.

$$
\begin{aligned}
& \text { CIS } 479 \text { Network Security Fundamentals. . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { CIS } 488 \text { Firewalls and Network Security . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { CIS } 489 \text { Computer Forensics } \\
& \text { CIS } 490 \text { Computer Forensics: } \\
& \text { Network Analysis and Defense . . . . . . . . . . } 3 \text { units }
\end{aligned}
$$

## CS Internet Programming

## 16 semester units

A grade of "C" or higher is required for each course applied to the certificate.
CIS 362 Enterprise Database Management. ..... OR
CIS 363 Enterprise Database Management with MySQL. ..... OR
CIS 364 Enterprise Data Warehousing. ..... 4 units
CIS 377Internet Programming: JavaScript/HTML ..... 2 units
CIS 379 Internet Programming: XML ..... 3 units
CIS 380 Internet Programming PHP ..... 3 units
Plus, select 4 units from the following courses:
CIS 112 Internet Programming: Ajax. ..... 2 units
CIS 113 Internet Programming: Ruby ..... 4 units
CIS 390 Internet Programming: Perl ..... 2 units

## CS Java Programming

## 8 semester units

A grade of "C" or higher is required for each course applied to the certificate.
CIS 256 (CS2) Data Structures: Java . . . . . . . . . . . . . . . . . . . 4 units

## COSMETOLOGY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## AA Associate in Arts Degree

Cosmetology
57 units

## CA Certificate of Achievement

Cosmetology..................................... . 57 units

## Recommended high school preparation:

Coursework in Art, Business Mathematics, Accounting, Psychology and Interpersonal Communication.

State Law requires completion of the tenth grade or equivalent. Student must be 17 years of age to be eligible for the State Examination. High School students may enroll in cosmetology training at College of San Mateo in their junior or senior year. Contact the Cosmetology Department for more information.

## Admission Requirements:

Student must complete the four items below.

1. The CSM Admissions Application
2. The Cosmetology Program Application (Contact the Department for an application (650) 574-6363
3. CSM English Placement Test
4. CSM Matriculation requirements

## Admissions priority is given to San Mateo Community College

 District residents.When space is available, students with previous training may be eligible for admission to the Advanced Standing program in Cosmetology within a one-year period of withdrawal from a pervious school and upon submission of State Board records to the Cosmetology Department.

No student who has completed more than 600 hours of approved training in another school will be admitted to the Advanced Standing program.

## AA Major in Cosmetology

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 57 semester units

A grade of " C " or higher is required for each course applied to the major. COSM 712 Fundamentals of Cosmetology I . . . . . . . . . . . . . 10 units COSM 722 Fundamentals of Cosmetology II. . . . . . . . . . . 10 units COSM 732 Advanced Cosmetology I ......... . 18.5-23.5 units

COSM 742 Advanced Cosmetology II ........ 18.5-23.5 units
Upon satisfactory completion of 1600 total hours with grades of "C" or higher, students are qualified to take the California State Board of Cosmetology examination for licensure as a Cosmetologist.

## CA Cosmetology

57 semester units required
Complete major requirements listed under Associate in Arts - Major in Cosmetology. A grade of "C" or higher is required for each course applied to the certificate.

## Special Course in Cosmetology

## COSM 750 - Brush-Up

Refresher course to upgrade skills for students who hold an out-ofstate license that require supplemental training to qualify for the California State Bureau of Cosmetology licensing exam.

## DENTAL ASSISTING

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## AS Associate in Science Degree

Dental Assisting.
60 units

## CA Certificate of Achievement

Dental Assisting. . . . . . . . . . . . . . . . . . . . . . . . . . . 31-35.5 units

## Recommended high school preparation:

Coursework in Science, English, Psychology, and courses in Art that develop manual dexterity.

## Requirements:

Students are required to take the CSM English Placement Test prior to enrolling in the program. Any student who wants to become licensed by the State of California as a Registered Dental Assistant (RDA) must have a high school diploma or equivalent to qualify for the licensing exam.

## AS Major in Dental Assisting

Complete General Education and other requirements listed for the Associate of Science degree and

## Major requirements: $\mathbf{3 5}$ semester units

A grade of " C " or higher is required for each course applied to the major.
DENT 716 Dental Office Procedures (Fall) . . . . . . . . . . . . . . 2.5 units
DENT 721 Dental Materials I (Fall). . . . . . . . . . . . . . . . . . . . . 3 units
DENT 722 Dental Materials II (Spring).................... . . 2 units
DENT 731 Dental Science I (Fall) . . . . . . . . . . . . . . . . . . . . . . 3 units
DENT 732 Dental Science II (Spring) . . . . . . . . . . . . . . . . . . 3 units
DENT 735 Communication in Allied Health (Fall)......... 1 unit
DENT 740 Chair side I (Fall) ................................. 3 units
DENT 742 Chair side II (Spring) ............................. 3 units
DENT 743 Coronal Polish (Spring). . . . . . . . . . . . . . . . . . . . . 0.5 unit
DENT 749 Pre-Clinical Science (Fall). . . . . . . . . . . . . . . . . . . . 0.5 unit
DENT 751 Dental Clinic (Fall). . . . . . . . . . . . . . . . . . . . . . . . 1.5 units
DENT 763 Dental Radiology (Fall and Spring) ........... 2 units
DENT 647 Dental Assisting Clinical Internship (Spring)
.4 units
SPCH 120 Interpersonal Communication 3 units

Select 3 units from the following courses:
PSYC 108 Psychology in Practice OR
PSYC 100 General Psychology . . . . . . . . . . . . . . . . . . . . . . . 3 units
SOCI 100 Introduction to Sociology . . . . . . . . . . . . . . . . . . . 3 units

## CA Dental Assisting

## 31.5-32 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.

| DENT 716 Dental Office Procedures (Fall). <br> DENT 721 Dental Materials I (Fall) | .3 units |
| :---: | :---: |
| DENT 722 Dental Materials II (Spring) | . 2 units |
| DENT 731 Dental Science I (Fall) | nits |
| DENT 732 Dental Science II (Spring) | . 3 units |
| DENT 735 Communication in Allied Health (Fall) | 1 unit |
| DENT 740 Chair side I (Fall) | 3 units |
| DENT 742 Chair side II (Spring) | . 3 units |
| DENT 743 Coronal Polish (Spring). | 0.5 unit |
| DENT 744 Dental Sealants (Spring) | 0.5 unit |
| DENT 749 Pre-Clinical Science (Fall). | . 0.5 unit |
| DENT 751 Dental Clinic (Fall) | units |
| DENT 763 Dental Radiology (Fall and Spring) | . 2 units |
| DENT 647 Dental Assisting Clinical |  |
| Internship (Spring) . . | 4 |

SPCH 860 or 100 or 120 Communication in
the Workplace .1 unit

Select 1-1.5 units from the following courses:
ENGL 865 Projects in Workplace Writing $\qquad$
READ 812 Individualized Reading Improvement . . . . . . . . . o.5-3 units

## DRAFTING TECHNOLOGY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program <br> 60-70 transferable units <br> California State University <br> University of California <br> Independent Colleges and Universities

## AS Associate in Science Degree <br> CAD/Drafting Technology 60 units

## CA Certificates of Achievement

CAD/Drafting Technology 21 units

## CS Certificates of Specialization

Computer-Aided Design
16-17 units

## Recommended high school preparation:

Coursework in Mechanical Drawing, Art, Computers, Mathematics

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. Consider university majors that may be listed as Industrial Technology, Construction Management, Construction Engineering Technology. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AS Major in CAD/Drafting Technology

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: 21 semester units

A grade of "C" or higher is required for each course applied to the major. DRAF 120 Principles of Technical Drawing. . . . . . . . . . . . . 3 units DRAF 121 Computer-Aided Drafting I . . . . . . . . . . . . . . . . . . 3 units DRAF 122 Computer-Aided Drafting II . . . . . . . . . . . . . . . . . 3 units DRAF 123 Computer-Aided Drafting III. . . . . . . . . . . . . . . . . . 3 units DRAF 124 Computer-Aided Drafting IV . . . . . . . . . . . . . . . 3 units DRAF 130 Mechanical Design and Computer Aided Drafting (CAD) . . . . . . . . . . . . . 3 units

Plus, select 3 units from any course in:
ARCH (Architecture)
BUSW (Business Applications Windows Platform)
ELEC (Electronics)
MANU (Machine Tool Technology)
MULT (Multimedia)
WELD (Welding)

## CA CAD/Drafting Technology

## 21 semester units

Complete major requirements listed under Associate in Science - Major in Drafting. A grade of "C" or higher is required in each course applied to the certificate.

## CS Computer-Aided Design

## 16-17 semester units

A grade of " $C$ " or higher is required in each course applied to the certificate.

DRAF 120 Principles of Technical Drawing . . . . . . . . . . . . . . . 3 units
DRAF 121 Computer-Aided Drafting I . . . . . . . . . . . . . . . . . . . 3 units
DRAF 122 Computer-Aided Drafting II. . . . . . . . . . . . . . . . . . . 3 units
DRAF 130 Mechanical Design and
Computer Aided Drafting (CAD). . . . . . . . . . . . . . 3 units
CRER 123 Career Exploration and Student Success . . . . . . . . 1 unit
ENGL 848 Introduction to
Composition and Writing. . . . . . . . . . . . 4 units . . OR
ENGL 100 Composition and Reading . . . . . . . . . . . . . . . . . . 3 units

## ECONOMICS

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program <br> 60-70 transferable units

California State University
University of California
Independent Colleges and Universities

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## ELECTRICAL TECHNOLOGY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## CS Certificate of Specialization

Electrical Technology: Inside Wireman . . . . . . . . 15 units

## Requirements

The courses required for this degree and certificate are administered by College of San Mateo in conjunction with the Joint Apprenticeship Training Committee. Registration is limited to those students fulfilling the related instructional requirements of the State of California as an indentured apprentice. For information, contact the San Mateo County JATC for Electrical Construction Industry of the Technology Division.

Students must be at least 18 years of age and have a high school diploma or G.E.D. High school mathematics courses or at least one semester of college-level algebra is also required for this course of study.

For course descriptions see 'Apprenticeship Training'.

## CS Electrical Technology: Inside Wireman

Complete General Education and other requirements listed for the Associate degree and

## 15 semester units

A grade of " $C$ " or higher is required in each course applied to the certificate.
ELEL 731 Electrical Apprenticeship I. . . . . . . . . . . . . . . . . . . . 1.5 units
ELEL 732 Electrical Apprenticeship II . . . . . . . . . . . . . . . . . . . 1.5 units
ELEL 733 Electrical Apprenticeship III . . . . . . . . . . . . . . . . . . 1.5 units
ELEL 734 electrical Apprenticeship IV . . . . . . . . . . . . . . . . . 1.5 units
ELEL 735 Electrical Apprenticeship V . . . . . . . . . . . . . . . . . . . 1.5 units
ELEL 736 Electrical Apprenticeship VI . . . . . . . . . . . . . . . . . . 1.5 units
ELEL 737 Electrical Apprenticeship VII. . . . . . . . . . . . . . . . . . 1.5 units
ELEL 738 Electrical Apprenticeship VIII . . . . . . . . . . . . . . . . . 1.5 units
ELEL 739 Electrical Apprenticeship IX . . . . . . . . . . . . . . . . . 1.5 units
ELEL 740 Electrical Apprenticeship X . . . . . . . . . . . . . . . . . 1.5 units

## ELECTRONICS TECHNOLOGY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## AS Associate in Science Degree

Electronics Technology
Option 1: Wireless Communications Systems . . . 60 units
Option 2: Industrial Electronics . . . . . . . . . . 60 units
Option 3: Microcomputer Systems . . . . . . . 60 units
Option 4: General Electronics. . . . . . . . . . . . 60 units
Electronics Technology Advanced Placement. . . 60 units

## CA Certificate of Achievement

Electronics Technology
Option 1: Wireless Communications Systems . . . 38 units
Option 2: Industrial Electronics . . . . . . . . . . 37 units
Option 3: Microcomputer Systems . . . . . . . . 40 units
Option 4: General Electronics. . . . . . . . . . . . 44 units
Electronics Technology Advanced Placement. . . 22 units

## CS Certificates of Specialization

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Network Cabling Specialist 10.5 units
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Electronics Assembly 7 units

## Recommended high school preparation:

Coursework in Electronics, Science, Mathematics, English

## AS Major in Electronics Technology Option 1: Wireless Communications Systems

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: 38 semester units

A grade of " C " or higher is required for each course applied to the major.
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . . . . . . 1.5 units
BUSW 530 Introduction to Internet . . . . . . . . . . . . . . . . . . . 1.5 units
ELEC 201 D.C. Electronics . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ELEC 202 A.C. Electronics. . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ELEC 215 Introduction to PC Hardware. . . . . . . . . . . . . . . . . 3 units
ELEC 231 Basic Applied Electronic Mathematics . . . . . . . . . 2 units
ELEC 232 Advanced Electronics Mathematics . . . . . . . . . . . 1 unit
ELEC 262 Digital Electronics . . . . . . . . . . . . . . . . . . . . . . . 4 units
ELEC 275 Active Devices. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4 units
ELEC 282 Introduction to Soldering Rework . . . . . . . . . . . . 2 units
ELEC 290 Introduction to Communications Systems . . . . . 3 units
ELEC 320 Linear Circuit Analysis. . . . . . . . . . . . . . . . . . . . . 4 units
ELEC 332 Prototype Project Development . . . . . . . . . . . . . . 2 units
ELEC 362 Radio-Frequency Communication . . . . . . . . . . . . 4 units

## CA Electronics Technology Option 1: Wireless Communications Systems 38 semester units

Complete major requirements listed under Associate in Science Major in Electronics Technology Option 1: Wireless Communications Systems. A grade of "C" or higher is required for each course applied to the certificate.

## AS Major in Electronics Technology Option 2: Industrial Electronics

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: 37 semester units

A grade of "C" or higher is required in each course applied to the major.
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . . . . . . . 1.5 units
BUSW 530 Introduction to Internet . . . . . . . . . . . . . . . . . . 1.5 units
ELEC 201 D.C. Electronics . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ELEC 202 A.C. Electronics. . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ELEC 215 Introduction to PC Hardware. . . . . . . . . . . . . . . . 3 units
ELEC 231 Basic Applied Electronic Mathematics . . . . . . . . 2 units
ELEC 232 Advanced Electronics Mathematics . . . . . . . . . . . 1 unit
ELEC 262 Digital Electronics . . . . . . . . . . . . . . . . . . . . . . . . 4 units
ELEC 275 Active Devices. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4 units
ELEC 282 Introduction to Soldering Rework . . . . . . . . . . . . 2 units
ELEC 290 Introduction to Communications Systems . . . . 3 units
ELEC 320 Linear Circuit Analysis. . . . . . . . . . . . . . . . . . . . . . 4 units
ELEC 332 Prototype Project Development . . . . . . . . . . . . . . 2 units
Plus, select 3 courses from the following:
ELEC 421 Fundamentals of Electric Motor Control . . . . . . . 4 units
ELEC 422 Introduction to Programmable Logic Controllers. 4 units
ELEC 424 Hydraulic, Pneumatic and Vacuum Power Systems. 4 units
ELEC 441 Sensors and Data Transmission Systems . . . . . . . 4 units
ELEC 442 Electronic and Pneumatic Process Control Systems 4 units
ELEC 444 Automated Process Control System Design . . . . 4 units

## CA Electronics Technology Option 2: Industrial Electronics

37 semester units

Complete major requirements listed under Associate in Science Major in Electronics Technology Option 2: Industrial Electronics. A grade of "C" or higher is required for each course applied to the certificate.

## AS Major in Electronics Technology Option 3: Microcomputer Systems

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: 40 semester units

A grade of "C" or higher is required in each course applied to the major.
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . . . . . . . 1.5 units
BUSW 530 Introduction to Internet . . . . . . . . . . . . . . . . . . . 1.5 units
ELEC 201 D.C. Electronics . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ELEC 202 A.C. Electronics. . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ELEC 215 Introduction to PC Hardware. . . . . . . . . . . . . . . . . 3 units
ELEC 231 Basic Applied Electronic Mathematics . . . . . . . . . 2 units
ELEC 232 Advanced Electronics Mathematics . . . . . . . . . . . 1 unit
ELEC 262 Digital Electronics . . . . . . . . . . . . . . . . . . . . . . . 4 units
ELEC 275 Active Devices. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4 units
ELEC 282 Introduction to Soldering Rework . . . . . . . . . . . 2 units
ELEC 290 Introduction to Communications Systems . . . . . 3 units
ELEC 320 Linear Circuit Analysis. . . . . . . . . . . . . . . . . . . . . . 4 units
ELEC 332 Prototype Project Development . . . . . . . . . . . . . . 2 units
BUSW 127 Windows 2000 Installation and Support . . . . . . 3 units
ELEC 216 PC Troubleshooting and System Maintenance 3 units

## CA Electronics Technology Option 3: Microcomputer Systems

40 semester units
Complete major requirements listed under Associate in Science Major in Electronics Technology Option 3: Microcomputer Systems. A grade of "C" or higher is required for each course.

## AS Major in Electronics Technology Option 4: General Electronics

Complete General Education and other requirements listed for the Associate degree and

| Major Requirements: 44 semester units |  |
| :---: | :---: |
| A grade of "C" or higher is required in each course applied to the major. |  |
| BUSW 114 Windows Fundamentals I | 1.5 units |
| BUSW 530 Introduction to Internet | 1.5 units |
| ELEC 201 D.C. Electronics | 3 units |
| ELEC 202 A.C. Electronics | 3 units |
| ELEC 215 Introduction to PC Hardware | 3 units |
| ELEC 231 Basic Applied Electronic Mathematics | 2 units |
| ELEC 232 Advanced Electronics Mathematics | it |
| ELEC 262 Digital Electronics | 4 units |
| ELEC 275 Active Devices | 4 units |
| ELEC 282 Introduction to Soldering Rework | 2 units |
| ELEC 290 Introduction to Communications Systems | . 3 units |
| ELEC 310 Introduction to Microprocessors. | 3 units |
| ELEC 320 Linear Circuit Analys | 4 units |
| ELEC 332 Prototype Project Development | ts |
| ELEC 360 Microcomputer Interfacing. | 3 units |
| ELEC 370 Nonlinear Circuit Analysis | 4 units |

## CA Electronics Technology Option 4: General Electronics 44 semester units

Complete major requirements listed under Associate in Science Major in Electronics Technology Option 3: Microcomputer Systems. A grade of " $C$ " or higher is required for each course applied to the certificate.

## AS Major in Electronics Technology

Advanced Placement for students with an extensive background in electronics from the military, industrial on-the-job training, or other educational institutions. Prior background is evaluated by Electronics faculty. The course substitution process must be used for official evaluation of prior work in the area.

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: 22 semester units

A grade of " C " or higher is required for each course applied to the major.
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . . . . . . . 1.5 units
BUSW 530 Introduction to Internet . . . . . . . . . . . . . . . . . . . 1.5 units
ELEC 282 Introduction to Soldering Rework ............... 2 units
ELEC 290 Introduction to Communications Systems . . . . . 3 units
ELEC 332 Prototype Project Development . . . . . . . . . . . . . . 2 units
Plus additional courses selected from one of the options previous listed with approval of Electronics faculty. A minimum of 22 units must be completed.

## CA Electronics Technology Advanced Placement

## 22 semester units

Complete major requirements listed under Associate in Science Major in Electronics Technology Advanced Placement. A grade of "C" or higher is required for each course applied to the certificate.

## CS Network Cabling Specialist <br> 10.5 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.

```
ELEC 110 Introduction to Fundamentals of Electronics. . . . . }3\mathrm{ units
ELEC 131 Copper-Based Network
            Cabling Fundamentals
                4.5 units
CIS 110 Introduction to Computer
        and Information Science.
                        3 units
```


## CS Electronics Assembly <br> 7 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.

ELEC 110 Introduction to Fundamentals of Electronics. . . . . 3 units
ELEC 282 Introduction to Soldering Rework . . . . . . . . . . . . 2 units
ELEC 332 Prototype Project Development . . . . . . . . . . . . . . 2 units

## ENGINEERING

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

```
University Transfer Program
60-70 transferable units
California State University University of California Independent Colleges and Universities
```


## AS Associate in Science Degree



## Recommended high school preparation:

Coursework in Mathematics (four years), Physics (one year), Chemistry (one year), Mechanical Drawing (one year), Computer Information Science and English

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for Engineering for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AS Major in Engineering

Complete General Education and other requirements listed for the Associate degree and


## AS Major in Engineering Technology: Electronics

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: $\mathbf{3 7}$ semester units

A grade of "C" or higher is required for each course applied to the major.
ELEC 220 DC/AC Circuits . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4 units
ELEC 262 Digital Electronics ................................ . . . 4 units
ELEC 275 Active Devices. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4 units
ELEC 290 Introduction to Communications Systems . . . . . 3 units
ELEC 310 Introduction to Microprocessors. . . . . . . . . . . . . . 3 units
ELEC 320 Linear Circuit Analysis. . . . . . . . . . . . . . . . . . . . . . 4 units
ELEC 360 Microcomputer Interfacing. . . . . . . . . . . . . . . . . . 3 units
ELEC 370 Nonlinear Circuit Analysis. . . . . . . . . . . . . . . . . . 4 units
MATH 241 Applied Calculus I. . . . . . . . . . . . . . . . . . . . . . . . . . 5 units
MATH 242 Applied Calculus II.
3 units

## AS Major in Engineering Technology: General

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: $\mathbf{2 6}$ semester units

A grade of " C " or higher is required for each course applied to the major.


MATH 241 Applied Calculus I. . . . . . . . . . . . . . . . . . . . . . . . . 5 units
MATH 242 Applied Calculus II . . . . . . . . . . . . . . . . . . . . . . . 3 units
PHYS 210 General Physics I . . . . . . . . . . . . . . . . . . . . . . . . . 4 units
PHYS 220 General Physics II . . . . . . . . . . . . . . . . . . . . . . . . 4 units
Plus, select 6 units from an area of technology specialization.
Suggested Electives:
ACTG 100 Accounting Procedures. . . . . . . . . . . . . . . . . . . . 3 units
ENGR 100 Introduction to Engineering . . . . . . . . . . . . . . . 3 units
CIS 278 (CS1) Programming Methods: C++. . . . . . . . . . . . . 4 units

Or other technical courses

## ENGLISH

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree <br> English . 60 units

## Recommended high school preparation:

Coursework in English, Literature, Journalism

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in English

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 21-24 semester units

A grade of " C " or higher is required for each course applied to the major. Select 3 units from the following courses:

ENGL 110 Composition, Literature, and Critical Thinking . . . . . . . . . . . . . . . . . . . . . . 3 units
ENGL 135 Composition, Fiction, and Critical Thinking . . . . . . . . . . . . . . . . . . . . . . . 3 units
ENGL 165 Advanced Composition. . . . . . . . . . . . . . . . . . . . . 3 units
And complete 15 units in Group A or Group B below:
Group A-15 units
Literature courses in the 100 series, the 200 series, LIT 430
Group B-15 units
9-12 units from Literature courses in the 100 series, the 200 series, LIT 430

And select 3-6 units from Creative Writing classes:
ENGL 161 Creative Writing I . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ENGL 162 Creative Writing II . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ENGL 163 Creative Writing III . . . . . . . . . . . . . . . . . . . . . . . . 3 units

## ETHNIC STUDIES

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program

60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree

Ethnic Studies. 60 units

## Recommended high school preparation:

Coursework in History, Social Science, Psychology, Sociology, English

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Ethnic Studies

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: $\mathbf{1 8}$ semester units

A grade of " C " or higher is required for each course applied to the major.
ETHN 101 Introduction to Ethnic Studies I
3 units
ETHN 102 Introduction to Ethnic Studies II
3 units
Plus, select 12 units from the following courses:
ETHN 150 Social Dynamics of People of Color. . . . . . . . . . . 3 units
ETHN 151 Patterns of Prejudice and Racism I . . . . . . . . . . 3 units
ETHN 152 Patterns of Prejudice and Racism II. . . . . . . . . . . 3 units
ETHN 160 Psychology of People of Color. . . . . . . . . . . . . . . 3 units
ETHN 261 African-American Culture I. . . . . . . . . . . . . . . . . . 3 units
ETHN 262 African-American Culture II. . . . . . . . . . . . . . . . . 3 units
ETHN 288 African-American Cinema . . . . . . . . . . . . . . . . . 3 units
ETHN 300 Introduction to La Raza Studies . . . . . . . . . . . . 3 units
ETHN 350 Native American Way of Life. . . . . . . . . . . . . . . . 3 units
ETHN 351 The Primal Mind and Cultural Diversity . . . . . . 3 units
ETHN 360 The People and Cultures of Polynesia . . . . . . . 3 units
ETHN 440 Cultural Experience of
Asian-American Writers . . . . . . . . . . . . . . . . . . . 3 units
ETHN 585 Ethnicity in Cinema. . . . . . . . . . . . . . . . . . . . . . . 3 units

## FILM

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program

60-70 transferable units
California State University
University of California Independent Colleges and Universities

## AA Associate in Arts Degree <br> Film . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 60 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Film

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: 21 semester units

A grade of "C" or higher is required for each course applied to the major.
$\qquad$
FILM 120 Film History I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
FILM 121 Film History II . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
FILM 215 Film and New Digital Media .................... 3 units
Plus, select 9 units from the following courses:
FILM 110 American Cinema.................................. . . 3 units
FILM 153 Screenwriting . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
FILM 200 Film in Focus . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ENGL 161, 162, 163 Creative Writing I/II/III . . . . . . . . 3 units each
ETHN 288 African-American Cinema . . . . . . . . . . . . . . . . . 3 units
ETHN 585 Ethnicity in Cinema. . . . . . . . . . . . . . . . . . . . . . . 3 units
HUM 114 Film and Literature as Communication in the Modern Era
.3 units

## FIRE TECHNOLOGY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AS Associate in Science Degree

Fire Technology . 60 units

## CA Certificate of Achievement

Fire Technology.
30 units

## Recommended high school preparation:

Coursework in Mathematics, English, and use of microcomputers, including spreadsheet and word processing applications.

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for areas such as Fire Protection or Forestry and Land Management for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AS Major in Fire Technology

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: 30 semester units

A grade of "C" or higher is required for each course applied to the major.
FIRE 680MA (FT6) Firefighter Safety \& Survival. . . . . . . . . . 3 units
FIRE 715 ( FT 1 ) Fire Protection Organization. .............. 3 units
FIRE 720 (FT2) Fire Prevention Technology ............... 3 units
FIRE 730 (FT5) Fire Behavior and Combustion ........... 3 units
FIRE 740 ( $\mathrm{FT}_{4}$ ) Building Construction for Fire Protection ... 3 units
FIRE 745 (FT3) Fire Protection Systems and Equipment . . . . 3 units
Plus, select 12 units from the following courses:
FIRE 705 Fire Hydraulics . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
FIRE 714 Wildland Fire Control . . . . . . . . . . . . . . . . . . . . . . 3 units
FIRE 725 Fire Apparatus and Equipment . . . . . . . . . . . . . . . 3 units
FIRE 793 Firefighter I Academy . . . . . . . . . . . . . . . . . . . . . . . 12 units
FIRE 795 Emergency Medical Technician - Basic ......... 7 units
FIRE 800 Fire Service Entrance Test Prep ................. 3 units
FIRE 810 Firefighter Internship . . . . . . . . . . . . . . . . . . . . . . 3 units
Other FIRE courses may be used with permission from the Fire Technology Coordinator and with an official course substitution approval on file in the Admissions and Records Office.

## CA Fire Technology

 30 semester unitsComplete major requirements listed under Associate in Science Major in fire Technology. A grade of "C" or higher is required for each course applied to the certificate.

Plus, completion of the General Education English requirement as outlined in Section C (2) of the Associate in Arts/Science Degree Requirements.

## FA Firefighter I Academy

The Firefighter Academy is a State Board of Fire Services certified academy that, when combined with a specified experience component, leads to State certification as a Firefighter I.

## EMT Emergency Medical Technician

Completion of Fire Technology 795, a seven unit course, and passing the National Registry Test which is offered as part of the course, provides the student with a National Registry certificate as an EMT. This course is also required as a prerequisite for students who want to continue on with paramedic training.

## FRENCH

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree

French .60 units

## CS Certificate of Specialization

French 12 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in French

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: $\mathbf{1 8}$ semester units

A grade of " C " or higher is required for each course applied to the major.

## Select 18 units from the following:

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FREN 110 Elementary French. .5 units
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FREN 111 Elementary French I ..... 3 units
FREN 112 Elementary French II ..... 3 units
FREN 115 Beginning French I. ..... 3 units
FREN 116 Beginning French II ..... 3 units
FREN 117 Advanced Beginning French I ..... 3 units
FREN 118 Advanced Beginning French II ..... 3 units
FREN 120 Advanced Elementary French. ..... 5 units
FREN 121 Advanced Elementary French ..... 3 units
FREN 122 Advanced Elementary French II ..... 3 units
FREN 130 Intermediate French ..... 5 units
FREN 131 Intermediate French I ..... 3 units
FREN 132 Intermediate French II. ..... 3 units
FREN 140 Advanced Intermediate French ..... 3 units

With Language Arts Division approval, ART 103 and HIST 101 may be accepted as part of the 18 units.

## CS French

## 12 semester units

"Pass" or grade of "C" or higher is required for each course applied to the certificate.


In special circumstances, the Dean of Language Arts may approve the limited use of other courses in the same language (such as those numbered 680 or taken at Skyline or Cañada Colleges). In rare circumstances, the Dean may approve using a course in another discipline if its content is closely related to the language studied.

## GEOGRAPHY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## GEOLOGICAL SCIENCES

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## As Associate in Science Degree

Geological Science. . . . . . . . . . . . . . . . . 60 units

## Recommended high school preparation:

Coursework in Chemistry, Biology, Mathematics,

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AS Major in Geological Science

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: $\mathbf{2 1}$ semester units

A grade of " C " or higher is required for each course applied to the major.
CHEM 210 General Chemistry I. ............................ . . 5 units
CHEM 220 General Chemistry II . . . . . . . . . . . . . . . . . . . . . . 5 units
GEOL 210 General Geology ................................... . 4 units
OCEN 100/101 Oceanography and Lab. . . . . . . . . . . . . . . . . 4 units
PALN 110 General Paleontology. . . . . . . . . . . . . . . . . . . . . . 3 units

## GERMAN

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program

60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## GLOBAL STUDIES

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## CS Certificate of Specialization <br> Global Studies <br> .17 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## CS Global Studies

## 17 semester units.

A grade of "C" or higher is required for each course applied to the certificate.
BUS 125 International Business. . . . . . . . . . . . . . . . . . . . . . 3 units
PLSC 120 Area Studies . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
Plus, select 3 units from the following courses:
GEOG 110 Cultural Geography 3 units
GEOG 150 World Regional Geography 3 units
ECON 100 Principles of Macroeconomics 3 units
ECON 102 Principles of Microeconomics 3 units

Plus, 3 units from the following course:
SPCH 150 Intercultural Communication 3 units

Plus, select 3 units of any 100 level foreign language course
Plus, 2 units of any Cooperative Education class.

## GRAPHICS

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree <br> Graphics . 60 units

## CA Certificate of Achievement

Graphics 39 units

Recommended high school preparation:
Coursework in Art, Computers, English

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Graphics

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: 39 semester units

A grade of " C " or higher is required for each course applied to the major.

## GRA 115 Designing with Type I:

$$
\text { Essentials of Typographic Expression. . . . . . . . . . } 3 \text { units }
$$

GRA 116 Designing with Type II:
Delivering the Message Effectively . . . . . . . . . . . . 3 units
GRA 135 Graphic Design Foundation .4 units
GRA 150 Adobe Illustrator for Print and Web Design I. . . . . 3 units
GRA 151 Adobe Illustrator for Print and Web Design II .... 3 units
GRA 160 Adobe Photoshop for Print and Web Design I. . . . . 3 units
GRA 161 Adobe Photoshop for Print and Web Design II. . . . . 3 units
GRA 170 Adobe InDesign..................................... . . 3 units
GRA 235 Graphic Design: Theory and Application ....... 4 units
GRA 242 Image on Paper: The possibilities of Print . . . . . . 3 units
GRA 255 Digital Publishing ................................ . . . 3 units
GRA 260 Portfolio. .............................................. . . 1 unit
MULT 172 Web Design: Dreamweaver . . . . . . . . . . . . . . . . 3 units

## CA Graphics

39 semester units
Complete major requirements listed under Associate in Arts - Major in Graphics. A grade of " $C$ " or higher is required for each course applied to the certificate.

## HISTORY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program

60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## HORTICULTURE

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AS Associate in Science Degree

| Horticulture: Environmental Option 1: Landscape Constructional Design . | . 60 units |
| :---: | :---: |
| Horticulture: Environmental Option 2: Nursery Management . | 60 units |
| Horticulture: Environmental Option 3: Landscape Management. | . 60 units |
| Horticulture: Floristry | 60 |

## CA Certificate of Achievement

| Horticulture: Environmental Option 1: Landscape Constructional Design . | 21-25 units |
| :---: | :---: |
| Horticulture: Environmental Option 2: Nursery Management . | 21-25 units |
| Horticulture: Environmental Option 3: Landscape Management. | 21-25 units |
| Horticulture: Floristry . . | 21 units |

## Recommended high school preparation:

Coursework in Science, Biology, Art, Design

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for Business and Accounting for the California State University and the University of California systems. For independent or out-ofstate colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AS Major in Horticulture: Environmental Option 1: Landscape Construction/Design

Complete General Education and other requirements listed for the Associate degree and
Major Requirements: 21-25 semester units
A grade of " C " or higher is required in each course applied to the major.
HORT 311 Plant Materials I: Trees ..... OR
HORT 711 Landscape Trees ..... 3 units
HORT 312 Plant Materials II: Shrubs and Groundcovers. ..... OR
HORT 712 Landscape Shrubs, Groundcovers, and Vines ..... 3 units
HORT 315 Landscape Management. ..... 3 units
Plus select Group A or Group B below:
Group A:
HORT 327 Nursery Management ..... 3 units
Group B:
BOTH HORT 705 Soils and Plant Growing ..... 3 units
AND either
HORT 325 Interior Plantscape ..... 3 units
OR either
HORT 706 Plant Propagation ..... 3 units
OR either
HORT 742 Greenhouse Management ..... 3 units
Plus select one of the following courses:
BIOL 145 Plants, People, Environment ..... 3 units
BIOL 110 General Principles of Biology ..... 4 units
Plus, two courses from the following selections:
HORT 342 Landscape Construction3 units
HORT 350 Principles of Landscape Design ..... OR
HORT 709 Principles of Landscaping ..... 3 units
CA Horticulture: Environmental Option 1: Landscape Construction/Design
21-25 semester units

Complete major requirements listed under Associate in Science - Major in Horticulture: Environment Option 1. A grade of "C" or higher is required for each course applied to the certificate.

## AS Major in Horticulture: Environmental Option 2: Nursery Management

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: 21-25 semester units

A grade of "C" or higher is required in each course applied to the major.
HORT 311 Plant Materials I: Trees . . . . . . . . . . . . . . . . . . . . . OR
HORT 711 Landscape Trees. . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
HORT 312 Plant Materials II: Shrubs and Groundcovers. . . . . . . . . . . . . . . . . OR
HORT 712 Landscape Shrubs, Groundcovers, and Vines

3 units
HORT 315 Landscape Management. 3 units

Plus select Group A or Group B below

## Group A:

HORT 327 Nursery Management. . . . . . . . . . . . . . . . . . . . . 3 units
Group B:
BOTH HORT 705 Soils and Plant Growing. . . . . . . . . . . . . . . 3 units AND either
HORT 325 Interior Plantscape . . . . . . . . . . . . . . . . . . . . . . . 3 units OR either
HORT 706 Plant Propagation. . . . . . . . . . . . . . . . . . . . . . . . . 3 units OR either

HORT 742 Greenhouse Management. . . . . . . . . . . . . . . . . 3 units
Select one of the following courses:
BIOL 145 Plants, People, Environment ..................... 3 units
BIOL 110 General Principles of Biology. . . . . . . . . . . . . . . . . 4 units
Plus, select two courses from the following selections:
HORT 330 Integrated Pest Management . . . . . . . . . . . . . . . 3 units AND

HORT 350 Principles of Landscape Design . . . . . . . . . . . . OR
HORT 709 Principles of Landscaping . . . . . . . . . . . . . . . . . . 3 units

## CA Horticulture: Environmental Option 2: Nursery Management

 21-25 semester unitsComplete major requirements listed under Associate in Science Major in Horticulture: Environmental Option 2. A grade of "C" or higher is required for each course.

## AS Major in Horticulture: Environmental Option 3: Landscape Management

Complete General Education and other requirements listed for the Associate degree and
Major Requirements: 21-25 semester units
A grade of "C" or higher is required in each course applied to the major.
HORT 311 Plant Materials I: Trees . . . . . . . . . . . . . . . . . . . . OR
HORT 711 Landscape Trees . . . . . . . . . . . . . . . . . . . . . . . . 3 units
HORT 312 Plant Materials II:
Shrubs and Groundcovers . . . . . . . . . . . . . . . . . OR

Plus select Group A or Group B below
Group A:
HORT 327 Nursery Management. . . . . . . . . . . . . . . . . . . . . . . 3 units
Group B:
BOTH HORT 705 Soils. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
AND either
HORT 325 Interior Plantscape . . . . . . . . . . . . . . . . . . . . . . . 3 units
OR either
HORT 706 Plant Propagation. . . . . . . . . . . . . . . . . . . . . . . . 3 units
OR either
HORT 742 Greenhouse Management 3 units

Select one of the following courses:
BIOL 145 Plants, People, Environment . . . . . . . . . . . . . . . . . 3 units
BIOL 110 General Principles of Biology. . . . . . . . . . . . . . . . . 4 units
Plus, two courses from the following selections:
HORT 330 Integrated Pest Management . . . . . . . . . . . . . . 3 units
AND
HORT 342 Landscape Construction . . . . . . . . . . . . . . . . . 3 units

## CA Horticulture: Environmental Option 3: Landscape Management

 21-23 semester unitsComplete major requirements listed under Associate in Science Major in Horticulture: Environmental Option 3. A grade of "C" or higher is required for each course applied to the certificate.

## AS Major in Horticulture: Floristry

Complete General Education and other requirements listed for the Associate degree and


## Horticulture: Floristry

## 21 semester units

Complete major requirements listed under Associate in Science Major in Horticulture: Floristry. A grade of "C" or higher is required for each course applied to the certificate.

## HUMANITIES

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree <br> Humanities. <br> 60 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Humanities

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 18 semester units

A grade of " C " or higher is required for each course applied to the major.
HUM 101 Intro to Humanities -
Greece through Reformation
.3 units
HUM 102 Intro to Humanities -
Reformation to Present
.3 units
Plus 12 units selected from the following groupings:
Select 3 units from:
HUM 111 Religion, Literature and Philosophy in Ancient Greece 3 units

HUM 114 Film and Literature as Communication in the Modern Era 3 units
Plus, 3 units from the following:
HUM 125 Technology/Contemporary Society/ Human Values 3 units
Select 3 units from:
HUM 131 Culture and Achievement of African-Americans 3 units
HUM 133 Culture and Achievement of Asian Americans 3 units
ANTH 370 Olmec, Maya, Aztec People and Cultures of Mexico \& Central America. 3 units
Plus, 3 units from the following:
HUM 140 Cultural Heritage of San Francisco and Its Environs. 3 units

## HUMAN SERVICES

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree <br> Human Services 60 units

## CA Certificate of Achievement

Human Services. 19 units

## CS Certificates of Specialization

Community Health Worker. . . . . . . . . . . . . . . . . 14 units
Family Development . . . . . . . . . . . . . . . . . . . . . . . 6 units
Peer Support Services . . . . . . . . . . . . . . . . . . . . . . . 12 units
Psychosocial Rehabilitation . . . . . . . . . . . . . . . . . 6 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. Research majors in Human Services or related areas such as Social Work, Social Welfare, or Human Resources. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Human Services

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 19 semester units

A grade of " C " or higher is required for each course applied to the major.
HMSV 100 Introduction to Human Services . . . . . . . . . . . 3 units
HMSV 110 Introduction to Counseling and Interviewing .3 units
HMSV 115 Introduction to Case Management . . . . . . . . . . 3 units
HMSV 120 Public Assistance and Benefits Program. . . . . . 1 unit
And, select 9 units from the following courses:
CRER 138 Skill Development for Career Growth . . . . . . . . 3 units
CRER 140 Peer Counseling. . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
CRER 142 Advanced Peer Counseling . . . . . . . . . . . . . . . . . . 3 units
HMSV 130 Employment Support Strategies . . . . . . . . . . . . .1-3 units
HMSV 150 Rehabilitation and Recovery . . . . . . . . . . . . . . 3 units

HMSV 151 Current Trends and Issues in
Psychosocial Rehabilitation . . . . . . . . . . . . . . . 1-3 units
HMSV 262 Empowerment Skills for Family Workers. . . . . . 3 units
HMSV 264 Supporting Family Success . . . . . . . . . . . . . . . . 3 units
PSYC 100 General Psychology . . . . . . . . . . . . . . . . . . . . . . . 3 units
PSYC 108 Psychology in Practice. . . . . . . . . . . . . . . . . . . . . 3 units
SOCI 100 Introduction to Sociology . . . . . . . . . . . . . . . . . . 3 units
SPCH 120 Interpersonal Communication . . . . . . . . . . . . . . . 3 units
SOSC 301 Introduction to Alcohol and Other Drug Studies 3 units

## CA Human Services

## 19 semester units

Complete major requirements listed under Associate in- Major in Human Services. A grade of "C" or higher is required for each course applied to the certificate.

## cs Community Health Worker

 14 semester unitsA grade of "C" or higher is required for each course applied to the certificate.

$$
\begin{aligned}
& \text { HMSV } 262 \text { Empowerment Skills for Family Worker . . . . . . } 3 \text { units } \\
& \text { HMSV } 264 \text { Supporting Family Success. . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { HSCI } 100 \text { General Health Education . . . . . . . . . . . . . . . } 2 \text { units } \\
& \text { Plus } 3 \text { units of } \\
& \text { Any HSCI (Health Science courses) . . . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { Plus } 3 \text { units selected from } \\
& \text { HMSV } 100 \text { Introduction to Human Services . . . . . . . . . . . . } 3 \text { units } \\
& \text { HMSV } 110 \text { Introduction to Counseling and Interview . . . . } 3 \text { units } \\
& \text { HMSV } 115 \text { Introduction to Case Management. . . . . . . . . . } 3 \text { units } \\
& \text { HMSV } 150 \text { Rehabilitation and Recovery . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { HMSV } 151 \text { Current Trends \& Issues in Psychosocial } \\
& \text { Rehabilitation . . . . . . . . . . . . . . . . . . . . . . . } 1-3 \text { units }
\end{aligned}
$$

## CS Family Development

## 6 semester units

A grade of "C" or higher is required for each course applied to the certificate.
HMSV 262 Empowerment Skills for Family Worker . . . . . 3 units
HMSV 264 Support Family Success . . . . . . . . . . . . . . . . . . 3 units
Husv 2 Supar fanily

## CS Peer Support Services 12 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.

CRER 138 Skill Development for Career Growth. . . . . . . . . 3 units
Select 3 units from the from the following courses:
CRER 140 Peer Counseling. . . . . . . . . . . . . . . . . . . . . . . . . . . OR
HMSV 110 Introduction to Counseling and Interviewing 3 units

Select 3 units from the from the following courses:
CRER 142 Advance Peer Counseling OR
HMSV 150 Rehabilitation and Recovery. . . . . . . . . . . . . . . . 3 units
Select 3 units from the from the following courses:
Any COOP selection Cooperative Education. . . . . . . . . . . . 3 units

## CS Psychosocial Rehabilitation

## 6 semester units

A grade of "C" or higher is required for each course applied to the certificate.

HMSV 150 Rehabilitation and Recovery. . . . . . . . . . . . . . . 3 units
HMSV 151 Current Trends and Issues in
Psychosocial Rehabilitation . . . . . . . . . . . . . . . 3 units

# INTERDISCIPLINARY STUDIES 

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program <br> 60-70 transferable units

California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree

Interdisciplinary Studies with an Area of Emphasis with three options:
Option 1 - Intercultural Studies 60 units
Option 2 - Contemporary Issues. 60 units
Option 3 - Science and Society. 60 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Interdisciplinary Studies, Option 1: Intercultural Studies

This degree option introduces students to multiple cultural perspectives to enable them to be informed, engaged citizens in a multicultural society. Depending on the student's focus, this degree offers transfer opportunities into areas such as World Arts and Cultures, Global Studies, Multicultural Studies, and Ethnic Studies. Students should work with a counselor to identify any additional supporting classes for transfer to a particular program and university. Note: most courses listed in this major can also be used to meet requirements for the California State University General Education or IGETC.

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: A minimum of 18 units

A grade of " $C$ " or higher is required for each course applied to the major.
At least 3 units of courses that examine more than one culture within the course to be selected from the following options:
ANTH 110 Cultural Anthropology ..... 3 units
ANTH 180 Magic, Science \& Religion ..... 3 units
ETHN 351 The Primal Mind and Cultural Diversity ..... 3 units
ETHN 585 Ethnicity in Cinema ..... 3 units
GEOG 110 Cultural Geography .3 units
LIT 220 Introduction to World Literature. ..... 3 units
MUS 250 World Music ..... 3 units
PHIL 300 Introduction to World Religions ..... 3 units
PLSC 110 Contemporary Foreign Governments ..... 3 units
SPCH 150 Intercultural Communication ..... 3 units
At least 6 units of courses in the arts and literature to be selectedfrom the following options:
ART 100 Art of the Western World ..... 3 units
ETHN 288 African-American Cinema ..... 3 units
ETHN 350 Native American Way of Life ..... 3 units
ETHN 440 Cultural Experience of Asian-American Writers 3 units
HUM 131 Cultural Achievements of African-Americans ..... 3 units
HUM 133 Cultural Achievements of Asian Americans ..... 3 units
LIT 232 Survey of English Literature. ..... 3 units
LIT 430 Mythology and Folklore. ..... 3 units
At least 9 units of courses in the areas of social, political, and eco-nomic institutions to be selected from the following options:
ANTH 370 Olmec, Maya, and Aztec People and Cultures of Mexico and Central America ..... 3 units
ETHN 101 Introduction to Ethnic Studies I ..... 3 units
ETHN 102 Introduction to Ethnic Studies II. ..... 3 units
ETHN 150 Social Dynamics of People of Color ..... 3 units
ETHN 261 African-American Culture I ..... 3 units
ETHN 262 African-American Culture II ..... 3 units
ETHN 300 Introduction to La Raza Studies. ..... 3 units
ETHN 360 The People and Cultures of Polynesia: An Introduction ..... 3 units
ETHN 440 Cultural Experience of Asian-American Writers ..... 3 units
HIST 100 History of Western Civilization I ..... 3 units
HIST 101 History of Western Civilization II ..... 3 units
HIST 102 History of American Civilization ..... 3 units
HIST 260 Women in American History ..... 3 units
PLSC 120 Area Studies ..... 3 units
PLSC 212 Introduction to American Politics and Society ..... 3 units
SOSC 220 British Life and Culture ..... 3 units
SOSC 221 French Life and Culture ..... 3 units

## AA Major in Interdisciplinary Studies, Option 2: Contemporary Issues

This degree option provides students with both an introduction to the wide range of issues facing contemporary society and the tools to analyze these issues critically. Depending on the student's focus, this degree offers transfer possibilities into such majors as Communications, Environmental Studies, Ethnic Studies, Sociology, and Social Services. Note: most courses listed in this major can also be used to meet requirements for the California State University General Education or IGETC.

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: A minimum of 18 units

A grade of " $C$ " or higher is required for each course applied to the major.
At least 6 units of courses that introduce students to major disciplines in the social sciences. The 6 units of courses must be selected from the following options and include at least two different discipline areas:
BUS 100 Contemporary American Business . . . . . . . . . . . . . 3 units
ECON 100 Principles of Macroeconomics . . . . . . . . . . . . . . . 3 units
ECON 102 Principles of Microeconomics. . . . . . . . . . . . . . . . 3 units
GEOG 110 Cultural Geography . ............................. . . 3 units
PSYC 100 General Psychology . . . . . . . . . . . . . . . . . . . . . . . . 3 units
PSYC 300 Social Psychology . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
SOCI 100 Introduction to Sociology. . . . . . . . . . . . . . . . . . . . . 3 units
SPCH 100 Public Speaking . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
At least 3 units of courses in statistics or critical thinking, selected from the following:
ECON 123 Business-Economic Statistics ..... 3 units
ENGL 165 Advanced Composition ..... 3 units
MATH 147 Mathematics and Global Studies ..... 4 units
MATH 200 Elementary Probability and Statistics ..... 4 units
PHIL 103 Critical Thinking ..... 3 units
PSYC 121 Basic Statistical Concepts ..... 3 units
SOSC 111 Critical Thinking and Writing ..... 3 units
At least 9 units of courses that explore particular issues facing con-temporary society. The 9 units of courses must be selected from thefollowing options and include at least two different discipline areas:
ARCH 100 Survey of Contemporary Architecture ..... 3 units
BIOL 102 Environmental Conservation ..... 3 units
BIOL 195 Biology Field Laboratory ..... 1 unit
BCST 110 Media in Society ..... OR
DGME 100 Media in Society ..... 3 units
DGME 102 Media Law and Ethics ..... 3 units
ETHN 151 Patterns of Prejudice and Racism I ..... 3 units
ETHN 152 Patterns of Prejudice and Racism II ..... 3 units
HSCI 112 Current Health Issues ..... 1 unit
HUM 125 Technology/Contemporary Society/ Human Values. ..... 3 units
JOUR 110 Mass Media in Society ..... OR
DGME 100 Media in Society . ..... 3 units
PHIL 244 Contemporary Social and Moral Issues ..... 3 units
PLSC 130 International Relations ..... 3 units
PLSC 215 Contemporary Issues in American Politics ..... 3 units
PLSC 250 Civil Liberties and Civil Rights. ..... 3 units
SOCI 105 Social Problems ..... 3 units
SOCI 141 Race and Ethnic Relations ..... 3 units
SOCI 200 Urban Sociology ..... 3 units

## AA Major in Interdisciplinary Studies, Option 3: Science and Society

This degree provides students with the foundation from which to understand the impact of scientific issues on contemporary society. Depending on the student's focus, this major offers transfer possibilities in the social sciences, including Economics, Sociology, and Social/Behavioral Sciences, and in more specialized interdisciplinary majors such as Environmental Economics and Policy, Environmental Analysis and Design, Social Ecology, Community and Regional Development, and Development Studies. Students should work with a counselor to identify the appropriate mathematics classes and any additional supporting classes for transfer to a particular program and university. Note: most courses listed in this major can also be used to meet requirements for the California State University General Education or IGETC.

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: A minimum of 19 units

A grade of " $C$ " or higher is required for each course applied to the major.
At least 3 units of courses that link science with society, to be selected from:
HUM 125 Technology/Contemporary Society/
$\quad$ Human Values. ............................ 3 units
MATH 147 Mathematics and Global Studies ............. 4 units
PHIL 244 Contemporary Social and Moral Issues ....... 3 units

At least 7 units of courses in the sciences to be selected from the following options:
BIOL 100 Introduction to Life Sciences 3 units
BIOL 102 Environmental Conservation ..... 3 units
BIOL 110 General Principles of Biology ..... 4 units
BIOL 145 Plants, People, and Environment ..... 3 units
BIOL 184 Wildlife Biology ..... 3 units
BIOL 195 Biology Field Laboratory ..... 1 unit
GEOL 100 Survey of Geology ..... 3 units
GEOL 101 Geology Laboratory ..... 1 unit
METE 100 Elementary Meteorology ..... 3 units
METE 101 Meteorology Laboratory ..... 1 unit
OCEN 100 Oceanography

$\qquad$ ..... 3 unitsOCEN 101 Oceanography Laboratory/Field Study1 unit
At least 9 units of courses in the social sciences to be selected from the following options:
ANTH 110 Cultural Anthropology . . . . . . . . . . . . . . . . . . . 3 units
ANTH 180 Magic, Science \& Religion . . . . . . . . . . . . . . 3 units
ECON 100 Principles of Macroeconomics . . . . . . . . . . . 3 units
ECON 102 Principles of Microeconomics. . . . . . . . . . . . 3 units
GEOG 100 Physical Geography. . . . . . . . . . . . . . . . . . . 3 units
GEOG 110 Cultural Geography . . . . . . . . . . . . . . . . . . . . 3 units
GEOG 150 World Regional Geography . . . . . . . . . . . . . 3 units
PLSC 215 Contemporary Issues in American Politics . . . . . 3 units
PSYC 100 General Psychology . . . . . . . . . . . . . . . . . . . 3 units
PSYC 220 Introduction to Psychobiology . . . . . . . . . . . . 3 units
SOCI 100 Introduction to Sociology. . . . . . . . . . . . . . . . 3 units
SOCI 105 Social Problems . . . . . . . . . . . . . . . . . . . . . 3 units
SOCI 200 Urban Sociology . . . . . . . . . . . . . . . . . . . . 3 units

ANTH 180 Magic, Science \& Religion . . . . . . . . . . . . . . . . . . 3 units
ECON 100 Principles of Macroeconomics . . . . . . . . . . . . . . . 3 units
ECON 102 Principles of Microeconomics. . . . . . . . . . . . . . . . 3 units
GEOG 100 Physical Geography. . . . . . . . . . . . . . . . . . . . . . . 3 units
GEOG 110 Cultural Geography . . . . . . . . . . . . . . . . . . . . . . . . 3 units
GEOG 150 World Regional Geography. . . . . . . . . . . . . . . . . . 3 units
PLSC 215 Contemporary Issues in American Politics . . . . . 3 units
PSYC 100 General Psychology . . . . . . . . . . . . . . . . . . . . . . . . 3 units
PSYC 220 Introduction to Psychobiology . . . . . . . . . . . . . . . 3 units
SOCI 100 Introduction to Sociology. . . . . . . . . . . . . . . . . . . . . 3 units
SOCI 105 Social Problems . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
SOCI 200 Urban Sociology . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units

## ITALIAN

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## CS Certificate of Specialization

Italian 12 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## CS Italian

12 semester units
"Pass" or grade of "C" or higher is required for each course applied to the certificate.

Select at least 5 units from the following courses:
ITAL 110 Elementary Italian . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 units

ITAL 111 Elementary Italian I . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ITAL 112 Elementary Italian II. . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ITAL 120 Advanced Elementary Italian. . . . . . . . . . . . . . . . . 5 units
ITAL 121 Advanced Elementary Italian I . . . . . . . . . . . . . . . . . 3 units
ITAL 122 Advanced Elementary Italian II . . . . . . . . . . . . . . . 3 units
The balance of units may be from the following list of courses:
ITAL 115 Beginning Italian I . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ITAL 116 Beginning Italian II. . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ITAL 117 Advanced Beginning Italian I . . . . . . . . . . . . . . . . . 3 units
ITAL 118 Advanced Beginning Italian II. . . . . . . . . . . . . . . . . 3 units
ITAL 801 Conversational Italian I, Elementary. . . . . . . . . . . 2 units
ITAL 802 Conversational Italian II, Advanced . . . . . . . . . . . 2 units
In special circumstances, the Dean of Language Arts may approve the limited use of other courses in the same language (such as those numbered 680 or taken at Skyline or Cañada Colleges). In rare circumstances, the Dean may approve using a course in another discipline if its content is closely related to the language studied.

## JAPANESE

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## CS Certificates of Specialization

Japanese 12 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## CS Japanese

## 12 semester units

"Pass" or grade of " $C$ " or higher is required for each course applied to the certificate.

Select at least 12 units from the following courses applied to the certificate:

JAPN 110 Elementary Japanese . ............................ . . 5 units

JAPN 112 Elementary Japanese II. . . . . . . . . . . . . . . . . . . . . . 3 units
JAPN 120 Advanced Elementary Japanese . . . . . . . . . . . . . . 5 units
JAPN 121 Advanced Elementary Japanese I . . . . . . . . . . . . . 3 units
JAPN 122 Advanced Elementary Japanese II . . . . . . . . . . . . 3 units
In special circumstances, the Dean of Language Arts may approve the limited use of other courses in the same language (such as those numbered 680 or taken at Skyline or Cañada Colleges). In rare circumstances, the Dean may approve using a course in another discipline if its content is closely related to the language studied.

## JOURNALISM

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program <br> 60-70 transferable units

California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree

Journalism......................................... . . 60 units

## Recommended high school preparation:

Coursework in English, Journalism, Creative Writing, Political Science, Mass Communication, Psychology, Sociology

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. Research majors in Journalism, Mass Communication, Media Arts. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Journalism

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 19 semester units

A grade of " C " or higher is required for each course applied to the major.
JOUR 110 Mass Media in Society. ........................... . . 3 units
JOUR 120 Newswriting. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4 units
JOUR 300 Newspaper Production. . . . . . . . . . . . . . . . . . . . 3 units
Plus, select 9 units from English and/or literature courses

## LIFE SCIENCES

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Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).
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## University Transfer Program

``` 60-70 transferable units
California State University
University of California Independent Colleges and Universities
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## AA Associate in Arts Degree <br> Life Sciences: General 60 units

## AS Associate in Science Degree

| Life Sciences: Biologica |  |
| :---: | :---: |
| Life Sciences: Biotechnology . | 60 units |
| Life Sciences: Medical (Pre-Med, Pre-Dental, Pre-Vet) | 60 units |
| Life Sciences: Pre-Nursing | 60 |

## CS Certificate of Specialization

Biotechnology<br>$\qquad$

## Recommended high school preparation:

One year of Biology, Chemistry, Physics, four years of Mathematics, English

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Life Sciences: General

Complete General Education and other requirements listed for the Associate degree and
Major requirements: 19-23 semester units
A grade of "C" or higher is required for each course applied to the major.
4-5 units from the following courses:
BIOL 110 General Principles of Biology ..... 4 units
BIOL 210 General Zoology ..... 5 units
BIOL 220 General Botany ..... 5 units
BIOL 230 Introductory Cell Biology ..... 4 units
12-15 units from the following courses:
BIOL 102 Environmental Conservation ..... 3 units
BIOL 110 General Principles of Biology ..... 4 units
BIOL 130 Human Biology ..... 3 units
BIOL 145 Plants, People, and Environment ..... 3 units

| BIOL 184 Wildlife Biology. | nits |
| :---: | :---: |
| BIOL 195 Biology Field Laboratory | unit |
| BIOL 210 General Zoology | 5 units |
| BIOL 220 General Botany. | 5 units |
| BIOL 230 Introductory Cell Biology | . 4 units |

Plus, 3 units of a Physical Science -

> ASTR, CHEM, GEOG, GEOL, METE, OCEN, PALN, PHYS, PSCI

Students are encouraged to group course selections as follows to emphasize their major interests.
Human Biology: BIOL 110, 130, CHEM 410 or 210
Marine Biology: BIOL 110, OCEN 100 or GEOL 100
Natural History: BIOL 110, 111, 200,GEOL 100 or METE 100 or GEOG 100

Wildlife/Forestry: BIOL102, 110 or 184, GEOL 100 or METE 100

## AS Major in Life Sciences: Biological

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{2 4}$ semester units

A grade of " C " or higher is required for each course applied to the major.


Students with little or no high school preparation should first complete BIOL 110, CHEM 192, MATH 110, and PHYS 100 prior to beginning major coursework.

## AS Major in Life Sciences: Biotechnology

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 25 semester units

A grade of "C" or higher is required for each course applied to the major.
BIOL 123 Biotechnology Workshop . . . . . . . . . . . . . . . . . . . . 1 unit
BIOL 210 or 220 General Zoology . . . . . . . . . . . . . . . . . . . . . 5 units
or General Botany . . . . . . . . . . . . . . . . . . . . . . 5 units
BIOL 230 Introductory Cell Biology. . . . . . . . . . . . . . . . . . . . 4 units
BIOL 240 General Microbiology . . . . . . . . . . . . . . . . . . . . . 4 units
BIOL 666 Careers in Biotechnology and Biology. . . . . . . . . 1 unit
CHEM 210 General Chemistry I............................. . . 5 units
CHEM 220 General Chemistry II............................ 5 units
Students with little or no high school preparation should first complete BIOL 100, CHEM 100 or 192, and PHYS 100 prior to beginning major coursework.

## CS Biotechnology

11-12 semester units
A grade of " $C$ " or higher is required for each course applied to the certificate.

$$
\begin{aligned}
& \text { BIOL } 123 \text { Biotechnology Workshop ....................... } 1 \text { unit } \\
& \text { BIOL } 666 \text { Careers in Biotechnology and Biology........ } 1 \text { unit } \\
& \text { CHEM } 210 \text { or } 220 \text { General Chemistry I/II ............. } 5 \text { units } \\
& \text { Plus select one course from the following: } \\
& \text { BIOL } 110,210,220,230,240
\end{aligned}
$$

## AS Major in Life Sciences: Medical

Complete General Education and other requirements listed for the Associate degree and
Major requirements: $\mathbf{1 9}$ semester unitsA grade of "C" or higher is required for all courses applied to the major.
BIOL 210 General Zoology

$\qquad$ ..... 5 units
BIOL 230 Introductory Cell Biology. ..... 4 units
CHEM 210 General Chemistry I ..... 5 units
CHEM 220 General Chemistry II ..... 5 units

## AS Major in Life Sciences: Pre-Nursing

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 21-23 semester units

A grade of " C " or higher is required for all courses applied to the major.

$$
\begin{aligned}
& \text { BIOL } 240 \text { General Microbiology . . . . . . . . . . . . . . . . . . . . . . } 4 \text { units } \\
& \text { BIOL } 250 \text { Human Anatomy ............................ . . . } 4 \text { units } \\
& \text { BIOL } 260 \text { Inits }
\end{aligned}
$$

Plus 8 or 10 units from one of the following groups
Group 1 CHEM 210 and 220 ..... 10 units
Group 2 CHEM 410 and 420 ..... 8 units

## MANAGEMENT

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program <br> 60-70 transferable units <br> California State University <br> University of California <br> Independent Colleges and Universities

## AA Associate in Arts Degree

| Business Management | 60 units |
| :---: | :---: |
| Marketing Management | 60 units |
| Retail Management | 60 units |

## CA Certificate of Achievement

Business Management . . . . . . . . . . . . . . . . . . . . 24 units
Marketing Management ........................ 24 units
Retail Management . . . . . . . . . . . . . . . . . . . . . . . 31-32 units

## CS Certificates of Specialization

Human Resource Management . . . . . . . . . . . . . . 9 units
Project Management. . . . . . . . . . . . . . . . . . . . . . . 12 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Management: Business Management

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{2 4}$ semester units

A grade of " C " or higher is required for each course applied to the major.
BUS 100 Contemporary American Business .............. 3 units
MGMT 100 Intro to Business Management .............. 3 units
MGMT 235 Techniques of Supervision . . . . . . . . . . . . . . . . . 3 units
ACTG 100 or 3 units from BUSW series. . . . . . . . . . . . . . . . . 3 units
Plus select 12 units from the following courses:
BUS 101 Human Relations I
3 units
BUS 150 Small Business Management . . . . . . . . . . . . . . . . . . 3 units
BUS 180 Marketing. ......................................... . . 3 units
CIS 110 Introduction to CIS .................................. 3 units
MGMT 215 Management of Human Resources . . . . . . . . . . 3 units
MGMT 220 Organizational Behavior. . . . . . . . . . . . . . . . . . 3 units
MGMT 265 Project Management . . . . . . . . . . . . . . . . . . . . . 3 units
COOP 641 Cooperative Work Experience Education . . . . . . . 3 units

## CA Business Management <br> 24 semester units

Complete major requirements listed under Associate in Arts - Major in Business Management A grade of "C" or higher is required for each course applied to the certificate.

## AA Major in Management: Marketing Management

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{2 4}$ semester units

A grade of " C " or higher is required for each course applied to the major. MGMT 100 Introduction to Business Management 3 units
MGMT 235 Techniques of Supervision 3 units
BUS 100 Contemporary American Business 3 units
BUS 180 Marketing
3 units
Plus select 12 units from the following courses:
CIS 110 Introduction to CIS
3 units
MGMT 215 Management of Human Resources 3 units
MGMT 220 Organizational Behavior. . . . . . . . . . . . . . . . . . 3 units
MGMT 265 Project Management . . . . . . . . . . . . . . . . . . . . 3 units
BUSW series . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .1.5-3 units

## CA Marketing Management

 24 semester unitsComplete major requirements listed under Associate in Arts - Major in Marketing Management. A grade of "C" or higher is required for each course applied to the certificate.

## AA Management: Retail Management

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{3 2}$ semester units

A grade of " C " or higher is required for each course applied to the major.
ACTG 100 Accounting Procedures. . . . . . . . . . . 3 units . . OR
ACTG 121 Financial Accounting . . . . . . . . . . . . . . . . . . . . . . 4 units
BUS 101 Human Relations I . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 115 Business Mathematics . . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 180 Marketing. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 186 (Canada College). . . . . . . . . . . . . . . . . . . . . . . . . . . . OR
BUS 190 (Skyline College). . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 295 Computer Systems in Business . . . . . . . . . . . . . . . 4 units
BUS 401 Business Communications . . . . . . . . . . . . . . . . . . 3 units
MGMT 100 Introduction to Business Management . . . . . . OR
MGMT 235 Techniques of Supervision . . . . . . . . . . . . . . . . 3 units
MGMT 215 Management of Human Resources . . . . . . . . . 3 units
SPCH 120 Interpersonal Communication. . . . . . . . . . . . . . . 3 units

## CA Retail Management

## 31-32 semester units

Complete major requirements listed under Associate in Arts - Major in Retail Management. A grade of "C" or higher is required for each course applied to the certificate.

## CS Human Resources Management

## 9 semester units

A grade of "C" or higher is required for each course applied to the certificate.
MGMT 100 Introduction to Business Management
3 units

MGMT 215 Management of Human Resources
3 units

Plus select 3 units from the following courses:
BUS 101 Human Relations I
3 units
MGMT 220 Organizational Behavior. . . . . . . . . . . . . . . . . . . 3 units
MGMT 235 Techniques of Supervision . . . . . . . . . . . . . . . . . 3 units

## CS Project Management

12 semester units
A grade of "C" or higher is required for each course applied to the certificate.

MGMT 100 Introduction to Business Management . . . . . 3 units
MGMT 265 Project Management . . . . . . . . . . . . . . . . . . . . 3 units
BUSW 450 Microsoft Project Fund. I . . . . . . . . . . . . . . . . . . 1.5 units
BUSW 451 Microsoft Project Fund. II . . . . . . . . . . . . . . . . . . 1.5 units
Plus select 3 units from the following courses:
BUS 101 Human Relations I
3 units
MGMT 220 Organizational Behavior. .3 units

## MANUFACTURING TECHNOLOGY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP)<br>University Transfer Program<br>60-70 transferable units<br>California State University<br>University of California<br>Independent Colleges and Universities

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## MATHEMATICS

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AS Associate in Science Degree

Mathematics 60 units

## Recommended high school preparation:

Four years of Mathematics.

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AS Major in Mathematics

Complete General Education and other requirements listed for the Associate degree and

Major requirements: 22-24 semester units
A grade of " C " or higher required for each course applied to the major.

| MATH 25 |  |  |
| :---: | :---: | :---: |
| MATH 253 Calculus with Analytical Geometry III ........ 5 units |  |  |
| Plus select 7-9 units from the following courses: |  |  |
| MATH 200 Elementary Probability and Statistics . . . . . . . 4 units |  |  |
| MATH 268 Discrete Mathematics . . . . . . . . . . . . . . . . . . . 4 units |  |  |
| MATH 270 Linear Algebra . . . . . . . . . . . . . . . . . . . . . . . . . 3 units |  |  |
| MATH 275 Ordinary Differential Equations . . . . . . . . . . . 3 units |  |  |
|  |  |  |

## MULTIMEDIA

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program

60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree

Multimedia Option 1: Web Design . . . . . . . . . . 60 units
Multimedia Option 2: Digital Video $\ldots$. . . . . . . 60 units
Multimedia Option 3: Digital Audio. . . . . . . . . 60 units

## CA Certificate of Achievement

Multimedia Web Design . . . . . . . . . . . . . . . . . . . . . . . . . . . . 280 units 28.5 units
Multimedia Digital Video . . . . . . . . . . . . . . . . . 25.5 units

## CS Certificates of Specialization

Multimedia Web Design . . . . . . . . . . . . . . . . . . . . 12 units
Multimedia Digital Video . . . . . . . . . . . . . . . . . . . . 12 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Multimedia Option 1: Web Design

Complete General Education and other requirements listed for the Associate degree and


## Major requirements: 30 semester units

A grade of "C" or higher is required for each course applied to the major.
MULT 102 Introduction to Multimedia
(replaces 105 \& 107) . . . . . . . . . . . . . . . . . . . . . . . 3 units
MULT 172 Web Design: Dreamweaver
(replaces 170 \& 171)
3 units
MULT 177 Graphics for Multimedia (Photoshop/Fireworks)
(replaces 175 \& 176) . . . . . . . . . . . . . . . . . . . . . . . 3 units
MULT 253 Multimedia Design (replaces 251 \& 252). . . . . . . 3 units
MULT 274 Flash (replaces 270 \& 271) . . . . . . . . . . . . . . . . . 3 units
MULT 279 Flash Actionscript . . . . . . . . . . . . . . . . . . . . . . . . 3 units
MULT 392 Multimedia Internship (replaces 390 \& 391) . . . . . 3 units
CIS 111 Introduction to Internet Programming. . . . . . . . . . . 3 units
Design Electives: choose 6 units from the following:
MULT 113, BCST 110, GRA 160, GRA 115/116
Developer Electives: choose 6 units from the following: CIS 254, 377, 380.

## CA Multimedia Web Design

30 semester units
Complete major requirements listed under Associate in Arts - Major in Multimedia Option 1: Web Design. A grade of "C" or higher is required for each course.

## AA Multimedia Option 2: Digital Video

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{2 8 . 5}$ semester units

A grade of "C" or higher is required for each course applied to the major.
MULT 102 Introduction to Multimedia
(replaces 105 \& 107) . . . . . . . . . . . . . . . . . . . . . . . 3 units
MULT 177 Multimedia Graphics -
(Photoshop/Fireworks). . . . . . . . . . . . . . . . . . . . . 3 units
MULT 187 Final Cut Pro (replaces 182 \& 183) . . . . . . . . . . . 3 units
MULT 184 Digital Video (replaces 180 \& 181) . . . . . . . . . . . . 3 units
MULT 192 Digital Audio (replaces 190 \& 191) . . . . . . . . . . . . 3 units
MULT 282 After Effects (replaces 280 \& 281) . . . . . . . . . . . 3 units
MULT 292 DVD Studio Pro (replaces 290 \& 291) . . . . . . . . . 3 units
$\begin{aligned} & \text { MULT } 387 \text { Digital Video Workflow } \\ & \text { (replaces } 385 \& 386 \text { ) . . . . . . . . . . . . . . . . . . . . . . } 3 \text { units }\end{aligned}$
BCST 312 Field Lighting/Studio Lighting. . . . . . . . . . . . . . . . 1.5 units
Electives - choose 3 units form the following:
MULT 113, BCST 110
Strongly recommended: MULT 392

## CA Multimedia Digital Video

28.5 semester units

Complete major requirements listed under Associate in Arts - Major in Multimedia Option 2: Digital Video. A grade of " $C$ " or higher is required for each course applied to the certificate.

## AA Multimedia Option 3: Digital Audio

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{2 5 . 5}$ semester units

A grade of "C" or higher is required for each course applied to the major.

> MULT 102 Introduction to Multimedia
> (replaces 105 \& 107) . . . . . . . . . . . . . . . . . . . . . . . 3 units
> MULT 192 Digital Audio (replaces 190 \& 191). . . . . . . . . . . . 3 units
> MULT 297 Pro Tools LE (replaces 295 \& 296) . . . . . . . . . . . . 3 units
> MULT 317 Digital Studio Recording (replaces 315 \& 316)
> .3 units
> MUS 290 Electronic Music I. . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
> MUS 291 Electronic Music II. . . . . . . . . . . . . . . . . . . . . . . . . . 2 units
> MUS 292 Sound Creation: Sampling and Synthesis . . . . . . 3 units
> MUS 293 Audio for Visual Media ........................... 2.5 units

Plus, 3 units from the following courses:
MULT 113 Fundamentals of Mac OS \&
File Management (replaces 111 \& 112) . . . . . . . . . 3 units
BCST 110 Media in Society . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units

## CA Multimedia Digital Audio

## 25.5 semester units

Complete major requirements listed under Associate in Arts - Major in Multimedia Option 3: Digital Audio. A grade of " C " or higher is required for each course applied to the certificate.

## CS Multimedia Web Design

## 12 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.

```
MULT }172\mathrm{ Web Design: Dreamweaver(replaces 170 \& 171)3 units
```

MULT 177 Graphics for Multimedia (Photoshop) (replaces 175 \& 176) 3 units
MULT 253 Multimedia Design (replaces 251 \& 252) ..... 3 units
MULT 274 Flash (replaces 270 \& 271) ..... 3 units

## CS Multimedia Digital Video

## 12 semester units

A grade of " $C$ " or higher is required for each course applied to the certificate.

$$
\text { MULT } 184 \text { Digital Video (replaces } 180 \text { \& 181). . . . . . . . . . . . } 3 \text { units }
$$

MULT 187 Final Cut Pro (replaces 182 \& 183) . . . . . . . . . . . . 3 units
MULT 282 After Effects (replaces 280 \& 281). . . . . . . . . . . . 3 units
MULT 292 DVD Studio Pro (replaces 290 \& 291) . . . . . . . . . 3 units

## MUSIC

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program

60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree

Music
60 units
Electronic Music
60 units

## CA Certificate of Achievement

Electronic Music 26.5 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Music

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 33.5 semester units

A grade of " C " or higher is required for each course applied to the major.
Theory and Musicianship Core, 19.5 units:

| MUS 131 | Harmony I.... AND | nits |
| :---: | :---: | :---: |
| MUS 101 | Musicianship I... | . 3 units |
| MUS 132 | Harmony II.... | 3 units |
|  | AND |  |
| MUS 102 | Musicianship II. | 3 units |
| MUS 133 | Harmony III.... | . 3 units |
|  | AND |  |
| MUS 103 | Musicianship III.. | . 3 units |

Plus, concurrent enrollment during the above 3 semesters in MUS 800 for a total of 1.5 units.
(It is recommended that students complete a 4th semester of Harmony and Musicianship: MUS 134, MUS 104 and MUS 800)

Ensemble Requirements, 4 units - select from the following courses:
MUS 451 Jazz Workshop. 1 unit
MUS 452 Repertory Jazz Band. 1 unit


## AA Electronic Music

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{2 6 . 5}$ semester units

A grade of "C" or higher is required for each course applied to the major.

ELEC 110 Introduction to Fundamentals of Electronics. ... 3 units

Plus, select 6 units from the following courses:
MUS 100 Fundamentals of Music........................... 3 units AND

MUS 101 Musicianship I.................................... . . . OR
MUS 101 Musicianship I...................................... . 3 units AND
MUS 131 Harmony I. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OR
MUS 102 Musicianship II . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units AND
MUS 132 Harmony II........................................... . . OR
MUS 103 Musicianship III ..................................... 3 units AND
MUS 133 Harmony III . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OR
MUS 104 Musicianship IV . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units AND
MUS 134 Harmony IV 3 units

Plus, select 1 unit from the following courses:
MUS 301-304 Piano I, II, III, IV. . 1 unit each

Plus, select 3 units from the following courses:
MUS 202 Music Listening and Enjoyment . . . . . . . . . . . . . 3 units
MUS 250 World Music . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
MUS 275 History of Jazz. . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units

## CA Electronic Music

26.5 semester units

Complete major requirements listed under Associate in Arts - Major in Electronic Music. A grade of "C" or higher is required for each course applied to the certificate.

## NURSING - REGISTERED NURSING PROGRAM

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AS Associate in Science Degree

Nursing
74-85 units

## Recommended high school preparation:

Coursework in Biology, Chemistry, Anatomy, English, Mathematics, Psychology

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## Nursing Program Admissions Requirements

Go to the CSM Nursing Program web site for the current admissions information (collegeofsanmateo.edu/nursing). At this site print the Nursing Program Information Sheet and the Nursing Articulation Grid for detailed information about admissions requirements and processes. You may also contact the Nursing Department, 650-5746218.

## Admissions Requirements

If there are more applicants than spaces available, the following applicants are given priority.

1. Applicants who have completed the "pre admission" major requirements.
2. Applicants with a grade point average of 2.5 or higher for all pre admissions and major course requirements.
3. Applicants who have completed Biology 240, Biology 250, and Biology 260 with a cumulative grade point average of 2.5 for this group and no grade less than C in each course and no more than one repetition of any of these courses.
4. Applicants with equal priority are selected by a computerized random number system.
5. Applicants are required to successfully complete an assessment test prior to the entry in to the program. In the event that the applicant does not pass the test, they need to successfully complete remediation course work prior to entry into the nursing program.

## AS Major in Nursing

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 74-85 semester units

A grade of " C " or higher is required in each course applied to the major.
NURS 211 Introduction to Nursing . ....................... . 4.5 units
NURS 212 Concepts of Homeostasis in Nursing . ........ 4.5 units
NURS 215 Nursing Skills Lab I. . . . . . . . . . . . . . . . . . . . . . . . 0.5 unit
NURS 221 Pediatric Nursing. . . . . . . . . . . . . . . . . . . . . . . . . 4.5 units
NURS 222 Maternity Nursing . . . . . . . . . . . . . . . . . . . . . . . 4.5 units
NURS 225 Nursing Skills Lab II . . . . . . . . . . . . . . . . . . . . . . . 0.5 unit
NURS 231 Psychiatric Nursing . . . . . . . . . . . . . . . . . . . . . . . . . 5 units
NURS 232 Medical/Surgical Nursing. . . . . . . . . . . . . . . . . . . 5 units
NURS 235 Nursing Skills Lab III. . . . . . . . . . . . . . . . . . . . . . . 0.5 unit
NURS 241 Advanced Medical/Surgical Nursing. . . . . . . . . . 5 units
NURS 242 Leadership/Management in Nursing . . . . . . . . . . 5 units
NURS 245 Nursing Skills Lab IV . . . . . . . . . . . . . . . . . . . . . . 0.5 unit
NURS 808 Open Skills Laboratory . . . . . . . . . . . . . . . . . . . . . . . . . 5 -3 3 units
BIOL 240 General Microbiology . . . . . . . . . . . . . . . . . . . . . . . 4 units
BIOL 250 Anatomy............................................ . . 4 units
BIOL 260 Introductory Physiology. .......................... 5 units
PSYC 100 General Psychology. . . . . . . . . . . . . . . . . . . . . . . 3 units
PSYC 200 Developmental Psychology ..................... . 3 units
SOCI 100 Introduction to Sociology . . . . . . . . . . . . . . . . . . . OR
ANTH 110 Cultural Anthropology . . . . . . . . . . . . . . . . . . . . . 3 units
SPCH 100 Public Speaking. .................................. . . OR
SPCH 120 Interpersonal Communication .................. OR
SPCH 150 Intercultural Communication.................... 3 units
ENGL 100 Composition and Reading . . . . . . . . . . . . . . . . . 3 units

## Pre-admissions Major requirements 32-39 units

*MATH 120 or MATH 122 and $123 \ldots \ldots \ldots . .$. . . . . . . . . . . . 5-6 units
*For those students with catalog rights prior to fall 2009, completion of Math 110 or 111/ 112 or the equivalent or placement in a math course higher than Math 110/112 on the College of San Mateo Math Placement Test meet this pre-admissions major requirement. Beginning in fall 2009 and thereafter, students must complete Intermediate Algebra, Math 120 or Math 122/123 or the equivalent or placement in a math course higher than Math 120/123 on the College of San Mateo Math Placement Test to meet this admissions and major requirement.
CHEM 410 or 192 or 210 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4-5 5 units
BIOL 240 General Microbiology . . . . . . . . . . . . . . . . . . . . . . 4 units
BIOL 250 Anatomy. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4 units
BIOL 260 Physiology . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 units
ENGL 100 English Composition. . . . . . . . . . . . . . . . . . . . . . . 3 units
PSYC 100 General Psychology . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
PSYC 200 Developmental Psychology . . . . . . . . . . . . . . . . . 3 units
SOCI 100 Introduction to Sociology. . . . . . . . . . . . . . . . . . . . OR
ANTH 110 Cultural Anthropology . . . . . . . . . . . . . . . . . . . . . . 3 units



Students interested in an LVN upgrade through the AND plan or 30 Unit Option should call the Nursing Department for additional information. Students who wish to transfer into the nursing program or challenge nursing courses should also call the Nursing Department.
*To comply with recent legislation, students accepted into the nursing program who have completed a bachelor's degree at a college or university in the United States that is accredited by an agency approved by the SMCCCD do not need to complete CSM prescribed general education courses. Only major courses listed above are required for the ASN degree for students with a bachelor's degree.

## Requirements for R.N. Licensing Exam:

1. Graduation from high school or equivalent
2. All major requirements listed under pre-admissions and major.
3. If an individual has been convicted of a crime, evidence of rehabilitation will be required before taking the R.N. exam.

## PHILOSOPHY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program

60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## PHYSICAL EDUCATION

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## PHYSICAL SCIENCE

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program<br>60-70 transferable units<br>California State University<br>University of California<br>Independent Colleges and Universities

## AS Associate in Science Degree

Physical Science 60 units

## Recommended high school preparation:

Coursework in Mathematics, Chemistry, Physics, English

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AS Major in Physical Science

Complete General Education and other requirements listed for the Associate degree and

Major requirements: $\mathbf{1 8}$ semester units
A grade of "C" or higher is required for each course applied to the major.

Select one or more classes from each group.
Group 1
ASTR 100 Introduction to Astronomy. . . . . . . . . . . . . . . . . . 3 units
ASTR 101 Astronomy Laboratory. . . . . . . . . . . . . . . . . . . . . . 1 unit
Group 2
CHEM 210 General Chemistry I............................. . 5 units
CHEM 410 Health Science Chemistry I.................... . 4 units
Group 3
GEOL 100 Survey of Geology. . . . . . . . . . . . . . . . . . . . . . . . . 3 units
GEOL 210 General Geology . . . . . . . . . . . . . . . . . . . . . . . . . . 4 units
Group 4
PHYS 100 Descriptive Introduction to Physics ........... 3 units
PHYS 210 General Physics I.................................. . . 4 units
PHYS 250 Physics with Calculus I.......................... . 4 units
You may complete the required 18 units with courses selected from Groups $1,2,3$, and 4 . However, if you have not completed the
required 18 units from these groups you may complete the unit requirement by selecting courses from the following list.

| M 231 Organic Chemistry | its |
| :---: | :---: |
| HUM 125 Technology/Contemporary Society. | its |
| CIS 255 Programming Methods: Java |  |
| CIS 278 Programming Methods: C++ | ts |
| MATH 251 Calculus w/ Analytical Geometry I | its |
| MATH 252 Calculus w/ Analytical Geometry II | 5 units |
| MATH 253 Calculus w/ Analytical Geometry I | 5 units |
| MATH 275 Ordinary Differential Equations | ts |
| METE 100 Elementary Meteorology | . 3 units |
| METE 101 Meteorology Laboratory | 1 unit |
| PHYS 250 Physics with Calculus I | its |
| PHYS 260 Physics with Calculus II | its |
| PHYS 270 Physics with Calculus III | 4 |

## PHYSICS

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AS Associate in Science Degree <br> Physics <br> 60 units

## Recommended high school preparation:

Coursework in Mathematics (four years), Physics, Chemistry, English

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information

## AS Major in Physics

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 18 semester units

A grade of " C " or higher is required for each course applied to the major.
PHYS 250 Physics with Calculus I ........................ 4 units
PHYS 260 Physics with Calculus II ..................... 4 units
PHYS 270 Physics with Calculus III................... 4 units

Plus, 6 units selected from the following courses:
CHEM 210 General Chemistry I............................. . . 5 units
CHEM 220 General Chemistry II . . . . . . . . . . . . . . . . . . . . . . 5 units
CHEM 231 Organic Chemistry I . . . . . . . . . . . . . . . . . . . . . . . . 5 units
CHEM 232 Organic Chemistry II . . . . . . . . . . . . . . . . . . . . . . 5 units
CIS 255 Programming Methods: Java . . . . . . . . . . . . . . . . . . 4 units
CIS 278 Programming Methods: C++ . . . . . . . . . . . . . . . . . 4 units
MATH 200 Elementary Probability and Statistics ........ . 4 units
MATH 251 Calculus with Analytic Geometry I . . . . . . . . . . . 5 units
MATH 252 Calculus with Analytic Geometry II ........... . . 5 units
MATH 253 Calculus with Analytic Geometry III........... . 5 units
MATH 270 Linear Algebra . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
MATH 275 Ordinary Differential Equations . . . . . . . . . . . . . 3 units

## POLITICAL SCIENCE

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## PSYCHOLOGY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## REAL ESTATE

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## AA Associate in Arts Degree <br> Real Estate <br> 60 units

## CA Certificate of Achievement

Real Estate 21 units

## Recommended high school preparation:

Coursework in Mathematics, Business, Accounting, English

## Pre-requisite Requirements:

For licensed Real Estate Agents, R.E. 100 and 105 may be waived as prerequisites for all real estate courses.

## AA Major in Real Estate

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 21 semester units

A grade of "C" or higher is required for each course applied to the major.

| BUS 100 Contemporary America |  |
| :---: | :---: |
| MGMT 100 Introduction to Busines | 3 units |
| R.E. 100 Real Estate Principles | units |
| R.E. 110 Real Estate Practice | its |
| R.E. 121 Legal Aspects of Real Estat | its |
| R.E. 131 Real Estate Finance I. | 3 units |
| R.E. 141 Real Estate Appraisal: Basic | 3 units |
| R.E. 200 Real Estate Economics |  |

## CA Real Estate

## 21 semester units

Complete major requirements listed under Associate in Arts - Major in Real Estate. A grade of " C " or higher is required for each course applied to the certificate.

## SOCIAL SCIENCE

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program

60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree

Social Science 60 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Social Science

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{1 8}$ semester units

A grade of "C" or higher is required for each course applied to the major.

Select courses from at least three of the subject areas listed below. In one of the subject areas you must select at least two courses.

- Anthropology
- Economics (excluding ECON 123)
- Ethnic Studies (excluding ETHN 288, 350, 351, 585)
- Geography (excluding GEOG 100)
- History
- Political Science
- Psychology (excluding PSYC 121)
- Social Science (excluding SOSC 111)
- Sociology


## SOCIOLOGY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## SPANISH

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program

60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree

Spanish 60 units

## CS Certificate of Specialization

Spanish 12 units

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AA Major in Spanish

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 18 semester units

A grade of "C" or higher is required for each course applied to the major.

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\begin{aligned}
& \text { SPAN } 110 \text { Elementary Spanish . . . . . . . . . . . . . . . . . . . . . . . } 5 \text { units } \\
& \text { SPAN } 111 \text { Elementary Spanish I . . . . . . . . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 112 \text { Elementary Spanish II . . . . . . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 115 \text { Beginning Spanish I . . . . . . . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 116 \text { Beginning Spanish II . . . . . . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 117 \text { Advanced Beginning Spanish I . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 118 \text { Advanced Beginning Spanish II . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 120 \text { Advanced Elementary Spanish. . . . . . . . . . . . . . . } 5 \text { units } \\
& \text { SPAN } 121 \text { Advanced Elementary Spanish I ............... . . } 3 \text { units } \\
& \text { SPAN } 122 \text { Advanced Elementary Spanish II . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 130 \text { Intermediate Spanish . . . . . . . . . . . . . . . . . . . . . . } 5 \text { units } \\
& \text { SPAN } 131 \text { Intermediate Spanish I. . . . . . . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 132 \text { Intermediate Spanish II. . . . . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 140 \text { Advanced Intermediate Spanish . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 161 \text { Reading in Spanish Literature I. . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 162 \text { Reading in Spanish Literature II. . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 251 \text { Hispanoamerica Contemporanea. . . . . . . . . . . . . } 3 \text { units } \\
& \text { With Language Arts Division approval, ANTH } 110 \text { may be } \\
& \text { accepted as part of the } 18 \text { units. }
\end{aligned}
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## SPEECH COMMUNICATION

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program<br>60-70 transferable units<br>California State University<br>University of California<br>Independent Colleges and Universities

## AA Associate in Arts Degree

Speech Communication 60 units

## CS Certificate of Specialization

Speech Communication 12 units

## Recommended high school preparation:

Coursework in English, Speech, Psychology

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information

## AA Major in Speech Communication

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: 21 semester units

A grade of " C " or higher is required for each course applied to the major.

Select 15 units from the following courses:
SPCH 100 Public Speaking 3 units

SPCH 111 Oral Interpretation I . . . . . . . . . . . . . . . . . . . . . . . 3 units
SPCH 112 Oral Interpretation II ............................ 3 units
SPCH 120 Interpersonal Communication.................. 3 units
SPCH 140 Small Group Communication. . . . . . . . . . . . . . . . 3 units
SPCH 150 Intercultural Communication. . . . . . . . . . . . . . . . 3 units
SPCH 180 Family Communication. . . . . . . . . . . . . . . . . . . . 3 units
Plus, select 6 units from English and/or literature courses.

## CS Speech Communication

## 12 semester units

A grade of "C" or higher is required for each course applied to the certificate
SPCH 100 Public Speaking ..... 3 units
SPCH 120 Interpersonal Communication ..... 3 units
Plus, select 6 units from the following courses
SPCH 111 Oral Interpretation I ..... 3 units
SPCH 112 Oral Interpretation II ..... 3 units
SPCH 140 Small Group Communication ..... 3 units
SPCH 150 Intercultural Communication ..... 3 units
SPCH 180 Family Communication ..... 3 units

## SPRINKLER FITTER

The courses required for this degree are administered by College of San Mateo in conjunction with the Joint Apprenticeship and Training Committee. Registration is limited to those individuals fulfilling the related instruction requirements of the State of California as an indentured apprentice. For additional Information contact the Plumbers JATC or the Technology Division Office at 650-574-6177

## AS Associate in Science Degree

Sprinkler Fitter<br>60 units

## CA Certificate of Achievement

Sprinkler Fitter
30 units

## Required high school preparation:

Coursework in Mathematics. At least 18 years of age; High School graduate or GED; one semester of college-level algebra with a grade of "C" or higher.

## AS Major in Sprinkler Fitter

Complete General Education and other requirements listed for the Associate degree and

## Major Requirements: $\mathbf{3 0}$ semester units

A grade of "C" or higher is required for each course applied to the major.

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\begin{aligned}
& \text { SPFI } 701 \text { Sprinkler Fitter Apprentice I. . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPFI } 702 \text { Sprinkler Fitter Apprentice II. . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPFI } 703 \text { Sprinkler Fitter Apprentice III . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPFI } 704 \text { Sprinkler Fitter Apprentice IV . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPFI } 705 \text { Sprinkler Fitter Apprentice V. . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPFI } 706 \text { Sprinkler Fitter Apprentice VI . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPFI } 707 \text { Sprinkler Fitter Apprentice VII. . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPFI } 708 \text { Sprinkler Fitter Apprentice VIII . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPFI } 709 \text { Sprinkler Fitter Apprentice IX . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPFI } 710 \text { Sprinkler Fitter Apprentice X . . . . . . . . . . . . . } 3 \text { units }
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## CA Sprinkler Fitter

30 semester units
Complete major requirements listed under Associate in Science with a major in Fire Sprinkler Technology. A grade of "C" or higher is required for each course applied to the certificate.

## TECHNICAL PREPARATION (TECH PREP)

Career opportunities: TECH PREP programs link the last two years of high school and two years of community college study. TECH PREP offers students strong academic courses and career basics within broad career clusters, such as Health Careers or Business. Hands-on technical skills are incorporated into English, mathematics, and other high school subjects. All TECH PREP classes meet high school graduation and community college entrance requirements.

TECH PREP articulation agreements have been approved by local high schools, the San Mateo County Regional Occupational Program (ROP), Opportunities Industrialization Center West (OICW), and College of San Mateo in the following occupational areas: Accounting, Business Information Processing, Computer Information Science, Drafting Technology, Electronics Technology, and Manufacturing Technology. Other approved articulation agreements exist at Canada College and Skyline College.

The number of college units students may earn through these Tech Prep articulation agreements varies according to the specific occupational program.

TECH PREP instructors and counselors believe that every student can learn the skills required for success in a competitive world. High school and community college staff work together to help students learn academic and applied skills in real-world ways. They find mentors and internships for students' on-the-job learning in what they are being taught on campus. They help students locate and secure career jobs.

TECH PREP students master the skills necessary for success in college and in high-skill, high wage careers. They learn how to develop good work habits, how to work on teams, and how to be effective in real work settings. They visit and work at local companies. Some enter career employment after completing community college study; others transfer to four-year colleges and universities. Many work at good jobs while continuing their education.

TECH PREP employers tell schools and colleges what jobs are available and what skills these jobs require. They help students learn these skills on campus and in the workplace. They mentor students, coaching and encouraging them for success and to remain in college. They provide internships and other training experiences while students are in school and hire TECH PREP graduates into entry-level jobs with real futures.

TECH PREP communities have well-educated workforces, high employment rates, and strong local economies. Their young people find good jobs after high school and move easily into advanced college courses because of the skills they learned as teenagers. Relocating companies are attracted by the good schools and colleges in these communities and are impressed by the skills of local workers.

## UNIVERSITY TRANSFER

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).<br>California State University<br>University of California<br>Independent Colleges and Universities

## CA Certificate of Achievement

## University Transfer with three options: <br> Option 1: California State University General Education Certification (CSU/GE). 39 units <br> Option 2: Intersegmental General Education <br> Transfer Curriculum Certification CSU <br> (IGETC/CSU). 37 units <br> Option 3: Intersegmental General Education <br> Transfer Curriculum Certification for UC <br> (IGETC/UC) 34--39 units

For all options, find courses approved to meet university transfer general education requirements at www.assist.org and search under College of San Mateo.

## CA University Transfer Option 1: California State University General Education Certification (CSUGE)

Complete 39 units of coursework to meet the California State University General Education Certification requirements as listed below.

## Complete 9 units of Area A:

Communications in the English Language and Critical Thinking. Courses in Area A must be completed with a grade of "C" or higher. Select a course from each area below.
A1: Oral Communication
.3 units
A2: Written Composition .3 units
A3: Critical Thinking .3 units

## Complete 9 units of Area B:

Physical Universe and Its Life Forms. The course used to meet Area B4 must be completed with a grade of "C" or higher. One of the courses selected to meet Area B1 or Area B2 must be a lab course or have a lab component to meet the B3 lab requirement. Select a course from each area below.
B1: Physical Science . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
B2: Life Science .3 units
B3: Lab Course (the course selected to meet either B1 or B2 must be a lab course or have a lab component to meet the B3 requirement)
B4: Math Concepts/Quantitative Reasoning .3 units
Complete 9 units of Area C:
Arts, Literature, Philosophy and Foreign Language. At least one course must be selected from Arts and one course from Humanities. The third course can be selected from either Arts or Humanities.
C1: Arts ..... 3 units
C2: Humanities ..... 3 units
C1 or C2 ..... 3 units

## Complete 9 units in Area D:

Social, Political and Economic Institutions. Must complete coursework in at least two disciplines. Courses selected to meet Area D may also be used to meet a CSU graduation requirement in US History, US Constitutions, and California State and Local Government (referred to as AH\&I/CA State). (CSU Chico does not allow double counting of courses in Area D to meet AH\&I/CA State.)

> Area D

9 units

## Complete 3 units in Area E:

Lifelong Understanding and Self Development.

## Area E

3 units

## CA University Transfer Option 2: Intersegmental General Education Transfer Curriculum Certification for CSU (IGETC /CSU)

Complete 37 units of coursework to meet the IGETC/CSU Certification requirements as listed below.

All courses must be completed with a grade of "C" or higher.
Complete 9 units in Area 1: English Communication
Area 1A: English Composition. . . . . . . . . . . . . . . . . . . . . . . . . 3 units
Area 1B: Critical Thinking . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
Area 1 C : Oral Communication
3 units
Complete 3 units in Area 2:
Mathematical Concepts and Quantitative Reasoning.
Area 2
3 units

## Complete 9 units in Area 3

Arts and Humanities. At least one course must be selected from Arts and one course from Humanities. The third course can be selected from either Arts or Humanities.

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## Complete 7 units in Area 5:

Physical and Biological Sciences. At least one course must include a laboratory component.

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Area 5A: Physical Science
3-4 units
Area 5B: Biological Science . . . . . . . . . . . . . . . . . . . . . . . . . 3-4 units
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## CA University Transfer Options 3: Intersegmental General Education Transfer Curriculum Certification for UC (IGETC/UC)

Complete 34-39 units of coursework to meet the IGETC/UC Certification requirements as listed below.

All courses must be completed with a grade of "C" or higher
Complete 6 units in Area 1: English Communication
Area 1A: English Composition. . . . . . . . . . . . . . . . . . . . . . . . . 3 units
Area 1B: Critical Thinking . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
Complete 3 units in Area 2: Mathematical Concepts and Quantitative Reasoning.

## Area 2

3 units

## Complete 9 units in Area 3:

Arts and Humanities. At least one course must be selected from Arts and one course from Humanities. The third course can be selected from either Arts or Humanities.

Area 3A: Arts . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
Area 3B: Humanities. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
Area 3 A or 3 B. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units

## Complete 9 units in Area 4:

Social and Behavioral Sciences. Must complete coursework in at least two disciplines.

Area 4
9 units

## Complete 7 units in Area 5:

Physical and Biological Sciences. At least one course must include a laboratory component.
Area 5A: Physical Science . . . . . . . . . . . . . . . . . . . . . . . . . . . 3-4 units
Area 5B: Biological Science . . . . . . . . . . . . . . . . . . . . . . . . . . 3-4 units

## Language other than English - Area 6:

This area is a proficiency requirement that can be fulfilled through a number of options. Verification for any of the options listed on page 49 is required to complete certification.

## WELDING TECHNOLOGY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

## University Transfer Program

60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AS Associate in Science Degree <br> Welding Technology 60 units

## CA Certificate of Achievement

Welding Technology: Welding Technician ..... 50 units
Welding Technology: General Welder 29 units

## Recommended high school preparation:

Coursework in Mathematics, Physics, Mechanical Drawing, Drafting

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. Transfer majors may be listed as Welding Technology, Industrial Technology or other listings. For independent or out-ofstate colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

## AS Major in Welding Technology

Complete General Education and other requirements listed for the Associate degree and

## Major requirements: $\mathbf{5 0}$ semester units

A grade of "C" or higher is required for each course applied to the major.


## CA Welding Technology: Welding Technician

50 semester units.
Complete major requirements listed under Associate in Science Major in Welding Technology. A grade of "C" or higher is required for each course applied to the certificate.

## CA Welding Technology: General Welder 29 semester units

A grade of "C" or higher is required for each course applied to the certificate.
WELD 110 Elementary Welding Theory I ..... 4 units
WELD 111 Elementary Welding Practice I ..... 3 units
WELD 120 Elementary Welding Theory II ..... 4 units
WELD 121 Elementary Welding Practice II ..... 3 units
WELD 250 Fundamentals of Non-Destructive Testing ..... 2 units
DRAF 120 Principles of Technical Drawing. ..... 3 units
MATH 110 (or higher level math) Elementary Algebra ..... 5 units
MTT. 200 Machine Tool Technology ..... 2 units
PHYS 100 Descriptive Introduction to Physics ..... OR
MANU 100 Science for Technology ..... 3 units

## District Programs Not Offered at CSM

San Mateo County Community College District also operates Cañada College in Redwood City and Skyline College in San Bruno which offer a number of special programs not available at College of San Mateo:
Cañada College
4200 Farm Hill Blvd.,
Redwood City, CA $\mathbf{9 4 0 6 1}$
( $\mathbf{6 5 0}$ ) 306 -3100 or ( $\mathbf{6 5 0}$ ) $\mathbf{3 6 4 - 1 2 1 2}$
Programs
Drama/Theater Arts
Early Childhood Education
English Institute
Fashion Design
Interior Design
Medical Assisting
Paralegal
Radiologic Technology
Small Business Development and Job Training Center
(Office Automation and Small Business Development)
Athletics
Men's Basketball
Men's Golf
Men's Soccer
Women's Golf
Women's Soccer
Women's Volleyball
UNIVERSITY CENTER
Bachelor and graduate degree programs in
partnership with Bay Area universities.
(650) 306-3399

Skyline College
3300 College Drive,
San Bruno, CA 94066
(650) 738-4100 (day) • (650) 738-4251 (evening)

Programs
Arabic
Automotive Technology
Toyota Technical Education Network
Biotechnology
Central Service/Sterile Processing
Cosmetician/Esthetician (Eve. \& Sat.)
Early Childhood Education
Environmental Science and Technology
Family and Consumer Sciences
Fashion Merchandising
Filipino/Tagalog
International Logistics
International Studies
International Trade
Image Consulting
Japanese Automotive Technology
Medical Assistant
Medical Billing and Coding
Paralegal
Respiratory Therapy
Surgical Technology
Telecommunications and Network
Information Technology

## Athletics

Men's Basketball
Men's Soccer
Men's Wrestling
Women's Badminton
Women's Soccer
Women's Volleyball

## Description of Courses

## Prerequisites, Corequisites and Recommended Preparation

A prerequisite is a condition of enrollment that a student is required to meet. A corequisite is a course that a student is required to take simultaneously in order to enroll in another course. Recommended preparation is a condition of enrollment that a student is advised, but not required, to meet.

## Course Articulation

At the end of each course description there are letters that identify how the course applies to your educational goals, or in other words, how the course is articulated. "AA" indicates the course is applicable to the associate degree. "CSU" indicates the course is transferable to the California State University System. "UC" indicates the course is transferable to the University of California system. Absence of any of these letters indicates that the course is not degree applicable. In addition to these basic letters, other "attributes" appear that provide information about how the course may meet general education requirements for the associate degree, California State University General Education pattern, and the Intersegmental General Education Transfer Curriculum (IGETC) pattern for UC and CSU. An in depth description of these attributes and their meaning is provided on the last page of this Addendum. In addition, use PROJECT ASSIST (www.assist.org) for a more thorough understanding of articulation and how courses taken at College of San Mateo apply to transfer lower division general education requirements and lower division major requirements.

## Special Courses

The following special courses may be offered in instructional programs as recommended by the appropriate Division Dean and approved by the Committee on Instruction. See class schedule for specific course descriptions and current semester offerings.

64I COOPERATIVE WORK EXPERIENCE EDUCATION (.5-8) (Pass/ No Pass or letter grade option.) Work experience in a field related to a career goal, supplemented by individual counseling from an instructor-coordinator. (See Index: "Cooperative Work Experience Education.") (CSU)

680-689 SELECTED TOPICS ( $\mathbf{I}-\mathbf{3}$ ) Hours by arrangement. Selected topics not covered by regular catalog offerings. Course content and unit credit to be determined by the appropriate division in relation to community-student need and/or available staff. May be offered as a seminar, lecture, or lecture/laboratory class. (CSU)

690 SPECIAL PROJECTS (I-3) Hours by arrangement. Prerequisite: 3.0 G.P.A. in subject field. Independent study in a specific field or topic, directed by an instructor and supervised by the Division Dean. Students are eligible to request approval of a special project only after successfully completing at least two college-level courses in the subject field. (Note: Students normally may receive credit for only one special project per semester.) (May be taken four times for a maximum of i2 units.) (CSU)

680 and 690 courses are also transferable to UC, contingent upon a review of the course outline by a UC campus after transfer. Maximum creditallowed in Selected Topics and Special Projects is 3 units perterm, with 6 units total in any or all subject areas combined.

879 SELECTED TOPICS (I-3) Hours by arrangement. Non-Transferable degree-applicable course. Selected topics not covered by regular catalog offerings. Course content and unit credit to be determined by the appropriate division in relation to community-student need and/or
available staff. May be offered as a seminar, lecture, or lecture/laboratory class.

880-889 SELECTED TOPICS ( $\mathbf{I}-\mathbf{3}$ ) Hours by arrangement. Non-Transferable non degree-applicable course. Selected topics not covered by regular catalog offerings. Course content and unit credit to be determined by the appropriate division in relation to community-student need and/or available staff. May be offered as a seminar, lecture, or lecture/laboratory class. (Units do not apply toward AA/AS degree.)

## Accounting

A materials fee in the amount shown in the Schedule of Classes is payable upon registration for Accounting courses.

Ioo ACCOUNTING PROCEDURES (3) Minimum of 48 lecture hours per term. Study of the accounting cycle for service and merchandising businesses. Preparation of journals, ledgers and financial statements using manual work papers and accounting software. Accounting ioo provides an important foundation for ACTG I2I. (AA, CSU)

IO3 TEN-KEY SKILLS (.5) (Pass/No Pass grading) (Open Entry/Open Exit) Minimum of 24 lab hours per term. Self-paced course covering development of speed and accuracy using a ten-key calculator and the ten-key pad on a computer keyboard. (AA, CSU)

I2I FINANCIAL ACCOUNTING (4) Minimum of 64 lecture hours per term. Recommended Preparation: ACTG ioo. Preparation and interpretation of accounting information. Topics include application of generally accepted accounting principles to value assets, liabilities, and equity; accounting systems and internal controls; use of software applications to prepare and analyze accounting information; use of accounting information by decision makers. Students will demonstrate communication skills using PowerPoint and spreadsheet skills using Excel. (AA, CSU, UC)

I3I MANAGERIAL ACCOUNTING (4) Minimum of 64 lecture hours per term. Prerequisite: ACTG I2I with a C or better. Use of accounting information by management for analysis, planning, decision making and control; use of software applications to prepare and analyze accounting information. Topics include product cost accumulation, cost-volume-profitanalysis, responsibility accounting, budgeting, and capital budgeting. Students will demonstrate communication skills using PowerPoint and spreadsheet skills using Excel.(AA, CSU, UC)

144 QUICKBOOKS: SET-UP AND SERVICE BUSINESS (1.5) Minimum of 24 lecture hours perterm. Practical, hands-on introductionto QuickBooks accounting software. Covers set-up and service business transactions, including the sales cycle, the purchasing cycle, and end-of-period procedures. ACTG I44 and I45 are independent courses and may be taken in either order or concurrently. (May be taken twice for a maximum of 3 units.) (AA, CSU)

145 QUICKBOOKS: PAYROLL AND MERCHANDISING BUSINESS (I.5) Minimum of 24 lecture hours per term. Practical, hands-on introduction to QuickBooks accounting software. Covers payroll and merchandising business transactions, including the sales cycle, the purchasing cycle, and end-of-period procedures. ACTG I44 and 145 are independent courses and may be taken in either order or concurrently. (May be taken twice for a maximum of 3 units.) (AA, CSU)

16I INTERMEDIATE ACCOUNTING I (4) Minimum of 64 lecture hours per term. Prerequisite: ACTG I2I with $a$ C or better. Application of gen-
erally accepted accounting principles (GAAP) and guidelines from the Financial Accounting Standards Board (FASB) to value of assets, liabilities, and equity. Advanced analysis of cash, receivables, inventory, plant assets, and the related revenues and expenses. This course provides part, but not all, of the preparation needed for the CPA exam. (AA, CSU, UC)

162 INTERMEDIATE ACCOUNTING II (4) Minimum of 64 lecture hours per term. Prerequisite: ACTG I6I. Application of generally accepted accounting principles (GAAP) and guidelines from the Financial Accounting Standards Board (FASB) to value of assests, liabilities, and equity. Advanced analysis ofliabilities, leases, income taxes, pensions, equity, and the related revenues and expenses. Preparation of statement of cash flows. This course provides part, but not all, of the preparation needed for the CPA exam. (AA, CSU)

163 AUDITING (3) Minimum of 48 lecture hours per term. Prerequisite: ACTG I2I. In-depth study of the philosophy, environment and practice of auditing. Topics include professional auditing standards (GAAS), ethics, legal liability and malpractice; internal controls and audit risk; audit planning, procedures, statistical tools, evidence, documentation and reports. This course will provide part, but not all, of the preparation needed for the CPA exam. (AA, CSU)

164 GOVERNMENTAL AND NONPROFIT ACCOUNTING (3) Minimum of 48 lecture hours per term. Prerequisite: ACTG I2I. In-depth study of the theory and practice of accounting for government entities (local, state and Federal) and nonprofit agencies. Topics include analysis and application of pronouncements from the Governmental Accounting Standards Board (GASB); fund accounting, operational and cash budgeting, and operational control issues; transaction analysis, financial statement preparation and analysis, and external reporting issues. This course will provide part, but not all, of the preparation needed for the CPA exam. (AA, CSU)

I65 COST ACCOUNTING (3) Minimum of 48 lecture hours per term. Prerequisite: ACTG I3I. In-depth study of the theory and practice of managerial cost accumulation concepts and techniques for product and service costing, planning and control. Special emphasis will be placed on the use of cost accounting information for decision making and the preparation, analysis and use of cost accounting information. Topics include process costing, job order costing, variable costing, direct costing, standard costing, activity based costing, budgeting, and profit planning. This course will provide part, but not all, of the preparation needed for the CPA exam. (AA, CSU)

171 INDIVIDUAL INCOME TAXES (3) Minimum of 48 lecture hours and 16 lab hours per term. Preparation of Federal and California income tax returns for individuals; basic income tax law, theory, and practice. Students who successfully complete this course may apply to CTEC, the California Tax Education Council, to become a Registered Tax Preparer in California. (AA, CSU)

172 BUSINESS INCOME TAXES (3) Minimum of 48 lecture hours per term. Prerequisite: ACTG Ioo or I2I. Recommended Preparation: ACTG 177.Preparation of Federal and California income tax returns for corporations, partnerships, and sole proprietorships. Successful completion of Accounting I7I and 172 enables students to complete most tax returns required of professional tax preparers. This course meets continuing education requirements for the California Tax Education Council (CTEC). (AA, CSU)

173 TRUST, ESTATE, AND GIFT TAXES (I.5) (Pass/No Pass or letter grade option) Minimum of 24 lecture hoursperterm. Recommended Preparation:

ACTG 171. Study of Federal and California income tax regulations and theirapplication to trusts, estates, and gifts. Covers preparation of Form IO4I (Fiduciary Tax Return), Form 706 (Estate Tax Return), Form 709 (Gift Tax Return), and the related California tax forms. Completion of this course, combined with Accounting 17 I and I 72 , enables students to prepare most of the tax returns required of accounting professionals. Meets continuing education requirements for the California Tax Education Council (CTEC). (AA, CSU)

175 VOLUNTEER INCOME TAX PREPARATION (2) (Pass/No Passgrading.) Minimum of 24 lecture and 24 lab hours per term. Students serving in the Volunteer Income Tax Assistance (VITA) program prepare income tax returns for qualifying individuals at no cost. CSM VITA volunteers receive 24 hours of training and then volunteer to prepare income tax returns for 24 hours at the VITA site on the CSM campus. Training includes preparation of Federal and California income tax returns and use of TaxWise software. Topics include the Earned Income Tax Credit (EITC), Child Tax Credit, Child and Dependent Care Credit, filing status, dependency exemptions, basic deductions and adjustments. (May be taken four times for a maximum of 8 units.) (AA, CSU)

176 ENROLLED AGENT EXAM PREPARATION (3) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Recommended Preparation: ACTG I2I, I7I, I72, I73. Preparation for the IRS Enrolled Agent exam, known as the SEE (Special Enrollment Exam). Topics include taxation of individuals, inheritance, gifts, estates; taxation of small businesses, partnerships, farmers, C corporations, S corporations, not-for-profit entities, foreign corporations, and retirement plans. Other topics include fiduciary tax returns, determination of tax exempt status, practice before the IRS and tax preparer rules. Course content will be adjusted to reflect the latest changes in the SEE. This course qualifies for 48 Federal continuing education hours for CTEC. (May be taken four times for a maximum of 12 units.) (AA, CSU)

665 SPECIAL TOPICS IN TAXATION (.5-3) (Pass/No Pass or letter grade option) Minimum of 8 to 48 lecture hours plus o to 2 hours by arrangement per term. Prerequisite: ACTG I7I or equivalent professional experience. Study of Federal and/or California income tax regulations as applied to topic of the course. Topics selected will meet the continuing education requirements of tax professionals. (Each topic may be taken three times for a maximum of I .5 to 9 units.) (AA, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880-889 SELECTED TOPICS ( $\mathbf{( 1 - 3 )}$ ) (See first page of Description of Courses section.)

## Administration of Justice (Law Enforcement)

IOo INTRODUCTION TO THE CRIMINAL JUSTICE SYSTEM (3) Minimum of 48 lecture hours per term. Required of all Administration of Justice majors. Recommended Preparation: eligibility for ENGL848. History and philosophy of administration of justice in America; recapitulation of the system; identification of the various subsystems, role expectations, and their interrelationships; theories of crime; education and train-
ing for professionalism in the system. Includes POST Basic Learning Domains. (This course is part of the core curriculum.) (AA: Area E5d, CSU, UC)

102 PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838, 848 or equivalent. Legal processes from pre-arrest, arrest through trial and sentencing; federal and state courtjurisdiction; procedures from initial entry to final disposition. History of case law in the development of such legal procedures as stop and frisk, arrest, search and seizure, line-ups; current case law relating to the 4th, 5th, 6th, 8th, and I4th Amendments; legal issues relating to custody. Includes POST Basic Learning Domains. (This course is part of the core curriculum.) (AA, CSU, UC)

104 INTRODUCTION TO CRIMINAL LAW (3) Minimum of 48 lecture hours per term. Required of all Administration of Justice majors. Recommended Preparation: eligibility for ENGL 848. Historical development; philosophy oflawand constitutional provisions; definitions; classifications of crime and their application to the system of administration of justice; legal research, study of case law, and methodology and concepts of law as a social force. Includes POST Basic Learning Domains. (This course is part of the core curriculum.) (AA, CSU, UC)

IO6 LEGAL ASPECTS OF EVIDENCE (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838, 848 or equivalent. Origin, development, philosophy, and constitutional basis of evidence; constitutional and procedural considerations affecting arrest, search, and seizure; kinds and degrees of evidence and rules governing theiradmissibility; judicial decisions interpreting individual rights and case studies. Includes POST Basic Learning Domains. (This course is part of the core curriculum.) (AA, CSU)

IO8 COMMUNITY RELATIONS/MULTI-CULTURAL POLICING ISSUES (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Study of relationships between the Criminal Justice System and diverse culturegroups within the community, along with the role of human and cultural relations in the justice system. Analysis of minority group problems in America, as well as problems involved with policing in today's multicultural population. Development of positive culturegroup working relationships and involvement of law enforcement personnel as community problems solvers are emphasized. Includes POST Basic Learning Domains. (This course is part of the core curriculum.) (AA, CSU, UC)

I20 CRIMINAL INVESTIGATION (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838, 848 or equivalent; and ADMJ IO2, IO4, and IO6. Basic principles of criminal investigations. Includes human aspects of dealing with the public; specific knowledge necessary for handling crime scenes; interviews, evidence, surveillance, follow-up, technical resources, and case preparation. Includes POST Basic Learning Domains. (This course is part of the core curriculum.) (AA, CSU)

145 BASIC POLICE ACADEMY (22) 350 lecture hours and 450 lab hours. Prerequisite: POST approved pre-entry English skills assessment exam provided by the Academy; medical clearance by a licensed physician; and criminal history clearance pursuant to Penal Code. This 880 hour course of training is certified by the California Commission on Peace Officers Standards and Training to meet the statutory basic training requirements. The course requires a significant commitment of time and dedication and both academic and physical skills in addition to extra motivation to endure the intensive agenda. Level 2 reading and
writing. Students will be required to provide academy uniform, leather gear/equipment, physical training clothing, firearm, and abstract of driver's license. (AA, CSU)

153 SPECIAL LAW ENFORCEMENT ISSUES (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838, 848 orequivalent. Methods, techniques, and responsibilities of patrol procedures. Includes special issues regarding leadership, ethics, information systems, persons with disabilities, crisis intervention, crimes against children, juvenile procedures, and domestic violence. Includes POST Basic Learning Domains. (AA, CSU)

185 INTRODUCTION TO FORENSIC SCIENCE (3) Minimum of 32 lecture hours and 48 lab hours per term. Recommended Preparation: appropriate skill levels as indicated by the Math and Reading placement tests or successful completion of READ 825 and concurrent enrollment in Math IIO or III. Course is intended for the non-science major seeking a law enforcement career but is useful to all students interested in the field of forensic science. An introductory survey in the field of criminal forensic investigation through techniques of crime scene investigation, fingerprint identification and comparison, blood spatter evidence, serology and DNA analysis, firearms and bullet identification, and trace evidence. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)
680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.) (AA, CSU)

710 POLICE REPORT WRITING (3) Minimum of 48 lecture hours per term. Prerequisite: ENGL 838 or 848 or equivalent. Recommended Preparation: ADMJ IO2, IO4, IO6. Crime incident note taking, observation, interviewing and report writing techniques, utilizing scenario exercises to prepare data and provide courtroom information for prosecution purposes. Includes POST Basic Learning Domains. (AA)

77I PENAL CODE 832: ARREST AND CONTROL TRAINING (3) (Pass/ No Pass grading.) Minimum of 48 lecture hours per term. Arrest, search, and seizure; theory and practical application of related laws. Students must meet performance objectives upon completion of course. Course is certified by POST (Peace Officer Standards and Training Commission) as required under Penal Code Section 832.6 (a) (I). (AA)

775 PENAL CODE 832: FIREARMS TRAINING (.5) (Pass/No Pass grading.) Minimum of 8 lecture hours and 16 lab hours per term. Prerequisite: Per Penal Code I35II.5, students must obtain written clearance from the California Department of Justice verifying that they are not prohibited from firearms training. Call Administration of Justice Office for information. Successful completion of or concurrent enrollment in ADMJ 77I or successful completion of the P.C. 832 Arrest and Control portion (40 hours). Includes handgun and shotgun familiarization; handgun and shotgun safety; care, cleaning, and storage; handgun and shotgun shooting principles; firearms range qualifications. Firearms used in this course are those typically used by law enforcement. Firearms and materials will be supplied in class. Lab fees required. (May be taken twice for a maximum of I unit.) (AA)

780 REGULAR BASIC COURSE MODULE III (9.5) (Pass/No Pass grading) 136 lecture and 68 lab hours per offering. Prerequisite: per Penal Code I35II.5, written clearance from the California Department of Justice granting approval for firearms training. Possession of a current, valid driver license, and proof ofautomobile insurance. Recommended Preparation: eligibility
for ENGL 838/848 or higher. First level of training in the Regular Basic Course - Modular Format as prescribed by the California Commission on Peace Officer Standards and Training (POST). Includes PC832 certification. (May be taken twice for a maximum of 19 units.)

78I REGULAR BASIC COURSE MODULE II (13) (Pass/No Pass grading) Minimum of 188 lecture and 60 lab hours per semester. Prerequisite: Per Penal Code I35II.5, written clearance from the California Department of Justice granting approval for firearms training. Successful completion of Module III and current PC832 Certification. Passage of Module III End-ofCourse Proficiency Test within the preceeding I2 months. Recommended Preparation: eligibility for ENGL 838/848 or higher. Second level of training in the Regular Basic Course - Modular Format as prescribed by the California Commission on Peace Officer Standards and Training (POST). (May be taken twice for a maximum of 26 units.)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Administration of Justice-Public Safety Training Courses (AJPS)

In-service training courses offered for police personnel through the Public Safety Training Consortium. Course numbers will be assigned as needed, and Consortium titles will be used. The curriculum for each course offered adheres to POST (Peace Officers Standards and Training) and Title V requirements.

## Aeronautics

(Also see Meteorology ioo)
IOo PRIVATE PILOT GROUND SCHOOL (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Recommended Preparation: eligibility for ENGL 838/848. Preparation to take FAA Private Pilot written examination. Principles of flight, Federal Aviation Regulations, flightenvironment, aircraft performance, and aviation weather. Weather charts, navigation, cross country flight planning, emergency procedures, and aviation medical considerations. (Since this course may cover an updated version of the code, it may be taken three times for a maximum of 9 units.) (AA, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880-889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## American Sign Language

Note: To be transferable to UC, American Sign Language courses must be taken for letter grade.

III ELEMENTARY AMERICAN SIGN LANGUAGE I (3) (Pass/No Pass
or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Basic course in American Sign Language taught as a second language using dialogue drills, commands, and creative ideas. (AA: Area E5c, CSU, UC)

112 ELEMENTARY AMERICAN SIGN LANGUAGE II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: ASL III or equivalent with Pass or a grade of C or higher. Encoding, decoding, interaction, and acquisition techniques for skilled hearing signers and deaf people. (AA: Area E5c, CSU, UC: Area 6)

I2I ADVANCED ELEMENTARY AMERICAN SIGN LANGUAGE I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus I6 lab hours by arrangement per term. Prerequisite: ASL II2 or equivalent with Pass or a grade of C or higher. Covers the fundamental principles of Level II American Sign Language and introduces more advanced information about the Deaf community and Deaf culture. (AA: Area E5c, CSU: Area C2, UC: Area 6)

122 ADVANCED ELEMENTARY AMERICAN SIGN LANGUAGE II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus I6 lab hours by arrangement per term. Prerequisite: ASL I2I or equivalent with Pass or a grade of $C$ or higher. Covers the fundamental principles of Level II American Sign Language and introduces more advanced information about the Deaf community and Deaf culture. (AA: Area E5c, CSU: Area C2, UC: Area 6)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (1-3) (See first page of Description of Courses section.)

880-889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Anthropology

(Also see Biology 125)
ino CULTURAL ANTHROPOLOGY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of culture as the man-made environment of particular societies. Introduction to the anthropological point of view. Cross-cultural comparisons of cultural practices in specific societies and sub-cultures, including contemporary ethnic groups in the United States. (AA: Area E5b, CSU: Area D, UC: Area 4)

180 MAGIC, SCIENCE \& RELIGION (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405 or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Cross-cultural study of societies' on the nature of reality, and their religious, scientific, and magical practices as a consequence. (AA: Area E5b, CSU: Area C2/Area D, UC: Area 4)

350 INTRODUCTION TO ARCHAEOLOGY (3) (Telecourse) (Pass/No Pass or letter grade option.) Recommended Preparation: ANTH IIO and eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Anthropological study of four million years of human biological evolution and the archaeological study of sociocultural adaptation. (AA: Area E5b, CSU: Area D)

370 OLMEC, MAYA, AND AZTEC PEOPLE AND CULTURES OF MEXICO AND CENTRAL AMERICA (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Develops an awareness and understanding of the major accomplishments of Olmec, Zapotec, Teotihuacan, Maya, Toltec, and Aztec subcultures via their myths, philosophy, religion, art, and socio-political traditions. The final segment of the course shows how many of these past traditionssurvivetodayintheMexicanandCentralAmericancultures. (AA: Area E5b, CSU: Area D, UC: Area 4)

680 - 689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Apprenticeship Training

The courses in this section are administered by College of San Mateo in conjunction with various trade and industry joint apprenticeship committees. Registration is limited to those students fulfilling the related instruction requirements of the State ofCalifornia as indentured apprentices. For more information contact the Technology Division Office.

64I COOPERATIVE EDUCATION (.5-8) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Electrical Apprenticeship: Inside Wireman (ELEL)

Prerequisite: indenture in the Electrical ApprenticeshipProgram, approved by the California State Division of Apprenticeship Standards.

73I ELECTRICAL APPRENTICESHIP I (I.5) (Replacing ELEL 70I) 90 lab hours per semester. Prerequisite: Indenture in the Electrical Apprenticeship Inside Wireman Program, approved by the California State Divison of Apprenticeship Standards. First half of year one of a five-year Electrical Apprenticeship Program. Industry and program overview, work environment and basic skills, wire construction and insulation, conduit bending and trigonemetric functions, material overview, drafting/ blueprint reading. (May be taken twice for a maximum of 3 units.)

732 ELECTRICAL APPRENTICESHIP II (I.5) (Replacing ELEL 702) 90 lab hours per semester. Prerequisite: Indenture in the Electrical Apprenticeship Inside Wireman Program, approved by the California State Division of

Apprenticeship Standards. Second half ofyear one of a five-year Electrical Apprenticeship Program. Electrical Theory and its application on series circuits, parallel circuits and combination circuits; introduction to the National Electric Code (NEC). (May be taken twice for a maximum of 3 units.)

733 ELECTRICALAPPRENTICESHIP III (I.5) (Replacing ELEL 703) 90 lab hours per semester. Prerequisite: Indenture in the Electrical Apprenticeship Inside Wireman Program, approved by the California State Division of Apprenticeship Standards. First half of year two of a five-year Electrical Apprenticeship Program. Electrical test instruments, NEC code book skills, direct current (DC), generators, drafting and blueprints, conduit bending and febrication for commerical installation. (May be taken twice for a maximum of 3 units.)

734 ELECTRICAL APPRENTICESHIP IV (I.5) (Replacing ELEL 704) 90 lab hours per semester. Prerequisite: Indenture in the Electrical Apprenticeship Inside Wireman Program, approved by the California State Division of Apprenticeship Standards. Second half of year two of a five-year Electrical Apprenticeship Program. AC circuits, RLC circuits, power factor, electrical transformers, building/structure conductors. (May be taken twice for a maximum of 3 units.)

735 ELECTRICAL APPRENTICESHIP V (I.5) (Replacing ELEL 705) 90 lab hours per semester. Prerequisite: Indenture in the Electrical Apprenticeship Inside Wireman Program, approved by the California State Division of Apprenticeship Standards. First half of year three of a five-year Electrical Apprenticeship Program. Electrical safety-related work practices, blueprints, semiconductor use, transistors, electronic applications in the construction electrical industry. (May be taken twice for a maximum of 3 units.)

736 ELECTRICALAPPRENTICESHIPVI (I.5) (Replacing ELEL 706) 90 lab hours per semester. Prerequisite: Indenture in the Electrical Apprenticeship Inside Wireman Program, approved by the California State Division of Apprenticeship Standards. Second half of year three of a five-year Electrical Apprenticeship Program. Grounding and bonding, grounding electrode system, ground faults and short circuits, grounding and bonding equipment, three-phase transformers, overcurrents. (May be taken twice for a maximum of 3 units.)

737 ELECTRICAL APPRENTICESHIP VII (I.5) (Replacing ELEL 707) 90 labhours per semester. Prerequisite: Indenture in the Electrical Apprenticeship Inside Wireman Program, approved by the California State Division of Apprenticeship Standards. First half of year four of a five-year Electrical Apprenticeship Program. Motors, motor control devices, motor control diagrams. (May be taken twice for a maximum of 3 units.)

738 ELECTRICAL APPRENTICESHIP VIII (I.5) (Replacing ELEL 708) 90 labhours per semester. Prerequisite: Indenture in the Electrical Apprenticeship Inside Wireman Program, approved by the California State Division of ApprenticeshipStandards. Second half of year four ofa five-year Electrical Apprenticeship Program. Programmable logic controllers, controller fundamentals, ladder programming, NEC for electrical equipment. (May be taken twice for a maximum of 3 units.)

739 ELECTRICAL APPRENTICESHIP (I.5) (Replacing ELEL 709) 90 lab hours per semester. Prerequisite: Indenture in the Electrical Apprenticeship Inside Wireman Program, approved by the California State Division of Apprenticeship Standards. First half of year five of a five-year Electrical Apprenticeship Program. Fire alarm systems, security systems, structured cabling system, generated pwer and distribution. (May be taken twice for a maximum of 3 units.)

740 ELECTRICAL APPRENTICESHIP X (I.5) (Replacing ELEL 7IO) 90 lab hours per semester. Prerequisite: Indenture in the Electrical Apprenticeship Inside Wireman Program, approved by the California State Division of Apprenticeship Standards. Second half of year five of a five-year Electrical Apprenticeship Program. Power distribution systems, high voltage testing, automation networks, preparation for general electricians' certification, electrical project supervision. (May be taken twice for a maximum of 3 units.)

## Sprinkler Fitter Apprenticeship (SPFI)

Prerequisite: indenture in the Sprinkler Fitter Apprenticeship Program, approved by the California State Division of Apprenticeship Standards.

70I SPRINKLER FITTER APPRENTICESHIP I (3) Minimum of 48 lecture hours and i6 lab hours per term. Safety and health; introduction to hand tools, ladders, scaffolds, and the Rigid 300 machine; introduction to reading sprinkler drawings (part I); care and use of hand tools; operation of sprinkler head; reading a ruler; communication of pipe dimensions; power actuated tools licensing.

702 SPRINKLER FITTER APPRENTICESHIP II (3) Minimum of 48 lecture hours and I6 lab hours per term. Prerequisite: SPFI 70I with a grade of C or higher. Safety and health; industry gasses; shoring and man lifts; introduction to reading sprinkler drawings (part 2); types of industry pipes, fittings, valves, and hangers; First Aid instruction; CPRCertification; history, installation, and hazard ratings of automatic sprinkler systems; Victaulic grooved and plain-end piping methods; CPVC installation certification.

703 SPRINKLER FITTER APPRENTICESHIP III (3) Minimum of 48 lecture hours and I6 lab hours per term. Prerequisite: SPFI 702 with grade of C or higher. Basic mathematics; operation and functioning of a sprinkler head; knot tying and rigging techniques; oxygen-acetylene safety (part I); heritage and future in the pipe trades.

704 SPRINKLER FITTER APPRENTICESHIP IV (3) Minimum of 48 lecture hours and 16 lab hours per term. Prerequisite: SPFI703 with a grade of C or higher. Review of OSHA safety standards; copper pipe installation (soldering and brazing); wet pipe installation according to the NFPA I3 standard; wet pipe alarm valves; maintenance and inspection of automatic fire protection systems.

705 SPRINKLER FITTER APPRENTICESHIPV (3) Minimum of 48lecture hours and 16 lab hours per term. Prerequisite: SPFI 704 with a grade of C or higher. Safety and health issues related to underground construction; underground piping installation (NFPA 24); oxygen- acetylene safety (part 2); fundamentals of gas welding and flame cutting.

706 SPRINKLER FITTER APPRENTICESHIP VI (3) Minimum of 48 lecture hours and 16 lab hours per term. Prerequisite: SPFI 705 with a grade of $C$ or higher. Operation of dry valves, accelerators, and exhausters; hydraulics and the physical properties of fluids; isometric drawing; building plans, including architectural, structural, mechanical, and electrical drawings.

707 SPRINKLER FITTER APPRENTICESHIP VII (3) Minimum of 48 lecture hours and 16 lab hours per term. Prerequisite: SPFI 706 with a grade of Corhigher. Economics of the Sprinkler Industry; water spray systems (NFPA 15); pneumatic, hydraulic, and release deluge and Viking rate of rise fire protection systems; preaction non-interlock, single-interlock, and double-interlock systems; soldering of large diameter copper tubing; techniques and topics for tailgate meetings.

708 SPRINKLER FITTER APPRENTICESHIP VIII (3) Minimum of 48 lecture hours and I6 lab hours per term. Prerequisite: SPFI 707 with a grade of C or higher. Use of the T-Drill; automatic fire pump installation, start-up, certification and maintenance; combined sprinklerstandpipe systems; technical reports; fire protection supply.

709 SPRINKLER FITTER APPRENTICESHIPIX (3) Minimum of 48 lecture hours and 16 lab hours per term. Prerequisite: SPFI 708 with a grade of $C$ or higher. Sprinkler alarms; AA rate of rise; protomatic rate of rise; fire detectors; good foremanship (part I); backflow protection.
7IO SPRINKLER FITTER APPRENTICESHIP X (3) Minimum of 48 lecture hours and I6 lab hours per term. Prerequisite: SPFI 709 with a grade of C or higher. Types of foaming agents; direct injection and proportion base foam systems; bladder type foam tanks; TRI-WATER fire protection system; basic hydraulics review; fire protection for cooking equipment; fire pump basics review; good foremanship (part 2); BATT training; computer basics.

## Architecture

Students intending to major in Architecture are advised to consult with the architectural counselor/advisor in the Math/Science Division before registering.

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.

IOo SURVEY OF MODERN ARCHITECTURE (3) Minimum of 48 lecture hours per term. Basic values and concepts in contemporary architecture as a synthesis of art and science. Study of the significant design work, principles, and visions of influential architects, planners, and designers from the end of the 19th century into the 2ist century. Explores the critical relationships betweenarchitectureand environmental designand human experience, societal needs, building technique and community. Slides, films lecture hours and individual research. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA: Area E5c, CSU: Area Ci, UC*)

I2O ARCHITECTURAL + DESIGN DRAWING I: DRAWING AND VISUAL THINKING (2) Minimum of 16 lecture hours and 48 lab hours plus 32 hours byarrangement perterm. Presents the basictechniques of hand drawing as an essential method and skill of design exploration, visual thinking, and design communication. Studio work involves observation and freehand drawing of objects, architecture and environmental settings exploring techniques of line, tone, and their combination using soft pencil, conte/charcoal and pen/ink. Topics include proportion, visual composition, principles of observed perspective, and orthographic drawing conventions such as plan, section and elevation. Graphic supplies will be required. A materials fee as shown in the Schedule of Classes is payable upon registration. (May be takentwice for a maximum of 4 units.) (Fall only) (AA, CSU, UC*)

I40 ARCHITECTURAL+DESIGN DRAWING II: DESIGN COMMUNICATION (2) Minimum of 16 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: ARCH I2O and MATH II5 or equivalent. Development of the ability to visualize and graphically express forms and spaces in two and three dimensions, utilizing orthographic, paraline and perspective drawing in both black/white and color media. Introduction to essential Principles of Pictorial space, shade and shadow, methods of delineation, and mixed media techniques. Graphic supplies will be required. (Spring only.) (AA, CSU, UC*)

155 ARCHITECTURE, TECHNOLOGY, AND BUILDING 1: CONSTRUCTION MATERIALS AND METHODS (2) Minimum of 16 lecture hours and 48 lab hours plus 16 hours by arrangement per term. Prerequisite: ARCH I4O. Fundamental terminology, principles, and materials of construction and building components within the context of the design process in architecture. Emphasis placed upon the origin, history, nature and application of both traditional and emergent materials and processes in building construction. Includes discussion of sustainable materials and methods in construction and fundamental principles of structure, stability and form in building. (Fall only.) (AA, CSU)

I65 ARCHITECTURE, TECHNOLOGY, AND BUILDING 2: CONSTRUCTION PROCESSES AND SYSTEMS (2) Minimum of 16 lecture hours and 48 lab hours plus 16 hours by arrangement per term. Prerequisite: ARCH I55. Fundamental aspects of construction systems, principles of structure, and the process of architectural project delivery. Topics include terminology and fundamental concepts of building codes and constraints, design principles of building structures, light wood and metal frame systems, and basic construction documentation and communication methods. Introductory exposure to concepts and applications of integrated building modeling technologies or Building Information Modeling (BIM). Sustainable and green building materials and methods in construction. Introduction to the format and life safety principles of building codes as an integrated element in the design process of architecture. (Spring only.) (AA,CSU)

210 DESIGN I: INTRODUCTION TO ARCHITECTURE, ENVIRONMENTAL DESIGN, AND THE DESIGN PROCESS (4) Minimum of 48 lecture hours and 48 lab hours plus 48 hours by arrangement per term. Corequisites: concurrent enrollment or completion of ARCH I2O and 666. Introduction to architectural and environmental design with emphasis on critical two and three dimensional thinking utilizing visual, graphic, written, and three-dimensional analysis. Explores principles and relationships of form and space with people and place, scale, proportion, order, contrast, balance, and unity. Study of exemplar buildings and environments including significant movements and theories in design and architecture history as well as indigenous cultures. Relationship and value of the design process and design decisions on human existence is interwoven through the semester's work. Studio design exercises provide an introductory exposure to the means of design communication and craft, including verbal, written, hand graphic and three-dimensional object model building skills. Graphic supplies required. A materials fee as shown in the Schedule of Classes is payable upon registration. (Fall only) (AA, CSU)

220 DESIGN II: ARCHITECTURE DESIGN, FORM AND THE BUILT ENVIRONMENT (4) Minimum of 48 lecture hours and 48 lab hours plus 48 hours by arrangement per term. Prerequisite: ARCH I2O. Corequisite: concurrent enrollment in or completion of ARCH I4O. Continuation of the architectural design studio methodology introduced in Arch 2IO. Introduction to the tactile, experiential, and ordering elements of architectural and environmental form as physical responses to specific needs and constraints. Design opportunities, lectures, and discussion include the presentation, development, and analysis of elemental architectural solutions and topics. Students exploreand manipulateordering elements in architecture, building schema and essential principles of architectonic form including order, shelter, enclosure, light, texture, place, solids/voids, hierarchy and circulation/movement. Graphic processes and visual analysis combined with model building and other representational techniques are used for a more critical approach to problem solution and developed graphic expression. Design process
issues, setting design goals and objectives and the creation of spatial settings for human use are critically investigated. Graphic supplies will be required. A materials fee as shown in the Schedule of Classes is payable upon registration. (Spring only.) (AA, CSU, UC*)

230 DESIGN III: VISIONING AND BUILDING ARCHITECTURE (4) Minimum of 48 lecture hours and 48 lab hoursplus 48 hours by arrangement per term. Prerequisite: ARCH 220. Corequisite: Concurrent enrollment in or completion of ARCH 155. Expands upon the environmental design principles introduced in ARCH2IO and 220. Introduction offundamental principlesandopportunitiesinthedesignofelementarythreedimensional architectural solutions and the making ofbuildings in response to specific program needs within defined constraints. Design exercises explore the development of building forms and the materiality and construction of building solutions within the context of the problem solving process. The design studio fosters the development of integrated drawing, verbal, and model building design communication skills. Graphic supplies will be required. A materials fee as shown in the Schedule of Classes is payable upon registration. (Fall only.) (AA, CSU)
240 DESIGN IV: VISIONING PLACE AND COMMUNITY (4) Minimum of 48 lecture hours and 48 lab hours plus 48 hours by arrangement per term. Prerequisite: ARCH 230. Corequisite: Concurrent enrollment in or completion of Arch 165 . Expands upon the environmental design principles fostered in Arch 210 and 220 and the building design principles introduced in Arch 230. Introduction and exploration of basic principles of site planning, context, community, and regionalism including sustainable design, urbanism, and livable communities. Design studio opportunities explore the development of architectural solutions within specific environmental settings, both urban and non-urban. Course exposes the student to principles of environmentally sensitive site planning, and fosters an understanding of site constraints, topography, and reading and analyzing an architectural context in the urban or suburban setting. Graphic supplies will be required. A materials fee as shown in the Schedule of Classes is payable upon registration. (Spring only) (AA, CSU)

666 INTRODUCTION TO ARCHITECTURE (I) (Pass/No Pass) Minimum of I6 lecture hours per term. An overview of professional opportunities and requirements in architecture and environmental design including licensure and education. Discussion of the process of design, the role of the architect, professional opportunities in architecture, and opportunities in related fields. Exploration of educational paths in architecture and environmental design including transfer programs and requirements. Fall only (AA, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.)

## Art

Ioo ART OF THE WESTERN WORLD (3) (Telecourse) (Pass/No Pass or letter grade option.) Recommended Preparation: ENGL 848. "Art of the Western World" traces the Western tradition in the visual arts from ancient Greece to the present day. Chronologically introducing the societies, values, and ideals that gave birth to Western Art, it explores the connection between great works and the environment that stimulated their creation. Not applicable to Art major. (AA: Area E5c, CSU: Area Ci)

IOI ART \& ARCHITECTURE FROM THE ANCIENT WORLD TO MEDIEVAL TIMES, (c. I400) (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Ancient, Classical, Early Christian, Byzantine and Medieval art and architecture. Survey of artistic expression from Prehistoric to late Medieval times with emphasis on sculpture and architecture. Chronologically introducing the great works of the period, this course explores the connection between them and the societies, values, and ideals that stimulated their creation. (AA: Area E5c, CSU: Area Ci, UC: Area 3A)

102 ART \& ARCHITECTURE OF RENAISSANCE AND BAROQUE EUROPE, (C. 1300-I700) (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Survey of artistic expression during the Proto-Renaissance, Renaissance, High Renaissance, and Baroque periods (c. I300-I700). Emphasizes developments in painting and sculpture and their relationship to their historical and cultural context. (AA: Area E5c, CSU: Area Ci, UC: Area 3A)

103 ART OF EUROPE AND AMERICA FROM THE ROCOCO TO THE PRESENT, (c. I700 to the Present.) (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Survey of European and American artistic expression from the i8th Century to the present. Emphasizes the development of modern painting and sculpture as a reaction against earlier traditions. (AA: Area E5c, CSU: Area Ci, UC: Area 3A)

IO4 ART OF THE 20th CENTURY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Survey of principal styles in Western art from 1888 to I999, from Post-Impressionism to Modernism and PostModernism, from Paris to New York and the West Coast. (AA: Area E5c, CSU: Area Ci, UC: Area 3A)

124 OLD MASTERS' AESTHETICS AND TECHNIQUES (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 48 lab hours plus 48 hours by arrangement per term. Recommended Preparation: eligibility for ENGL 838/848. Art history and art studio classes are combined to introduce the aesthetics, materials, and techniques of the Renaissance and Baroque periods and their relationship to their cultural and historical context. Historical topics include the development of narrative and illusionistic painting in relationship to Humanism from the fourteenth, fifteenth, and I6th centuries. Major masterpieces are used to illustrate aesthetics, while lectures and lab work instruct students in painting techniques, including fresco, egg tempera, and traditional oils. (AA: Area E5c, CSU: Area Ci, UC: Area 3A)

201 DRAWING AND COMPOSITION I (3) Minimum of 48 lecture-critique hours and 48 lab hoursplus 48 labhours by arrangement per term. Drawing proficiency not required. Basic drawing course for college students. Study of two-and three-dimensional form and space relationships and
the elements of design in pictorial composition. Sequence of problems based on still life. Drawing in various dry media. (AA, CSU, UC)

202 DRAWING AND COMPOSITION II (3) Minimum of 48 lecturecritique hours and 48 lab hours plus 48 lab hours by arrangement per term. Prerequisite: ART 20I. Advanced composition; further study of threedimensional form, in black and white and color; advanced pictorial composition in illustration and the fine arts. (AA, CSU, UC)

206 FIGURE DRAWING AND PORTRAITURE (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours and 48 lab hours plus 48 lab hours by arrangement per term. Recommended Preparation: ART 20I. Drawing the human figureand portraiture in the modern approach from live models using charcoal, conte, ink, and mixed media.Emphasis is on gesture, line, mark-making, and expression. Extra supplies may be required. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (To increase competency, may be taken four times for a maximum of 12 units.) (AA, CSU, UC)

207 LIFE DRAWING (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours and 48 lab hours plus 48 lab hours by arrangement per term. Prerequisite: ART 2OI. Drawing the human figure in the traditional manner. Incorporates in-depth lectures in artistic anatomy (structure of the skeletal and muscular system of the body) as well as classic French academic drawing techniques designed to sharpen skills of visual perception and drawing from an observational approach. Various media will be used: in particular, students will gain proficiency with graphite as well as black/white charcoal on toned paper. (To increase competency, may be taken four times for a maximum of I2 units) (AA, CSU: Area CI, UC)

214 COLOR (3) Minimum of 48 lecture-critique hours and 48 lab hours plus 32 lab hours by arrangement per term. Drawing proficiency not required. Study of the physical and psychological properties of color. Stresses knowledge and skills needed to use color aesthetically and imaginatively. (AA, CSU, UC)

223 OIL PAINTING I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours and 48 lab hours plus 48 lab hours by arrangement per term. Recommended Preparation: ART2OI and 2I4. Introduction to basic oil painting techniques, including the use of value, color, and light to model 3D form. Students are encouraged to develop personal style in the later part of the course. (AA, CSU, UC)

224 OIL PAINTING II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours and 48 lab hours plus 48 lab hours by arrangement per term. Recommended Preparation: ART 223. A continuation of Oil Painting I with increased emphasis on a variety of painting techniques and development of a personal style. (To increase competency, may be taken three times for a maximum of 9 units.) (AA, CSU, UC)

225 ACRYLIC PAINTING I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours and 48 lab hours plus 32 lab hours by arrangement per term. Prerequisite: Art 20I. Introduction to acrylic painting techniques, including the use of value, color and light to model 3D form. Students are encouraged to develop personal style in the latter part of the course. (AA, CSU, UC)

226 ACRYLIC PAINTING II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours and 48 lab hours plus 32 lab hours by arrangement per term. Prerequisite: Art 225. Continuation of Art 225 with emphasis on a variety of acrylic painting techniques and development of a personal aesthetic. (To increase competency, may be taken three times for a maximum of 9 units.) (AA, CSU, UC)

23 I WATERCOLOR I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours and 48 lab hours plus 48 hours by arrangement per term. Prerequisite: ART 20I. Recommended Preparation: ART 214. Introduction to the basic tools and techniques of water color; washes, wet-into-wet, dry brush, transparent vs. opaque. Includes discussion of color theory, laws of diminishing contrast and compositional considerations. (AA, CSU, UC)

232 WATERCOLOR II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours and 48 lab hours plus 48 hours by arrangement per term. Prerequisite: ART 23I. Continuation of ART 23I, with emphasis on more painting experience in various styles and techniques in watercolor, such as an addition of opaque paints and the use of collage to extend the painting experience. (To increase competency, may be taken three times for a maximum of 9 units.) (AA, CSU, UC)
236 CHINESE BRUSH PAINTING (2-3) (Pass/No Pass or letter grade option.) Minimum of 32 to 48 lecture hours and 32 to 48 lab hours per term. Introduction to the three classic elements of Chinese art (brush painting, calligraphy, and aesthetics) and the development of these three elements from antiquity to the present. Emphasizes the series of Chinese masterpieces, both ancient and contemporary, focusing on the concepts of style, line, composition, perspective, and stroke. (May be taken up to four times for up to i2 units.) (AA, CSU)

245 MOSAIC MURALI (4) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 48 lab hours per term. Tile mosaic design essentials including continuity, tesselation, color, shaping, and pattern. Demonstration of materials, tools and techniques. Each student designs and makes both a small group mosaic and a personal mosaic panel. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

246 MOSAICMURALII (4) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 48 lab hours per term. Prerequisite: ART 245 . This course is a continuation of Mosaic Mural I. Tile mosaic design essentials for a public art mural: continuity, color, shaping and pattern. Materials, tools, techniques including some digital. Design and construct a modular section of a public mural to be installed in a public place. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken three times for a maximum of I2 units.) (AA, CSU)

30I DESIGN (3) Minimum of 48 lecture-critique hours and 48 labhoursplus 48 labhours by arrangement perterm. Two-dimensional design elements and principles; line, shape, texture, balance, rhythm, pattern, and more. Collage, drawing, painting, and digital media. (AA, CSU, UC)

315 DIGITAL PRINTING AND MIXED MEDIA (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours and 48 lab hours plus 32 lab hours by arrangement per term. A hybrid approach to twodimensional art making, exploration in both digital and traditional art media. Students will make a portfolio using Photoshop techniques to create fine digital prints on a variety of media. Drawing and painting materials will be combined with digital tools to enrich visual art practice. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies will be required. (May be taken four times for a maximum of 12 units.) (AA, CSU, UC)

350 VISUAL PERCEPTION (3) Minimum of 48 lecture-critique hours per term. Visual exploration into natural forms and man-made objects as an expression of art using 35 mm slides or digital photographs as the medium. Covers basic principles of perception, light, color, composition, and visual awareness. Encourages students to transmit their aes-
thetic, intellectual and emotional concerns through the photographic medium. Instruction in the use of 35 mm and digital cameras, lenses, film, and other creative controls of photography are included. Extra supplies may be required. (AA: Area E5c, CSU: Area Ci)

35I BEGINNING BLACK AND WHITE PHOTOGRAPHY (3) Minimum of 48 lecture-critique hours and 48 labhoursplus I6labhours by arrangement per term. Recommended Preparation: ART 20I or 350. The use of black and white photography as a means of increasing visual awareness. Introduction to basic black and white photographic skills and equipment including film processing, printing, print finishing. Exploration of the creative process: observation, discovery, examination, interpretation and response. Extensive darkroom work and a professional portfolio produced. Camera not required. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (AA: Area E5c, CSU: Area Ci, UC)

352 INTERMEDIATE BLACK AND WHITE PHOTOGRAPHY (3) Minimum of 48 lecture-critique hours and 48 lab hours plus 32 lab hours by arrangement per term. Prerequisite: ART 35I. Designed for students who have basic black and white camera and darkroom skills. Refinement of visual and technical skills. Covers intermediate exposure and development techniques applied to fine printmaking, filters, and Zone System. Portfolio is produced. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (AA, CSU, UC)

353 ADVANCED BLACK AND WHITE PHOTOGRAPHY (3) Minimum of 48 lecture-critique hours and 48 lab hours plus 32 lab hours by arrangement per term. Prerequisite: Art 352. Designed for students who have intermediate camera and black-and-white darkroom skills. Further refinement of visual and technical skills. Covers studio lighting, advanced exposure and development techniques applied to fine printmaking, archival processing, portfolio presentation and use of the view-camera. Portfolio is produced. A materials fee as shown the Schedule of Classes is payable upon registration. Extra supplies may be required. (May be taken twice for a maximum of 6 units.) (AA, CSU, UC*)

354 COLOR PHOTOGRAPHY I (3) Minimum of 48 lecture-critique hours and 48 lab hours plus 32 lab hours by arrangement per term. Prerequisite: ART 35I. Introduction to the use of color materials as an expressive medium. Access to color processor. Emphasizes mastery of the technical aspect of color balance and exposure. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (AA, CSU)
355 COLOR PHOTOGRAPHY II (3) Minimum of 48 lecture-critique hours and 48 lab hours plus 32 lab hours by arrangement per term. Prerequisite: ART 354. Continuation of ART 354, with emphasis on more refined control of color materials and more cohesive portfolio. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (May be taken three times for a maximum of 9 units.) (AA, CSU)

360 EXPERIMENTAL PHOTOGRAPHY (3) Minimum of 48 lecturecritique hours and 48 lab hours plus 48 lab hours by arrangement per term. Prerequisite: ART35I. Designed for students who have basic camera and black-and-white darkroom skills. Refinement of visual and technical skills with emphasis on experimental techniques, such as infra-red, multiple-imagery, handcoloring and others. Portfolio is produced. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (May be taken four times for a maximum of 12 units.) (AA, CSU)

365 INTERMEDIATE DIGITAL PHOTOGRAPHY (4) Minimum of 48 lecture hours and 48 lab hours plus 48 lab hours by arrangement per term. Prerequisite: ART 35 I and 38I. Recommended Preparation: ART 350. Introduction to digital editing, and printing using current tools, and software through the development of a portfolio. Students to provide photographic materials in the form of images from digital cameras, 35 mm slides or black and white/color negatives. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (May be taken twice for a maximum of 8 units.) (AA, CSU, UC)

366 ADVANCED DIGITAL PHOTOGRAPHY (4) Minimum of 48 lecture hours and 48 lab hours plus 48 lab hours by arrangement per term. Prerequisite: ART 365 with a grade of $C$ or higher. Intermediate scanning from film and flat art; intermediate editing and printing using the current tools, technologies, and software. Development of a portfolio. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (AA, CSU)

374 MASTER PORTFOLIO (2) Minimum of 16 lecture hours and 8 lab hours plus 32 lab hours by arrangement per term. Prerequisite: Art 353 and Art 360. Designed for students who have completed the Photography Program and wish to enroll in a course that allows them to produce a professional quality photographic portfolio on a topic of their choice. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (May be taken four times for a maximum of 8 units.) (AA, CSU)

38I BEGINNING DIGITAL PHOTOGRAPHY (3) Minimum of 48 lecturecritique hours plus 48 lab hours by arrangement per term. Recommended Preparation: Art 350. Advanced visual perception and refinement of composition using the computer to organize and display digital photographs. Covers principles of heightened visual awareness and the creation of digital photographs linked by a theme. Teaches the Macintosh operating system; organizing, managing and backing up digital photographs. Advanced instruction in the use of digital cameras, lenses, and the creation of a digital slide show are included. Extra supplies may be required. (May be taken twice for a maximum of 6 units.) (AA, CSU, UC)

405 SCULPTURE I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours and 48 lab hours plus 32 lab hours by arrangement per term. Beginning modeling of abstract and human forms. May be cast, carved, or welded. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (AA, CSU, UC*)
406 SCULPTURE II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours and 48 lab hours plus 32 lab hours by arrangement per term. Prerequisite: ART 405 or equivalent. Continuation of ART 405, with an emphasis on self-expression. Choice of media is open. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (May be taken three times for a maximum of 9 units.) (AA, CSU, UC)

4II CERAMICS I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours and 48 lab hours plus 32 lab hours by arrangement per term. Elementary clay construction, including pinch, coil, and slab; methods of ornamentation, glazing, and firing; introduction to the potter's wheel. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (AA, CSU, UC)

412 CERAMICS II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours and 48 lab hours plus 32 lab hours by arrangement per term. Prerequisite: ART 4II. Continuation and advanced study of topics introduced in ART 4II. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (May be taken three times for a maximum of 9 units.) (AA, CSU, UC)
665 SPECIAL TOPICS IN ART (.5-3) (Pass/No Pass or letter grade option.) Minimum of 16 lecture hours to 144 lab hours or combination of lecture hours and lab hours to equate to .5- 3 units; plus additional lab hours by arrangement for certain topics per term. Recommended Preparation: Successful completion of a beginning art studio course. Advanced or specialized study in studio arts. Designed for students in ceramics, drawing, painting, photography, print-making, and sculpture. Course provides extended study of a particular media, technique, or artistic problem through selected themes as listed in the class schedule. (May be repeated twice per topic.) (AA, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

8oi ART \& ARCHITECTURE FROM THE ANCIENT WORLD TO MEDIEVAL TIMES, (c. I400) (3) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Ancient, Classical, Early Christian, Byzantine and Medieval art and architecture. Survey of artistic expression from Prehistoric to late Medieval times with emphasis on sculpture and architecture. Chronologically introducing the great works of the period, this course explores the connection between them and the societies, values, and ideals that stimulated their creation. (AA)

802 ART \& ARCHITECTURE OF RENAISSANCE AND BAROQUE EUROPE, (c. 1300-1700) (3) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Survey of artistic expression during the ProtoRenaissance, Renaissance, High Renaissance, and Baroque periods (c. I300-I700). Emphasizes developments in painting and sculpture and their relationship to their historical and cultural context. (AA)

803 ART OF EUROPE AND AMERICA FROM THE ROCOCO TO THE PRESENT, (c. I70o to the Present.) (3) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Survey of European and American artistic expression from the 18th Century to the present. Emphasizes the development of modern painting and sculpture as a reaction against earlier traditions. (AA)

804 ART OF THE 20TH CENTURY (3) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Survey of principal styles in Western art from 1888 to I999, from Post-Impressionism to Modernism and PostModernism, from Paris to New York and the West Coast. (AA)

805 ART OF ASIA AND THE NEAR EAST (3) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Introduction to some of the major monuments and themes of the visual arts of Asia and the Near East. Explores the connection between great works of art and the societies, values, and ideals that stimulated their creation. (AA)

824 OLD MASTERS' AESTHETICS AND TECHNIQUES. (3) (Pass/No Pass grading.) Minimum of 48 lecture hours and 48 lab hours plus 48 hours by arrangement per term. Art history and art studio classes will be combined to introduce the aesthetics, materials and techniques of the Renaissance and Baroque periods and their relationship to their cultural and historical context. Historical topics will include the development of narrative and illusionistic painting in relationship to

Humanism during the fourteenth, fifteenth, and 16 th centuries. Major master pieces will be used to illustrate aesthetics, while lectures and lab work will instruct students in painting techniques, including fresco, egg tempera, and traditional oils. (AA)

879 Selected Topics (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ Selected Topics ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.)

## Astronomy

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.
IOO INTRODUCTION TO ASTRONOMY (3) Minimum of 32 lecture hours and 16 recitation hours plus 16 hours by arrangement per term. Survey of astronomy satisfying science requirements in state colleges and universities. Includes descriptive material on the solar system, stars, galaxies and, life in the universe, together with an introduction to the methods employed by astronomers ingathering information. (AA: Area E5a, CSU: Area Bi, UC: Area 5A)

IOI ASTRONOMY LABORATORY (I) Minimum of 48 hours per term. Prerequisite: MATH IIO or equivalent AND completion of or concurrent enrollment in ASTR IOO. Use of planetarium for constellation identification, coordinate systems, and basic astronomical measurements of planets, stars and spectra. Occasional telescopic observations and visits to observatories. With ASTR Ioo, satisfies lab science requirements for U.C. and California State Universities. Extra supplies may be required. (AA: Area E5a, CSU: Area B3, UC: Area 5A)

IO3 OBSERVATIONAL ASTRONOMY LAB (I) Minimum of 48labhoursper term. Recommended Preparation: completion ofor concurrentenrollment in ASTR Ioo or equivalent. An alternative to Astronomy ior. Students observe the night sky and image planets, the moon, star cluster, and galaxies using the department's telescopes, CCD camera, and spectrograph. Use of the department's planetarium projectorassists students in becoming familiar with the sky. Focus is on observational techniques. Extra supplies may be required. (May be taken twice for a maximum of 2 units.) (AA: Area E5a, CSU: Area B3, UC: Area 5A)

115 THE SOLAR SYSTEM (3) Minimum of 48 lecture hours, plus 16 hours by arrangement per term. Study of the sun, planets, their moons, asteroids, and comets, as well as the age and formation of the solar system. Also covers the history of astronomy and the contributions of various cultures to astronomy. Emphasizes the connection between Newton's Laws and the conservation of energy to Kepler's laws of planetary motion. Discusses the discovery of extrasolar planets and the possibility of earthlike planets. Focuses on conceptual understanding of the solar system. (AA: Area E5a, CSU: Area Bi, UC: Area 5A)

125 STARS AND GALAXIES (3) Minimum of 48 lecture hours per term. Study the sun, other stars, Milky Way galaxy, other galaxies and their evolution, black holes, quasars, dark matter, and the foundations of cosmology. Will become familiar with the basic tenets of general relativity and its application to black holes. The concept regarding stars as the primary producers of energy in the universe as well as the chemicals necessary for life, is emphasized. Focus is on conceptual understanding of stars, galaxies, and the rudiments of cosmology. (AA: E5a, CSU: Area BI, UC: Area 5a)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS ( $\mathbf{1}-3$ ) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS ( $\mathrm{I}-3$ ) (See first page of Description of Courses section.)

## Biology

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.

IOO INTRODUCTION TO THE LIFE SCIENCES (3) Minimum of 48 lecture hoursplus 16 hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill levels as indicated by the reading placement tests or other measures. Fundamental principles of life. The awareness of plant and animal interrelations and inter-dependencies. Examines the human role in the world of living things in relation to contemporary problems. One or more field trips may be required. (Intended for non-science majors with no previous experience in the biological sciences.) (AA: Area E5a, CSU: Area B2, UC: Area 5B)
102 ENVIRONMENTAL CONSERVATION (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405 or 415 OR appropriate skill levels as indicated by the reading placement tests or other measures. Study of the relationship of humans to the immediate and global environments, including the conservation of renewable and non-renewable resources, dynamics of ecosystems, and the interaction of plant and animal populations; alternative energy sources; and current problems caused by human interactions with the environment. One or more field trips may be required. (AA: Area E5a, CSU: Area B2, UC: Area 5B)
IIO GENERAL PRINCIPLES OF BIOLOGY (4) Minimum of 48 lecture hours and 48 lab hours plus 16 hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848. Study of the principles of the biological sciences. Includes origin and evolution of life, cellular nature of living things, genetics, ecology, life cycles, and natural history. One or more field trips may be required. Extra supplies may be required. (AA: Area E5a, CSU: Area B2/Area B3, UC: Area 5B)

123 BIOTECHNOLOGY WORKSHOP: TECHNIQUES AND APPLICATIONS OF THE POLYMERASE CHAIN REACTION (I) Minimum of 16 lecture hours perterm. Recommended Preparation: BIOL IIO or equivalent. Workshop in principles, applications, and hands-on techniques in PCR (polymerase chain reaction). A materials fee as shown in the Schedule of Classes is payable upon registration. (AA, CSU)
126 TEACHING SCIENCE I: K-5 CLASSROOMEXPERIENCE \& SEMINAR (I) Minimum of 16 lecture hours per term plus I hour per week in $K-5$ school classroom with a mentor. Investigation of elementary school teaching careers and requirements for earning a California $\mathrm{K}-5$ school teaching credential; study of California Department of Education standards in science for grades K-5; development and teaching class lessons in physical and life sciences. Same as Physics i26. (AA, CSU)

127 TEACHING SCIENCE II: MIDDLE SCHOOL CLASSROOM EXPERIENCE AND SEMINAR (I) Minimum of 16 lecture hours per term plus I hour per week in middle school classroom with a mentor. Prerequisite: completion of one college course in Physics, Chemistry or Biology with a grade of $C$ or better. Investigation of middle school teaching careers and requirements for earning a California middle school teaching credential; study of California Department of Education standards in science for grades $6,7,8$; development and teaching class lessons in physical and life sciences. Same as Physics 127. (AA, CSU)

I28 TEACHING SCIENCEIII: HIGHSCHOOLCLASSROOMEXPERIENCE \& SEMINAR (I) Minimum 16 lecture hours per term plus 2 hours per week in high school classroom with a mentor. Prerequisite: completion of Biology I27 or Physics I27. Investigation of high school teaching careers and requirements for earning a California high school teaching credential; study of California Department of Education standards in science for grades 9-I2; development and teaching class lessons in physical and life sciences. Same as Physics I28. (AA, CSU)

I30 HUMAN BIOLOGY (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill levels as indicated by the reading placement tests or other measures. Introductory study of human anatomy and physiology. Includes development, genetics, evolution and ecology. Recommended especially for students in the Medical Assisting program. (AA: Area E5a, CSU: Area B2, UC*)

I45 PLANTS, PEOPLE, AND ENVIRONMENT (3) Minimum of 48 lecture hours plus I6 hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill levels as indicated by the reading placement tests or other measures. Introduction to plants and their functions as they apply to people. Principles ofliving organisms, theirstructure-functions, evolution, and ecology. Emphasizes the role of plants in the development of human civilization and considers their impact as a primary food source for human population. One or more field trips may be required. (AA: Area E5a, CSU: Area B2, UC: Area 5B*)

184 WILDLIFE BIOLOGY (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848. Study of wildlife species of North America, with emphasis on common mammals of the Pacific states. Additional selected and appropriate vertebrate species: identification, characteristics, life histories, abundance, and distribution. Basic biological and ecological principles directly applicable to wildlife issues of species and habitat conservation. One or more field trips may be required. (AA: Area E5a, CSU: Area B2, UC: Area 5 B )

195 BIOLOGY FIELD LABORATORY (I) Minimum of 48 lecture hours plus i6 hours by arrangement per term. Prerequisite: completion of or concurrent enrollment in BIOL IOO, IO2, I4O, I45, I80, or I84. Emphasis on field trips to selected sites with laboratory preparation. Covers a wide range of topics including animals, both domestic and wild; natural and human-made ecosystems; forests; habitat disruption; and museums and parks. Laboratory and field investigations conducted using the scientific method. Emphasizes critical thinking skills. Designed for non-science majors to fulfill laboratory science G.E. requirement. (AA: Area E5a, CSU: Area B3, UC: Area 5B)

2IO GENERAL ZOOLOGY (5) Minimum of 48 lecture hours and 96 lab hours plus 16 hours by arrangement per term. Prerequisite: MATH I2O or

MATH I23 or the equivalent with a grade of $C$ or higher. Recommended Preparation: eligibility for ENGL 848 and READ 830 with a grade of C or higher and concurrent enrollment in READ 400 or 405 OR appropriate skill level as indicated by the reading placement tests or other measures; successful completion of a college biology course with lab and a college chemistry course with lab. Introduction to the principles of animal biology. Includes molecular basis of life; structure, function, and behavior as seen in invertebrates and selected chordates; ecology; zoogeography; and animal evolution. One or more field trips may be required. Extra supplies may be required. (AA: Area E5a, CSU: Area B2/ Area B3, UC: Area 5B)

220 GENERAL BOTANY (5) Minimum of 48 lecture hours and 96 lab hours per term. Prerequisite: MATH I2O or I23 or higher with a grade of C or higher. Recommended Preparation: READ 830 with a grade of $C$ or higher and concurrent enrollment in READ 400 or 405 OR appropriate skill level as indicated by the reading placement tests or other measures; successful completion of a college biology course with lab and a college course with a lab. Principles of biology as illustrated by plants with emphasis on structure, physiology, evolution and reproduction in green plants. One or more field trips may be required. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area E5a, CSU: Area B2/Area B3, UC: Area 5B)

230 INTRODUCTORY CELL BIOLOGY (4) Minimum of 48 lecture hours and 48 labhoursplus 16 hours by arrangement perterm. Prerequisite: CHEM 220. Recommended Preparation: eligibility for ENGL 838, 848; BIOL 2 IO or 220; and concurrent enrollment in CHEM 23I. Evaluation and analysis of the living cell and its components. Examines cell structures and metabolism as they relate to cell function and reproduction. (Recommended for all life science and medical science majors.) A materials fee in the amount shown in the Schedule of Classes is payable upon registration. One or more field trips may be required. Extra supplies may be required. (AA: Area E5a, CSU: Area B2/Area B3, UC: Area 5B)

240 GENERAL MICROBIOLOGY (4) Minimum of 48 lecture hours and 48 lab hours per term. Prerequisite: one semester of college chemistry and college-level biology with lab course. Recommended Preparation: eligibility for ENGL 848. Introduction to the morphology, physiology, and genetics of micro-organisms, with emphasis on bacteria and viruses. Includes environmental, applied microbiology, and the role of bacteria and viruses in health and disease. Laboratory work consists of isolation, cultivation, and identification of bacteria and techniques used to demonstrate microbial properties. (Recommended forstudents majoring in life science, physical science, and health science.) One or more field trips may be required. Extra supplies may be required. (AA: Area E5a, CSU: Area B2/Area B3, UC: Area 5B)

250 ANATOMY (4) Minimum of 48 lecture hours and 48 lab hours plus 16 hours by arrangement per term. Prerequisite: college level biology course with a grade of $C$ or higher. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400, or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, OR appropriate skill level as indicated by the reading placement tests or other measures. Structure of the human body. Laboratory study and dissection of the human male and female. (Primarily intended forstudents of nursing, physiotherapy, physical education and related fields such as chiropractic. Elective for pre-dental, pre-medical, and pre-veterinary students.) Extra supplies may be required. Students may take either the BIOL $250-260$ or the BIOL 265-266 series. (AA: Area E5a, CSU: Area B2/Area B3, UC: Area 5B*)

260 INTRODUCTORY PHYSIOLOGY (5) Minimum of 48 lecture hours and 96 lab hours plus 16 hours by arrangement per term. Prerequisite:

BIOL 250 and completion of a college chemistry course with a lab. Recommended Preparation: eligibility for ENGL 838 and 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Functions of the organs and systems of the human body. (Intended for students of nursing, physiotherapy, physical education, psychology and related fields. Elective for pre-dental, pre-medical, and pre-veterinary students.) A materials fee in the amount shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. Students may take either the BIOL 250-260 or the BIOL 265-266 series. (AA: Area E5a, CSU: Area B2/Area B3, UC: Area 5B*)

64I Cooperative Education (.5-8) See first page of Description of Courses section. (AA, CSU)

666 CAREERS IN BIOTECHNOLOGY AND BIOLOGY (I-2) (Pass/No Pass or letter grade option.) Minimum of 16 to 32 lecture hours per term. Recommended Preparation: a course in biology. Intended forgeneral audiences interested in understanding modern Biology and genetic engineering. Explores the mechanisms that underlie the normal functions of living cells and living organisms and the ways in which those functions are regulated by genes. Recombinant DNA methods used in medicine, agriculture, and industry in general, including genetic disease mapping, DNA fingerprinting, monoclonal antibodies, polymerase chain reaction and genetic diagnosis, growth factors, pharmaceuticals, and other topics. Exploration of employment possibilities in the field of biotechnology. One or more field trips may be required. Extra supplies may be required. (AA, CSU)

675 HONORS COLLOQUIUM IN BIOLOGY (I) Minimum of I6 lecture hours per term. Prerequisite: limited to students in the Honors Program who have completed or are concurrently enrolled in an associated nonhonors course in biology. Readings, discussion, and lectures covering selected advanced topics in biology to be determined by the Biology Department and the Honors Program. (AA, CSU, UC*)

680 - 689 SELECTED TOPICS (1-3) See first page of Description of Courses section. (AA, CSU)

690 SPECIAL PROJECTS (I-3) See first page of Description of Courses section. (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) See first page of Description of Courses section.

## Broadcast and Electronic Media

IIO MEDIA IN SOCIETY (3) (Pass/No Pass or letter grade option) Minimum of 48 lecture hours per term. Recommended Preparation: ENGL 838/848 or equivalent. Introduction to radio, television and cable TV. Includes a survey of the emerging technologies such as the internet, the web, direct satellite broadcast, interactive TV, digital radio and TV, Video On-Demand and podcasting. Other topics include: electronic media organization, history, programming and government regulations, news-making and advertising. This course is designed for Broadcasting majors and non-majors. (AA: Area E5b/Area E5d, CSU: Area D)

210 TELEVISION STUDIO TECHNIQUES (3) (Pass/No Pass or letter grade option.) Minimum of 32 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Recommended Preparation: ENGL 838 or ENGL 848
or equivalent; BCST IIO or equivalent; MULT I8I, I9I or equivalent; Entry level course in television production including all crew positions and operations of all equipment in the television studio (cameras, microphones, audio mixer, video switcher, graphics equipmentand lighting); also includes writing, producing and directing. (AA, CSU)

220 BROADCAST WRITING (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: ENGL 838 or ENGL848 orequivalent. Hands-on learning environment that prepares the student for a writing career, in media. Writing on deadlines, timing and editing scripts, researching subjects, legal issues, interviewing techniques, and writing to pictures. (To increase competency, may be taken two times for a maximum of 6 units.) (AA, CSU)

230 ON-AIR TALENT (3) (Pass/No Pass or letter grade option) Minimum of 32 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Recommended Preparation: ENGL 838 or ENGL 848 or equivalent. Introduction to basic announcing and communicating techniques for television and radio talent. Emphasizes format, delivery and oncamera performance. Includes practice in marking copy, ad-lib, and microphone techniques. (May be taken twice for a maximum of 6 units.) (AA, CSU)

240 DIRECTING TALENT (I) (Pass/No Pass or letter grade option.) Minimum of 16 lecture hours and 8 lab hours plus 16 hours by arrangement per term. Recommended Preparation: ENGL 838 or ENGL 848 or equivalent; BCST 210 or equivalent. Entry level course in directing talent for electronic media, including fiction, news, casting, motivation and dialogue, staging, blocking cameras to actors, choreography and beats. (May be taken twice for a maximum of 2 units.) (AA, CSU)

3IO STUDIO LIGHTING TECHNIQUES (I.5) (Pass/No Pass or letter grade option.) Minimum of 24 lecture hours and 8 lab hours plus 16 hours by arrangement per term. Recommended Preparation: ENGL 838 or ENGL 848 or equivalent; BCST 2 IO or equivalent. Video lighting for both entry level students and those with some familiarity in video-lighting production. Course covers basic studio techniques, discussion of differences in lighting equipment, routinely used grip equipment, real world solutions to commonly experienced lighting problems in studio lighting, and equipment maintenance. (May be taken twice for a maximum of 3 units.) (AA, CSU)

312 FIELD LIGHTING TECHNIQUES (I.5) (Pass/No Pass or letter grade option.) Minimum of 24 lecture hours and 8 lab hours plus 16 hours by arrangement per term. Recommended Preparation: ENGL 838 or ENGL 848 or equivalent; BCST 2 IO or equivalent. Video lighting for both entry level students and those with some experience in field lighting for video production. Course covers basic field lighting techniques, discussion of differences in lighting equipment, routinely used grip equipment, real world solutions to commonly experienced lighting problems in location shoots, and equipment maintenance. (May be taken twice for a maximum of 3 units.) (AA, CSU)

3 I6 PRODUCING FOR MEDIA (3) (Pass/No Pass or letter grade option.) Minimum of 32 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: BCST 210 or equivalent; BCST 220 or equivalent. Recommended Preparation: ENGL838 or ENGL848orequivalent. Provides hands-on experience to produceatelevision program from the producers' perspective. Covers an overview of the producing process, from program concept and budgeting, to production and distribution. Critical part of this course is to produce compelling programs that are on schedule and on budget. Suitable program material may air on PBS station KCSM-TV. (May be taken twice for a maximum of 6 units.) (AA, CSU)

320 DIGITAL TELEVISION FIELD (3) Pass/No Pass or letter grade option.) Minimum of 32 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisites: BCST 220 or equivalent. Recommended Preparation: ENGL 838 or ENGL 848 or equivalent. Introduction to digital video techniques and technologies for video production in a field setting. Comprehensive survey of digital television field production. Allows students to sharpen their skills in all field production positions including camcorder operation, audio, lighting, and grip; introduction to digital video editing. Covers field production from planning through final editing. (May be taken twice for a maximum of 6 units.) (AA, CSU)

4IO ADVANCED PRODUCTION TECHNIQUES (3) (Pass/No Pass orletter grade grading option.) Minimum of 32 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: BCST 210 or equivalent. Advanced course in television production including all crew positions and hands on operations of all equipment in the television studio (cameras, microphones, audio mixer, video switcher, graphics equipment and lighting); also includes set and graphic design, post production, producing, directing, field production and big remotes. (May be taken twice for a maximum of 6 units.) (AA, CSU)

420 ADVANCED AUDIO OPERATIONS (3) (Pass/No Pass or letter grade option.) Minimum of 32 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: MULT3I6 or equivalent. Corequisite: MUS 293 or equivalent. Recommended Preparation: MULT 296 or equivalent. A study of the best audio practices that are used in media outlets, such as radio stations, TV stations, websites and streaming media. These practices show the correct use of audio equipment and their interface to computers for processing, editing, distribution and archiving. (May be taken twice for a maximum of 6 units.) (AA, CSU)

450 INTERNSHIP IN BROADCASTING (3) (Pass/No Pass or letter grade option) Minimum of 32 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: BCST 41O or BCST 420 or equivalent. Continuation of the Broadcasting program where students create media projects using production and design techniques learned in earlier courses. Students work with a media company and are given "real" projects. Hands-on experience producing media programs. (May be taken three times for a maximum of 9 units.) (AA, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Building Inspection Technology

700 INTRODUCTION TO THE BUILDING CODE (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Survey of the four required courses covering building inspections, code terminology, techniques of inspection, and construction practices. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA: E5d)
$7 I O$ NON-STRUCTURAL PROVISIONS OF THE UNIFORM BUILDING CODE (3) Minimum of 48 lecture hours per term. Prerequisite: BLDG 700
or equivalent with a grade of $C$ or higher. Study of the fire and life safety provisions of the Uniform Building Code, and the International Building Code. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)

720 ELECTRICAL INSPECTION I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Overview of the National Electrical Code. Covers the various aspects of electrical service as applied to building inspection, single-family dwellings and multi-family dwellings, commercial locations, industrial locations and specialized and hazardous locations. Includes recent electrical code changes, the application of research techniques for inspection, preparation of reports, and code interpretation considerations. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)

725 ELECTRICAL INSPECTION II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Prerequisite: BLDG 720 or equivalent with a grade of $C$ or higher. In-depth advanced study of the sections of the National Electrical Code dealing with calculations. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)

730 PLUMBING INSPECTION (3) (Pass/No Pass or letter grade grading option.) Minimum of 48 lecture hours per term. Building regulations governing drainage systems, vents and venting, plumbing, water systems, building sewers, and gas piping. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)

735 ADA BUILDING REQUIREMENTS (3) (Pass/no Pass or letter grade option.) Minimum of 48 lecture hours per term. Covers the essential concepts, reference materials, federal legislation, litigation and use of guidelines, codes and standards in the design and construction of built environments under the American Disabilities with American Barriers Acts. Participants learn how to apply federal and state access code regulations to legal case studies, field inspections, plan reviews and typical property improvement scenarios. Course emphasizes the intent of the laws and their proper interpretation. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of I2 units.) (AA)

740 MECHANICAL CODE (3) Minimum of 48 lecture hours per term. Prerequisite: BLDG 700 or equivalent with a grade of $C$ or higher. Regulations and inspection methods governing mechanical construction, heating and cooling equipment, combustion air, floor furnaces, wall furnaces, unit heaters, venting, ducts, ventilation systems, and refrigeration systems and equipment. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)

750 STRUCTURAL PROVISIONS OF THE UNIFORM BUILDING CODE (3) Minimum of 48 lecture hours per term. Prerequisite: BLDG 700 or equivalent with a grade of Corhigher. Study of engineering fundamentals and the structural provisions of the Uniform Building Code. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of I2 units.) (AA)

760 ENERGY REGULATIONS (3) Minimum of 48 lecture hours per term. Prerequisite: BLDG 7oo or equivalent with a grade of C or higher. Methods of compliance with energy regulations applicable to dwellings, apartments, condominiums, and hotels. Includes heat transfer, insulation, weather stripping, climate control systems, water heating, mandatory requirements, computer compliance, point system, component pack-
ages, appliance regulations, and solar systems. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)

775 INTRODUCTION TO RESIDENTIAL DWELLING INSPECTION TECHNOLOGY (3) Minimum of 48 lecture hours per term. Provides an overview of the building, mechanical, plumbing and electrical sections under the provisions of the International Residential Code. Suitable for jurisdictional or home inspectors, facility managers, contractors, architects, engineers and those in related fields of the real estate profession. (Since codes change, this course may be taken four times for a maximum of 12 units.) (AA)

790 BLUEPRINT READING FOR CONSTRUCTION (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Course provides an overview of the building, mechanical, plumbing and electrical sections under the provisions of the International Residential Code. Suitable for jurisdictional or home spectors, facility managers, contractors, architects, engineers and those in related fields of the real estate profession. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
880 - 889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Business

Ioo CONTEMPORARY AMERICAN BUSINESS (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Current concepts of American business including examination of societal issues affecting business in a dynamic economic environment. Includes the nature of major business functions and the roles of producer and consumer in the economy. (AA: E5b, CSU,UC)
Ioi HUMAN RELATIONS I (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848. Designed to increase competence in personal and interpersonal skills, which are critical prerequisites for a successful career in business. Covers perception, self-management, self-image, communication, prejudice, conflict management, leadership, and resistance to change. (AA: Area E5b, CSU: Area E)
115 BUSINESS MATHEMATICS (3) Minimum of 48 lecture hours per term. Prerequisite: score of 26 or higher on CSM Mathematics Placement Test I or other measures; or MATH 8II with grade of C or higher. Study of mathematics as applied to business, with emphasis on word problems involving interest, discount, negotiable instruments, financial statements and ratios, inventory pricing, depreciation, payroll, income tax, annuities, and amortization. (AA, CSU)

125 INTERNATIONAL BUSINESS (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibilityfor ENGL848. Introduces students to the dynamic field of international business from the theoretical and practical viewpoints. Designed to give students the competitive advantage in a global market place, this course covers cultural differences, international trade theory, political environments, foreign exchange markets, geography, and trading blocks, international business strategies, exporting, importing, countertrade, global marketing, and global human resource management. (AA: Area E5b, CSU: Area D)

I3I MONEY MANAGEMENT (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Develops understanding and skill in dealing with consumer financial planning, saving and borrowing money, real estate and introduction to security investments, estate planning, and income tax preparation. (AA, CSU)
150 SMALL BUSINESS MANAGEMENT (3) Minimum of 48 lecture hours perterm. Prerequisite: BUS. IOO or equivalent. Recommended Preparation: eligibility for ENGL 848. Examination of the opportunities and hazards of small business operation. Designed for business students who plan to establish or supervise a small business. Explores significant areas of vital interest to the prospective independent businessperson, including pre-opening requirements. (AA, CSU)
I80 MARKETING (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Broad study of marketing principles and methods applicable to both consumer and industrial goods and services. Includes retailing and wholesaling consumer goods, marketing industrial goods, marketing policies and practices, and government relationship to marketing. (AA, CSU)
201 BUSINESS LAW I (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL848. Introduction to the study of businesslaw, including sources, agencies, and enforcement procedures. Emphasizes the ability to understand and review simple contracts and a basic understanding of contract law. Discusses sales warranties and consumer protection legislation. (AA: Area E5d, CSU, UC)
295 COMPUTER SYSTEMS IN BUSINESS (4) Minimum of 48 lecture hours and 32 lab hours plus 16 lab hour by arrangement per term. Prerequisite: BUSW 415 or equivalent; BUS. II5 or MATH IIO or equivalent; and concurrent enrollment in or completion of ACTG IOO or I2I. Recommended Preparation: eligibility for ENGL 848. Introduction to business computers; principles of computeroperations and system design. Flowcharting, writing, running, and debugging programs in BASIC for accounting and management. Use of microcomputer software applications for word processing, spreadsheets, and database management. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA: Area E2b, CSU)

315 KEYBOARDING I (3) Minimum of 48 lecture hoursplus 32 lab hours by arrangementperterm. Beginning course forstudents to learn to inputand process information using a computer keyboard. Includes keyboarding by touch, speed and accuracy, basic word processing techniques, basic formatting, and printing. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU)

316 KEYBOARDING II (3) Minimum of 48 lecture hoursplus 32 labhours by arrangement per term. Recommended Preparation: BUS. 315 or equivalent. Advanced course to increase keyboarding speed and accuracy as well as improve skills in formatting and producing letters, memos, reports, and tabulated material. A materials fee as shown in the Schedule of Classes is payable upon registration. (To increase competency, may be taken twice for a maximum of 6 units.) (AA: Area E5d, CSU)
317 MICRO/KEYBOARDING: SKILLBUILDING (1.5) Minimum of 24 lecture hours plus 16 lab hours by arrangement per term. Recommended Preparation: BUS. 315 or equivalent. Increase keyboard speed and accuracy through the use of an interactive microcomputer skillbuilding program. A materials fee as shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 3 units.) (AA: Area E5d, CSU)

326 ELECTRONIC FILING AND RECORDS MANAGEMENT (I.5) Minimum of 24 lecture hours plus 16 lab hours by arrangement per term. Recommended Preparation: BUS. 315 or equivalent; eligibility for ENGL 838 or 848 . Study of both manual and microcomputer filing methods from creation through maintenance of data records. Covers alphabetic, numeric, geographic, and subject filing rules. (May be taken twice for a maximum of 3 units.) (AA, CSU)

352 INTRODUCTION TO INSURANCE (I) (Pass/No Pass or letter grade option) Minimum of 16 lecture hours per term. Course provides students with a basic background of the modern property/casualty insurance system. Topics include insurance products and services, reinsurance, civil and tort laws, basic commercial and personal ISO insurance contracts, and the importance of the risk management process. (AA, CSU)

353 PROPERTY AND LIABILITY INSURANCE PRINCIPLES (3) (Pass/ No Pass or letter grade option) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and BUS 352 orequivalent. Fundamentals of property and liability insurance. Course covers the following three segments: (I) fundamentals of insurance including types of insurers, institutions that provide insurance, how it is regulated, and measurement of financial performance; (2) insurance operations such as marketing, underwriting, and claims; (3) insurance contracts, loss exposure, and risk management. (AA, CSU)

354 PERSONAL INSURANCE (3) (Pass/No Pass or letter grade option) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and BUS 352 or equivalent. Fundamentals of personal insurance. Course provides valuable information to anyone majoring in business oranyone interested in learning about the subject to handle his/her personal insurance needs. Topics includeautomobile insurance; homeowners insurance; other residential insurance, such as fire and earthquake insurance; marine insurance; other personal property and liability insurance; financial planning; life insurance; and health insurance. (AA, CSU)

355 COMMERCIAL INSURANCE (3) (Pass/No Pass or letter grade option) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and BUS 352 or equivalent. Fundamentals of commercial insurance. Course covers information concerning commercial property insurance, business income insurance, commercial crime insurance, equipment breakdown insurance, inland and ocean marine insurance, commercial general liability insurance, commercial automobile insurance, business owners policies and farm insurance, worker's compensation and employer's liability insurance, and other miscellaneous coverage. (AA, CSU)

356 CODE AND ETHICS ( $\mathbf{I}$ ) (Pass/No Pass or letter grade option) Minimum of 16 lecture hoursperterm. Recommended Preparation: eligibilityfor ENGL 838 or 848 and BUS 352 or equivalent. Course covers topics on business ethical behavior and ethics unique to the insurance industry. A series of case studies regarding ethical behavior in the field of insurance will be included in the course. (AA, CSU)

40I BUSINESS COMMUNICATIONS (3) Minimum of 48lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and ability to type. Comprehensive review of grammar, punctuation, and vocabulary used in business. Identifies, explains, and develops the communication skills and tools that contribute to effective verbal and written communications. Instruction includes exercises using microcomputers. (AA: Area E2b, CSU)

64I COOPERATIVE EDUCATION (.5-8) (See first page of Description of Courses section.) (AA, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Business Microcomputer Applications

## Business Applications - Windows Platform (BUSW)

A materials fee in the amount shown in the Schedule of Classes is payable upon registration for Windows Platform courses.

105 INTRODUCTION TO MICROCOMPUTERS (I.5) (Pass/No Pass grading.) Minimum of 24 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: BUS. 315 orequivalent. Recommended Preparation: eligibility for ENGL 838/848. Introduction to microcomputers. Covers equipment, operating systems, and Windows software applications including word processing, spreadsheet, and business presentations. (May be taken twice for a maximum of 3 units.) (AA, CSU)

II4 WINDOWS FUNDAMENTALS I (I.5) Minimum of 24 lecture hours plus 16 lab hours by arrangement per term. Recommended Preparation: BUSW IO5 or equivalent; eligibility for ENGL 838 or 848. Introduction to Microsoft Windows. Includes hardware needs, relationship between versions of Windows, customizing Windows, and networking capabilities, desktop concepts and organization, OLE, accessory applications, file search and management, updating, maintenance and security. (May be taken twice for a maximum of 3 units.) (AA, CSU)

II5 WINDOWS FUNDAMENTALS II (1.5) Minimum of 24 lecture hours plus I6 lab hours by arrangement per term. Prerequisite: BUSW II4 or equivalent. Continuation of BUSW II4. Covers how to install and customize Windows with features such as the backup program, registry, and startup options; how to install software application programs; how to configure devices, drivers, and memory; and how to set up fonts and printers. (May be taken twice for a maximum of 3 units.) (AA, CSU)

214 WORDPROCESSINGIUSINGWORDFORWINDOWS(I.5) Minimum of 24 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: BUS. 315 orequivalent. Recommended Preparation: eligibility for ENGL 838 or848. Introduction to WORD for Windows software. Includes overview of document formats; preparation (creating, formatting, editing, saving, and printing) of both single- and multi-page documents; outlines; tables of content; tables; multiple windows; and file management. (May be taken twice for a maximum of 3 units.) (AA, CSU)

215 WORD PROCESSING II USING WORD FOR WINDOWS (I.5) Minimum of 24 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: BUSW 214 or equivalent. Continuation of BUSW 214. Includes graphics, charts, columns, templates, macros, mail-merge, labels, sorting, forms, and software linking. (May be taken twice for a maximum of 3 units.) (AA, CSU)
383 BUSINESS PRESENTATIONS USING POWER POINT FOR WINDOWS I(1.5) Minimum of 24 lecture hours plus i6lab hours by arrangement perterm. Prerequisite: BUSW2I4 orequivalent. Examines the components of effective business presentations and capabilities and features of business presentation software for the purpose of planning and creating a
complete presentation of integrated text and graphics in a slide format. (May be taken twice for a maximum of 3 units.) (AA, CSU)

384 BUSINESS PRESENTATIONS II USING POWER POINT FOR WINDOWS (I.5) Minimum of 24 lecture hours plus i6 lab hours by arrangement perterm. Prerequisite: BUSW 383 or equivalent. Examination of advanced features of Power Point such as customizing templates, animation and slide show effects, charts, importing templates and clips from MS web site, self running presentations, making presentations available to others like workgroups and new features of the current version of Office. (May be taken twice for a maximum of 3 units.) (AA, CSU)

415 SPREADSHEET I USING EXCEL FOR WINDOWS (I.5) Minimum of 24 lecture hours plus i6 lab hours by arrangement per term. Prerequisite: BUSW IO5 or equivalent. Recommended Preparation: eligibility for ENGL 838 or 848 . Creation and use of spreadsheets. Includes spreadsheet design, use of menu systems, basic formulas and functions, relative and absolute addressing, formatting, printing, and graphing. (May be taken twice for a maximum of 3 units.) (AA, CSU)

416 SPREADSHEET II USING EXCEL FOR WINDOWS (1.5) Minimum of 24 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: BUSW 415 or equivalent. Advanced spreadsheet functions. Includes design and optimization of large and complex spreadsheets, advanced formulas and functions, database features, macros, and linking of spreadsheets with other software programs. (AA, CSU)

450 MICROSOFT PROJECT FUNDAMENTALS I (1.5) (Pass/No Pass or letter grade option.) Minimum of 24 lecture hours plus i6 hours by arrangement per term. Prerequisite: BUSW IO5 or equivalent. Introduction to project management software for tracking tasks, costs and resources. Covers creating and analyzing project plans, schedules, and reports. Textbook includes i2o-day trial version of Microsoft Project. (May be taken twice for a maximum of 3 units.) (AA, CSU)

45I MICROSOFT PROJECT FUNDAMENTALS II (I.5) (Pass/No Pass or letter grade option) Minimum of 24 lecture hours plus 16 lab hours by arrangement per term. Continuation of BUSW 450 . Covers baselines, updating and tracking, detailed customized reports, integration with other applications, multiple projects, and collaboration. Textbook includes trial version of Microsoft Project. (May be taken twice for a maximum of 3 units.) (AA, CSU)
464 DATABASE MANAGEMENT FUNDAMENTALS USING ACCESS FOR WINDOWS (3) Minimum of 48 lecture hours plus 32 lab hours by arrangement per term. Prerequisite: BUSW II4 or equivalent. Introduction to database design, use and applications for business to edit data, search for specific information, create forms, and print reports. (May be taken twice for a maximum of 6 units.) (AA, CSU)
530 INTRODUCTION TO INTERNET (I.5) Minimum of 24 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: BUSW II4 or equivalent. Recommended Preparation: eligibility for ENGL 838 or 848. Exploration of Internet history, structure and features (E-mail, File Transfer Protocol, and World Wide Web); Internet tools (web browser interfaces, search engines, security extensions); doing business on web; and societal and ethical issues. (May be taken twice for a maximum of 3 units.) (AA, CSU)

534 HTML I (HYPERTEXT MARKUP LANGUAGE) (I.5) Minimum of 24 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: BUSW 530 or equivalent. Explores creating and maintaining Web pages for Internet and Intranet; using HTML source code; creating file structures; using FTP to upload files. Examines page features such as
design, use of tables, color codes, applets, fonts, extensions, hyperlinks, image maps, and graphics. (May be taken twice for a maximum of 3 units.) (AA, CSU)

535 HTML II (ADVANCED HYPERTEXT MARKUP LANGUAGE) (I.5) Minimum of 24 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: BUSW534 or equivalent. Advanced HTML class for examining forms, JAVA script, JAVA script objects and events, multimedia Web pages, JAVA applets, cascading style sheets, and database use. (May be taken twice for a maximum of 3 units.) (AA, CSU)
680-689 SELECTED TOPICS ( $\mathbf{I}-3$ ) See first page of Description of Courses section. (AA, CSU)
879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) See first page of Description of Courses section.

## Career and Life Planning

104 TRANSFER ESSENTIALS AND PLANNING (.5) (Pass/No Pass grading.)Minimumof8lecturehours. Provides essential informationaboutthe university transfer function. Highly recommended for students whose educational goal is to transfer to a college or university to complete a bachelor's degree. Learn how to transfer to destinations within the CSU, UC, independent or out-of-state colleges or universities systems. Covers academic requirements, transfer decisions, transfer planning, general education and lower division major requirements, application timelines, services that support transfer, and other issues related to this educational goal. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of I unit.) (AA: Area E5d, CSU)

105 COLLEGE PLANNING (.5) (Pass/No Pass grading.) Minimum of 8 lecture hours. Course is highly recommended forall incoming students. Comprehensive college orientation provides information about educational goals, academic planning, the college academic and social culture, college policies and procedures that affect student success, learning styles, time management, overcoming past substandard academic performance, success strategies and how to use them, and a review of college services and programs that enhance success and retention. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (May be taken twice fora maximum of I unit.) (AA: Area E5d, CSU, UC)
IO7 INTRODUCTION TO CHOOSING A COLLEGE MAJOR (.5) (Pass/No Pass grading.) Minimum of 8 lecture hours. Course assists students to research and identify a college major and understand major requirements and course planning. Highly recommended for students who are undecided about a major for an Associate degree or for university transfer. University transfer students need to complete lower division major courses to assure successful transfer. A materials fee in the amountas shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of I unit.) (AA: Area E5d, CSU)

108 ACHIEVING AN ASSOCIATE DEGREE AND/OR VOCATIONAL CERTIFICATE (.5) (Pass/No Pass grading.) Minimum of 8 lecture hours. Recommended for students who plan to complete a CSM Associate degree or Certificate program or are undecided about educational goals. Learn how to research programs, course requirements, and to use college resources to successfully identify and complete an AA/ AS Degree and/or Certificate. Recommended for students who plan
to transfer since it is possible to concurrently complete an associate degree and transfer requirements. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of I unit.) (AA: Area E5d, CSU)

112 CAREER ADVANTAGE (.5-2) (Telecourse.) (Pass/No Pass grading) (Open entry/open exit) For those who are undecided about career goals or are changing career direction. Stresses the significance of clearly defined values and the development of strategies and goals for life work. (May be taken four times for a maximum of 8 units.) (AA: Area E5d, CSU)

120 COLLEGE AND CAREER SUCCESS (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. A comprehensive approach to college and career planning. Emphasizes self-assessment, decision making, educational planning, college success strategies, study skills, learning styles and techniques for addressing personal changes associated with college and career. Explores college life, responsibilities, and career options. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU: Area E, UC)

I2I PLANNING FOR STUDENT SUCCESS (I) (Pass/No Pass or letter grade option.) Minimum of 16 lecture hours per term. Provides students with the tools necessary to maximize academic success by developing their understanding of college expectations, resources, facilities, and requirements. A preliminary Student Educational Plan (SEP) is researched and developed. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU: Area E)

122 STUDY SKILLS (I) (Pass/No Pass or letter grade option.) Minimum of 16 lecture hours per term. Provides students with information about what is expected of a college student. Students practice a variety of techniques to increase confidence and to develop college-level study skills. Emphasizing individual learning styles, effective study habits and reducing test-taking anxiety. Each student will create a study plan reflecting his/her specific learning needs. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU)

123 CAREER EXPLORATION FOR STUDENT SUCCESS (I) (Pass/No Pass or letter grade option.) Minimum of 16 lecture hours per term. Assists students in decision making process. Students explore career and work options in relation to college majors. Self assessment such as understanding personality, values, interests, abilities and skills is explored. Emphasizes personal strengths and self-knowledge. Each student creates an educational/career action plan. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU: Area E)

126 CAREER CHOICES I: CAREER ASSESSMENT (.5) (Pass/No Pass grading) (Open entry/open exit) Minimum of 8 lecture hours. This class is designed to help students determine an appropriate career, major or job choice. Self-assessment activities such as vocational surveys, personality assessments, work values, skill identification, decision making and goal setting may be used. Students will research career, majors, and life planning issues in order to make informed choices. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of I unit.) (AA: Area E5d, CSU)

127 CAREER CHOICES II: JOB SEARCH (.5) (Pass/No Pass grading) (Open entry/open exit) Minimum of 8 lecture hours. Focuses on job search preparation. Topics include: the hidden job market, resume, network-
ing, marketing yourself, gathering information, preparing for the interview, common interview questions, successful interview strategies and follow-up actions. Students will practice and receive coaching on all phases of a successful interview. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of I unit.) (AA: Area E5d, CSU)

138 SKILL DEVELOPMENT FOR CAREER GROWTH (.5-3) (Pass/No Pass or letter grade option.) Minimum of 8 to 48 lecture hours per term. A practical, contemporary, and diversified approach to maintaining a healthy, purposeful, well-balanced life. Emphasizes the importance of developing effective personal skills for career growth. (AA: Area E5d, CSU: Area E)

I40 PEER COUNSELING (3) Minimum of 48 lecture hours per term. An orientation and training course to develop peer counseling skills, emphasizing the experiential process of interpersonal communication as well as the theoretical explanation of the counseling process and behavior. Students may be given the opportunity to do volunteer peer counseling work on campus or in the community. (AA: Area E5d, CSU: Area E)

142 ADVANCED PEER COUNSELING (3) Minimum of 48 lecture hours per term. Prerequisite: CRER I4O with a grade of C or higher. An in-depth study of aspects of counseling theory and practice that are applicable to peer counseling placements where the peer counselor is the primary provider of service and requires advanced problem solving and intervention skills. Lecture, discussion, and role play are used to teach peer counseling strategies useful in a wide range of circumstances and situations. Topics include grief and loss, group counseling, conflict resolution, suicide prevention, depression, drug and alcohol abuse, and mental illness. (AA: Area E5d, CSU)

30I INTRODUCTION TO SCHOLARSHIPS (I) (Pass/No Pass grading.) Minimum of 16 lecture hours per term. Students are introduced to scholarship opportunities at the local, state and national level. Learn research techniques and utilize internet sites, publications and community resources. Identify scholarships that meet personal criteria. Develop a personal organizational system to manage the process of scholarship search and application. Personal statements and interview techniques are also covered. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 2 units.) (AA, CSU)

305 INTRODUCTION TO FINANCIAL AID (.5) (Pass/No Pass grading.) Minimum of 8 lecture hours per term. Whether you are seeking a vocational certificate, pursing an associate degree, or plan to transfer to a university and complete a bachelor's degree, there is money to help you pay for college. This class teachs you about financial aid opportunities available through the College of San Mateo Financial Aid program. Learn about types of financial aid, financial aid requirements, application process, student responsibilities, and program eligibility. Also learn how to make the best use of your time in order to complete your educational and career goals once you have secured financial aid. (AA, CSU)

680-689 SELECTED TOPICS ( $\mathbf{I}-3$ ) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880 - $\mathbf{8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Chemistry

Unless otherwise indicated, a grade of $C$ or higher is required for all prerequisite courses.

192 ELEMENTARY CHEMISTRY (4) Minimum of 48 lecture hours and 48 lab hours plus 16 hours by arrangement per term. Prerequisite: MATH IIO or one semester course of algebra. It is recommended that students enroll concurrently in MATH II5 or MATH I2O or I22. Chemical nomenclature and formula writing, and mathematical review, including logarithms and exercises in calculation relating to chemistry. (Provides preparation for students who do not have adequate preparation for CHEM 2IO.) Extra supplies may be required. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA: Area E5a, CSU, UC*)

2IO GENERAL CHEMISTRY I (5) Minimum of 48 lecture hours and 96 lab hours plus I6 hours by arrangement per term. Prerequisite: CHEM 192 with a grade of C or better or equivalent; MATH I2O with a grade of C or better. Recommended Preparation: eligibility for ENGL 838/848 and one course in physics. Basic principles of atomic and molecular structure and bonding. Chemical reactions and equations, solutions, gas laws, stoichiometry, and related calculations. Extra supplies may be required. A materials fee as shown in the Schedule ofClasses is payable upon registration. (Intended for students majoring in science fields and chemical engineering.) (AA: Area E5a, CSU: Area BI/Area B3, UC: Area 5A)

220 GENERAL CHEMISTRY II (5) Minimum of 48 lecture hours and 96 lab hours plus 16 hours by arrangement per term. Prerequisite: CHEM 2 IO with a grade of C or better. Descriptive chemistry of the elements and qualitative analysis. Introduction to nuclear chemistry and detailed treatment of electrochemistry, thermodynamics, coordination compounds, equilibrium, and kinetics. Extra supplies may be required. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA: Area E5a, CSU, UC: Area 5A)

23I ORGANIC CHEMISTRY I (5) Minimum of 48 lecture hours, I6 recitation hours, and 80 lab hours plus 16 hours by arrangement per term. Prerequisite: CHEM 220 or 225 . Introduction to basic concepts of structure and reactivity of organic compounds; reactions of major functional groups; reaction mechanisms; and synthesis. Principles and practice of laboratory techniques; methods of separation, purification, and synthesis. Theory and practice of instrumental methods, including spectroscopy. Designed as the first semester of a one-year organic course or as a one-semester survey. Extra supplies may be required. (AA: Area E5a, CSU: Area BI/Area B3, UC: Area 5A)

232 ORGANIC CHEMISTRY II (5) Minimum of 48 lecture hours, 16 recitation hours, and 80 lab hours plus 16 hours by arrangement per term. Prerequisite: CHEM 23I. More rigorous treatment of mechanisms, reactions, and synthesis; structure determination using classical and spectroscopic methods. Laboratory work implements techniques and skills taught in CHEM 23I, including identification of unknown compounds and mixtures. Extra supplies may be required. (Spring only.) (AA: Area E5a, CSU: Area BI/Area B3, UC: Area 5A)

250 ANALYTICAL CHEMISTRY QUANTITATIVE ANALYSIS (4) Minimum of 32 lecture hours and 96 lab hours plus 16 hours by arrangement per term. Prerequisite: CHEM 220 with a grade of $C$ or better. Theory, calculations and practice of common analytical procedures. Includes gravimetric and volumetric methods; also colorimetric, potentiometric and other instrumental procedures. Extra supplies may be required. (AA, CSU, UC)

4IO HEALTH SCIENCE CHEMISTRY I (4) Minimum of 48 lecture hours and 48 lab hours plus 16 hours by arrangement per term. Recommended Preparation: MATH IIO or one semester course of algebra; eligibility for ENGL 848. Introduction to chemistry for the applied sciences, beginning with scientific measurement and the metric system, followed by chemical bonding, solution chemistry, acids and bases, redox reactions, gases, and general aspects of stoichiometry. Extra supplies may be required. Students who complete CHEM 2Io220 and CHEM 4IO-420 will receive credit for CHEM 2IO-220 only. (AA: Area E5a, CSU: Area Bi/Area B3)

420 HEALTH SCIENCE CHEMISTRY II (4) Minimum of 48 lecture hours and 48 lab hours plus 16 hours by arrangement per term. Prerequisite: CHEM 4IO. Completes the sequence, focusing on organic and biochemistry with special emphasis on the chemistry of carbohydrates, lipids, proteins, nucleic acids, and vitamins and their respective metabolism. Extra supplies may be required. (Spring only.) Students who complete CHEM 2IO-22O and CHEM 4IO-420 will receive credit for CHEM 2IO-220 only. (AA: Area E5a, CSU)
680-689 SELECTED TOPICS (1-3) See first page of Description of Courses section. (AA, CSU)

690 SPECIAL PROJECTS (I-3) See first page of Description of Courses section. (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS ( $\mathbf{( 1 - 3 )}$ See first page of Description of Courses section.

## Chinese

Language Laboratory and Listening Requirement: since imitation, response, and independent practice are integral features of the study of a foreign language at the College, students enrolled in certain courses in foreign language are required to use the language laboratory as prescribed by each department.

Note: To be transferable to UC, Chinese courses must be taken for letter grade.

III ELEMENTARY CHINESE I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours by arrangement per term. A beginning course in Mandarin Chinese with instruction and practice in understanding, speaking, reading, and writing. (AA: Area E5C, CSU: Area C2, UC)
112 ELEMENTARY CHINESE II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and I6 lab hours by arrangement per term. Prerequisite: CHIN III or equivalent with Pass or a grade of $C$ or higher. A continuation of CHIN III with further development of the skills of understanding, speaking, reading, and writing. (AA: Area E5c, CSU: Area C2, UC)

I2I ADVANCED ELEMENTARY CHINESE I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours by arrangement per term. Prerequisite: CHIN II2 or equivalent with Pass or a grade of C or higher. The third course in elementary Mandarin, with continued emphasis on grammar and the spoken language. (AA: Area E5c, CSU: Area C2, UC)

122 ADVANCED ELEMENTARY CHINESE II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours by arrangement per term. Prerequisite: CHIN I2I or equivalent with Pass or a grade of C or higher. A continuation of Chinese I2I with further training in spoken and written Mandarin. (AA: Area E5c, CSU: Area C2, UC: Area 6)

13I INTERMEDIATE CHINESE I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours by arrangement per term. Prerequisite: CHIN I22 or equivalent with Pass or a grade of $C$ or higher. Approximately the first half of the semester's work in intermediate Mandarin Chinese as taught at four-year institutions. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 6)

132 INTERMEDIATE CHINESE II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours by arrangement per term. Prerequisite: CHIN I3I or equivalent with Pass or a grade of C or higher. Approximately the second half of the semester's work in intermediate Mandarin Chinese as taught at four-year institutions. (AA: Area E5C, CSU: Area C2, UC: Area 3B/Area 6)

134 BASIC CHINESE WRITING SKILLS (3) (Pass/No Pass or letter grade option.) (Online Course) Prerequisite: CHIN I22 or equivalent with Pass or a grade of $C$ or higher. Advanced course in Mandarin designed to introduce basic Chinese writing skills. Provides a forum to improve comprehension, vocabulary, and grammarwhilelearning the basic skills of writing. Principal means of communication between students and teacher shall be by way of the World Wide Web. (AA: Area E5c, CSU)

140 ADVANCED INTERMEDIATE CHINESE (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: CHIN I32 or equivalent with Pass or a grade of C or higher. A proficiency-oriented course designed for further practice in conversation, reading, and composition with pronunciation and continued grammar review. Conducted primarily in Mandarin Chinese. (AA: Area E5c, CSU, UC: Area 6)

201 CHINESE CHARACTER WRITING FOR BEGINNERS (I) (Pass/No Pass grading.) Minimum of i6lecture hoursplus8labhours by arrangement. Corequisite: CHIN III or II2. An introductory course that focuses on recognizing, reading, and writing Chinese characters. Emphasizes the evolution of characters and their writing regulations; analyzing their structures and stroke orders; and recognizing their use in context. Includes some Chinese calligraphy forms and offers hands-on experience in calligraphy pen writing. Designed for students who wish to extend their basic skills of Chinese character writing. (AA, CSU)

2 II COLLOQUIAL MANDARIN CHINESE I, ELEMENTARY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours byarrangement perterm. A beginning conversational Mandarin Chinese course. Extensive oral training in Mandarin. Emphasizes practical vocabulary, pronunciation, and idiomatic usage, with sufficient grammar to give flexibility to the spoken language. The phonetic system Pinyin is used to represent sounds in Mandarin and substitute for characters as a written form. Designed for students who wish to acquire basic skills of spoken Mandarin Chinese. (AA: Area E5c, CSU)

212 COLLOQUIAL MANDARIN CHINESE II, ELEMENTARY (3) (Pass/ No Pass or letter grade option.) Minimum of 48 lecture hours plus i6 lab hours by arrangement per term. Prerequisite: CHIN 21 II or equivalent with Pass or a grade of C or higher. Continuation of Chinese 2II. Extensive oral training in Mandarin. Emphasizes further development of the practical vocabulary, pronunciation, and idiomatic usage, with suffi-
cient grammar to give flexibility to the spoken language. The phonetic system Pinyin is used to represent sounds in Mandarin and substitute for characters as a written form. Course designed for students who wish to extend their basic skills of spoken Mandarin Chinese. (AA: Area E5c, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Computer and Information Science

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.

IIO INTRODUCTION TO COMPUTER AND INFORMATION SCIENCE (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus i6 lab hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848. Introduction to computers and information science. Includes computer terminology, computer hardware and software, networks, common operating systems, data representation, telecommunications, Internet access and security issues, computer ethics, and beginning programming in Visual Basic and/or HTML. Covers topics motivated by current issues and events. Examines such issues as privacy, intellectual property, and copyright infringements. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area E2b/Area E5b, CSU, UC)

III INTRODUCTION TO INTERNET PROGRAMMING (3) (Pass/No Pass or letter grade option) Minimum of 48 lecture hours and 16 lab hours plus I6 hours by arrangement per term. Recommended Preparation: eligibility for ENGL 838 or 848 . Course provides an introduction to the World Wide Web and internet programming. Basic XHTML and CSS will be introduced, as well as client-side scripting in JavaScript using variables, functions, and objects. DHTML (Dynamic HTML programming with XHTML, CSS, JavaScript, and the DOM (Document Object Model.) Server-side scripting with ASP, JSP, Perl and PHP will be demonstrated. Web 2.o topics, such as Ajax, blogs, mashups, podcasts, RSS feeds, Web services, and wikis will be covered. (AA, CSU)

112 INTERNET PROGRAMMING: AJAX (2) (Pass/No Pass or letter grade option.) Minimum of 24 lecture hours and 24 lab hours per term. Prerequisite: CIS 377 or equivalent. Recommended Preparation: eligibility for ENGL 838/848. Study of Ajax (Asynchronous JavaScript and XML) technologies, including JavaScript, HTML/XHTML, CSS, DOM, XML, and XMLHttpRequest. Covers Ajax design patterns, client- and server-side programming, RSS, JSON, browser issues, as well as advanced topics such as open-source Ajax toolkits, mashups, security, performance, and Web Services. (AA, CSU)

II3 INTERNET PROGRAMMING: RUBY (4) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 48 lab hours per term. Prerequisite: CIS 254 orequivalent. Recommended Preparation: eligibilityfor ENGL 838/848. Comprehensivecoursein Ruby, an open-sourcedynamicobject-oriented scripting language. Covers variables, arrays and hashes, methods and procs, classes, objects, and writing server-side Ruby scripts for the Web.

Also covered areexception handling, regularexpressions, I/Oobjects, and modules. An introduction to SQLand the MySQLdatabase, and advanced topics suchasModel-View-ControllerarchitectureandagileWebapplication development with the Ruby on Rails framework. (AA, CSU)

125 VISUAL BASIC I (4) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 48 lab hours plus 16 hours by arrangement per term. Prerequisite: MATH IIO or equivalent. Recommended Preparation: eligibility for ENGL 848. Introduction to computer programming and Visual Basic. Includes computer hardware and operating systems concepts necessary for computer program coding, compilation, and execution, algorithms and problem-solving techniques using structured methods and programming in Visual Basic.NET; programtesting; documentation issues and techniques; and professional ethics. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area E2b/, CSU, UC)

15I NETWORKS AND DIGITAL COMMUNICATION (3) (Pass/No Pass or letter grade option) Minimum of 48 lecture hours and 16 lab hours plus I6 hours by arrangement per term. Prerequisites: completion of or concurrent enrollment in CIS iso or equivalent. Recommended Preparation: eligibility for ENGL 838/848. Intro to networking focusing on Local Area Networks. Topics include the TCP/IP suite of protocols and its relationship to the OSI reference model, network services, network hardware and topologies, network protocol usage fundaments, IP network addressing, current industry trends including IPv6 and an intro to network administration. Class activities include lecture, hands-on and online research. Prepares students for courses in advanced networking, computer forensics, broadcasting, information security, and internet programming. (AA, CSU)

254 INTRODUCTION TO OBJECT-ORIENTED PROGRAM DESIGN (4) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 48 lab hours per term. Recommended Preparation: completion of MATH IIO or equivalent with a grade of C or higher and eligibility for ENGL 838 or 848. Introduction to object-oriented computer programming for computer science majors and computer professionals. Includes simple data types; control structures; an introduction to array and string data structures and algorithms; debugging techniques; history of computer science, computer systems and environments; and the social implications of computing. Emphasizes object-oriented design, good software engineering principles and developing fundamental programming skills in Java. This course conforms to the ACM CSo standards. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area E2b, CSU)

255 (CSI) PROGRAMMING METHODS: JAVA (4) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 48 lab hours plus i6 hours by arrangement per term. Prerequisite: MATH I2O or equivalent; CIS 254 or equivalent. Recommended Preparation: eligibility for ENGL 848. Continuation of CIS 254. Object-oriented programming methodology for both computer science majors and computer professionals. Systematic approach to design, construction, and management of computer programs; emphasizing program documentation, testing, debugging, maintenance and software reuse. Also includes UML, virtual machines, exception handling, sorting and searching algorithms, recursion, fundamental graphics, and computer ethics. This course conforms to the ACM CSI standards. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area CI/Area E2b, CSU, UC)

256 (CS2) DATA STRUCTURES: JAVA (4) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 48 lab hours plus 16 hours by
arrangement per term. Prerequisite: CIS 255 or equivalent. Recommended Preparation: eligibilityfor ENGL 838/848. Abstract data type implementation and usage techniques for computer science majors and computer professionals. Object-oriented approach to a variety of abstract data types including: lists, stacks, queues, priority queues, trees, maps, sets and graphs. Also includes advanced sorting and searching topics, and algorithmic analysis using Big-O notation. This course conforms to the ACM CS2 standards. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU, UC)

278 (CS1) PROGRAMMING METHODS: C++ (4) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 48 lab hours plus 16 hours by arrangement per term. Prerequisite: MATH I2O or equivalent; CIS 254 or equivalent. Recommended Preparation: eligibility for ENGL 848. Continuation of CIS 254 . Object-oriented programming methodology for both computer science majors and computer professionals. Systematic approach to design, construction, and management of computer programs; emphasizing program documentation, testing, debugging, maintenance and software reuse. Also includes UML, virtual machines, exception handling, sorting and searching algorithms, recursion, fundamental graphics, and computer ethics. This course conforms to the ACM CSI standards. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area Ci/Area E2b, CSU: Area B4, UC)

279 (CS2) DATA STRUCTURES: C++ (4) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 48 lab hours plus 16 hours by arrangement per term. Prerequisite: CIS 278 or equivalent. Recommended Preparation: eligibility for ENGL 838/848. Data abstract data type implementation and usage techniques for computer science majors and computer professionals. Object-oriented approach to a variety of abstractdata types including: lists, stacks, queues, priority queues, trees, maps, and graphs. Also includes advanced sorting and searching topics, and algorithmic analysis using Big-O notation. This course conforms to the ACM CS2 standards. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU, UC)

312 UNIX OPERATING SYSTEMS I(I) (Pass/No Passor letter grade option.) Minimum of I6 lecture hours and 16 lab hours per term. Prerequisite: CIS IIo or equivalent. Recommended Preparation: eligibility for ENGL 848. Introduction to the UNIX operating system. Includes a brief introduction to operating systems and UNIX history. Covers Unix file systems; common shell features including I/O redirection, piping, command substitution, and simple job control; shell-specific facilities including use of environmental and local variables; common UNIX utilities and the UNIX GUI. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area E2b, CSU)

313 UNIX OPERATING SYSTEMS II (I) (Pass/No Pass or letter grade option.) Minimum of 16 lecture hours and I6 lab hours per term. Prerequisite: CIS 3 I2 or equivalent. Recommended Preparation: eligibility for ENGL 848. Continuation of CIS 3I2, this course introduces more advanced features of UNIX. Includes advanced UNIX utilities, shell scripting, communications, and system administration. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

362 ENTERPRISE DATABASE MANAGEMENT (4) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 48 lab hours per term. Prerequisite: CIS 254 or equivalent. Recommended Preparation: ENGL 838 or 848 or equivalent. Introduction to database design, implementation, and management methods; database administration issues; current issues and trends. Hands-on design and development of databases
using Oracle and PL/SQL. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)
363 ENTERPRISE DATABASE MANAGMENT WITH MYSQL (4) (Pass/ No Pass or letter grade option.) Minimum of 48 lecture hours and 48 lab hours per semester. Prerequisite: CIS 254 or equivalent. Recommended Preparation: eligibility for ENGL 838/848. Comprehensive course in enterprise databasemanagementwith theopen-sourceMySQLdatabase. Covers relational model and theory, forms and theories of normalization, and in-depth SQL. Overview of database administration, stored procedures, functions, triggers, and metadata. Also covered are MySQL server administration, performance tuning, security, optimization, and database design. Advanced topics include Client-Server database applications using Java and PHP, dynamic SQL, prepared SQL, and callable statements. (AA, CSU)

364 ENTERPRISE DATA WAREHOUSING (4) (Pass/No Pass or lettergrade option.) Minimum of 48 lecture hours and 48 lab hours per term. Prerequisite: CIS 362 or CIS 363 or equivalent. Recommended Preparation: ENGL $838 / 848$. Introduction to data warehousing architecture, data extraction, management, and load. Also covered are metadata management, logical and physical models, dimensional modeling, data aggregation, and project management. Hands-on design and development of a data warehouse using Oracle or MySQL. Advanced topics such as OLAP query processing, security management, and data mining techniques will be introduced. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (AA, CSU)

377 INTERNET PROGRAMMING: JAVASCRIPT/HTML (2) (Pass/No Pass or letter grade option.) Minimum of 24 lecture hours and 24 lab hours plus 8 hours by arrangement per term. Prerequisite: CIS 254 or equivalent coursework. Recommended Preparation: eligibility for ENGL 848 and familiarity with the Internet. Study of the object-oriented JavaScript programming language. Includes a quick overview of HTML (HyperText Markup Language), client-side programming, variables, functions, event handlers, objects, form validation, image and form objects, frames, windows, and cookies. (AA, CSU)
379 INTERNET PROGRAMMING: XML (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours plus 16 hours by arrangement per term. Prerequisite: CIS I25 or CIS 254 or equivalent. Recommended Preparation: BUSW 534 or equivalent; eligibility for ENGL 848. Access to a computer with Internet capability is strongly recommended. Comprehensive course in XML (eXtensible Markup Language). Includes writing well-formed and valid XML; the use of DTDs (Document Type Definitions), XML schema, CSS (Cascading Style Sheets) and XSLT (eXtensible Style Sheet Language Transformation) for formatting; and advanced topics such as XPath, XLink and XPointer. (AA, CSU)
380 INTERNET PROGRAMMING: PHP (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours plus 16 hours by arrangement per term. Prerequisite: CIS 254 orequivalent. Recommended Preparation: eligibility for ENGL 838 or 848 . Familiarity with the Internet and access to a computer with Internet capability are strongly recommended. Comprehensive course in PHP (hypertext preprocessor scripting language). Includes writing server-side PHP scripts for the Web, procedural and object-oriented programming, forms and browser I/O, and introduction to SQL statements and the MySQL database. Also covers advanced topics, such as creating dynamic Web content with PHP and MySQL, sessions, and authentication with PHP. (AA, CSU)
390 INTERNET PROGRAMMING: PERL (2) (Pass/No Pass or letter grade option.) Minimum of 24 lecture hours and 24 lab hours plus 8 hours
by arrangement per term. Prerequisite: CIS 254 or equivalent coursework. Recommended Preparation: eligibility for ENGL 848 and familiarity with the Internet. Access to a computer with Internet capability is strongly recommended. Covers the basic components of the Perl language, including arrays, lists, hashes, regular expressions, and subroutines. Addresses other supporting topics, such as installation, file handlers, debugging, and standard Perl modules. (AA, CSU)

479 NETWORK SECURITY FUNDAMENTALS (3) (Pass/No Pass orletter grade option.) Minimum of 48 lecture hours plus i6labhours by arrangement per term. Prerequisite: CIS I5I or equivalent. Recommended Preparation: eligibility for ENGL 838/848. Analysis, risk assessment, and strategy for designing network security for the Windows network environment. Includes analysis of company and management models; enterprise risk assessment; evaluation and design of security solutions; authentication strategies; DNS/SNMP, remote services, and communication channel security. Prepares students for Microsoft MCSE certification exam. (May be taken twice for a maximum of 6 units.) (AA)

488 FIREWALLS AND NETWORK SECURITY (I.5) (Pass/No Pass or letter grade option.) Minimum of 24 lecture hours plus 8 hours by arrangement. Prerequisite: CIS 479 or equivalent. Recommended Preparation: eligibility for ENGL 838. Provides a comprehensive look at firewalls and their use with other network security components to secure local area networks. Covers DMZ, Routers, VPN, Proxy, Authentication, and Encryption. Prepares students for industry standard tests for Network Security Certification, such as Comptia and Microsoft. (May be taken twice for a maximum of 3 units.) (AA, CSU)

489 COMPUTER FORENSICS (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: CIS I5I or equivalent. Recommended Preparation: eligibility for ENGL 838/848. Provides students with a solid foundation by introducing computer forensics to those who are new to the field. Guides students toward becoming skilled computer forensic investigators. Prepares students to take industry standard tests. (May be taken twice for a maximum of 6 units.) (AA, CSU)
490 COMPUTER FORENSICS: NETWORK ANALYSIS AND DEFENSE (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and I6 lab hours plus 16 hours by arrangement per term. Prerequisite: CIS 151 and 489 or equivalent. Recommended Preparation: eligibility for ENGL 838 or 848. Access to a computer with Internet capability is strongly recommended. Comprehensive course that includes an overview of the foundations of network security, an introduction to protocol analysis, network security risk analysis, use of risk analysis to develop a network security policies, an overview of firewalls and VPNs, using and configuring intrusion detection systems, responding to network intrusions, preventing network intrusions, and managing and improving network defense. (AA, CSU)
49I COMPUTER FORENSICS: SEARCH AND SEIZURE (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours plus I6 hours by arrangement per term. Prerequisite: CIS 489 or equivalent. Recommended Preparation: ENGL 838 or 848. Access to a computer with Internet capability is strongly recommended. Comprehensive course that includes an overview of computer crime, federal and state guidelines for computer search and seizure, the chain of custody, computer forensics in law enforcement and corporate environments, exercises in digital evidence discovery using forensic hardware and software, special media forensics, documentation, warrants and investigation reports, presentation in court, case studies, and advanced topics such
as cryptography, steganography, hostile code, and Internet forensics. (May be taken twice for a maximum of 6 units.) (AA, CSU)

492 COMPUTERFORENSICS: WHITE-COLLAR CRIME (3) (Pass/No Pass or letter grade option). Minimum of 48 lecture hours and 16 lab hours plus I6 hours by arrangement per term. Prerequisite: CIS 489 or equivalent.
Recommended Preparation: eligibility for ENGL 838 or 848. Access to a computer with Internet capability is strongly recommended. Provides an in-depth look at white-collar with emphasis on those crimes involving computers. Types of white-collar crime include mail, wire, and bank fraud, corporate fraud, securities and fiduciary fraud; tax crimes, currency-reporting crimes, bankruptcy crimes, as well as corporate, government, environmental, and computer crimes. Relevant state and federal statutes will be introduced. Forensic software and hardware suited to the collection and preservation of digital evidence will be discussed and employed in group projects. Documentation and reporting requirements for white-collar crime will be covered. (May be taken twice for a maximum of 6 units.) (AA, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS ( $\mathbf{( - 3 )}$ ) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Consumer Arts and Science

3 IO NUTRITION (3) Minimum of 48 lecture hours per term. Principles of good nutrition. Includes discussion of nutrients, food sources, and functions in the body as related to optimal health. Emphasizes the physiological processes, including digestion and metabolism of nutrients. Students also conduct a personal nutrition assessment. (May be substituted for HSCI II3 in meeting the Health Science requirement.) (AA: Area 5a, CSU: Area E, UC)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS ( $\mathbf{( 1 - 3 )}$ ) (See first page of Description of Courses section.)

880 - 889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Cooperative Work Experience Education

Cooperative Work Experience education is offered in two basic programs: (I) general workplace experience; and (2) vocational experience. Students may choose between letter grading and Pass/No Pass grading.

640 COOPERATIVE WORK EXPERIENCE EDUCATION/GENERAL WORKPLACE EXPERIENCE (.5-3) (Pass/No Pass or letter grade option) Designed for the student who has a job that does not necessarily relate
to a specific occupational goal or college major. Under the direction of an instructor, students focus on career awareness and the development of desirable employment habits and attitudes. Each student must establish measurable learning objectives appropriate for his or her job. Students may be eligible for up to three units of credit per term, and the course may be taken for a total of six units of credit. Seventy-five hours of paid work (approximately 5 hours per week) or sixty hours of unpaid work (approximately 3.5 hours per week) is equivalent to one unit of credit. (AA: Area E5d, CSU)

64I COOPERATIVE WORK EXPERIENCE EDUCATION (.5-8) (Pass/No Pass or letter grade option.) Work must be in a field related to a career goal or major. Under the direction of an instructor, students focus on career goals and development. Students may beeligible for up to 8 units of credit per term, and the course may be taken for a total of i6 units of credit. The student must have new learning opportunities in order to repeat the course. Seventy-five hours of paid work (approximately 5 hours per week) or sixty hours of unpaid work (approximately 3.5 hours per week) is equivalent to one unit of Pass. (AA: Area E5d, CSU)

## Cosmetology

The courses described below are open only to those students accepted in the Cosmetology Program. Completion of the tenth grade or equivalent required by California Board of Barbering and Cosmetology; completion of the twelfth grade is recommended. A grade of $C$ or higher is necessary for progression in the sequence of courses. Concurrent enrollment in ESL classes is strongly advised for non-native speakers. Upon successful completion of the program, including satisfactory performance on a comprehensive "mock board" examination including both theory and practical performance, the candidate receives a Certificate in Cosmetology and is eligible to write for the California Bureau of Cosmetology licensing examination. Note: Applicants for the California Board of Barbering and Cosmetology licensure must be I7 years of age or older.

712 FUNDAMENTALS OF COSMETOLOGY I (3.5-IO) A combination of 80 lecture and 240 lab hours attains 320 clock hours toward the required 1600 hours to be eligible for licensing. Prerequisite: admission to and registration in the Cosmetology program. Recommended Preparation: Eligibility for READ 400. Studytheoreticaland practicalapplication of: haircutting, hairtexture services, hair coloring, hair styling, manicuring, skin care, and health and safety as prescribed by the California State Bureau of Barbering and Cosmetology. A materials fee as shown in the Schedule of Classes is payable upon registration. (May be repeated for a maximum of 20 units.)(AA)

722 FUNDAMENTALS OF COSMETOLOGY II (3.5-IO) A combination of 80 lecture hours and 240 lab hours per term attains 320 clock hours toward the required 1600 hours to be eligible for licensing. Prerequisite: admission to and registration in the Cosmetology program. Recommended Preparation: eligibility for READ 400. Study theoretical and practical application of: hair cutting, hair texture services, hair coloring, hair styling, manicuring, skin care, and health and safety as prescribed by the California State Bureau of Barbering and Cosmetology. A material fee as shown in the Schedule of Classes is payable upon registration. (May be repeated for a maximum of 20 units.) (AA)

732 ADVANCED COSMETOLOGY I (3.5-10) Minimum combination of 80 lecture and 240 lab hours per term provides 320 clock hours toward the required 1600 hours needed for license eligibility. Prerequisite: minimum of IO units of COSM 7 I2 and 722 with a grade of C or higher. A continued study of theoretical and practical application covering: hair cutting,
hair texture services, hair coloring, hair styling, manicuring, skin care, and health and safety provisions prescribed by the California State Bureau of Barbering and Cosmetology. Study of salon business as applied to cosmetology. Continuation of COSM 7 I2 and 722 . COSM 732 and 742 are required for licensing as a cosmetologist. A materials fee as shown in the Schedule of Classes is payable upon registration. (May be repeated for a maximum of 30 units.) (AA)

742 ADVANCED COSMETOLOGYII (3.5-10) Minimum of 80 lecture hours and 240 lab hours per term provides 320 clock hours toward the required ı600 hours needed for license eligibility. Prerequisite: minimum of io units with a grade of C or higher in COSM 712 and 722. A continued study of theoretical and practical application covering: hair cutting, hair texture services, hair coloring, hair styling, manicuring, skin care, and health and safety provisions prescribed by the California State Bureau of Barbering and Cosmetology. Study of cosmetology chemistry and electricity as applied to cosmetology. Continuation of COSM 7 I 2 and 722. COSM 732 and 742 are required for licensing as a cosmetologist. A materials fee as shown in the Schedule of Classes is payable upon registration. (May be repeated for a maximum of 30 units.) (AA)

750 BRUSH-UP (.5-IO) Up to 80 lecture and 240 lab hours per term for a total of 400 hours per year. Prerequisite: Cosmetology license. Recommended Preparation: eligibility for ENGL 836, 848 or ESL 400. To satisfy supplemental training requirements or out-of-state training requirements. Course requirements must be met satisfactorily prior to state exam. (May be repeated for a maximum of 20 units.) (AA)

765 ADVANCED HAIRCOLOR THEORY \& TECHNIQUES (I)Minimum of I6 lecture hours and I6 lab hours per term. Prerequisite: Current cosmetology license or a student with a minimum of 600 hours training toward a cosmetology license with a grade of C or higher. Introductory course with instruction and preparation for the American Board of Certified Haircolorist Performance Examiniation. Includes materials and practices of advanced haircolor techniques and haircolor theory. This course is for students interested in advancing to a higher level in the hair coloring profession. (May be taken three times for a maximum of 3 units.) (AA)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Dance

(See Physical Education, Dance)

## Dental Assisting

A grade of $C$ or higher is necessary for progression in sequence. Upon successful completion of the program, the candidate is eligible to apply to the Office of Admissions and Records for a Certificate in Dental Assisting and to write for the National Certification Examination and the California Registered Dental Assistant Examination. The program is open to part-time students.

647 DENTAL ASSISTING CLINICAL INTERNSHIP (4) Minimum of 256 lab hours per term. Prerequisite: successful completion of DENT 7I6, DENT 72I, DENT 73I, DENT 735 or equivalent, DENT 740, DENT 749, and DENT 75I. Corequisite: concurrent enrollment in or prior competion of DENT

722, DENT 732, DENT 742, DENT 743, DENT 763, SPCH 860 or equivalent, and ENGL 865 or equivalent. Clinical experience in dental assisting procedures and duties for students in the dental assisting program, supplemented by corequisite classes and individual counseling from an instructor-coordinator of the Dental Assisting Program. Clinical work must be unpaid and a certain number of hours accumulated per ADA Accrediatation Standards. For students enrolled full time in the Dental Assisting Program. Offered during Spring semesters only. (AA, CSU)

716 DENTAL OFFICE PROCEDURES (2.5) Minimum of 32 lecture hours and 32 lab hours per term. Perform basic dental office procedures, including telephone management, letter writing, appointment control, use of dental office software, dental office accounting procedures, management of recall systems, operation of office equipment, ethics, and jurisprudence. A materials fee as shown in the Schedule of Classes is payable upon registration. (Fall only.) (AA)

72I DENTAL MATERIALS I (3) Minimum of 32 lecture hours and 48 lab hours per term. Equipment and safety procedures necessary in the dental laboratory and operatory. Physical properties, with study in dental cements, restorative impression materials, and gypsum products. Designed to develop skills necessary for manipulation in both the dental treatment rooms and laboratory. Study of the principles of prosthodontics. Extra supplies may be required. (Fall only.) (AA)

722 DENTAL MATERIALS II (2) Minimum of 16 lecture hours and 48 lab hours per term. Study of impression materials, dental casting alloys, removable prosthodontics, with special emphasis on dental assisting and registered dental assisting duties pertaining to dental materials. Extra supplies may be required. (Spring only.) (AA)

73I DENTAL SCIENCE I (3) Minimum of 48 lecture hours per term. Basic introduction to the hard and softtissues of the oral cavity, tooth morphology, oral embryology, and oral histology. Pathological disturbances and pharmacology, with an introduction to oral health principles including nutrition. (Fall only.) (AA)

732 DENTALSCIENCEII (3) Minimum of 48 lecture hours perterm. Further study in the hard and soft tissues of the oral cavity and anatomy of the head and neck. Introduction to the body systems, blood supply of the head and neck, and innervation of the teeth. (Spring only.) (AA)

735 COMMUNICATION IN ALLIED HEALTH PROFESSIONS (I) Minimum of I6 lecture hours per term. Prepares allied health students to work and communicate effectively with patients, auxiliaries, practitioners, and other health professionals. (Fall only.) (AA)

740 CHAIRSIDE ASSISTING I (3) Minimum of 32 lecture hours and 48 labhours perterm. Introduction to chairside procedures to be performed at the University of the Pacific School of Dentistry and the Veterans Affairs Dental Clinic. Beginning clinical application of chairside assisting techniques. Preparation of the patient and operatory area. Study of instrumentation, dental armamentarium, operative and fixed prosthodontic procedures, dental officeemergencies, and public health dentistry. (Fall only.) (AA)

742 CHAIRSIDE ASSISTING II (3) Minimum of 32 lecture hours and 48 lab hours per term. Further study in chairside procedures. Emphasizes students' individual development. Study of dental specialties; instrumentation, application, procedure, and patient instruction. Introduction to intra-oral functions. DA and RDA levels. Coronal Polish by arrangement. (Spring only.) (AA)

743 CORONAL POLISH (.5) (Pass/No Pass grading.) Minimum of 8lecture hours and 6 lab hours per term. Prerequisite: concurrent enrollment in or completion of DENT 7I6, 72I, 722, 73I, 732, 735, 740, 742, 749, 75I, and 763; ENGL 830; SPCH 850; COOP 647. Designed to meet the requirements of the California State Board of Dental Examiners for the removal of stains and soft deposits from the coronal surfaces of teeth. (AA)

744 DENTAL SEALANTS (.5) Minimum of 4 lecture hours and I2 lab/ clinical hours perterm. Prerequisite: concurrent enrollment in or successful completion of DENT 716, 712, 722, 73I, 732, 735, 740, 742, 743, 749, 75I, and 647; ENGL 865; SPCH 860. Designed to meet the requirements of the California State Board of Dental Examiners for the placement of pit and fissure sealants as a preventive measure of dentistry as a RDA delegatable skill. (Spring only)

749 PRECLINICAL DENTAL SCIENCE LABORATORY (.5) Minimum of 42 lab hours. Prerequisites: concurrent enrollment in or completion of DENT 7I6, 72I, 73I, 735, 740, 75I, 763; ENGL 830; SPCH 850. Introduction to chairside skills, dental charting, classification of cavities, prefixes, suffixes, rubber dam, local anesthesia, dental units, preparing and dismissing the dental patient, oral evacuation, and instrumentation. Prepares the dental assisting student for clinical procedures performed at the local dental schools. (AA)

751 DENTAL CLINIC (1.5) Minimum of 84 lab hours. Prerequisite: completion of or concurrent enrollment in DENT 749. Introduction to and application of chairsideskills; manipulation ofdental materials and care of the dental patient. Held at local dental schools. (Fall only.) (AA)

763 DENTAL RADIOLOGY (2) Minimum of 16 lecture hours and 48 lab hours perterm. Designed to meet the standards established by the Board of Dental Examiners for the operation of dental radiographic equipment in California. Includes both didactic and clinic application, utilizing both DXTTR mannikin and patients. Study of radiation, legislation, effects and protection, exposing techniques for the adult, pedodontic, mixed dentition, and edentulous patients, utilizing the various types of dental films, identification and correction of faulty films, developing and processing procedures, record maintenance, mounting and evaluation of films. Emphasizes the student's individual development. (A California State Dental X-ray License will be issued by the Dental Assisting Department to students who successfully complete this course with a grade of C or higher.) Extra supplies may be required. (AA)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880 - $\mathbf{8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Dental Hygiene

200 INTRODUCTION TO DENTAL HYGIENE (3) Minimum of 48 lecture hours per term. Overview of the scope and responsibility for the dental hygiene profession. Course provides the prospective dental hygiene student with the ability to make an informed decision regarding entry into the profession. Required for admission to the Dental Hygiene program. (AA)

## Developmental Skills

8II SPECIFIC LEARNING SKILLS ASSESSMENT (.5) (Pass/No Pass grading.) (Open entry/open exit)Minimumof8lecture hours by arrangement per term. Use of an assessment battery to determine specific learning capacity as well as academic skill levels in reading, spelling, and mathematics. Following assessment, students will design and implement, with the assistance of instructors, individual learning programs. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (Units do not apply toward AA/AS degree.)

8I7 ASSISTIVE COMPUTER ACCESS (.5-3) (Pass/No Passgrading.) (Open entry/open exit) Minimum of 24 to I44 lab hours per term. Recommended Preparation: touch typingfamiliaritywith the keyboard. Designed primarily for students with disabilities, this course provides training in the use of computer access technologies that enhance a student's ability to access and use microcomputers. Training in the use of computer access technologies will occur within the context of word processing. No previous computer experience is required. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (Units do not apply toward AA/AS degree.)

819 STUDY SKILLS FOR ACADEMIC SUCCESS (I) (Pass/NoPass grading.) Minimum of 16 lecture hours per term. Designed to assist students with specific learning problems to obtain study skills and develop learning strategies to reach their educational objectives. Includes understanding learning styles, intervention strategies, time management, note taking, test preparation, memory techniques, critical thinking, and problem solving. (Units do not apply toward AA/AS degree.)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880 - 889 SELECTED TOPICS (I-3) See first page of Description of Courses section.

## Digital Media

IOO MEDIA IN SOCIETY (3) (Pass/No Passorletter grade option.) Minimum of 48 lecture hours per term. Prerequisite: eligibility for ENGL 838 or ENGL 848 or equivalent. Students in this class will analyze their personal media habits while also examining media¿s influence on culture and society. This course invites students to think about the ways in which they receive and perceive news and entertainment. Students will be guided through the extraordinary history of mass communication, from cave drawings to texting. This course incorporates newspaper, magazines, TV, radio, the Internet, mobile devices, and the predicted convergence of all electronic media. Other topics include propaganda, international media, research and theories, a free press, and advertising. (CSU)

IOI WRITING ACROSS THE MEDIA (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Prerequisite: eligibility for ENGL 838 or ENGL 848 or equivalent. This course covers a range of writing styles for different forms of media. Students will practice the basic skills needed to write for various forms of media, including news for print and electronic media as well as writing for entertainment, public relations, web sites and advertising. (AA, CSU)

102 MEDIA LAW \& ETHICS (3) (Pass/No Pass or letter grade option.) Minimum 48 lecture hours per term. Prerequisite: eligibility for ENGL 838 or ENGL 848 or equivalent. Why do you think they're called "illegal" downloads? In this course, students will examine U.S. law and regula-
tion governing mass media, from print to the Internet. Students will also examine the ethical conflicts faced by media professionals. Topics include: freedom of speech, citizen journalism, defamation, privacy, copyright, obscenity, truth, ethics and advertising. This course will help prepare future media producers to work in industries that have significant influence over society. (AA, CSU)

## Drafting Technology

(Also see Machine Tool Technology and Manufacturing and Industrial Technology.)
Extra supplies required in all Drafting Technology courses.
IIo SOLIDWORKS I (3) Mimimum of 32 lecture, 64 lab and 16 hours by arrangement perterm. SolidWorks software is used togenerate 3-dimensional solid models, assemblies, and detailed drawings of mechanical objects used in industrial design and engineering. Sketching, dimensioning, part creation, assemblies, drawing creation and printing will be covered. (AA, CSU)
120 PRINCIPLES OF TECHNICAL DRAWING (3) Minimum of 32 lecture hours and 64 lab hours plus i6 lab hours by arrangement per term. Recommended Preparation: BUSW 105 or II4; eligibility for ENGL 848. Basic mechanical drawing with instruction surveying the field of graphic communications. Technical sketching, visualization, descriptive geometry, orthographic projection, geometric construction, pictorial drawing methods, and sectional views; electromechanical and computer-aided drafting. (AA: Area E5d, CSU)

I2I COMPUTER-AIDED DRAFTING I (3) Minimum of 32 lecture hours and 64 lab hours plus 16 lab hours by arrangement per term. Prerequisite: one semester of college drafting orequivalent. Recommended Preparation: BUSW IO5 or II4. A beginning AutoCAD course for students who have completed one semester of college drafting. Covers basic entities, edit commands, display controls, layering, text, dimensioning and isometric drawing using AutoCAD. (AA, CSU, UC)

122 COMPUTER-AIDED DRAFTING II (3) Minimum of 32 lecture hours and 64 lab hours plus 16 lab hours by arrangement per term. Prerequisite: DRAF IOO or I2I or equivalent with a grade of $C$ or higher. Intermediate computer aided drafting for students who have completed a basic course in AutoCAD. Includes plotting, wireframe modeling, AutoCAD 3D modeling, Render, slide shows, blocks and attributes. (AA, CSU)
I23 COMPUTER-AIDED DRAFTING III (3) Minimum of 32 lecture hours and 64 lab hours plus 16 lab hours by arrangement per term. Prerequisite: DRAF 122 or equivalent with a grade of $C$ or higher. Advanced AutoCAD course. Covers advanced applications of AutoCAD including customizing menus and tablets and the use of Autolisp routines. (AA, CSU)

I24 COMPUTER-AIDED DRAFTING IV (3) Minimum of 32 lecture hours and 64 lab hours plus 16 lab hours by arrangement per term. Prerequisite: DRAF 122 or equivalent with a grade of C or higher. Advanced CAD course covering links between AutoCAD data and third-party software applications such as Microsoft's Word, Excel, and Access. Also includes an Introduction to Mechanical Desktop, Architectural and Rendering Programs. (AA, CSU)
I3O MECHANICAL DESIGN WITH COMPUTER-AIDED DRAFTING (CAD) (3) Minimum of 32 lecture hours and 64 lab hours plus 16 lab hours by arrangement per term. Prerequisite: DRAF I2O and I2I or equivalent with a grade of $C$ or higher. Preparation of working drawings including
detail, assembly drawings and engineering change procedures; threads and fasteners; dimensioning and tolerancing; pictorial projections; intersections and developments. (AA, CSU)

680-689 SELECTED TOPICS ( $\mathbf{( 1 - 3 )}$ ) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS ( $\mathbf{( I - 3 )}$ (See first page of Description of Courses section.)

## Economics

IOo PRINCIPLES OF MACROECONOMICS (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 4I5 OR appropriate skill level as indicated by the reading placement tests or other measures. The American economy; the price system; the role of business, labor, and government; the money and banking system; trends of national income and factors in its determination; problems and policies for stabilization and growth. (AA: Area E5b, CSU: Area D, UC: Area 4)
102 PRINCIPLES OF MICROECONOMICS (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placementtestsorothermeasures. Supply, demand, and price determination in a market economy; business firm's costs, revenues, and price policies under conditions of competition through monopoly; role of government in cases of market failure; determination of wages, rent, interest, and profits; international trade and finance; comparative economic systems of other nations. (AA: Area E5b, CSU: Area D, UC: Area 4)

123 BUSINESS-ECONOMIC STATISTICS (4) Minimum of 64 lecture hours per term. Prerequisite: MATH I2O or I23 or equivalent at a postsecondary institution OR equivalent skill level as measured by a satisfactory score on a math placement test. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Designed for the Business and Economics major. Graphic presentation, measures of central tendency, dispersion, index numbers, time series, seasonal indexes, probability, hypotheses testing, type I and type II error, Chi-square goodness-of-fit test, contingency tables, regression and correlationanalysis, and non-parametric methods. Introduction to using a computer. (AA: Area Ci/Area E2b, CSU: Area B4, UC: Area $2 A^{*}$ )

680-689 SELECTED TOPICS ( $\mathbf{I}-3$ ) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.) (AA, CSU)
879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.)

## Electronics Technology

Extra supplies/lab fee may be required in all Electronics Technology courses.

IIO INTRODUCTION TO FUNDAMENTALS OF ELECTRONICS (3) Minimum of 32 lecture hours and 48 lab hours plus 32 lab hours by arrangement per term. Reading simple schematic diagrams and constructing elementary electrical/electronics circuits; making measurements with multimeter and oscilloscopes; using DC power supplies and AC power sources; basic digital principles. Emphasizes laboratory experiments and techniques. For non-Electronics Technology majors. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

I3I COPPER-BASED NETWORK CABLING FUNDAMENTALS (4.5) Minimum of 56 lecture hours and 64 lab hours plus 32 lab hours by arrangement per term. Recommended Preparation: completion of or concurrent enrollment in CIS IIO and ELEC IIO or equivalent. Covers the planning, site preparation, installation, troubleshooting, and certification of copper-based network cabling systems. Industry workmanship standards dealing with cable preparation and installation govern student skill development and the evaluation process. Uses industry standard troubleshooting techniques and test equipment to develop diagnostic skill. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)
133 FIBER OPTIC NETWORK CABLING FUNDAMENTALS (2) Minimum of 16 lecture hours and 48 lab hours plus 32 lab hours by arrangement per term. Prerequisite: ELEC I3I or equivalent with a grade of $C$ or higher. A study of the planning for, preparation of, installation of, and troubleshooting of fiber optic network cabling systems. Industry workmanship standards of cable preparation and installation govern skill development and the evaluation process. Uses industry-based troubleshooting techniques and test equipment to develop diagnostic skills. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)
144 SOLAR ENERGY FUNDAMENTALS (4) Minimum of 48 lecture and 48 labplus 32 lab hours hours by arrangement per term. Prerequisite: eligibility for MATH IIO or III or equivalent; completion of ELEC IIO or equivalent, or equivalent experience. This course covers the fundamentals of solar energy production, including both thermal and photovoltaic technologies. Included will be an overview of applicable electrical principles, load analysis, evaluation of the solar resource, system sizing principles, and coverage of the components included in off-grid and grid interactive systems. The lab section provides hands-on experience in building and testing solar based systems. Information will also be provided on the California rebate process and installer certification requirements for residential-based solar energy systems. (AA, CSU)

201 D.C. ELECTRONICS (3) Minimum of 32 lecture and 48 lab hours plus 32 lab hours by arrangement per term. Prerequisite: eligible for or successful completion of MATH IIO or III or equivalent; concurrent enrollment in or completion of ELEC 23 I or equivalent. Study of direct current and its effect on resistors, inductors, and capacitors. The nature of electricity, resistance, basic circuit laws, Ohm's Law, magnetism, inductance, capacitance, and the use of power supplies, multimeters, and oscilloscopes. (AA, CSU)

202 A.C. ELECTRONICS (3) Minimum of 32 lecture hours and 48 lab hours plus 32 lab hours by arrangement per term. Prerequisite: ELEC 20I or equivalent with a grade of $C$ or higher. Study of alternating current
and its effect on resistors, inductors, and capacitors. The nature of AC, AC and resistance, inductive and capacitive reactance, transformers, resonance, and the use of power supplies, multimeters, and oscilloscopes. (AA, CSU)

215 INTRODUCTION TO PC HARDWARE (3) Minimum of 40 lecture hours and 24 lab hours plus 16 lab hours by arrangement per term. Prerequisite: CIS IIO; ELEC IIO or their equivalent, all with a grade of C or higher. Corequisite: completion of or concurrent enrollment in BUSW II4 or its equivalent. Installation and configuration of the board-level electronic systems that make up an IBM compatible personal computer. Includes motherboard architecture, processors, memory systems, BIOS, bus architectures, systems resources, floppy and hard disk systems, keyboard and mouse video systems, I/O ports, and power supplies. (AA, CSU)

2 I6 PC TROUBLESHOOTING AND SYSTEM MAINTENANCE (3) Minimum of 40 lecture hours and 24 lab hours plus 16 lab hours by arrangement per term. Prerequisite: BUSW II4 and ELEC 215 or their equivalent, both with a grade of C or higher. Troubleshooting and maintenance of PC hardware including motherboards, memory, video display systems, mass storage, keyboards, and pointing devices. High level and low diagnostic software used extensively. Commercial optimization tools are installed and configured.Emphasizes hardware/firmware/software relationships. (AA, CSU)

23 I BASIC APPLIED ELECTRONIC MATHEMATICS (2) Minimum of 32 lecture hours plus 32 hours by arrangement per term. Prerequisite: eligible for or successful completion of MATH IIO or III or equivalent. Basic principles: algebra, trigonometry, logarithms, graphing, and scientific calculator use as applied to DC/AC circuits. (This course will transfer to CSU upon successful completion of ELEC 232.) (AA, CSU)

232 ADVANCED ELECTRONICS MATHEMATICS (I) Minimum of I6 lecture hours plus 32 hours by arrangement per term. Prerequisite: ELEC 231 with a grade of C or higher. Corequisite: concurrent enrollment in ELEC 302. In-depth study of algebra, trigonometry, logarithms, and graphing, as applied to amplifier, oscillator, and microwave circuits. (AA, CSU)
262 DIGITAL ELECTRONICS (4) Minimum of 48 lecture hours and 64 lab hours plus 32 hours by arrangement per term. Prerequisite: ELEC 201 or the equivalent with a grade of $C$ or higher. Covers the analysis and troubleshooting of combinational and sequentiallogic circuits. Includes basic gates, symbols, equations, truth tables, gate applications, number systems, mux and demux, encoders, decoders, adders, flip-flops, counters, and shift registers. (AA, CSU)

275 ACTIVE DEVICES (4) Minimum of 48 lecture and 64 lab hours plus I6 lab hours by arrangement per term. Prerequisite: ELEC 202 or equivalent with a grade of C or higher. Study of circuit behavior when DC and/ or AC voltage is applied to various combinations of diodes and bi-polar and field-effect transistors. Emphasizes verification of basic circuit laws through experiments, lab procedures, basic electronic measuring equipment, and computer-based simulation. (AA, CSU)
282 INTRODUCTION TO SOLDERING AND REWORK (2) Minimum of I6 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Recommended Preparation: ELEC IIO or 202 OR their equivalent experience with a grade of $C$ or higher. Introduces high reliability soldering and rework techniques including point-to-point, through-hole, and surface mount technologies. Identification of workmanship standards and self or peer-evaluation against said standards is stressed. Includes preparation and care of soldering equipment. (AA, CSU)

290 INTRODUCTION TO COMMUNICATIONS SYSTEMS (3) Minimum of 32 lecture and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: ELEC 202 or equivalent with a grade of $C$ or higher. Study of the reception and transmission of electromagnetic waves containing information. Includes AM and FM signal processing, television broadcasting, fiber optics, digital and satellite communications technologies, and PCS (cellular/pager) related technologies. (AA, CSU)

3IO INTRODUCTION TO MICROPROCESSORS (3) Minimum of 32 lecture hours and 48 lab hours plus 16 lab hours by arrangement per term. Prerequisite: ELEC 262 with a grade of C or higher or equivalent qualification. Covers the 16-bit microprocessor: the CPU instructional set, basic system hardware, chip select systems, memory, and direct I/O. Emphasizes assembly language programming and software control of hardware. (AA, CSU)
320 LINEAR CIRCUIT ANALYSIS (4) Minimum of 48 lecture hours and 64 lab hours plus 32 lab hours by arrangement per term. Prerequisite: ELEC 275 or equivalent with a grade of $C$ or higher or equivalent experience; completion of or concurrent enrollment in ELEC 232 or equivalent experience. Circuit parameter analysis, including frequency response techniques and computer-based simulation, of discrete and monolithic multistage audio voltage and power amplifiers and operational amplifiers. (AA, CSU)

332 PROTOTYPE PROJECT DEVELOPMENT (2) Minimum of 16 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: completion of BUSW 530; ELEC IIO or 202; ELEC 282 or their equivalent with a grade of C orhigher orequivalent experience. An introduction to the process of prototype project development in the electronics industry. Includes catalog research, parts identification and sizing, layout for functionality and style, circuit board layout and fabrication, final assembly and construction, final testing, and product documentation. (AA, CSU)

360 MICROCOMPUTER INTERFACING (3) Minimum of 32 lecture hours and 48 lab hours plus 16 lab hours by arrangement per term. Prerequisite: ELEC 3Io with a grade of C or higher or equivalent qualification. Programmable microprocessor compatible support chips. Interrupts, parallel data transfer techniques, serial data communications, A-to-D and D-to-A conversion, and software diagnostics. (AA, CSU)

362 RADIO-FREQUENCY COMMUNICATION (4) Minimum of 48 lecture hours and 48 lab hours plus 16 lab hours by arrangement per term. Prerequisite: ELEC 232 or higher level math course; ELEC 320 and 290 with a grade of $C$ or higher or equivalent qualification. Principles and techniques of radio frequency/microwave transmission and reception, including transmission lines and antennas. (AA, CSU)

370 NONLINEAR CIRCUIT ANALYSIS (4) Minimum of 48 lecture hours and 64 lab hours plus 32 lab hours by arrangement per term. Prerequisite: ELEC 320 or equivalent with a grade of C or higher. Analysis and computer-based simulation of discrete and monolithic applications of fixed and variable regulated power supplies, sine wave and non-sine wave RC oscillators, phase-locked loop circuits, and RF amplifiers/ oscillators. (AA, CSU)

42 FUNDAMENTALS OF ELECTRIC MOTOR CONTROL (4) Minimum of 48 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: ELEC 262 and 275 or equivalent with a grade of C or higher or equivalentexperience. Theory, construction, and operation of fractionaland multi-horse power DC and AC electric motors. Investigates various types of motor controls, including start/brake/stop switching, forward/ reverse switching, and speed control systems. (AA, CSU)

422 INTRODUCTION TO PROGRAMMABLELOGIC CONTROLLERS (4) Minimum of 48 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: ELEC 421 or equivalent with a grade of C or higher or equivalentexperience. Review of the component parts of a programmable logic controller and their function and their interrelationship. Examines PLC input/output systems and requirements. Covers ladder logic programming using basic I/O instructions, logic instructions, timers, counters, comparison, and math functions in-depth. Also introduces sequence of PLC operation, hardware installation, troubleshooting, and industrial applications of PLCs. (AA, CSU)

424 HYDRAULIC, PNEUMATIC AND VACUUM POWER SYSTEMS (4) Minimum of 48 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: ELEC 422 or equivalent with a grade of $C$ or higher. Theory, construction, installation, and operation of hydraulic, pneumatic, and vacuum power systems in an automated controls environment. Investigates various types of devices, including those that produce linear and rotary power, check valves, flow valves, and electrical activators. The various fundamental laws of physical science that govern fluid flow are also reviewed with respect to operation and troubleshooting. (AA, CSU)

44I SENSORS AND DATA TRANSMISSION SYSTEMS (4) Minimum of 48 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: ELEC 262 and 275 or equivalent with a grade of $C$ or higher or equivalent experience. A practical course in industrial measurement of temperature, flow, pressure, and level, focusing on their physical basis and fundamental laws. Describes application concepts in industrial instrumentation systems, sensor troubleshooting, and factors that influence sensor and system accuracy, performance, and calibration while stressing basic sensor theory of operation, faults, and calibration. (AA, CSU)

442 ELECTRONIC AND PNEUMATIC PROCESS CONTROL SYSTEMS (4) Minimum of 48 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: ELEC 441 or equivalent with a grade of $C$ or higher. A practical course in industrial electronic and industrial pneumatic control systems. Stresses calibration theory, a review of transmitter calibration, electronic systems, pneumatic systems, controller operation, control loop theory, PID, loop tuning, and control loop troubleshooting. (AA, CSU)

444 AUTOMATED PROCESS CONTROL SYSTEM DESIGN (4) Minimum of 48 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: ELEC 442 or equivalent with a grade of $C$ or higher. A practical course in process control system design and tuning. Covers integration of sensors, transmitters, indicators, controllers and final control elements. Stresses documentation of system (PCSU.ID), control loop theory, PID, loop tuning, and control loop troubleshooting. (AA, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880 - $\mathbf{8 8 9}$ SELECTED TOPICS ( $\mathbf{( I - 3 )}$ ) (See first page of Description of Courses section.)

## Engineering

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.

IOo INTRODUCTIONTO ENGINEERING(3) Minimum of 32 lecture hours and 48 lab hours plus 16 hours by arrangement per term. Prerequisite: MATH I3O or equivalent, eligibility for ENGL 838/848. Introduction to the engineering profession, courses of study and resources forengineering students, engineering design and analysis, software tools, ethics in engineering. Individual and group work; oral and written presentations. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

210 ENGINEERING GRAPHICS (4) Minimum of 48 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: MATH I3O. Introduction to graphical communication and design for engineers. Engineering design, visualization, sketching, orthographic projection, formal engineering drawings, descriptive geometry, manufacturing processes, dimensioning, tolerancing. Use of Computer-Aided Design (CAD) software to support engineering design. Students complete weekly homework assignments and a group design project. (Fall only) (AA, CSU, UC*)

215 COMPUTATIONALMETHODS FOR ENGINEERS AND SCIENTISTS (3) Minimum of 32 lecture hours and 48 lab hours plus 16 hours by arrangement per term. Prerequisite: MATH 24 I or MATH 25I. Introduction to problem solving, programming and computational methods using the MATLAB programming environment. Procedural programming, recursion, sorting, object-oriented representations and data structures. Plotting and data visualization, introduction to statistical analysis of data, systems of linear equations, numerical methods. Applications in engineering, mathematics, and the sciences. A material fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU/UC)

230 ENGINEERING STATICS (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: PHYS 250; MATH 252. Corequisite: concurrent enrollment in or completion of MATH 253. Plane and space force-moment systems, equivalent systems, and couples; free body diagrams and design concepts; equilibrium problems involving structures, machines, distributed force systems, and friction; shear and moment diagrams, moment of inertia, energy methods. (Fall only) (AA, CSU, UC)

240 ENGINEERING DYNAMICS (3) Minimum of 48 lecture hours per term. Prerequisite: ENGR 230. Fundamentals of kinematics and kinetics of particles and rigid bodies. Topics include kinematics of particle motion; Newton's second law, work-energy and momentum methods; kinematics of planar and three-dimensional motions of rigid bodies; D'Alembert's principle, work-energy and momentum principles for rigid body motion; introduction to mechanical vibrations. (AA, CSU, UC)

260 CIRCUITS AND DEVICES (4) Minimum of 48 lecture hours and 48 lab hours per term. Prerequisite: PHYS 260. Recommended Preparation: Concurrent enrollment in or completion of MATH 275. Introduction to circuits. Natural and forced response, network theorems; characteristics and circuit models of electronic devices including transistors and diodes. Laboratory assignments include both hardwaretechniques and computer- aided analysis. (Spring only.) (AA, CSU, UC)

270 MATERIALSSCIENCE (3) Minimumof32 lectur hours and 48lab hours plus16 hours by arrangement perterm. Prerequisite: MATH 25I;CHEM 210.

Recommended Preparation: PHYS 250. Application of basic principles of physics and chemistry to the engineering properties of materials. Atomic and crystal structures, phase transformation, heat treatment of metals. The relationship between atomic- and micro-structure and the mechanical and electrical properties of metals, concrete, polymers, ceramics, and semiconducting materials. (AA, CSU, UC)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 9 0}$ SPECIAL PROJECTS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## English and Literature

(Also see Film, Reading, and Speech Communication.)
A materials fee in the amount shown in the Schedule of Classes is payable upon registration for English courses.

The English Placement Test is required of all entering freshmen. Students transferring to College of San Mateo with Pass in college English will notbe required to take the test. They must, however, take the Reading Test if they have not completed English ioo or equivalent with a grade of C or higher. Designed to measure the entrant's ability in reading, the mechanics of writing, and composition, the English Placement Test is used (in addition to other information) to determine placement of students in English roo and other English courses.

## The English Program

The English program consists of transfer and non-transfer courses in composition, film, language, literature, reading, and speech communication. Entering students should enroll first in one of the following courses in composition:

| Transfer Courses | Non-Transfer Courses |
| :--- | :--- |
| English Ioo | English 828, 838, 848 |
| ESL 400 | ESL 825, 826, |
|  | 827, or 828 |

The English requirement for the AA/AS degree may be completed with additional units chosen from the following courses:

| Transfer courses | Non-Transfer Courses |
| :--- | :--- |
| English IIO | English 875 |
| Speech Ioo, III, | Speech 855 |

speech 855

Note that English Ioo with a grade of C or higher is the prerequisite for English ino and for all transfer-level literature courses.

For those students who do not place into ENGL Ioo on the placement tests, the following course options satisfy the prerequisite for ENGL Ioo (all must be completed with a grade of C or higher): ENGL 838 or 848 or 400 ; or ESL 400.

For those students who do not place into ENGL 838 or 848 on the placement tests, the following course options satisfy the prerequisite for

ENGL 838 or 848 (all must be completed with a grade of C or higher): ENGL 828 or 400 ; or ESL 400 ; or ENGL 826 and READ 826.

Reading courses may be taken concurrently with any of the other courses in the English and Literature program.

Other English/Literature transfer courses are those numbered below 800; otherEnglish/Literature Non-Transfer courses are those numbered 800 or above.

The following English coursesarepass-bearingbut notdegree-applicable, which means that the units count for the purpose of financial aid but not toward the AA/AS degree: $828,850,875$.

IOo COMPOSITION AND READING (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: ENGL 838 or 848; or ESL 400, with a grade of C or higher (or appropriate skill level indicated by the English placement tests and other measures or equivalent). Intensive reading and writing based on a study of primarily nonfiction materials. Students write a minimum of 8,ooo words; writing emphasizes expository forms. (AA: Area C2/Area E2, CSU: Area A2, UC: Area IA)

102 ENGLISH PRACTICUM (2) (Pass/No Pass grading.) Minimum of 32 lecture hours per term. Correquisite: concurrent enrollment in ENGL IOO. Combined with ENGL Ioo, ENGL IO2 provides extensive practice in critical reading strategies, sentence structure, and grammar as well as essay and paragraph organization and development. (AA, CSU)

IIO COMPOSITION, LITERATURE, AND CRITICAL THINKING (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: ENGL Ioo with a grade of C or higher. Introduction to the major imaginative genres of poetry, drama, and fiction. Students write 8,ooo to io,000 words in expository essays and other kinds of assignments employing methods of literary analysis and demonstrating skill in critical thinking. (AA: Area E2/Area E5c, CSU: Area A3, UC: Area iB)

16I CREATIVE WRITING I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Prerequisite: eligibility for ENGL Ioo or equivalent. The craft of writing short fiction and poetry. Students write a minimum of two short stories and a complete poetry project. (AA: Area E2, CSU: Area C2, UC)

162 CREATIVE WRITING II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Prerequisite: ENGL I6I with a grade of $C$ or higher. Further instruction in the writing of fiction and/ or poetry. Students plan and complete an extensive creative writing project through agreement with the instructor. (AA: Area E2, CSU: Area C2, UC)

163 CREATIVE WRITING III (3) (Pass/No Pass or letter grade option) Minimum of 48 lecture hours per term. Prerequisite: ENGL 162 with a grade of $C$ or higher. Instruction in the writing of fiction or poetry for advanced students, with an emphasis on longer works. (To increase competency, may be taken twice for a maximum of 6 units.) (AA: Area E2, CSU: Area C2, UC)

165 ADVANCED COMPOSITION (3) Minimum of 48 lecture hours plus I6 hours by arrangement per term. Prerequisite: ENGL Ioo with a grade of $C$ or higher. Advanced techniques of essay and report writing with particularemphasis on critical thinking, persuasive and other rhetorical strategies, and research methods. Includes formal instruction in principles of logical thinking-inductive and deductive reasoning, the relationship of language to logic, common logical fallacies, and methods of analysis and evaluation. Students write a minimum of 8,ooo words of graded prose. (Fulfills critical thinking requirement for transfer
students.) (AA: Area E2, CSU: Area A3/Area C2, UC: Area IB)
680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

828 BASIC COMPOSITION AND READING (5) Minimum of 80 lecture hours plus 16 hours by arrangement per term. Recommended Preparation: appropriate skill level indicated by the English placement tests and other measures or READ 816 or 825 with a grade of C or higher. Practice in composition and reading based on the study of essays and other reading material. Composition of short essays, with focused work on reading, paragraph development, and sentence structure. (Units do not apply toward AA/AS degree.)

838 INTENSIVE INTRODUCTION TO COMPOSITION AND READING (5) Minimum of 80 lecture hours plus 16 hours by arrangement per term. All students who received a grade of C in ENGL 828 are strongly advised to enroll in ENGL 838. Prerequisite: appropriate skill level indicated by the English placement tests and other measures; OR ENGL 828 or 400 with a grade of C or higher; OR ESL 400 with a grade of C or higher; OR ENGL 826 with a grade of C or higher and READ 826 with Pass or a grade of $C$ or higher (or eligibility for READ 836 or 400-level reading course). Intensive practice in reading, writing, listening, speaking, and thinking to develop and refine composition proficiency. Includes intensive instruction in reading comprehension and vocabulary development, elements of the essay, and composing techniques necessary for college writing (writing from source materials, analytical reading, and English usage and mechanics). Designed mainly to prepare students to meet competency standards required for entrance into English ioo. (AA: Area E2a)

848 INTRODUCTION TO COMPOSITION AND READING (4) Minimum of 64 lecture hours plus 16 lab hours by arrangement per term. All students who received a grade of C in ENGL 828 are strongly advised to enroll in ENGL 838. Prerequisite: appropriate skill level indicated by the English placement tests and other measures; OR ENGL 828 or 400 with a grade of C or higher; OR ESL 400 with a grade of C or higher; OR ENGL 826 with a grade of C or higher and READ 826 with Pass or a grade of $C$ or higher (or eligibility for READ 836 or 400 -level reading course). Practice in reading, writing, listening, speaking, and thinking to develop and refine composition proficiency. Includes instruction in reading comprehension and vocabulary development, elements of the essay, and composing techniques necessary for college writing (writing from source materials, analytical reading, and English usage and mechanics). Designed mainly to prepare students to meet competency standards required for entrance into English Ioo. (AA: Area E2a)

850 WRITING WORKSHOP (.5-3) (Pass/No Pass grading.) (Open entry/ open exit) Minimum of 24 to I44 lab hours per term. For students having difficulty with their writing. Includes individual appointments with a faculty member who will help the student identify writing deficiencies and correct writing errors. Some writing areas that might receive attention are organization, development, and mechanics, although help will be tailored to the specific needs of the student. (May be taken four times for a maximum of 12 units.) (Units do not apply toward AA/AS degree.)
865 PROJECTS IN WORKPLACE WRITING (I) (Pass/No Pass grading.) Minimum of 16 lecture hours. Introduction to skills required in workplace writing, including judging purpose and audience, writing clearly and grammatically, cultivating a professional and appropriate tone, and mastering any writing tasks specific to particular professions. Offered
in self-contained, one-unit modules. Descriptions of the specific modules offered will be printed each semester in the Schedule of Classes. (Not transferable.) (AA)
875 ENGLISH GRAMMAR (3) Minimum of 48 lecture hours per term. Comprehensive review of English grammar, including topics such as syntax, agreement, verb tenses, precision, coordination and subordination, the absolute phrase, the elliptical clause, and punctuation and graphics. (Units do not apply toward AA/AS degree.)
879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880 - $\mathbf{8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Literature

IoI TWENTIETH-CENTURY LITERATURE (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: ENGL IOO or equivalent with a grade of C or higher. Study of a representative selection of the 20th Century fiction, poetry, and drama. Authors may include T.S. Eliot, Pablo Neruda, Vladamir Nabokov, Samuel Beckett, Virginia Woolf, Gabriel Garcia Marquez, Sylvia Plath, Eugene O'Neil, Toni Morrison, among others. Emphasis on innovations of the Century's major writers within the context of literary and cultural movements. Lectures, discussions, related reading, and writing of critical papers. (AA: Area E2a/Area E5C, CSU: Area C2, UC: Area 3B)
105 THE BIBLE AS LITERATURE (3) Minimum of 48 lecture hours per term. Prerequisite: ENGL Ioo or equivalent. Study of the significant writings of the Old and New Testaments and of the Apocrypha. (AA: Area E2/Area E5c, CSU: Area C2, UC: Area 3B)
II3 THE NOVEL (3) Minimum 48 lecture and 16 hours by arrangement per term. Prerequisite: ENGL IOO or equivalent with a grade of C or higher. Study of a representative selection of novels of the 19th, 20th and 2ist Centuries and of various aspects of literary criticism. Authors may include Jane Austen, Charlotte and Emily Bronte, Thomas Hardy, Henry James, William Faulkner, Gabriel Garcia Marquez, amongothers. Lectures, discussions, related reading, and writing of critical papers. (AA: Area E2/Area E5c, CSU: Area C2, UC: Area 3B)
15I SHAKESPEARE (3) Minimum of 48 lecture hours per term. Prerequisite: ENGL IOO or equivalent. Study of representative plays and poems. Reading, discussion, writing of critical papers, tests. (AA: Area E2/ Area E5c, CSU: Area C2, UC
2OI AMERICAN LITERATURE I (3) Minimum of 48 lecture hours per term. Prerequisite: ENGL Ioo or equivalent. Study of American literature from the beginning through the period of Mark Twain. Lectures, reading, analysis and discussion of selected works, and writing of critical papers. (Recommended for English majors.) (AA: Area E2/Area E5c, CSU: Area C2, UC)
202 AMERICAN LITERATURE II (3) Minimum of 48 lecture hours per term. Prerequisite: ENGL Ioo or equivalent. Study of American literature since Mark Twain. Lectures, reading, analysis and discussion of selected works, and writing of critical papers. (Recommended for English majors.) (AA: Area E2/Area E5c, CSU: Area C2, UC)

220 INTRODUCTION TO WORLD LITERATURE (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: English Ioo or equivalent with a C or higher. Study of World Literature and texts (poetry, prose, drama, and film) from antiquity to the present with a
focus on major authors representing literary traditions world-wide. Lectures, discussions, recorded readings, and writing of critical essays. (AA, CSU)
23I SURVEY OF ENGLISH LITERATURE I (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: ENGL IOO or equivalent with a grade of $C$ or higher. Study of the typical works of major English writers from Chaucer to the end of the 18th Century. Lectures, discussions, recorded readings, and writing of critical papers. (Recommended for English majors.) (AA: Area E2/Area E5c, CSU: Area C2, UC)

232 SURVEY OF ENGLISH LITERATURE II (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: ENGL Ioo or equivalent with a grade of $C$ or higher. Study of the typical works of major English writers of the igth and 20th Centuries. Lectures, discussions, recorded readings, and writing of critical papers. (AA: Area E2/Area E5c, CSU: Area C2, UC)
430 GREEK MYTHOLOGY \& CLASSICAL LITERATURE (3) Minimum of 48 lecture hours plus 16 hours hy arrangement per term. Prerequisite: ENGL IOO or equivalent. Survey of major deities and heroes, recurring mythological themes, and relationships between people and deities in ancient Greece and Rome. (AA: Area E2/Area E5c, CSU: Area C2, UC)
680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

804 TWENTIETH-CENTURY LITERATURE (3) (Pass/No Pass grading.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Study of a representative selection of the 2oth Century fiction, poetry, and drama. Authors may include T.S. Eliot, Pablo Neruda, Vladamir Nabokov, Samuel Beckett, Virginia Woolf, Gabriel Garcia Marquez, Sylvia Plath, Eugene O'Neil, Toni Morrison, among others. Emphasis on innovations of the Century's major writers within the context of literary and cultural movements. Lectures, discussions, readings, and optional writing of critical papers. (AA)

809 Bible as literature (3) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Study of selected texts from the Old and New Testaments and from the Apocrypha. Lectures, discussions, related readings, quizzes, and optional special project. (AA)

813 THE NOVEL (3) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Study of a representative selection of novels of the 19th, 20th, and 2ist Centuries and of various aspects of literary criticism. Authors may include Jane Austen, Charlotte and Emily Bronte, Thomas Hardy, Henry James, William Faulkner, Gabriel Garcia Marquez, amongothers. Lectures, discussions and related reading.

820 INTRODUCTION TO WORLD LITERATURE (3) (Pass/No Pass grading.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Study of World Literature and texts (poetry, prose, drama and film) from antiquity to the present with a focus on major authors representing literary traditions world-wide. Lectures, discussions, recorded readings, and writing of critical essays. (AA)
823 AMERICAN LITERATURE I (3) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Study of American literature from its beginning through Mark Twain. Lectures, reading, discussions, and writing of optional critical essays. (AA)

824 AMERICAN LITERATURE II (3) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Study of American literature since Mark Twain. Lectures, readings, discussions, and writing of optional critical essays. (AA)

830 GREEK MYTHOLOGY \& CLASSICAL LITERATURE (3) (Pass/No Pass grading.) Minimum 48 lecture hours plus 16 hours by arrangement per term. Survey of major deities and heroes, recurring mythological themes, and relationships between people and deities, especially in Greek and Roman cultures. Readings, discussions, and optional writing projects. (AA)

835 SHAKESPEARE (3) (Pass/No Pass grading.) Minimum of 48 lecture hours plus I6 hours by arrangement per term. Study of representative plays and poems, with emphasis on Shakespeare's poetic and dramatic skills and his understanding of human nature. Readings, discussions, and writing of optional critical papers. (AA)
837 SURVEY OF ENGLISH LITERATURE I (3) (Pass/No Pass grading.) Minimum of 48 lecture hours plus i6 hours by arrangement per term. Study of the typical works of major English writers from Chaucer to the end of the 18th Century. Lectures, discussions, recorded readings. (AA)

838 SURVEY OF ENGLISH LITERATURE II (3) (Pass/No Pass grading.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Study of the typical works of major English writers of the 19th and 2oth Centuries. Lectures, discussions, recorded readings. (AA)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## English as a Second Language

A materials fee in the amount shown in the Schedule of Classes is payable upon registration for ESL courses.
400 COMPOSITION FOR NON-NATIVE SPEAKERS (5) Minimum of 80 lecture hours plus 16 hours by arrangement per term. Prerequisite: ESL 828 with a grade of C or higher or appropriate skill level indicated by the English placement tests and other measures. Recommended Preparation: READ 830 (or appropriate skill level indicated by the English as a Second Language placement test and other measures.) It is recommended that students enroll concurrently in READ 400 or 405 and SPCH I20. Intensive practice in the writing of expository essays based on the analysis of complex pieces of writing, both fiction and non-fiction. The student is expected to conform to the conventions of standard English by demonstrating an ability to use proper punctuation, mechanics, structures, and grammar and to employ a variety of sentence patterns. (Meets the standards required for entrance into English ioo or $\mathbf{1 0 0} / \mathrm{IO2}$ or 838 or 848.) (AA: Area E2a, CSU, UC)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

825 WRITING FOR NON-NATIVE SPEAKERS I (5) (Pass/No Pass grading.) Minimum of 80 lecture hours per term. Recommended Preparation: appropriate skill level indicated by placement tests and other measures. It is recommended that students enroll concurrently in ESL 855 or higher course, ESL 845 or higher course, and READ 807. Students practice beginning-
level grammar structures in exercises and writing assignments. (Units do not apply toward AA/AS degree.)

826 WRITING FOR NON-NATIVE SPEAKERS II (5) (Pass/No Pass grading.) Minimum of 80 lecture hours per term. Recommended Preparation: Pass in ESL 825 (or appropriate skill level indicated by placement tests and other measures). It is recommended that students enroll concurrently in ESL 856 or higher course, ESL 846 or higher course, and READ 807. Introduces beginning rhetoric in the form of a connected series of simple sentences on topics of daily life and continues the study of English sentence types, imperatives, four basic tenses (past, present, future and progressive), modals, expletives, contractions, special verbs, count/no-count nouns, plurals, (regular/irregular), articles, adverbs, correct word order, punctuation, and spelling. (Units do not apply toward AA/AS degree.)

827 WRITING FOR NON-NATIVE SPEAKERS III (5) (Pass/No Pass or letter grade option.) Minimum of 80 lecture hours per term. Recommended Preparation: Pass in ESL 826 (or appropriate skill level indicated by placement tests and other measures). Students are strongly advised to enroll concurrently in ESL 857, READ 825 or 830, and ESL 847 or higher course. Focuses on writing organized and well-developed academic paragraphs. Covers intermediate level grammar structures, form, meaning, and use. (Units do not apply toward AA/AS degree.)

828 WRITING FOR NON-NATIVE SPEAKERS IV (5) Minimum of 80 lecture hours per term. Recommended Preparation: ESL 827 with a grade of C or higher (or appropriate skill level indicated by placement tests and other measures) and completion of ESL 857 or higher level reading course with a grade of C or higher (or appropriate skill level indicates by placement tests and other measures.) Students are strongly advised to enroll concurrently in READ 825 or higher level reading course and ESL 848 or higher level speech communication course. Practice in writing paragraphs and essays to develop composition skills. Work on high-intermediate-level grammar structures and editing within the context of the student's own work. (Units do not apply toward AA/AS degree.)

845 CONVERSATION FOR NON-NATIVE SPEAKERSI (3) (Pass/No Pass grading.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. It is recommended that students enroll concurrently in ESL 825 or higher course, ESL 855 or higher course, and READ 807. Practice in basic listening and speaking skills on a range of personal and classroom topics. (Units do not apply toward AA/AS degree.)

846 CONVERSATION FORNON-NATIVE SPEAKERSII (3) (Pass/No Pass grading.) Minimum of 48 lecture hours plus I6 lab hours by arrangement per term. Recommended Preparation: ESL 845 with Pass (or appropriate skill level indicated by placement tests and other measures). It is recommended that students enroll concurrently in ESL 825 or higher course, ESL 855 or higher course, and READ 807. Practice in low-intermediate listening and speaking skills on a range of personal and academic topics. (Units do not apply toward AA/AS degree.)

847 CONVERSATION FORNON-NATIVE SPEAKERS III (3) (Pass/NoPass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Recommended Preparation: ESL 846 with Pass (or appropriate skill level as indicated by placement tests and other measures). It is recommended that students enroll concurrently in ESL 827 or higher course and ESL 857. Advanced practice in conversational, listening, and pronunciation skills. (Units do not apply toward AA/AS degree.)

848 CONVERSATION FOR NON-NATIVE SPEAKERS IV (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Recommended Preparation: ESL 847 with Pass
or a grade of C or higher (or appropriate skill level indicated by placement tests and other measures). Students are strongly advised to enroll concurrently in ESL 828 or higher course and READ 825 or higher course. Advanced practice in conversation, listening, and the use of idiomatic expressions on a range of academic and informal topics. (May be taken twice for a maximum of 6 units.) (Units do not apply toward AA/AS degree.)

849 CONVERSATION WORKSHOP (.5) (Pass/No Pass grading.) (Open entry/Open Exit.) Minimum of 24 hours by arrangement per term. For native speakers of languages other than English who want to improve their conversation skills. Includes individual appointments and conversation circle activities with a faculty member or instructional aide. Students identify problem areas in their conversation skills and learn to correct errors in spoken English. Areas that might receive attention are listening skills, pronunciation, word choice, and specific grammar problems, although help will be tailored to the specific needs of each student. (Units do not apply toward AA/AS degree.) (May be taken four times for a maximum of 2 units.) (Not Degree Applicable; Not Transferable.)
850 WRITING WORKSHOP (.5-3) (Pass/No Pass grading.) (Open Entry/ Open Exit.) Minimum of 24 to 144 lab hours per term. A total of 24 hours equals. 5 unit. For native speakers of languages other than English having difficulty with their writing. Includes individual appointments with a faculty member who assists the students in identifying problem areas in writing and helps students learn to correct writing errors in English Some writing areas that might receive attention are organization, development, and specific grammar concerns, although help is tailored to the specific needs of each student. (Units do not apply toward AA/ AS degree.) (May be taken four times for a maximum of i2 units.) (Not Degree Applicable; Not Transferable.)

855 READING FOR NON-NATIVE SPEAKERS I (3) (Pass/No Pass grading.) Minimum of 48 lecture hours plus I6 lab hours by arrangement per term. It is recommended that students enroll concurrently in ESL 825 or higher course, ESL 845 or higher course, and READ 807. Designed to build basic vocabulary skills, improve the understanding of written instructions, and introduce main ideas and details. (May be taken twice for a maximum of 6 units.) (Units do not apply toward AA/AS degree.)

856 READING FOR NON-NATIVE SPEAKERS II (3) (Pass/No Pass grading.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Recommended Preparation: ESL 855 with Pass (or appropriate skill level as indicated by Reading Placement tests and/or other measures.) Students are strongly advised to enroll concurrently in ESL 826 or higher level writing course, ESL 846 or higher level conversation course, and Read 807, Phonics for Non-Native Speakers. Designed to emphasize low-intermediate vocabulary and comprehension skills (context clues, subject, main ideas, supporting details, and inferences) and build general background knowledge. (Units do not apply toward AA/AS degree.)
857 READING FOR NON-NATIVE SPEAKERS III (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Recommended Preparation: Pass in ESL 856 (or appropriate skill level indicated by the reading placement tests and other measures). It is recommended that students enroll concurrently in ESL 827 or higher writing course and ESL 847 or higher level conversation course. Designed to emphasize high-intermediatevocabulary and comprehension skills (context clues, main idea/supporting details, critical reading) and introduce fiction. (Units do not apply toward AA/AS degree.)

868 ESL FOR THE WORKPLACE (3) (Pass/No Pass grading.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Recommended

Preparation: one year of previous English language study, or appropriate skill level as indicated by placement tests and other measures. Intended for high-beginning (Level I/ESL 825) to low-intermediate (Level 2/ESL 826) students, this course will focus on the study of beginning English grammar, reading, writing, listening, and speaking skills, including work-related vocabulary and cross-cultural concepts relevant to work situations. (Units do not apply toward AA/AS degree.)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
890 ESL FOR PARENTS (2) (Pass/No Pass grading.) Minimum of 32 lecture hours per term. Recommended Preparation: ESL 845 with Pass or higher course (or appropriate skill level as indicated by placement tests and other measures.) Designed to help ESL parents improve their ability to speak with and about their children. Students will discuss a variety of topics, including: school-related issues (cultural norms related to education and discipline, communication between parents and teachers, helping children communicate with other children at school), and issues at home (establishing routines, sibling rivalry, and parent-child communication). Vocabulary, grammar, and pronunciation skills will be addressed in context. (Units do not apply toward AA/AS degree.)

891 ACCENT REDUCTION FOR NON-NATIVE SPEAKERS (3) (Pass/No Pass grading.) Minimum of 48 lecture hours plus I6 lab hours by arrangement per term. Prerequisite: SPCH 842 or ESL 846 or equivalent with Pass or eligibility for SPCH 843 or ESL 847 or higher. Designed for non-native speakers of English. Accent reduction focusing on the production of vowels, diphthongs, and consonants and on the correct use of pitch, rate, volume, vocal quality, and vocal image. (Units do not apply toward AA/AS degree.)
895 INDIVIDUALIZED READING IMPROVEMENT FOR NON-NATIVE SPEAKERS (.5-3) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of 24 to 144 lab hours per term. Improve reading skills. Practice methods of increasing comprehension and vocabulary to meet specific student needs. May include Internet, computer-assisted and/or DVD assignments. Uses self-paced programs based on individual diagnostic test results to meet specific student needs. Designed for non-native speakers of English - Level I-3. Students may enroll in this self-paced course any time through the isth week of the semester. (May be taken up to four times for a maximum of 12 units.) (Units do not apply toward AA/AS degree.)

896 VOCABULARY FOR NON-NATIVE SPEAKERS OF ENGLISH 1 (.5I.5) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of 24 to 72 lab hours per term. A self-paced, individualized course designed to help non-native speakers of English build their vocabulary skills through a words-in-context approach. Students will use textbooks and computer programs to study basic words. Designed for ESL Level I students. (May be taken three times for a maximum of 4.5 units.) (Units do not apply toward AA/AS degree.)
897 VOCABULARY FOR NON-NATIVE SPEAKERS OF ENGLISH II (.51.5) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of 24 to 72 lab hours per term. A self-paced, individualized course designed to help non-native speakers of English build their vocabulary skills through a words-in-context approach. Students will use textbooks and computer programs to study basic words. Designed for ESL Level II students. (May be taken three times for a maximum of 4.5 units.) (Units do not apply toward AA/AS degree.)

898 COMPREHENSIVE GRAMMAR REVIEW FOR NON-NATIVE SPEAKERS (3.0) (Pass/No Pass or letter grade option) Minimum of 48 lecture hours per term. Recommended Preparation: Completion of ESL 827 with a grade of C or higher, or appropriate skill level as indicated by placement tests and other measures. A maintenance course designed specifically for newand continuingESLstudents. Review ofgrammatical structures which are generally problematic for ESL students, including verb tenses, passive voice, articles, prepositions. Practice of these structures through written and oral exercises and in shortcompositions. Review of strategies for finding and correcting these errors in students' own writing. (Units do not apply toward AA/AS degree.)

## Ethnic Studies

IOI INTRODUCTION TO ETHNIC STUDIES I (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848; completion of READ 400 or 405 or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of the historical and cultural presence of Native and Latin Americans in the United States, with special emphasis on their contributions to California's social, political, and economic institutions. Studies the roots of these groups from California and national perspectives. Provides the student with the general background of two of California's oldest ethnic groups and stimulates dialogue related to contemporary issues in California's institutional processes. (Satisfies State and Local Government requirement.) (AA: Area Eib/Area E5b, CSU: Area D/Area F3, UC: Area 4/Area 7C)

102 INTRODUCTION TO ETHNIC STUDIES II (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 4 I5 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of the historical and cultural presence of Black-Americans and Asians in the United States, with special emphasis on their contributions to California's social, political, and economic institutions. Their roots in California will be studied and compared from a national perspective. Provides the student with general background of these two California groups and stimulates dialogue related to contemporary issues in California's institutional processes. (Satisfies State and Local Government requirement.) (AA: Area Eib/Area E5b, CSU: Area D/Area F3, UC: Area 4/Area 7C)

150 SOCIAL DYNAMICS OF PEOPLE OF COLOR (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Social structure and dynamics of Third World institutions, with emphasis upon development and effectiveness of these institutions among Third World communities in the United States. Concentrates on the family, education, religion, and business. (AA: Area E5b, CSU: Area D, UC: Area 4)

15I PATTERNS OF PREJUDICE AND RACISM I (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Analyzes patterns of prejudice and racism from a social-psychological perspective. Focuses on the prejudiced personality and how it develops,
functions, and affects both the prejudiced individual and the victim. Examines both external and internal dynamics of prejudice and its manifestation in discriminatory behavior. (AA: Area E5b, CSU: Area D/Area E, UC: Area 4*)

152 PATTERNS OF PREJUDICE AND RACISM II (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 4I5 OR appropriate skill level as indicated by the reading placement tests or other measures. Sociological analysis of how major American institutions create, facilitate, support, and systematically reinforce patterns of racism and discrimination. Specifically, how these institutions function, are organized, and operate against Asians, African-Americans, Hispanics, Native Americans, women, and other oppressed groups in the U.S. and how they can be modified structurally and functionally to eliminate instead of foster racism. (AA: Area E5b, CSU: Area D/Area E, UC: Area 4)

26I AFRICAN-AMERICAN CULTURE I (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 4 I5 OR appropriate skill level as indicated by the reading placement tests or other measures. Relevance of African culture to the study of African-American life, including the African diaspora and its impact on contemporary African-American cultural institutions. (AA: Area E5b, CSU: Area D, UC: Area 4)

262 AFRICAN-AMERICAN CULTURE II (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Emergence of modern African-American social movements in the United States, their leaders and philosophies, and contemporary issues, including the African-American consciousness movement, Pan-Africanism, counter-cultural forms of expression, and social problems. (AA: Area E5b, CSU: Area D, UC: Area 4)

265 EVOLUTION OF HIP HOP CULTURE: A SOCIO-ECONOMIC AND POLITICAL PERSPECTIVE (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Traces the evolution of Hip Hop from its African roots through the diaspora as a cultural form of expression by examining music, dancing, spoken word, philosophy, and lifestyles. Alsoanalyzes HipHop from a social, economic, and political perspective. Explores it as a product of the African American struggle as reflected in music, poetry, lyrics, dance, artists, and major issues associated with Hip Hop. (AA: Area E5b, CSU: Area C2, UC: Area 3B)

288 AFRICAN-AMERICAN CINEMA (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Contributions of African-Americans in the film industry and their historical relationship to the industry. Extensive use of films, supplemented by lecture and presentations by African-Americans involved in the film industry. (AA: Area E5c, CSU: Area Ci, UC: Area 3A)

300 INTRODUCTION TO LA RAZA STUDIES (3) (Pass/No Pass or let-
ter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to the philosophy, methodology, and structure of La Raza Studies (Chicano/Chicana, Latino/Latina studies). Analyzes the relationships between social institutions and their effects upon the La Raza individual, especially in the United States setting. (AA: Area E5b, CSU: Area D, UC: Area 4)

350 NATIVE AMERICAN WAY OF LIFE (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 4I5 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of Native American philosophy, customs, and spiritual practices based on the works of Dr. Carlos Castaneda. Introduces the mystical knowledge of the Yaqui Indians and comparative study of Hindu vedas, Buddhism, Heraclitus, and Sufism. (AA: Area E5c, CSU: Area C2, UC: Area 3B)
35I THE PRIMAL MIND AND CULTURAL DIVERSITY (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 4 I5 OR appropriate skill level as indicated by the reading placement tests or other measures. Theory of origin and evolution of life. Migration from Africa. Comparative study of Native Americans with Eurasians. Origin of consciousness, self image and ego. Primal mind of the child; conception, pregnancy and birth. Intuitive mind and development of linear thinking. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 4)
360 THE PEOPLE AND CULTURES OF POLYNESIA: AN INTRODUCTION (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to the history and cultures of the Polynesian islands. Focuses on the history, geography, social institutions, languages, traditions, and recent issues affecting the people, both on the islands and the United States mainland. Compares and contrasts selected islands of the Pacific. (AA: Area E5b, CSU: Area D, UC: Area 4)

440 CULTURAL EXPERIENCE OF ASIAN-AMERICAN WRITERS (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to Asian American writers' experiences as shaped by the treatment of minorities in the U.S. and by institutional racism. Analyzes writers' works in the context of historical, social and political influences and compares Asian Americans with other ethnic groups and the majority society. (AA: Area E5b, CSU: Area C2/Area D, UC: Area 3B/Area 4)

585 ETHNICITY IN CINEMA (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibilityfor ENGL 838 or 848 and completion of READ 400 or 405 or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. A survey class that uses cinema as a resource to explore how stereotypes are used and how it continues to portray persons of color in the United States. Class will review films about African Americans, Latinos/Chicanos, Native Americans, and Asia Pacific Americans. (AA: Area E5c, CSU: Area Ci, UC: Area 3A)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)
879 SELECTED TOPICS ( $\mathbf{( 1 - 3 )}$ ) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Film

IOO INTRODUCTION TO FILM (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours per term. Recommended Preparation: ENGL 848. Introductory survey of fundamental film techniques and styles of expression. Emphasizes film appreciation, the language of film, and analysis for full film enjoyment. Lectures, screenings, discussions, quizzes, and writing of critical papers. (AA: Area E5c, CSU: Area Ci, UC: Area 3A)
IIO AMERICAN CINEMA (3) (Telecourse)Familiarizes students with the history of American cinema, focusing on the studio system, the star system, genres, and directors. Develops film vocabulary and critical viewing skills. (AA: Area E5c, CSU: Ci)

I20 FILM HISTORY I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and I6 lab hours per term. Recommended Preparation: ENGL 838/848 with a grade of C or higher. Chronological survey of important American and international films from 1895 to World War II. Emphasizes the evolution of film as a distinct art form and the intersection of film and society. Lectures, screenings, discussions, quizzes, and writing of critical papers. (AA: Area E5c, CSU: Area CI, UC: Area 3A)
I2I FILM HISTORY II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours per term. Recommended Preparation: ENGL 838/848 with a grade of C or higher. Chronological survey of important American and international films from World War II to the present. Emphasizes the evolution of film as a distinct art form and the intersection of film and society. Lectures, screenings, discussions, quizzes, and writing of critical papers. (AA: Area E5c, CSU: Area Ci, UC: Area 3A)

153 SCREENWRITING (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Study of the craft of writing screenplays with instruction and practice in devising film ideas, developing a film premise, structuring film stories, preparing character biographies, developing scenes, creating dialogue, and preparing a professional film script.(AA, CSU: Area C2)

200 FILM IN FOCUS (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours per term. Recommended Preparation: FILM IOO, I2O, or I2I or equivalent. Study of the art and history of film by focusing on selected film topics, such as genres, directors, stars, gender, race, national cinemas, and new technologies (course topics vary from semester to semester). Lectures, screenings, discussions, quizzes, and writing of critical papers. (May be taken three times for a maximum of 9 units.) (AA: Area E5c, CSU: Area Ci, UC: Area 3A)

215 FILM AND NEW DIGITAL MEDIA (3) (Pass/No pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours per term. Recommended Preparation: Film IOO, IIO, I2O or I2I, or equivalent. Explores the new role of digital media in the art of film. Historical survey of
digital special effects and digital independent film practice since the 1990s; critical overview of the interface between film and other digital media, such as computer animation, video games, and the Internet. Lectures, screenings, discussions, quizzes and writing of critical papers. (AA: Area E5c, CSU, UC)
680 - 689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)
800 FILM IN FOCUS (3) (Pass/No Pass grading.) Minimum of 48 lecture hours and 16 lab hours per term. Study of the art and history of film by focusing on selected film topics, such as genres, directors, stars, gender, race, national cinemas, or new technologies. (Course topic varies from semester to semester). Lectures, screenings, readings, discussions and writing of optional critical essays. (May be taken four times for a maximum of I 2 units.) (AA)

815 FILM AND NEW DIGITAL MEDIA (3) (Pass/No Pass grade or letter grade option.) Minimum of 48 lecture hours and 16 lab hours per term. Explores the new role of digital media in the art of film. Historical survey of digital special effects and digital independent film practice since the ig9os; critical overview of the interface between film and other digital media, such as computer animation, video games, and the internet. Lectures, screenings, readings, discussions, and optional critical essays. (Units do not apply toward AA.)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.)

## Fire Technology

64I COOPERATIVE EDUCATION (.5-8) (See first page of Description of Courses section.) (CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

705 FIRE HYDRAULICS (3) Minimum of 48 lecture hours per term. Basic mathematics, principles of hydraulics, calculations of engine and nozzle pressures, discharge, fire streams, friction loss, and pump operation and characteristics. Application of formulas to hydraulics and water supply problems. (AA, CSU)

7I4 WILDLAND FIRE CONTROL (3) Minimum of 48 lecture hours per term. Focuses on the principles and techniques used to extinguish wildland fires and to prevent and control their occurrence. Subjects include: California's wildland fire problem, safety, weather effects, wildland fuels, fire behavior, attack methods, urban-interfaces, and investigation. (AA, CSU)

715 (FT1) FIRE PROTECTION ORGANIZATION (3) Minimum of 48 lecture hours per term. History and philosophy of fire protection; organization of public and private fire protection services; laws and regulations affecting the fore service; basic fire chemistry and physics; and basic fire systems, fire strategy, and tactics. (AA: E5d,CSU)

720 (FT2) FIRE PREVENTION TECHNOLOGY (3) Minimum of 48 lecture hours perterm. Provides fundamental information regarding the history and philosophy of fire protection; organization and operation of a fire prevention bureau; use offire codes; identification and correction of fire hazards; and the relationship of fire prevention to fire safety education and detection and suppression systems. (AA, CSU)

725 FIRE APPARATUS AND EQUIPMENT (3) Minimum of 48 lecture hours per term. Covers the operation, care and maintenance, specifications, capabilities, and effective use of fire service apparatus and related equipment. (AA, CSU)

730 (FT5) FIRE BEHAVIOR AND COMBUSTION (3) Minimum of 48 lecture hours per term. Theory and fundamentals of how 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. (AA, CSU)

740 (FT4) BUILDING CONSTRUCTION FOR FIRE PROTECTION (3) Minimum of 48 lecture hours perterm. 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. Covers the development and evolution of building codes in relationship to past fires in residential, commercial, and industrial occupancies. (AA, CSU)

745 (FT3) FIRE PROTECTION SYSTEMS AND EQUIPMENT (3) Minimum of 48 lecture hours per term. 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. (AA, CSU)

787 EMERGENCY MEDICAL TECHNICIAN 1 BASIC: RECENT ADVANCES (.5-I.5) (Pass/No Pass grading.) (Open entry/open exit) Minimum of 8 to 24 lecture hours per term. Prerequisite: possession of a valid EMT-I Certificate. Refresher course in preparation for EMT-I recertification. Presents updated and new technology in the areas of emergency pre-hospital care. (May be taken four times to maintain skills and certification.) (AA)

789 RECRUIT FIREFIGHTER TRAINING (15.5) (Pass/No Pass grading.) Minimum of 160 lecture and 444 lab hours per term. Prerequisite: sponsorship by a fire service agency as a professional firefighter. In-service and pre-service instruction in basic firefighter skills and knowledge. Includes all areas of fire suppression, handling hose/ladders, operating hand and power tools, completing salvage functions, performing rescue operations, and responding to hazardous materials emergencies. Intensive, physically demanding course that meets daily for eight hours. For State certification as a firefighter and/or to receive a "Certificate of Completion" for firefighter training from College of San Mateo, the student must be EMT certified. (AA)

790 WILDLAND FIRE ACADEMY (3) Minimum of 44 lecture and 24 lab hours. Recommended Preparation: completion of one or more Fire Technology courses; appropriate physical condition to handle hoses, hand tools, and other firefighting equipment. Covers basic firefighting knowledge and skills specific to wildland firefighters. Includes lecture and manipulative instruction in all areas of responsibility for a wildland firefighter (State Certified) except medical care. (AA)

793 FIREFIGHTER I ACADEMY (I2) Minimum of I44 lecture and I53 lab hours per term. Prerequisite: FIRE 715 or equivalent, plus three (3) additional units of Fire Technology coursework (excluding EMT) with a grade of C or better, or equivalent fire service experience. Pre-service instruction in basic fire fighting knowledge and skills. Lecture and manipulative
instruction in all areas of responsibility for a firefighter. (Certificate of course completion issued by the Fire Technology Department with proof of EMT certification.) (AA)

795 EMERGENCY MEDICAL TECHNICIAN - BASIC (7) Minimum of 96 lecture and 64 lab hours per term. Prerequisite: Current certification in health care provider CPR (Cardiopulmonary Resuscitation) through an accredited agency. Instruction in basic life support/pre-hospital care using the National Registry curriculum. Students who qualify will be given the National Registry exam at the end of the course. Nonrefundable testing/materials fee required. (May be taken twice for a maximum of I4 units.) (AA)

800 FIRE SERVICE ENTRANCE TEST PREPARATION (3) Minimum of 48 lecture hours per term. Covers models for written examinations and oral interviews for firefighter positions; mathematical concepts relating to fire service; reading and writing skills for resumes and applications; physical requirements; test preparation; and career opportunities. (AA)

8io FIREFIGHTER INTERNSHIP (3) (Pass No/Pass grading.) Minimum of I44 lab hours per offering. Prerequisite: Sponsorship by a fire service agency as a firefighter intern. Under the direction of a coordinator, students will learn to work in a firehouse environment alongside professional firefighters. Includes hands-on training, emergency response, clerical duties and other duties as assigned. Students will be able to use these hours towards their requirement for their Firefighter I State Certification. (AA)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Fire Technology-Public Safety Training Courses (FTPS)

In-service training courses offered for fire personnel through the Public Safety Training Consortium. Course numbers will be assigned as needed, and Consortium titles will be used. The curriculum for each course offered adheres to Title V requirements.

## Foreign Languages

Students who expect to transfer to a four-year institution are strongly advised to study a foreign language at CSM. See information on Foreign Language Certificates of Specialization in the Major and Certificate Requirements section.

For information on specific languages, see American Sign Language, Chinese, French, German, Italian, Japanese, and Spanish.

## Numbers and Levels

The beginning courses in the classroom transfer sequences are numbered IIO (often offered as III and II2), I2O (often offered as I2I and 122), I3O (often offered as I3I and I32), and I40. Higher-level classes have higher numbers in the 100 and 200 range.
If you have completed one semester of a language in high school, consider beginning at CSM with a II2 class. If you have completed one year, consider I2O. If you have completed two years, consider 130 .

Some languages also offer a telecourse transfer sequence beginning with a course numbered 115 .

Non-transfer courses focusing on spoken language are numbered 8or, 802,803 , etc. The first class is for those with little or no knowledge of the language.

## French

LanguageLaboratoryandListening Requirement:sinceimitation, response, and independent practice are integral features of the study of a foreign language at the College, students enrolled in certain courses in foreign language are required to use the language laboratory as prescribed by each department.
Note: To be transferable to UC, French courses must be taken for letter grade.
iIo ELEMENTARY FRENCH (5) (Pass/No Pass or letter grade option.) Minimum of 80 lecture hours plus 32 lab hours by arrangement per term. Recommended Preparation: eligibilityfor ENGL 838/848 or a higher English course. Introduction to the French language and Francophone cultures with emphasis on practical vocabulary, basic sentence structures, and clear pronunciation. Skills in speaking, listening, reading, and writing are developed through practice, including prepared work, role-playing, and otheractivities. Work done by arrangement. includes audio, video/ DVD, and computerized resources to improve proficiency. (AA: Area E5c, CSU: Area C2, UC)

III ELEMENTARY FRENCH I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848 or a higher English course. Introduction to the French language and Francophone cultures with emphasis on practical vocabulary, basic sentence structures, and clear pronunciation. Skills in speaking, listening, reading, and writing are developed through practice, including prepared work, role-playing, and other activities. Laboratory work includes audio, video, DVD, and computer resources to improve proficiency. (Covers approximately the first half of the semester's work in French ioo.) (AA: Area E5c, CSU: Area C2, UC*)

II2 ELEMENTARY FRENCH II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: FREN III or equivalent with Pass or a grade of $C$ or higher. Continued elementary study of the French language and Francophone cultures with emphasis on practical vocabulary, basic sentence structures, and clear pronunciation. Skills in speaking, listening, reading, and writing are developed through practice, including prepared work, role-playing, and other activities. Work done by arrangement. includes audio, video/DVD, and computerized resources to improve proficiency. (French iII and II2 are equivalent to French iIo.) (AA: Area E5c, CSU: Area C2, UC*)

115 BEGINNING FRENCH I (3) (Telecourse) (Pass/No Pass or letter grade option.) A televised, entry-level course that introduces basic French vocabulary and language structures and enhances appreciation of worldwide Francophonecultures. Workbookand audio tape exercises focus on reading, writing, and listening comprehension. This course parallels French in but without the oral component. (AA: Area E5c, CSU: Area C2)

II6 BEGINNING FRENCH II (3) (Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: FREN II5 or equivalent with Pass or a grade of $C$ or higher. The second semester of a televised, entry-level course that introduces basic French vocabulary and language structures and enhances appreciation of worldwide Francophone cultures. Workbook
and audio tape exercises focus on reading, writing, and listening comprehension. This course parallels French II2 but without the oral component. (AA: Area E5c, CSU: Area C2)

II7 ADVANCED BEGINNING FRENCH I (3) (Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: FREN II 6 or equivalent with Pass or a grade of C orhigher. The third semester of a televised, entry-level course that introduces basic French vocabulary and language structures and enhances appreciation of worldwide Francophone cultures. Workbook and audio tape exercises focus on reading, writing, and listening comprehension. This course parallels French I2I but without the oral component. (AA: Area E5c, CSU: Area C2, UC)
118 ADVANCED BEGINNING FRENCH II (3) (Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: FREN 117 or equivalent with Pass or a grade of C or higher. The fourth semester of a televised, entry-level course that introduces basic French vocabulary and language structures and enhances appreciation of worldwide Francophone cultures. Workbook and audio tape exercises focus on reading, writing, and listening comprehension. This course parallels French I22 but without the oral component. (AA: Area E5c, CSU)

120 ADVANCED ELEMENTARY FRENCH (5) (Pass/No Pass orlettergrade option.) Minimum of 80 lecture hours plus 32 lab hours by arrangement per term. Prerequisite: FREN IIO or II2 or equivalent with Pass or a grade of $C$ or higher. Continued study of the basics of the French language and Francophone cultures with emphasis on practical vocabulary, common sentence structures, and clear pronunciation. Skills in speaking, listening, reading, and writing are developed through practice, including prepared work, role-playing, and other activities. Laboratory work includes audio, video, and computerized resources to improve proficiency. (AA: Area E5c, CSU: Area C2, UC: Area $6^{*}$ )
I2I ADVANCED ELEMENTARY FRENCH I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus I6 lab hours by arrangement per term. Prerequisite: FREN IIO or II2 or equivalent with Pass or a grade of $C$ or higher. Continued study of the basics of the French language and Francophone cultures with emphasis on practical vocabulary, common sentence structures, and clear pronunciation. Skills in speaking, listening, reading, and writing are developed through practice, including prepared work, role-playing, and other activities. Laboratory work includes audio, video, and computerized resources to improve proficiency. (AA: Area E5c, CSU: Area C2, UC*)
122 ADVANCED ELEMENTARY FRENCH II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus I6 lab hours by arrangement per term. Prerequisite: FREN I2I or equivalent with Pass or a grade of $C$ or higher. Advanced study of the basics of the French language and Francophone cultures with emphasis on practical vocabulary, common sentence structures, and clear pronunciation. Skills in speaking, listening, reading, and writing are developed through practice, including prepared work, role-playing, and other activities. Laboratory work includes audio, video, and computerized resources to improve proficiency. (French I2I and I22 are equivalent to French I2O.) (AA: Area E5c, CSU: Area C2, UC: Area 6*)
130 INTERMEDIATE FRENCH (5) (Pass/No Pass or letter grade option.) Minimum of 80 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: FREN I2O or I22 or equivalent with a grade of C or higher. Reading of short stories, plays, or novels; review of grammar; conversation, composition, and dictation. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 6)

I3I INTERMEDIATE FRENCH I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 8 lab hours by arrangement per term. Prerequisite: FREN I2O or I22 or equivalent with a grade of $C$ or higher. Covers approximately the first half of the semester's work in French 130, the level following French I2O or I22. Study of authentic French and Francophone culture through materials such as fiction, plays, film, and periodicals. Work on listening and pronunciation with a view toward improving oral communication, further study of grammar and vocabulary. Conducted largely in French. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area6)

132 INTERMEDIATE FRENCH II (3) (Pass/No Pass or lettergrade option.) Minimum of 48 lecture hours plus 8 lab hours by arrangement per term. Prerequisite: FREN I3I or equivalent with a grade of $C$ or higher. Covers approximately the second half of the semester's work in French I30, the level following French I2O or I22. Continued study of authentic French and Francophone culture through materials such as fiction, plays, film, and periodicals. Advanced work on listening and pronunciation with a view toward improving oral communication, further study of grammar and vocabulary. Conducted largely in French. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area6)
140 ADVANCED INTERMEDIATE FRENCH (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Prerequisite: FREN I3O or 132 or equivalent with a grade of C or higher. Continued study of authentic French and Francophone culture through materials such as fiction, plays, films, and periodicals. Reading a sampling of short excerpts from a variety of Francophone authors as well as concentrating on one long work such as a novel, play, memoir in French. Continued work on listening and pronunciation with a view toward fluent and natural oral communication, more advanced study of grammar and vocabulary. Conducted largely in French. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 6)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 9 0}$ SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)
8oi CONVERSATIONAL FRENCH I, ELEMENTARY (2) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. A practical course in French language and Francophone cultures approached through the spoken language. Practice in the expressions of daily speech, supported by enough grammar study and authentic materials to allow for flexibility and accuracy in communication. An appropriate course for those who have never studied a foreign language. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)
802 CONVERSATIONAL FRENCH II, ADVANCED ELEMENTARY (2) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Prerequisite: FREN 8oI or equivalent with Pass. A practical course in French language and Francophone cultures approached through the spoken language, on a more advanced level than French 8oI. Further practice in the expressions of daily speech, supported by enough grammar study and authentic materials to allow for flexibility and accuracy in communication. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)
803 CONVERSATIONAL FRENCH III, INTERMEDIATE (2) (Pass/ No Pass grading.) Minimum of 48 lecture hours per term. Prerequisite: FREN 802 or equivalent with Pass. More advanced work in conversation following the model of French 802. (This course will not fulfill
the language requirements at California State Universities or at the University California.) (AA)

804 CONVERSATIONAL FRENCH IV, ADVANCED INTERMEDIATE (2) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Prerequisite: FREN 803 or equivalent with Pass. Further advanced work in conversation following the model of French 803. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Geography

IOo PHYSICAL GEOGRAPHY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 4I5 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of the basic characteristics and spatial distributions of Earth¿s physical features, natural systems (such as global winds, ocean circulations, and the rock cycle) and phenomena (such as hurricanes, earthquakes, and volcanoes). Investigation into the interrelationships and interactions of these features, systems, and phenomena will be analyzed in a global framework, with an emphasis on human ecology. Includes basic characteristics of maps, seasons, weather and climate, vegetation biomes, ocean currents and landforms.(AA: Area E5a, CSU: Area Bi, UC: Area 5A)

IIo CULTURAL GEOGRAPHY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. The study of the use and understanding of space within and between culture groups of the world. Interpretation of cultural landscapes resulting from the interactions of humans with features and processes of the physical environment (such as terrain, climate, vegetation, wildlife, and availability of natural resources) and with one another (through language, religion, economy, government, etc.). Special attention is given to the concepts of location, place, distribution, circulation, and region. Focus on the concepts of culture region, cultural diffusion, cultural ecology, cultural interaction, and cultural landscape as applied to the analysis of specific culture traits, including those of popular culture. (AA: Area E5b, CSU: Area D, UC: Area 4)

I50 WORLD REGIONAL GEOGRAPHY (3) (Pass/ No Pass or letter grade option.) Minimum of 48 lecturehours perterm. Recommended Preparation: eligibility for ENGL 838 or ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or othermeasures.Geographicanalysis of the physical, cultural, and population patterns of world regions. A critical examination, with historical context, is also made of the economy and politics, sociocultural issues, environmental issues, and measures of human well-being within each region. This course is aimed at helping students make sense of world events, environments, cultures, conflicts, and lifestyles, and to begin to prepare them for life in an increasingly global community. (AA: Area E5b, CSU: Area D, UC: Area 4)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Geology

IOo SURVEY OF GEOLOGY (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Not open to students who have taken or are taking GEOL 2IO. Earthquakes, volcanoes, drifting continents, and plate tectonics; earth materials and processes that shape the land. (AA: Area E5a, CSU: Area Bi, UC: Area 5A*)

IOI GEOLOGY LABORATORY (I) Minimum of 48 lab hours plus i6 hours by arrangement per term. Prerequisite: completion of or concurrent enrollment in GEOL IOO. Optional introductory geology laboratory course designed to be taken concurrently with or following GEOL ioo. Identification of tectonic plates, minerals, rocks, plate rates; and geologic interpretation of maps and seismograms. Extra supplies may be required. One or more field trips may be required. (AA: Area E5a, CSU: Area B3, UC: Area 5A*)

2IO GENERAL GEOLOGY (4) Minimum of 48 lecture and 48 lab hours plus 16 hours by arrangement per term. The work of wind, water, gravity, and glaciers; earthquakes, the earth's interior, drifting continents, volcanoes and plate tectonics. Rocks and minerals and their identification. Interpretation of maps and geologic structures. Extra supplies may be required. One or more field trips may be required. (AA: Area E5a, CSU: Area Bi/Area B3, UC: Area 5A*)

680-689 Selected Topics (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## German

Language Laboratory and Listening Requirement: since imitation, response, and independent practiceareintegralfeatures ofthestudy ofa foreignlanguageattheCollege, studentsenrolledincertaincoursesinforeign languagearerequired tousethelanguagelaboratoryas prescribed byeach department.

Note: To be transferable to UC, German courses must be taken for letter grade.

IIO ELEMENTARY GERMAN (5) (Pass/No Pass or letter grade option.) Minimum of 80 lecture hours plus 32 lab hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848 or a higher English course. Introduction to the German language and culture with emphasis on practical vocabulary, basic sentencestructures, and clear pronunciation. Skills in listening, speaking, reading, and writing are developed through practice, including prepared work, small-group and paired activities, and other exercises. (AA: Area E5c, CSU: Area C2, UC)
III ELEMENTARY GERMAN I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Covers approximately the first half of the semester's work in German
iIo. Recommended for those students without any background in foreign language study. (AA: Area E5c, CSU: Area C2, UC*)
II2 ELEMENTARY GERMAN II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: GERM III or equivalent with Pass or a grade of $C$ or higher. Elementary study of the German language and culture with emphasis on practical vocabulary, basic sentence structures, and clear pronunciation. Skills in listening, speaking, reading, and writing are developed through practice, including prepared work, small-group and paired activities, and other exercises. Covers approximately the second half of the semester's work in German IIO. (German III and II2 are equivalent to German ino.) (AA: Area E5c, CSU: Area C2, UC*)

I2o ADVANCED ELEMENTARY GERMAN (5) (Pass/No Pass or letter grade option.) Minimum of 80 lecture hours plus 32 lab hours by arrangement per term. Prerequisite: GERM IIO or II2 or equivalent with Pass or a grade of C or higher. Continuation of work begun in German iIO with further practice in listening, speaking, reading, and writing. (AA: Area E5c, CSU: Area C2, UC: Area 6*)
I2I ADVANCED ELEMENTARY GERMAN I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hoursplus i6lab hours byarrangement per term. Prerequisite: GERM IIO or II2 or equivalent with Pass or a grade of $C$ or higher. Continued study of the basics of the German language and culture with emphasis on practical vocabulary, common sentence structures, and clear pronunciation skills in listening, speaking, reading, and writing are developed through practice including prepared work, small groups and paired activities, and other exercises. Covers approximately the first half of the semester's work on German I2O. (AA: Area E5c, CSU: Area C2, UC*)
122 ADVANCED ELEMENTARY GERMAN II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: GERM I2I or equivalent with Pass or a grade of $C$ or higher. Advanced study of the basics of the German language and culture with emphasis on practical vocabulary, common sentence structures, and clear pronunciation. Skills in speaking, listening, reading and writing are developed through practice, including prepared work, small group and paired activities. Laboratory work includes audio, video, and computerized resources to improve proficiency. Covers approximately the second half of the semester's work in German I2O. (German I2I and I22 are equivalent to German I2O.) (AA: Area E5c, CSU: Area C2, UC: Area $6^{*}$ )
I3O INTERMEDIATE GERMAN (5) (Pass/No Pass or letter grade option.) Minimum of 80 hours plus 16 lab hours by arrangement per term. Prerequisite: GERM I2O or I22 or equivalent with Pass or a grade of $C$ or higher. Review of grammar and syntax; reading of short works of fiction and nonfiction. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 6)

13I INTERMEDIATE GERMAN I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: GERM I2O or I22 or equivalent with Pass or a grade of $C$ or higher. Covers the first part of German I3O, the level following German I2O or 122. Study of the German language and culture of Germanspeaking peoples through materials such as fiction, film, music, and newspaper articles. Work on listening and pronunciation to improve oral communication. Further study of grammar and expansion of vocabulary. Conducted mainly in German. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 6*)
132 INTERMEDIATE GERMAN II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus I6 lab hours by arrangement per
term. Prerequisite: GERM I3I or equivalent with Pass or a grade of $C$ or higher. Covers approximately the second half of the semester's work in German I3O. (German I3I and I32 are equivalent to German I3O.) (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 6*)

I40 ADVANCED INTERMEDIATE GERMAN (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Prerequisite: GERM I3O or I32 or equivalent with Pass or a grade of C or higher. Reading and discussion of selections from German literature; further practice in conversation and composition; continued review of principles of grammar. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 6)
680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

8oi CONVERSATIONAL GERMAN I, ELEMENTARY (2) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. A practical course in the German language approached by way of conversation. Intensive drill in the patterns and idioms of daily speech, supported with sufficient grammar to give flexibility in the spoken language. May be considered an excellent preparatory course for students who have not taken a foreign language before. (This course will not fulfill the language requirement at California State Universities or at the University of California.) (AA)

802 CONVERSATIONAL GERMAN II, ADVANCED ELEMENTARY (2) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Prerequisite: GERM 8oI or equivalent with Pass. Further work in conversation following the model of German 8oI. (This course will not fulfill the language requirementatCalifornia State Universities oratthe University of California.) (AA)

803 CONVERSATIONAL GERMAN III, INTERMEDIATE (2) (Pass/ No Pass grading.) Minimum of 48 lecture hours per term. Prerequisite: GERM 802 or equivalent with Pass. Advanced work in German following the model of German 802. (This course will not fulfill the language requirement at California State Universities or at the University of California.) (AA)

804 CONVERSATIONAL GERMAN IV, ADVANCED INTERMEDIATE
(2) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Prerequisite: GERM 803 or equivalent with Pass. More advanced work in conversation following the model of German 803. (This course will not fulfill the language requirement at California State Universities or at the University of California.) (AA)

880-889 SELECTED TOPICS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.)

## Graphics

II5 DESIGNING WITH TYPE I: ESSENTIALS OF TYPOGRAPHIC EXPRESSION (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hoursplus 32 hours by arrangement per term. Prerequisite: Any ONE of the following: GRA IOO, IO5, IO7, I50, I70 or equivalent. The essential knowledge and skills necessary to create professional looking typography. Emphasis on designing with display (large) type. Covers, in a practical and useful manner, type anatomy, terminology, choosing fonts, mixing fonts, developing contrasts, interpreting a message, optical refinements and display type treatments. Classroom theory is applied to practical typographic problems. Extra supplies required. A
materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

II6 DESIGNING WITH TYPE II: DELIVERING THE MESSAGE EFFECTIVELY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and I6 labhours plus 32 hours by arrangement per term. Prerequisite: GRA IO5, IO7, II5, I7O or equivalent. The essential knowledge and skills necessary to create professional looking typography. Emphasis on an intelligent approach to the use of text type. Includes how we read, intelligent choice of typeface, size, leading, line length, and other factors affecting readability. Extracting and creating a typographic hierarchy; visual punctuation; selecting, creating and using grids. Theory applied to practical typographic problems. Extra supplies required. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

135 GRAPHIC DESIGN FOUNDATIONS (4) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: Any ONE of the following: GRA IOO, I5O or equivalent. Principles of design, symbolism and typography. Graphic problem-solving process, from concept through presentation, using a variety of practical design problems. Extra supplies required. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

I40 ADOBE ACROBAT (I.5) (Pass/No Pass or letter grade option.) Minimum of 24 lecture and 8 lab hours plus 16 hours by arrangement. Prerequisite: MULT II3 or equivalent. Students will use Adobe Acrobat software in the design and production workflow of jobs destined for print and/ or electronic publishing. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 3 units.) (AA, CSU)

I50 ADOBE ILLUSTRATOR FOR PRINT AND WEB DESIGN I (3) (Pass/ No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus 32 hours by arrangement per term. Prerequisite: MULT II3 or equivalent Macintosh and/or Windows operating system experience. Creating digital illustrations destined for print or web applications. Pen tool, color models, path editing, layers, custom fills and strokes, filters, transforming. Extra supplies required. A materials fee shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 6 units) (AA: Area E5d, CSU)

I5I ADOBE ILLUSTRATOR FOR PRINT AND WEB DESIGN II (3) (Pass/ No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours plus 32 hours by arrangement per term. Prerequisite: GRA 150 or equivalent. Creating digital illustrations destined for print or web applications. Students complete a challenging series of projects using some of the more advanced features of Illustrator. Extra supplies required. A materials fee shown in the Schedule of Classes is payable upon registration. (AA, CSU)

## Graphics

Many of the courses in the Graphics Department have been restructured and renumbered. Below is a list of the graphic courses, indicating new numbers, titles and units with the numbers and titles of the predecessors. This list is provided for continuity reference only as the duration, units, and content of the new graphic courses may not be exactly the same as those of the former graphic courses.

| $\begin{aligned} & \text { New } \\ & \text { GRA } \end{aligned}$ | New Course Title | New Units | Old GRA | Former Course Title | Old <br> Units |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 115 | Designing with Type I: Essentials of Typographic Expression | 3.0 | 110 | Typography I | 2.0 |
| 116 | Designing with Type II: Delivering the Message Effectively | 3.0 | 111 | Typography II | 2.0 |
| 135 | Graphic Design Foundations | 4.0 | $\begin{aligned} & 130 \\ & 131 \end{aligned}$ | Graphic Design Foundations I Graphic Design Foundation II | $\begin{aligned} & 2.0 \\ & 2.0 \end{aligned}$ |
| 150 | Adobe Illustrator for Print \& Web Design I | 3.0 | $\begin{aligned} & 100 \\ & 101 \end{aligned}$ | Adobe Illustrator I Adobe Illustrator II | $\begin{aligned} & 1.5 \\ & 1.5 \\ & \hline \end{aligned}$ |
| 151 | Adobe Illustrator for Print \& Web Design II | 3.0 | 102 | Adobe Illustrator III | 1.5 |
| 160 | Adobe Photoshop for Print \& Web Design I | 3.0 | $\begin{aligned} & 120 \\ & 121 \end{aligned}$ | Adobe Photoshop/Graphic Artists I Adobe Photoshop/Graphic Artists II | $\begin{aligned} & 1.5 \\ & 1.5 \\ & \hline \end{aligned}$ |
| 161 | Adobe Photoshop for Print \& Web Design II | 3.0 | 122 | Adobe Photoshop/ Graphic Artists III | 1.5 |
| 170 | Adobe InDesign | 3.0 | $\begin{aligned} & 107 \\ & 108 \end{aligned}$ | Adobe InDesign I Adobe InDesign II | $\begin{aligned} & 2.0 \\ & 2.0 \end{aligned}$ |
| 235 | Graphic Design: <br> Theory \& Application | 4.0 | $\begin{aligned} & 230 \\ & 231 \end{aligned}$ | Graphic Design: Theory \& Application I Graphic Design: Theory \& Application II | $\begin{aligned} & 2.0 \\ & 2.0 \end{aligned}$ |
| 242 | Image on Paper: Possibilities of Print | 3.0 | 241 | Print Fundamentals | 3.0 |
| 255 | Digital Publishing | 3.0 | 250 | Digital Prepress | 4.0 |

Courses marked with a (*) are transferable with limitations as specified. If you have any questions, see your counselor/advisor.

I6o ADOBE PHOTOSHOP FOR PRINT AND WEB DESIGN I (3) (Pass/ No Pass or letter grade option.) Minimum of 48 lecture hours and I6 lab hours plus 32 hours by arrangement per term. Prerequisite: MULT II3 or equivalent Macintosh and/or Windows operating system experience. Creating and manipulating digital illustrations and photographs for web or print, including color correction. Class designed for the graphic arts/ web design generalist. Extra supplies required. A materials fee shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 6 units.) (AA: Area E5d, CSU)

I6I ADOBE PHOTOSHOP FOR PRINT AND WEB DESIGN II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and I6 lab hours plus 32 hours by arrangement perterm. Prerequisite: GRA I60 or equivalent. Advanced color correction, image creation, and image manipulation for print or web. Extra supplies required. A materials fee shown in the Schedule of Classes is payable upon registration. (AA, CSU)
I70 ADOBE INDESIGN (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours plus 32 hours by arrangement per term. Prerequisite: MULT 113 or equivalent Macintosh and/or Windows operating system experience. Instruction in the use of Adobe InDesign, with particular attention given to creating professional quality typography. Software instruction is accomplished by producing practical projects that include exposure to and practice with a wide variety of the software features. A materials fee shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 6 units) (AA, CSU)

225 PUBLICATION DESIGN (2) Minimum of 32 lecture hours and 32 lab hours plus 32 hours by arrangement per term. Prerequisite: GRA I35 and 170 or equivalent. Examines the role in the marketplace of a wide variety of publication formats and provides practical experience creating them. Analyzes the best approaches for communicating editorial and informational messages. Explains editorial design and the expression of content through design as well as the dynamics and principles of page layout. Extra supplies required. (AA)

235 GRAPHIC DESIGN: THEORY AND APPLICATION (4) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: GRA 135 or equivalent. Students visually express content and meaning while exploring and applying design principles to a variety of practical design projects. Covers a strategic approach to the design problem solving process, including the role of the designer and working with various types of clients. Extra supplies required. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

242 IMAGE ON PAPER: THE POSSIBILITIES OF PRINT (3) (Pass/No Pass orletter grade option.) Minimum of 48 lecturehours perterm. Examination of the print production cycle, from concept through finishing. Enables designers and production artists to work more effectively with printers and provides a solid understanding of the creative capabilities of printers and other printing industry vendors. (AA, CSU)

255 DIGITAL PUBLISHING (3) (Pass/No Pass or letter grade option.) Minimum of 32 lecture hours and 64 lab hours plus 32 hours by arrangement per term. Prerequisite: GRA I5O, I6O, I7O or equivalent. Creating printready digital files utilizing Adobe Illustrator, Adobe Photoshop, Adobe InDesign, and Adobe Acrobat. Emphasis on software proficiency, digital prepress, accurate color reproduction and creating PDF files for digital or conventional printing. Extra supplies required. A materials fee shown in the Schedule of Classes is payable upon registration. (AA, CSU)

260 PORTFOLIO (I) Minimum of i6 lecture hours and i6 lab hours plus 32 hours by arrangement per term. Prerequisite: completion of three semesters of GRA curriculum or equivalent. Students initiate, develop, and complete substantial individual projects in consultation with and under the direction of the instructor. Emphasizes development of a marketable portfolio. Extra supplies required. (AA, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Health Science

Two units of Health Science required for A.A./A.S. Degree. Health Science IOO or two units of Health Science IOI-I25 will satisfy the A.A./A.S. Degree requirement.
IOo GENERAL HEALTH SCIENCE (2) Minimum of 32 lectures hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill levels as indicated by the reading placement tests or other measures. Survey of today's most prevalent health problems, including nutrition, obesity, heart disease, cancer, sexually transmitted diseases, birth control, drug abuse, emotional mental, and holistic health. Emphasizes detection, treatment, prevention, and maintenance of personal and social health problems as well as the promotion of physical and emotional mental, and holistic health. (AA: Area E3, CSU: Area E, UC*)

112 CURRENT HEALTH ISSUES (I) Minimum of 16 lecture hours. Analysis of the most important and most controversial health issues making today's headlines. Class discussions, supported by appropriate biological, medical, legal, and historical information. (AA: Area E3, CSU: Area E)

113 SELECTED TOPICS IN NUTRITION (I) Minimum of 16 lecture hours. Practical study of the principles of nutrition. Focuses on the concepts of nutritional wellness with an emphasis on the role of essential micro and macro nutrients, food guide pyramids, fad diets, nutritional label facts, food labels, caloric metabolism, and understanding body composition. (May not be taken for credit following P.E. II3.) (AA: Area E3, CSU: Area E)

II4 FITNESS (i) Minimum of I6 lecture hours. Practical study of the principles of fitness as a contributing factor to total wellness. Provides tools for the student to develop a self-directed and self-monitored fitness program. Includes cardiovascular fitness, muscle strength, muscle endurance, flexibility, body composition, ergogenic aids, and guidelines for exercise testing and prescription. (May not be taken for credit following P.E. II4.) (AA: Area E3, CSU: Area E)

119 EXERCISE AND THE AGING PROCESS (3) Minimum of 48 lecture hoursperterm. Integrates exercise physiologyand theeffects of trueaging versus secondary aging. Covers how physical activity can be preventive as well as an appropriate treatment for disabling conditions typically associated with the aging process. Designed for students considering
the health care professions. (May not be taken for credit following P.E. II9.) (AA: Area E3, CSU)

I25 PRINCIPLES OF EXERCISE PHYSIOLOGY (3) Minimum of 48 lecture hours per term. Introduces the fundamentals of exercise science. Includes aspects of scientific method; physiologic adaptations to training of pulmonary, cardiovascular, and neuromuscular function as well as principles of exercise training, ergogenic aids, fitness assessment, and human physiology as it pertains to fitness and training. (May not be taken for credit following P.E. I25.) (AA: Area E3, CSU)

64I COOPERATIVE EDUCATION (.5-8) (See first page of Description of Courses section.) (AA, CSU)

680 - 689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

880-889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## History

(Also see Humanities)
IOO HISTORY OF WESTERN CIVILIZATION I (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. The rise and decline of the civilizations of the ancient world, the rise of Christianity, the growth and decline of Medieval society, the Renaissance, the Reformation, and the opening of the modern world. (AA: Area Eia/ Area E5b, CSU: Area D, UC: Area 3B)

IOI HISTORY OF WESTERN CIVILIZATION II (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. The rise of modern Europe and its expansionism; the Enlightenment; the age of revolutions (American, French, Industrial) and the growth of liberalism, nationalism, and imperialism; modern ideologies; the emergence of totalitarianism; the World Wars and subsequent global and cultural developments. (AA: Area Eia/Area E5b, CSU: Area D, UC: Area 3B)

IO2 HISTORY OF AMERICAN CIVILIZATION (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Social, cultural, constitutional, and political development of the area of the United States from the colonial period through the age of revolution, early independence, reform and sectional crisis in the i9th Century to the problems of industrialization and the emergence of modern society. Effects of expansionism and immigration in the 19th and 20th Centuries upon the culture of America and the role of the United States in a pluralistic contemporary world. (AA: Area Eia/Area E5b, CSU: Area D/Area Fi, UC: Area 3B/Area 7A*)

2OI UNITED STATES HISTORY I (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment
in READ 400, 405, or $4 I 5$ OR appropriate skill level as indicated by the reading placement tests or other measures. Survey of European expansionism in America, Indian-White encounters, colonial culture and institutions, the Revolution, the implementation of the Constitution, the Federalist and Jeffersonian eras, the age of Jackson, the slavery issue, and the Civil War. Covers economic, political, social, and cultural developments of the period. (AA: Area Eia/Area E5b, CSU: Area D/Area FI, UC: Area 4/Area 7A*)

202 UNITED STATES HISTORY II (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibilityfor ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Continues the work of History 20I; explores the Reconstruction period, industrial expansion, social, Constitutional, and economic development, and the foreign policies of the U.S. to the present. (AA: Area Eia/Area E5b, CSU: Area D/Area Fi, UC: Area 4/Area 7A*)

260 WOMEN IN AMERICAN HISTORY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours perterm. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. An in-depth survey of the experiences, contributions, and roles of American women in United States history from the colonial period to the present. Analysis of the political, economic, and social developments involving American women including legal and constitutional gains. American women of different racial, ethnic and class backgrounds are examined in depth. (AA: Area Eia/Area E5b, CSU: Area D/Area Fi, UC: Area 4/Area 7A)

3IO CALIFORNIA HISTORY (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 4I5 OR appropriateskill level as indicated by the reading placement tests or other measures. Survey of major topics in California's rapid growth, including the Indian culture; exploration and Spanish colonization; The mission-ranchero era; The Mexican period; the American takeover; the Gold Rush and the Vigilante eras; the constitutional, political, and economic growth of the State; federal policy and programs involving California, and contemporary social, multi-ethnic and economic issues as the most populous state in the Union. (AA: Area Eia/Area E5b, CSU: Area D/Area F3, UC: Area 4/Area 7C)

315 HISTORY OF SAN MATEO COUNTY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Survey of the county's development to the present. The natural setting; discovery and exploration; mission-ranchero era; establishment of county government; advent of railroads; lumbering; industry; growth of Bayside and Coastside communities; and the Peninsula's relation to the state and the nation. (AA: Area Eib/Area E5b, CSU: Area D)

350 HISTORY OF THE AMERICAN WEST (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 or 415 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. The movement of Americans west of the Mississippi River, with an emphasis
on fur trading, cattle raising, farming, mining, railroads, communitybuilding, Indian problems, and the character and image of the West and Westerners. (AA: Area Eia/Area E5b, CSU: Area D, UC: Area 4)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Horticulture

3II PLANT MATERIALS I: TREES (3) (Pass/No Pass or letter grade option.) Minimum of 32 lecture and 48 lab hours plus 16 hours by arrangement per term. Growth habits, cultural requirements, and landscape uses of ornamental trees adapted to the climates of California. (AA: Area E5a, CSU, UC)

312 PLANT MATERIALS II: SHRUBS AND GROUNDCOVERS (3) (Pass/ No Pass or letter grade option.) Minimum of 32 lecture and 48 lab hours plus 16 hours by arrangement per term. Growth habits, cultural requirements, and landscape; uses of ornamental shrubs and ground covers adapted to the climates of California. (AA: Area E5a, CSU, UC)

315 LANDSCAPE MANAGEMENT (3) (Pass/No Pass or letter grade option.) Minimum of 32 lecture and 48 lab hours (dayclass) or 48 lecture and 32 hours by arrangement (evening class) per term. Culture and maintenance of turf areas, ground covers, annuals, perennials, shrubs and trees. Landscape water management. Operation of landscape maintenance equipment. (AA, CSU)

325 INTERIOR PLANTSCAPE (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Study of various types of plant materials, containers, and growing media and of the environmental factors that affect plants used in interior plantscaping of commercial and home settings. (AA, CSU)

326 GROWING ORCHIDS (I) (Pass/No Pass or letter grade option.) Minimum of 18 lecture hours per term. Principles and techniques of growing orchids. Study of their history, growth habits, culture, media selection, potting techniques, diseases, pests, fertilizer requirements and propagation. Identification and culture of popular orchids used in the nursery, floral design industries, and for collectors of orchids. Field trips to outstanding orchid growers' greenhouses. (AA, CSU)
327 NURSERY MANAGEMENT (3) (Pass/No Pass or letter grade option.) Minimum of 32 lecture and 48 lab hours per term. Overview of the nursery industry. Practical application of the principles of nursery practice, including location, greenhouse design, and equipment. Plant propagation and plant growing techniques, using the college greenhouse. Field trips to outstanding nurseries. (AA, CSU)
330 INTEGRATED PEST MANAGEMENT (3) (Pass/No Pass or letter grade option.) Minimum of 32 lecture and 48 lab hours plus 16 hours by arrangement per term. Symptoms, identification, and methods of control of the principal diseases, pests, and weeds important in California landscape industry. Emphasis on integrated pest management including biological, cultural, and chemical controls. Calibration and use
of application equipment and pesticide safety. Preparation for State Applicator's License. (AA, CSU)
342 LANDSCAPE CONSTRUCTION (3) (Pass/No Pass or letter grade option.) Minimum of 32 lecture and 48 lab hours (day class) or 48 lecture and 32 hours by arrangement (evening class) per term. Planting and construction techniques: design, installation, and maintenance of sprinkler systems; cost finding and estimating for the landscape trades, including legal aspects of contracting. (Assists students in preparing for Landscape Contractor's License Examination.) (AA, CSU)
350 PRINCIPLES OF LANDSCAPE DESIGN (3) (Pass/No Pass or letter grade option.) Minimum of 32 lecture and 48 lab hours plus 48 hours by arrangement per term. Graphics, drafting, perspective, surveying, environmental planning, history, and design for the residential landscape. Extra supplies required. (AA: Area E5a, CSU)

400 FLORAL ARRANGING I (1.5) (Pass/No Pass or letter grade option.) Minimum of 16 lecture and 32 lab hours plus 16 hours by arrangement per term. In-depth study of Western Geometric floral design using current methods of fresh flower arranging and incorporating the principles and elements of the art of floral design. Covers industry standards of design and construction as well as correct care and handling techniques for fresh floral materials. Includes historical as well as contemporary design styles. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU)

40I FLORAL ARRANGING II (I.5) (Pass/No Pass or letter grade option.) Minimum of 16 lecture and 32 lab hours plus 16 hours by arrangement per term. Prerequisite: HORT 40 o or equivalent. Continuation of the study of floral arranging, emphasizing modern styles and techniques. Examines stylistic considerations and creative variety in the use of fresh floral material. Develops the practical application and construction of both decorative and natural design styles, with emphasis on the development of speed and efficiency. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 3 units.) (AA, CSU)

404 FLOWERS TO WEAR AND CARRY I (.5) (Pass/No Pass or letter grade option.) Minimum of 8 lecture and 16 lab hours. Study of the mechanics, techniques, skills, and designs of flowers to wear and carry. Includes history and meaning of body flowers, present styles, and use. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of I unit.) (AA, CSU)

405 FLOWERS TO WEAR AND CARRYII (.5) (Pass/No Pass orlettergrade option.) Minimum of 8 lecture and 16 lab hours. Prerequisite: HORT 404. Continuing study of the mechanics, techniques, skills, and designs of flowers to wear and carry introduced in Horticulture 404. Emphasizes advanced styles and unique interpretations. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of I unit.) (AA, CSU)

415 RETAIL FLORISTRY MANAGEMENT (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Principles and procedures of working in and owning a floral business. Covers employment, customer care and relations, product pricing, delivery, and handling fresh product. Introduces potential floral business owners to financing, purchasing and operating a business in the floral industry. Concepts discussed include: merchandising, cost of goods, inventory, wire services, delivery, accounting, profit and loss statements, advertising, employee relations, planning, buying and marketing. (AA, CSU)

417 EUROPEAN FLORAL DESIGN (I.5) (Pass/No Pass or letter grade option.) Minimum of 16 lecture hours and 32 lab hours per term. Prerequisite: HORT 4OI or equivalent. Study of floral design with emphasis on modern European styles. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 3 units.) (AA, CSU)

419 BRIDAL AND PARTY DESIGNS (I.5) (Pass/No Pass or letter grade option.) Minimum of 16 lecture and 32 lab hours per term. Prerequisite: HORT $40 I$ or equivalent. Advanced study of floral design focusing on wedding and party work. Emphasizes reception, church, bridal party, theme parties, and centerpieces. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 3 units.) (AA, CSU)

42I CONTEMPORARY IKEBANA (1.5) (Pass/No Passorlettergrade option.) Minimum of 16 lecture and 32 lab hours by arrangement per term. Study of Japanese flower arranging, its history, philosophy, method and practice. Includes worktoward a certificatefrom the SogetsuSchool. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken four times for a maximum of 6 units.) (AA, CSU)

422 DESIGNS FOR ENTERTAINING (.5) (Pass/No Pass or letter grade option.) Minimum of 8 lecture hours and I6 lab hours. An in-depth study of creative application of floral design skills used in floral decorating for large and small events. Development of a theme, budget, and buying plan and coordination with event specialists. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

425 CUT FLOWER IDENTIFICATION (I) (Pass/No Pass or letter grade option.) Minimum of 16 lecture hours per term. Study of the identification, care, and handling of cut floral materials. Covers the range of flowers and foliages most commonly used by retail florists. Includes proper care and handling of flowers from the grower to the retail shop as well as botanical and common names of cut flowers and foliages. Covers special care and handling of floral materials, with an emphasis on proper handling techniques for designers in the shop environment. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 2 units.) (AA, CSU)

426 SYMPATHY FLORAL DESIGN (I.5) (Pass/No Pass or letter grade option.) Minimum of 16 lecture and 32 lab hours per term. Prerequisite: HORT 400. In-depth study of historical and current styles, trends, and techniques used in the construction of floral designs for funeral tributes. Highlights stages of the grief process, correct salesmanship, and good relations with mortuaries. This is an intermediate level course. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

427 FLORAL DESIGN WITH EVERLASTING FLOWERS (I.5) (Pass/No Pass or letter grade option.) Minimum of 16 lecture and 32 lab hours plus I6 hours by arrangement per term. Prerequisite: HORT 400 Study of the commercial methods of flowerarrangingused to developoriginal design skills in the use of everlasting floral material. Highlights techniques, styles, and preservation uniquely suited to permanent botanicals and dried and pressed flowers. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

428 DISPLAY DESIGN FOR FLORISTS (.5) (Pass/No Pass or letter grade option.) Minimum of 8 lecture and 16 lab hours plus 8 hours by arrangement. Visual merchandising and display for retail florists. In-depth study of the purpose of display and rules of effective vi-
sual merchandising as used by successful retail florists. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of i unit.) (AA, CSU)

429 CORPORATE ACCOUNTS AND TROPICAL DESIGNS (.5) (Pass/ No Pass or letter grade option.) Minimum of 8 lecture and 16 lab hours plus 8 hours by arrangement. Recommended Preparation: HORT 4OI or equivalent. Study of the methods of developing, servicing, and expanding corporate floral accounts currently in practice in the retail floral community. Emphasizes the care and handling of tropical floral materials, as well as appropriate design styles. This is an advanced skill level course. A materials fee in the amountshown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of r unit.) (AA, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

705 SOILS AND PLANT GROWING (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Fundamental principles of soil, soil management, fertility, and plant nutrition. Soil types, origins characteristics, and biological relationships. Commercial and natural fertilizers; soil conditioners; growing media; land and plant relationships. (AA, CSU)

706 PLANT PROPAGATION (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Principles and practices of propagating plants for sale for landscape use, including laboratory work in making cuttings, grafting and budding, potting, and canning. Visits to wholesale and retail nurseries. Seedage, cuttage, layerage, and plant breeding and improvement. (AA, CSU)

709 PRINCIPLES OF LANDSCAPING (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Introduction to principles of residential landscaping, emphasizing fundamental design and construction. (AA, CSU)

7II LANDSCAPE TREES (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 32 hours by arrangement per term. Tree classification, description, nomenclature, and morphology. Study in class of trees commonly used in California parks and gardens. Emphasizes plant identification. (AA, CSU)

712 LANDSCAPE SHRUBS, GROUNDCOVERS AND VINES (3) (Pass/ No Pass or letter grade option.) Minimum of 48 lecture hours plus 32 hours by arrangement per term. Study of shrubs, ground covers, and vines commonly used in California. (AA, CSU)

742 GREENHOUSE MANAGEMENT (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Propagation and culture of roses, carnations, chrysanthemums, orchids, potted plants, and other greenhouse crops. Pest and disease control. (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Humanities

(Also see History and Philosophy)
IoI INTRODUCTION TO HUMANITIES: GREECE THROUGH REFORMATION (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Explores the major cultural and intellectual movements of Western Civilization from Greece through the Reformation. Considers the development of literature, art, architecture, and music, along with their relationship to mythological, religious, and scientific attitudes toward man, nature, and God. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

IO2 INTRODUCTION TO HUMANITIES: REFORMATION TO PRESENT (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Explores the major cultural and intellectual movements of Western Civilization from the Reformation to the present. Considers the development of literature, art, architecture, and music, along with their relationship to mythological, religious, and scientific attitudes toward man, nature, and God. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

III RELIGION, LITERATURE, AND PHILOSOPHY INANCIENT GREECE (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Examples drawn from Greek tragedy and philosophy focus on changing attitudes toward the gods, the hero, nature, society, and personal development. Explores concepts of justice, the significance of suffering and attitudes toward fate, human freedom, and responsibility. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

II4 FILM AND LITERATURE AS COMMUNICATION IN THE MODERN ERA (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 4I5 OR appropriate skill level as indicated by the reading placement tests or other measures. Human communication through literature and film in the Modern Era. Art as it reflects and brings about social change. The course will explore major events of the Modern Era through the literature and film of eye-witnesses who expressed and influenced their times. (AA: Area E5c, CSU: Area Ci/Area C2, UC: Area 3B)

I25 TECHNOLOGY/CONTEMPORARY SOCIETY/HUMAN VALUES (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL IOO and concurrent enrollment in or completion of READ 400 or 405 with a grade of $C$ or higher OR appropriate skill level as indicated by the reading placement tests or other measures. Humanistic and critical analysis of the impact of contemporary technology on the environment, economic and political systems, warfare, education, medicine, genetics, behavior control, and information management. Examines reasons for the rise of technological civilization in the West, the phenomenology of modern technology, and the problem of control. (AA: Area E5c, CSU: Area C2/Area D, UC: Area 3B)

I3I CULTURALACHIEVEMENTS OF AFRICAN-AMERICANS (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to Black aesthetics, concentrating on the religious, philosophical, literary, musical, and art forms of Africa and AfricanAmericans. Explores the relationship that philosophy, myth, religion and socio-political traditions have had with each other by examining the arts, literature, film, music, and other creative forces. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

133 CULTURAL ACHIEVEMENTS OF ASIAN AMERICANS (3) Minimum of 48 lecture hours per term. Recommended Preparation: previous Ethnic Studies courses and eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Develops an awareness and understanding of Asian cultures through study of the heritage in religion, family, literature, music, arts, crafts, and foods. Includes guest lecturers, tours, demonstrations, and hands-on experiences. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

140 CULTURAL HERITAGE OF SAN FRANCISCO AND ITS ENVIRONS (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Survey of the history, art, architecture, music, literature, and geography of San Francisco. Covers early California as well as the present but emphasizes the decades from the Gold Rush to the early part of the 2oth Century. (AA: Area E5c, CSU: Area C2)

675 HONORS COLLOQUIUM IN WESTERN CIVILIZATION I (I) Minimum of 16 lecture hours per term. Prerequisite: limited to students in the Honors Program who have completed or are concurrently enrolled in an associated non-honors course in Western Civilization or the equivalent. Recommended Preparation: Completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures Readings, discussion, and lectures covering selected advanced topics in Western Civilization to be determined by the Humanities Department and the Honors Program. (AA: Area E5c, CSU: Area C2)

676 HONORS COLLOQUIUM IN WESTERN CIVILIZATION II (I) Minimum of 16 lecture hours per term. Prerequisite: limited to students in the Honors Program who have completed or are concurrently enrolled in an associated non-honors course in Western Civilization or the equivalent. Recommended Preparation: Completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures Readings, discussion, and lectures covering selected advanced topics in Western Civilization to be determined by the Humanities Department and the Honors Program. (AA: Area E5c, CSU: Area C2)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880 - $\mathbf{8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Human Services

IOo INTRODUCTION TO HUMAN SERVICES (3) Minimum of 48 lecture hours per term. Recommended Preparation: completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 4 I5 OR appropriate skill level as indicated by the reading placement tests or other measures Introductory course for students interested in a career in Human Services. Covers the history of Human Services, types and functions of Human Services agencies, careers in Human Services, skills utilized in the Human Services professions, ethics, current trends and issues, human need theory, and self-support techniques for $\mathrm{Hu}-$ man Services workers. (AA: Area E5b/Area E5d, CSU)

IIO INTRODUCTION TO COUNSELING AND INTERVIEWING (3) Minimum of 48 lecture hours per term. Recommended Preparation: completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to the basic skills and techniques of counseling and interviewing. Covers listening, responding, building trust, questioning, assessment, reflecting strengths, referral, values and ethics. Designed for professionals and paraprofessionals in Human Services positions and students preparing for a career in Human Services. (AA, CSU)

115 INTRODUCTION TO CASE MANAGMENT (3) Minimum of 48 lecture hours per term. Recommended Preparation: completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or othermeasures.Covers philosophy, ethics,concepts,assessment, documentation, record keeping, plan development, linking to community agencies, services monitoring and an overview of benefits programs. Designed to provide students with knowledge and skills that can be applied to a variety of Human Services settings. (AA:Area E5b,CSU) (AA: Area E5b, CSU)

120 PUBLIC ASSISTANCE AND BENEFITS PROGRAMS (I) Minimum of 16 lecture hours per term. Recommended Preparation: completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 4 I5 OR appropriateskill level as indicated by the reading placement tests or other measures. Overview and examination of benefits awarded under state, federal and local assistance programs. Analyzes and evaluates Temporary Aid to Needy Families(TANF), Social Security Insurance (SSIand SSDI), Medical, Medicaid, Medicare and foodstamps and examines their implications for self-sufficiency. Students will gain a working knowledge of the various benefit programs available to persons in need, including eligibility requirements and duration. (AA: Area E5b)

130 EMPLOYMENT SUPPORT STRATEGIES (I-3) Minimum of I6 to 48 lecture hours per term. Recommended Preparation: completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. An introductory course for students preparing to work in Human Service agencies and other settings that assist individuals to secure and maintain employment. Covers the values and principles of employment support services, assessment for work readiness, strenth identification, motivation, removing barriers to employment, community training and employment resources, job
search and match, job coaching and support planning. May be taken up to four times for no more than six units. (AA: Area E5b,CSU)

I50 REHABILITATION AND RECOVERY (3) Minimum of 48 lecture hours per term. Recommended Preparation: completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to the principles and practices involved in providing support services to persons with psychiatric disabilities as they move through the process of rehabilitation and recovery. Covers the theory, values, and philosophy of psychosocial rehabilitation, diagnostic categories and symptoms of mental illnesses, the development of rehabilitative environments and support systems, disabilities management, approaches to service delivery, skills, and ethics. (AA: Area E5b, CSU)
$15 I$ CURRENT TRENDS AND ISSUES IN PSYCHOSOCIAL REHABILITATION (I-3) Minimum of I6 to 48 lecture hours per term. Recommended Preparation: completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405 or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Survey of current trends and issues affecting the field of psychosocial rehabilitation. Covers contemporary issues and service delivery trends in rehabilitation as they are applied to a mental health setting. Designed for paraprofessionals currently working in health and human service agencies and students preparing for careers in Human Services. May be taken up to four times for a maximum of 6 units. (AA:Area E5b,CSU)

262 EMPOWERMENT SKILLS FOR FAMILY WORKERS (3) Minimum of 48 lecture hours per term. Recommended Preparation: completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to family support services designed to prepare human services students and workers with the values, knowledge, and skills needed to empower families to achieve self-reliance. Focuses on the principles of family development, family empowerment skills, self-support for family workers, effective communication with families, and cultural competency. (AA, CSU)

264 SUPPORTING FAMILY SUCCESS (3) Minimum of 48 lecture hours per term. Recommended Preparation: completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. A skill-based course designed to prepare human service students and workers to provide support to families in a community setting. Covers strength-based assessment, resource development, service coordination, collaboration and networking, home visitations, team building, goal setting and family conference facilitation.(AA,CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Italian

Language Laboratory and Listening Requirement: since imitation, response, and independent practice are integral features of the study of a foreign language at the College, students enrolled in certain courses in foreign language are required to use the language laboratory as prescribed by each department.

Note: To be transferable to UC, Italian courses must be taken for letter grade.

IIo ELEMENTARY ITALIAN (5) (Pass/No Pass or letter grade option.) Minimum of 80 lecture hours plus 32 lab hours by arrangement per term. Introduction to the language for beginners: basicgrammarand vocabulary, conversation, reading, and writing. Presents cultural material in short readings. (AA: Area E5c, CSU: Area C2, CSU)
iii ELEMENTARY ITALIAN I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Recommended Preparation: eligibility for ENGL 838 or higher English course. Introduction to elementary communication in Italian based on oral and written exercises; acquisition of basic vocabulary and structures as well as cultural material studied in graded readings. (AA: Area E5c, CSU: Area C2, UC*)

II2 ELEMENTARY ITALIAN II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: ITAL III or equivalent with Pass or a grade of C or higher. Continuation of ITAL iII. Further study in elementary Italian based on oral and written exercises; acquisition of basic vocabulary and structures as well as cultural material studied in graded readings. (AA: Area E5c, CSU: Area C2, UC*)

115 BEGINNING ITALIAN I (3) (Telecourse.) (Pass/No Pass or letter grade option.) Basic Italian vocabulary and language structures studied through text, audiocassettes, and broadcast videotapes. Equivalent to Italian ini but without the oral component. (AA: Area E5c, CSU)

II6 BEGINNING ITALIAN II (3) (Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: ITAL II5 or equivalent with Pass or a grade of $C$ or higher. Continuation of a televised, entry-level course that introduces basic Italian vocabulary and language structures and enhances appreciation of Italian culture. Workbook and audiotape exercises focus on reading, writing, and listening comprehension. This course parallels Italian iI2 but without the oral component. (AA: Area E5c, CSU)

117 ADVANCED BEGINNING ITALIAN I (3) (Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: ITAL II6 or equivalent with Pass or a grade of $C$ or higher. First half of a televised second-semester course that continues to introduce basic Italian vocabulary and language structures and enhances appreciation of Italian culture. Workbook and audio tape exercises focus on reading, writing, and listening comprehension. This course parallels Italian I2I but without the oral component. (AA: Area E5c, CSU)

118 ADVANCED BEGINNING ITALIAN II (3) (Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: ITAL II7 or equivalent with Pass or a grade of C or higher. Second half of a televised second-semester course that completes the introduction to basic Italian vocabulary and language structures and enhances appreciation of Italian culture. Workbook and audio tape exercises focus on reading, writing, and listening comprehension. This course parallels Italian I22 but without the oral component. AA: Area E5c, CSU)

120 ADVANCED ELEMENTARY ITALIAN (5) (Pass/No Pass or letter grade option.) Minimum of 80 lecture hours per term. Prerequisite: ITAL IIO or II2 or equivalent with Pass or a grade of C or higher. Continuation of work begun in Italian ino. Emphasizes reading, writing, speaking, and introduction to Italian culture. (AA: Area E5c, CSU, UC: Area 6)

I2I ADVANCED ELEMENTARY ITALIAN I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: ITAL II2 or equivalent with Pass or a grade of $C$ or higher. Further study of grammar and sentence structure, oral and written exercises, conversation in Italian, and dictation. Further study of Italian culture. (AA: Area E5c, CSU: Area C2, UC*)

122 ADVANCED ELEMENTARY ITALIAN II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: ITAL I2I or equivalent with Pass or a grade of C or higher. Further study of grammar and sentence structure, oral and written exercises, conversation in Italian, and dictation. Further study of Italian culture. (AA: Area E5c, CSU: Area C2, UC: Area 6)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

8oi CONVERSATIONAL ITALIAN I, ELEMENTARY (2) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. A practical course in the Italian language. Intensive drill in the patterns and idioms of daily speech with sufficient grammar to give flexibility in the spoken language. May be considered an excellent preparatory course for students who have not taken a foreign language before. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)

802 CONVERSATIONAL ITALIAN II, ADVANCED (2) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Prerequisite: ITAL 8oi or equivalent with Pass. Further work in conversation following the model of Italian 8oI. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880-889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Japanese

Language Laboratory and Listening Requirement: since imitation, response, and independent practice are integral features of the study of a foreign language at the College, students enrolled in certain courses in foreignlanguagearerequiredtousethelanguagelaboratoryasprescribed by each department.

Note: To be transferable to UC, Japanese courses must be taken for letter grade.
io ELEMENTARY JAPANESE (5) (Pass/No Pass or letter grade option.) Minimum of 80 lecture hours plus 32 lab hours by arrangement per term. A beginning course in Japanese emphasizing oral expression, reading, and written forms. (AA: Area E5c, CSU: Area C2, UC)

III ELEMENTARY JAPANESE I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Covers approximately the first half of the semester's work in Japanese iII. (AA: Area E5c, CSU: Area C2, UC*)

112 ELEMENTARY JAPANESE II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: JAPN III or equivalent with Pass or a grade of C or higher. Covers approximately the second half of the semester's work in Japanese IIO. (Japanese III and II2 are equivalent to Japanese IIo.) (AA: Area E5c, CSU: Area C2, UC*)

120 ADVANCED ELEMENTARY JAPANESE (5) (Pass/No Pass or letter grade option.) Minimum of 80 lecture hours plus 32 lab hours by arrangement per term. Prerequisite: JAPN IIO or II2 or equivalent with Pass or a grade of $C$ or higher. Further study of basic patterns of Japanese. (AA: Area E5c, CSU: Area C2, UC: Area 6)

121 ADVANCED ELEMENTARY JAPANESE I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: JAPN IIO or II2 or equivalent with Pass or a grade of C or higher. Covers approximately half of the semester's work in Japanese i20. (AA: Area E5c, CSU: Area C2, UC*)

122 ADVANCED ELEMENTARY JAPANESE II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: JAPN I2I or equivalent with Pass or a grade of $C$ or higher. Covers approximately the second half of the semester's work in Japanese I2O. (Japanese I2I and I22 are equivalent to Japanese I20.) (AA: Area E5c, CSU: Area C2, UC: Area 6*)

680 - 689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Journalism

IIO MASS MEDIA IN SOCIETY (3) Minimum of 48 lecture hours per term. Prerequisite: eligibilityfor ENGLIOO. Covers the historical roots and the influence of mass media on society. Analyzes electronic and print media forms; journalism, entertainment, and advertising as distinct media offerings; the rights, responsibilities, and ethical issues in mass media; and excesses and propaganda in media messages. Develops autonomous skills in discerning media messages and influences. (AA: Area E5d, CSU: Area D, UC: Area 4)

120 NEWSWRITING (4) Minimum of 48 lecture and 48 lab hours per term. Prerequisite: eligibility for ENGL 848. Techniques of news gathering, judging news values, and writing the news story. For practical experience, students write for the college paper, The San Matean, thus preparing them for future newspaper work. (AA, CSU)
300 NEWSPAPER PRODUCTION (3) Minimum of I 6 lecture hours and 96 hours by arrangement per term. Production of the student newspaper, The San Matean. Discussion and criticism of staff organization and newspaper content. (To increase competency, may be taken four times for a maximum of 12 units.) (AA, CSU)

850 SPECIAL STUDIES IN JOURNALISM (I) Minimum of I6 lecture and 32 hours by arrangement per term. A flexible course designed to provide students from a variety of disciplines an opportunity to participate in student publications. This course has flexible hours and work assignments designed for the convenience of students. Assignments can include newswriting, editing, opinion writing, page design and layout, photography, and advertising. (May be taken four times for a maximum of 4 units.) (AA)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (1-3) (See first page of Description of Courses section.)

## Library Studies

IOO INTRODUCTION TO LIBRARY RESEARCH (I) (Pass/No Pass or letter grade option.) Minimum of 16 lecture hours per term. An introduction to library resources and research. Provides practical, hands-on introduction to library research. Topics covered include formulating and refining a research question, library organization, using reference materials, searching the online catalog and databases, avoiding plagiarism, and citing sources. (AA: Area E5d, CSU, UC)

105 ADVANCED ONLINE RESEARCH (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: LIBR IOO or IO7. Development of advanced online research skills with an emphasis on effective techniques for accessing and searching online databases and other research tools to identify and evaluate quality information. (AA: Area E5d, CSU, UC)

107 ONLINE RESEARCH BASICS (I) (Pass/No Pass grading) Minimum of I6 lecture hours per term. Basic skills in using the Internet as a medium for information, research, and communication. Hands-on training will beemphasized. Introduction tolarger issues such as governance, ethics, freedom of expression, copyright and plagiarism. (AA: Area E5d, CSU)
IIO INFORMATION RESOURCES AND LIBRARIES (3) (Open entry/open exit.) (Pass/ No Pass or letter grade option.) Minimum of 48 lecture hours plus 32 hours by arrangement per term. Comprehensive introduction to information competency skills needed by college students, researchers, and the general public with emphasis on a particular discipline (business, allied health, humanities, law, social, biological, or physical sciences, etc.). Students will learn how to efficiently search, retrieve, evaluate and manipulate relevant general, scholarly, professional, and specialized resources in print and electronic formats. Particular subject emphasis will be noted in the schedule of classes. (May be taken twice for a maximum of 6 units.) (AA: Area E5d, CSU, UC)
665 SPECIAL TOPICS: LIBRARY AND INFORMATION STUDIES (.5-2) (Pass/No Pass grading.) (Open Entry/Open Exit) Minimum of 8 to 32 lecture hours plus 64 hours by arrangement per term. Designed to present opportunities to gain in depth knowledge of a particular library and information research tool, strategy, topic, or issue. (May be taken four times for a minimum of 8 units.) (AA, CSU)

680-689 SELECTED TOPICS ( $\mathbf{I}-3$ ) (See first page of Description of Courses section.) (AA, CSU)
879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880-889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Life Sciences

(See Biology)

## Literature

(See English and Literature)

## Machine Tool Technology

200 INTRODUCTIONTO MACHINE TOOL TECHNOLOGY (2) Minimum of 16 lecture hours and 48 lab hours per term. Survey course for students who require a generalized experience in machine tools. Includes instruction in bench work, measurement, threads, cutting tools, lathe, mill, grinding, saws and, others. Lab supplies required. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)
680 - 689 SELECTED TOPICS ( $\mathbf{I}-3$ ) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS ( $\mathbf{1}-3$ ) (See first page of Description of Courses section.)
880-889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Management

IOo INTRODUCTION TO BUSINESS MANAGEMENT (3) Minimum of 48 lecture hours per term. Recommended Preparation:eligibility for ENGL 848. Study of the principal functions of contemporary management, including planning, organizing, staffing, controlling, and decisionmaking. (AA: Area E5d, CSU)

215 MANAGEMENT OF HUMAN RESOURCES (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Line supervision and personnel function in industry: selection and placement; wage and salary procedures; training and evaluation. (AA, CSU)

220 ORGANIZATIONAL BEHAVIOR (3) Minimum of 48 lecture hours perterm. Recommended Preparation: eligibilityfor ENGL 848. Individual motivation, interpersonal communication, organizational influence, group dynamics, and decision-making in the organization; the relationship between culture, structure, and technology; leadership and conflict management. (AA, CSU)

235 TECHNIQUES OF SUPERVISION (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Role of the supervisor: understanding and motivating employees; leadership,
communications, problem solving, and decision-making; employee training, performance evaluation, and labor relations; supervising different types of workers; delegation; improving work methods; reducing costs; planning and managing time. (AA, CSU)

265 PROJECT MANAGEMENT (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Principal functions of contemporary project management, including defining, organizing, tracking, and communicating information in order to meet project goals. Focuses on the science of project management as well as the art of managing projects. (AA, CSU)

64I COOPERATIVE EDUCATION (.5-8) (See first page of Description of Courses section.) (AA, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS ( $\mathbf{( 1 - 3 )}$ (See first page of Description of Courses section.)

## Manufacturing and Industrial Technology

IOo SCIENCE FOR TECHNOLOGY (3) Minimum of 48 lecture hours per term. Study of physical science with examples and applications selected to support students in technology programs. Units and measurement, mechanics, properties of matter, heat, electricity and magnetism, waves, atomic physics. Application areas include sensors and instrumentation, welding and non-destructive evaluation, construction. (AA: Area E5a, CSU)

I2O INDUSTRIAL MATERIALS AND PROCESSES (3) Minimum of 48 lecture hours per term. The study of metals common to industry and related industrial manufacturing processes. Includes the removing, shaping, and joining of metals as well as the processing of plastics, rubber, glass, and some exotic materials currently used in local industries. (AA, CSU)

I30 BEGINNING BLACKSMITHING AND INDUSTRIAL FORGING (2) (Pass/No Pass orlettergrade option.)Minimumof 16 lecture and 48 lab hours plus I6 hours by arrangement per term. Fundamentals of blacksmithing, metal properties, surface treatments, tool design, and manufacturing processes. Shop skills and techniques are demonstrated. Covers basic techniques in manipulating mild and tool steels and fabrication of simple tools. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies required. (May be taken twice for a maximum of 4 units.) (AA: Area E5d, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880 - $\mathbf{8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Mathematics

(Also see Business 115, 810)
The normal sequences of mathematics are:
Mathematics Curriculum
$\underbrace{\underbrace{\text { MAT } 120}_{\underbrace{\text { MATH } 811 \text { and/or MATH } 802}_{\text {MATH } 110 \text { or MATH 111+MATH } 112}}}_{\text {Transfer Math }}$
Transfer Math Sequence* Liberal Arts/Business
MATH 125 or MATH2OO or MATH145 or MATH147 or MATH241
MATH 242
(MATH130 prerequisite)

## Transfer Math Sequence* Science/Engineering/Math


*The Transfer Math Sequence you choose will depend on your major and your transfer destination. See a counselor if you need more information.
A student who qualifies for a particular mathematics course is eligible for any course lower in sequence. If the student has not taken a mathematics course during the previous two years, it is strongly recommended that the student enroll in a course below the one for which he or she would normally be eligible.

Prerequisites are listed in the descriptions that follow. A grade of C or higher is required for all prerequisite courses. Extra supplies may be required in all Mathematics classes except MATH 8II and 8i2.

IIo ELEMENTARY ALGEBRA (5) Day: Minimum of 80 lecture hours; evening:96lecture hours; plus 16 hours by arrangement per term. Prerequisite: appropriate score on the College Placement Test and other measures as appropriate OR MATH 8II with a grade of C or higher; OR MATH 802 with
a grade of C or higher. Recommended Preparation: concurrent enrollment in READ 830. A study of elementary algebra including introduction to: signed number operations, order of operations, linear equations and inequalities in one and two variables, systems of linear equations, exponents, polynomial operations, factoring, rational expressions and equations, roots, radicals and radical equations, and quadratic equations. (Units do not apply toward AA/AS degree.)

III ELEMENTARY ALGEBRA I (FIRST HALF) (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: appropriate score on the College Placement Test and other measures as appropriate $O R$ MATH 8II with a grade of C or higher; OR MATH 802 with a grade of $C$ or higher. Recommended Preparation: concurrent enrollment in READ 830. Covers the first half of MATH ino. First half of a study of elementary algebra including introduction to: signed number operations, order of operations, linear equations and inequalities in one and two variables, systems of linear equations, exponents. (Units do not apply to AA/AS degree.)

II2 ELEMENTARY ALGEBRA II (SECOND HALF) (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: satisfactory completion of MATH III. Recommended Preparation: Concurrent enrollment in READ 830. Covers the second half of MATH IIO. Second half of a study of elementary algebra including introductionsto: exponents, polynomial operations, factoring, rational expressions and equations, roots, radicals and radical equations and quadratic equations. (Note: MATH iII and MATH iI2 together are the equivalent of MATH iIo.) (Units do not apply to AA/AS degree.)

I15 GEOMETRY (5) Day:Minimum of 8o lecture hours;evening:96lecture hours; plus 16 hours by arrangement per term. Prerequisite: MATH IIO or II2 OR appropriate score on the College Placement Test and other measures as appropriate. Study of the properties of plane and solid figures, using formal logic and the real number system. (AA)

I2O INTERMEDIATE ALGEBRA (5) Day: Minimum of 80 lecture hours; evening: 96 lecture hours; plus 16 hours by arrangement per term. Prerequisite: Satisfactory completion of MATH IIO or II2 OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: MATH 115 and READ 830 and concurrent enrollment in READ 400 or 405 . A comprehensive review of elementary algebra with certain topics studied in greater depth. Extension of fundamental algebraic concepts and operations, problem solving and applications, linear, quadratic, rational, and radical equations, equations in two variables, graphs, systems of equations, complex numbers, exponential and logarithmic functions, sequences, and series. (AA: Area Ci/Area 2c)

Note: MATH I22 and MATH I23 together are the equivalent of MATH I2O.
122 INTERMEDIATE ALGEBRA I (FIRST HALF) (3) Minimum of 48 lecture hours plus I6 hours by arrangement per term. Prerequisite: Satisfactory completion of MATH IIO or II2 or higher with a grade of C or higher OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: MATH 115 and READ 830. First half of MATH I2O, a comprehensive review of elementary algebra with certain topics studied in greater depth. Extension of fundamental algebraic concepts and operations, problem solving and applications, linear, quadratic, rational equations, equations in two variables, graphs, systems of equations, complex numbers, exponential and logarithmic functions, sequences and series. MATH I22 and I23 together are equal to MATH I2O. (AA)

123 INTERMEDIATE ALGEBRA II (SECOND HALF) (3) Minimum of 48 lecture hours plus i6 hours by arrangement per term. Prerequisite: MATH 122 with a grade of C or higher. Recommended Preparation: MATH II5 and READ 830. Covers the Second half of MATH I20, a comprehensive review of elementary algebra with certain topics studied in greater depth. Extension of fundamental algebraic concepts and operations, problem solving and applications, linear, quadratic, rational, and radical equations, equations in two variables, graphs, systems of equations, complex numbers, exponential and logarithmic functions, sequences and series. Math I22 and I23 together are equivalent to Math I2O. (AA: Area CI/Area 2c)

125 ELEMENTARY FINITE MATHEMATICS (3) Minimum of 48 lecture hours plus 16 hours by arrangement. Prerequisite: MATH I2O or I23 OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: READ 400 or 405. Introduction to finite mathematics. Includes systems of linear equations and inequalities, matrices, set theory, logic, combinatorial techniques, elementary probability, linear programming, and mathematics of finance. Places particular emphasis on applications. (AA: Area E2c, CSU: Area B4, UC: Area 2A)

130 ANALYTIC TRIGONOMETRY (4) Minimum of 64 lecture hours plus 16 hours by arrangement per term. Prerequisite: MATH I2O or I23 OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: MATH 115 and READ 400 or 405. Trigonometric functions of real numbers and angles, their graphs and periodicity; reduction formulas; function of multiple angles; identities and equations; radian measure; inverse functions; and solution of triangles. (AA: Area E2c, CSU: Area B4)

145 LIBERAL ARTS MATHEMATICS (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: MATH I2O or I23 OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: READ 400 or 405 . Examination of important concepts of mathematics and of mathematics as a tool for decision making. Topics and applications may include aspects of history of mathematics, problem solving, counting methods, elementary number theory, sets, Euclidean and non-Euclidean geometry, Platonic Solids, topology, probability, problem solving, and logic. (AA, CSU: Area B4, UC: Area 2A)

147 MATHEMATICS AND GLOBAL ISSUES (3) Minimum of 48lecture plus I6 lab hours by arangement per term. Prerequisite: satisfactory completion of MATH I2O or I23 OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: completion of READ 400 or 405 with a grade of $C$ or higher or appropriate skill level as indicated by the reading placement test or other measures. The use of mathematics and basic scientific reasoning to address complex political, social, environmental, and scientific issues: global warming, endangered species, nuclear waste, world population, and others. Mathematical topics will include: functions and mathematical models; inverse functions; linear, exponential, and logarithmic models; data exploration and analysis; and the use of a computer to describe and understand the implications of a mathematical model. (AA, CSU: Area B4, UC: Area 2A)
200 ELEMENTARY PROBABILITY AND STATISTICS (4) Day:Minimum of 64 lecture hours; evening: 80 lecture hours plus 16 hours by arrangement per term. Prerequisite: MATH I2O or I23 OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: READ 400 or 405 . Representation of data, use and misuse of statistics, measures of central tendency and dispersion, probability,
sampling distributions, statistical inference, regressionand correlation, contingency tables, and non-parametric methods. (AA: Area E2c, CSU: Area B4, UC: Area $2 A^{*}$ )

222 PRECALCULUS (5) Day: Minimum of 80 lecture hours; evening: 96 lecture hours; plus 16 hours by arrangement per term. Prerequisite: MATH I30 OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: READ 400 or 405. Study of more advanced algebra including the theory of equations, complex numbers, logarithmic and exponential functions, sequences, and series, mathematical induction; review of trigonometry and topics of analytic geometry. (AA: Area E2, CSU: Area B4, UC: Area 2A)

Note: The prerequisites for MATH 242 are both MATH 130 and MATH 24I. Students planning to take both MATH 24I and 242 should take MATH 130 prior to entering MATH 24 I.
24I APPLIEDCALCULUSI (5) Day:Minimum of 8olecture hours; evening: 96 lecture hours; plus 16 hours by arrangement per term. Prerequisite: MATH I2O or I23 OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: Completion of READ 400 or 405 . Selected topics from analytic geometry, plus basic techniques of differential and integral calculus. (This sequence may not be substituted for the MATH 25 I sequence for mathematics, physics or engineering majors.) (AA: Area E2b, CSU: Area B4, UC: Area $2 A^{*}$ )

242 APPLIED CALCULUS II (3) Minimum of 48 lecture hours plus i6 hours by arrangement per term. Prerequisite: MATH 130 and 24I OR other measures as appropriate. Recommended Preparation: Completion of READ 400 or 405 . Further work in differentiation and integration, trigonometric functions, calculus of functions of several variables, and selected topics from differential equations. (AA, CSU: Area B4, UC: Area $2 \mathrm{~A}^{*}$ )

25I CALCULUS WITH ANALYTIC GEOMETRYI (5) Day: Minimum of 80 lecture hours; evening: 96 lecture hours; plus 16 hours by arrangement per term. Prerequisite: MATH 222 OR appropriate score on the College Placement Test andother measures as appropriate. Recommended Preparation: READ 400 or 405 . Study of limits, continuity, the derivative, and its applications, and the definite integral. (AA: Area E2b, CSU: Area B4, UC: Area $2 \mathrm{~A}^{*}$ )
252 CALCULUS WITH ANALYTIC GEOMETRY II (5) Day: Minimum of 8o lecture hours; evening: 96 lecture hours; plus 16 hours by arrangement perterm. Prerequisite: MATH 25I. Recommended Preparation: READ 400 or 405. Study of the Fundamental Theorem of Calculus, techniques of integration, applications of the definite integral, exponential, logarithmic and hyperbolic functions, polar coordinates, conic sections infinite series, Taylor series, and Taylor's formula. (AA, CSU: Area B4, UC: Area $2 \mathrm{~A}^{*}$ )

253 CALCULUS WITH ANALYTIC GEOMETRY III (5) Day: Minimum of 80 lecture hours; evening: 96 lecture hours; plus i6 hours by arrangement per term. Prerequisite: MATH 252. Recommended Preparation: READ 400 or 405 . Study of the calculus of functions of several independent variables, partial derivatives, multiple integration, vectors and vector calculus to include Green's theorem, Stokes' theorem, and the divergence theorem. (AA, CSU: Area B4, UC: Area $2 A^{*}$ )

268 DISCRETE MATHEMATICS (4) Day: Minimum of sixty-four lecture hours; evening: 80 lecture hours; plus 16 hours by arrangement per term. Prerequisite: MATH 251 ORother measures as appropriate. Recommended Preparation: READ 400 or 405 . Covers topics in discrete mathematics with particular emphasis on applications to computer science. In-
cludes logic, sets, functions and relations, mathematical induction, recursion, Boolean algebra, elementary number theory, probability, algebraic structures, statistics, graphs, counting, and combinatorics. Extra supplies may be required. (AA, CSU: Area B4, UC: Area 2A)

270 LINEAR ALGEBRA (3) Minimum of 48 lecture hours plus i6 hours by arrangement per term. Prerequisite: MATH 252 or equivalent. Recommended Preparation: concurrent enrollment in MATH 23 I or equivalent; READ 400 or 405 . Vectors and matrices applied to linear equations and linear transformations; real and inner product spaces. (AA, CSU: Area B4, UC: Area 2A)

275 ORDINARY DIFFERENTIAL EQUATIONS (3) Minimum of 48 lecture hours plus I6 hours by arrangement per term. Prerequisite: MATH 253 or equivalent. Recommended Preparation: READ 400 or 405 . With permission of the instructor, may be taken concurrently with MATH 253. Differential equations of first, second, and higher order; simultaneous, linear and homogeneous equations; solutions by power series; numerical methods, Fourier series, Laplace transforms, and applications. (AA, CSU: Area B4, UC: Area 2A)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

802 PREPARATION FOR ALGEBRA (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: satisfactory completion of Math $81 I$ or other measures as appropriate. Recommended Preparation: completion of or concurrent enrollment in READ 825. Designed for students who have a solid foundation in arithmetic skills but need to develop pre-algebra skills before taking a first developmental algebra course. Intended to serve as a bridge between Arithmetic review and Elementary algebra. Topics include: quick review and practice in fundamental arithmetic skills, operations involving signed numbers, variables and variable expressions, simple linear equations and their graphs, measurements, exponents, introduction to polynomials, and some practical applications. (Units do not apply toward AA/AS degree.)

8II ARITHMETIC REVIEW (3) (Pass/No Pass grading.) Minimum of 48 lecture hours plus 16 hours by arrangement perterm. Recommended Preparation: concurrent enrollment in READ 825. Basic arithmetic involving whole numbers, signed numbers, fractions, decimals, and percents; estimation, number sense, calculator skills, area and volume, and applications. (Units do not apply toward AA/AS degree.)

812 ELEMENTARY ALGEBRA REVIEW (I) (Pass/No Pass grading.) (Open entry/open exit) Minimum of 48 hours of individualized instruction per term. Prerequisite: MATH IIO or III/II2. A review of elementary algebra. (Units do not apply toward AA/AS degree.)

850 MATHEMATICS SUPPLEMENTI (.5-2) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of 24 to 96 hours by arrangement per term. For students who need to strengthen their basic math skills. Instructor will help students identify deficiencies and promote mastery of skills necessary for success in developmental mathematics courses. (May be taken four times for a maximum of 8 units.) (Units do not apply toward an AA/AS degree.)

852 MATHEMATICS SUPPLEMENT II (.5-2) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of 24 to 96 hours by arrangement per semester per term. For students who need to strengthen their math skills. Instructor will help students identify deficiencies and promote
mastery of skills necessary for success in college level mathematics and science courses. (May be taken four times for a maximum of 8 units.) (Units do not apply toward an AA/AS degree.)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880 - 889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Meteorology

IOo ELEMENTARY METEOROLOGY (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Basic course in descriptive meteorology. Includes the atmosphere's structure, the earth's heat budget, cloud forms and precipitation, pressure systems and wind, and air mass and frontal weather. Leads to a better understanding of the obvious and subtle ways of the weather. (AA: Area E5a, CSU: Area Bi, UC: Area 5A)

IOI METEOROLOGY LABORATORY (I) Minimum of 48 lab hours plus I6 hours by arrangement per term. Prerequisite: concurrent enrollment in or completion of METE IOO with a grade ofC or higher. Optional introductory meteorology laboratory course designed to be taken concurrently with or following Meteorology ioo. Use of instruments, charts, and the Internet to observe and interpret weather phenomena. May require one or more field trips. (AA: Area E5a, CSU: Area B3, UC: Area 5A)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Military Science

Qualified students may enroll through College of San Mateo in Military Science classes conducted by participating four-year universities at their campuses. For further information, contact the Office of the Dean of Admissions and Records, 574-6594.

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Multimedia

IOI WEBREADY (I) (Pass/No Pass grading) (Open Entry/Open Exit) Minimum of I6 online lecture hours. Prerequisite: None. This is a self-paced course that covers student skills used in taking web-assisted courses as well as gauges whether or not the online learning environment is suitable for their learning styles. Offers practice in the following skills: web browsing; Internet searching; sending and receiving email, attachments, compressed files, and PDF files; and collaborating on discussion boards. (May be taken twice for a maximum of 2 units.) (AA, CSU)

102 INTRODUCTION TO MULTIMEDIA (3) (Replacing MULT IO5 \& 107)(Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: ENGL 838 or 848 or equivalent. Introduces students to the technologies that make up multimedia productions and covers web, digital audio, digital video and includes hardware, software, and basic workflow that is used by professionals to create various productions. (May be taken twice for a maximum of 6 units.) (AA, CSU)

113 FUNDAMENTALS OF MAC OS \& FILE MANAGEMENT (3) (Replacing MULT III \& II2) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus 16 hours by arrangement per term. Prerequisite: eligibility for ENGL 838 or 848 or equivalent. Topics include basic Mac OS functionality, launching and quitting applications, managing files and folders, and system configuration. Learn about file management, using various storage devices (external hard drives, USB Flash drives), burning CDs \& DVDs, file conversions, and back-up strategies, computer upgrades, and application operability. (May be taken twice for a maximum of 6 units.) (AA, CSU)

172 WEBDESIGN: DREAMWEAVER (3) (Replacing MULT 170 \& 171) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus 16 hours by arrangement per term. Prerequisite: MULT 177 or equivalent. Recommended Preparation: eligibility for ENGL 838 or 848 or equivalent; MULT II3 or equivalent. Cover the web features of Dreamweaver, a popular professional web tool. Define a website:layout pages with cascading style sheets; use tables; create roll-overs; work with templates, media objects, and forms. Students will assemble a web site as part of the course. (May be taken twice for a maximum of 6 units.) (AA, CSU)

177 MULTIMEDIA GRAPHICS (PHOTOSHOP/FIREWORKS) (3) (Replacing MULT 175 \& I76) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus 16 hours by arrangement per term. Prerequisite: GRA I60, MULT IO2 or equivalent. Recommended Preparation: eligibility for ENGL 838 or 848 or equivalent; MULT II3 or equivalent. Introduction to professional graphics applications Photoshop and Fireworks. Covers the basics of various graphic file formats as applied to media production including media and web design features as well as workflow between the two applications. Students will complete a functional interface design. (May be taken twice for a maximum of 6 units.) (AA, CSU)

184 DIGITAL VIDEO (3) (Replacing MULT I80 \& I8I) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours plus 16 hours by arrangement per term. Prerequisite: MULT IO2 or equivalent; eligibility for ENGL 838 or 848 or equivalent. Recommended Preparation: MULT iIz or equivalent. Covers video fundaments including video signal analysis, HDTV and evolution of the technology. Students will learn digital camcorder operation, basic shooting and lighting techniques and basic editing and exporting. Study of digital video by planning, shooting, editing, and exporting several digital video projects. Learn about editing by working with audio, transitions, titling, and motion graphics in their productions. (May be taken twice for a maximum of 6 units.) (AA, CSU)

187 FINAL CUT PRO (3) (Replacing MULT 182 \& 183) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours and 16 lab hours plus I6 hours by arrangement per term. Prerequisite: MULT 184 or equivalent; eligibility for ENG 838 or 848 or equivalent. Recommended Preparation: MULT II3 or equivalent. Apple Final Cut Pro is a professional digital video editing software application used in television, movies, and video game productions. Learn basic capturing, editing, and software
functionality. Topics include media management, storyboard editing techniques, advanced video editing principles, audio editing, and timecode modification. (May be taken twice for a maximum of 6 units.) (AA, CSU)

192 DIGITAL AUDIO (3) (Replacing MULT igo \& 191) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus 16 hours by arrangement per term. Prerequisite: eligibility for ENGL 838 or 848 or equivalent; MULT IO2 or equivalent. Recommended Preparation: MULT iI3 or equivalent. Covers analog audio, sound fundamentals, recording equipment, and basic digital audio principles. Learn to edit audio and trans-code files and basic mixing, signal flow, and use of effects; basic music production and recording using GarageBand and Peak. (May be taken twice for a maximum of 6 units.) (AA, CSU)

253 MULTIMEDIA DESIGN (3) (Replacing MULT 25I \& 252) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus 16 hours by arrangement per term. Prerequisite: MULT I77 or equivalent. Recommended Preparation: eligibility for ENGL 838 or 848 or equivalent; MULT II3 or equivalent. Covers user interface design for website, interactive digital video and interactive Flash production. Explore the various design elements that create a compelling intuitive user interface. Course covers visual communication elements to create an entertaining and informative user interface. Students design interactive productions for critique in class. (May be taken twice for a maximum of 6 units.) (AA, CSU)

274 FLASH (3) (Replacing MULT 271 \& 27I) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus 16 hours by arrangement per term. Prerequisite: MULT 177 or equivalent. Recommended Preparation: eligibility for ENG 838 or 848 or equivalent; MULT II3 or equivalent. Introduces Flash, which is used to create vector animations and websites. Covers basic animation principles, interactivity, intro to action script, Flash Fundamentals, and basic software functionality. (May be taken twice for a maximum of 6 units.) (AA, CSU)

279 FLASH ACTIONSCRIPT (3) (Replacing MULT 272 \& 273) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus I6 hours by arrangement per term. Prerequisite: MULT 274 or equivalent. Recommended Preparation: eligibility for ENGL 838 or ENGL 848 or equivalent; MULT II3 or equivalent. Advanced Flash course focuses on dynamic content design and development, using actionscript, clip events and smart clips. Students will learn dynamic interface creation for web, Quicktime, Real Player files and Internet devices such as handheld computer devices. (May be taken twice for a maximum of 6 units.) (AA, CSU)

282 AFTER EFFECTS (3) (Replacing MULT 280 \& 28I) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus 16 hours by arrangement per term. Prerequisite: MULT I84 or equivalent; eligibility for ENGL 838 or ENGL 848 or equivalent. Recommended Preparation: MULT II3 or equivalent. Adobe After Effects is a professional motion graphics application used to create animations incorporating digital audio, digital video, still images, and other media. Used in television and film titling, video game productions, and TV commercials. Topics include software functionality and feature identification, media acquisition, basic animation principles, and basic exporting. Includes 2D \& 3D tools, vector paint tools, keying tools, motion tracking, type animation, and exporting. (May be taken twice for a maximum of 6 units.) (AA, CSU)

292 DVD STUDIO PRO (3) (Replacing MULT 290 \& 29I) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus i6
hours by arrangement per term. Prerequisite: MULT I77, 187 or equivalent. Recommended Preparation: eligibility for ENGL 838 or 848 or equivalent; MULT II3 or equivalent. Covers the basic DVD principles working with Apple's DVD Studio Pro to learn DVD production, authoring, menus, subtitling, slide shows, and compression. Students will create a final DVD as part of the class. (May be taken twice for a maximum of 6 units) (AA, CSU)

297 PRO TOOLS LE (3) (Replacing MULT 295 \& 296) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus i6 hours by arrangement per term. Prerequisite: MULT 192 or equivalent; eligibility for ENGL 838 or 848 or equivalent. Recommended Preparation: MULT II3
or equivalent. Pro Tools LE is a hardware/software solution for digital audio and music production. Students will learn about system capabilities, file management, hardware connectivity, interface basics, and basic editing. Topics include basic recording including monitoring and overdubs, advance editing techniques, mixing including signal flow and effects, and basic MIDI integration. (May be taken twice for a maximum of 6 units.) (AA, CSU)

317 DIGITAL STUDIO RECORDING (3) (Replacing MULT 3I5 \& 3I6) (Pass/ No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus I6 hours by arrangement per term. Prerequisite: MULT 297 or equivalent; eligibility for ENGL 838 or 848 or equivalent. Recommended Preparation:

## Multimedia

Many of the courses in the Multimedia Department have been restructured and renumbered. Below is a list of the multimedia courses, indicating new numbers, titles and units with the numbers and titles of the predecessors. This list is provided for continuity reference only as the duration, units, and content of the new multimedia courses.

| New MULT | New Course Title | New Units | Old MULT | Former Course Title | Old Units |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 102 | Intro to Multimedia | 3.0 | $\begin{aligned} & 105 \\ & 107 \end{aligned}$ | Intro to Multimedia Multimedia Technology | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 113 | Fundamentals of MAC OS \& File Management | 3.0 | $\begin{aligned} & 111 \\ & 112 \end{aligned}$ | Mac OS <br> Mac Applications | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 172 | Dreamweaver | 3.0 | $\begin{aligned} & 170 \\ & 171 \end{aligned}$ | Dreamweaver I Dreamweaver II | $1.5$ |
| 177 | Graphics for Multimedia (Photoshop) | 3.0 | $\begin{aligned} & 175 \\ & 176 \end{aligned}$ | Photoshop \& Illustrator I Photoshop \& Illustrator II | $\begin{array}{r} 1.5 \\ 1.5 \end{array}$ |
| 184 | Digital Video | 3.0 | $\begin{aligned} & 180 \\ & 181 \\ & \hline \end{aligned}$ | Digital Video I Digital Video II | $\begin{aligned} & 1.5 \\ & 1.5 \\ & \hline \end{aligned}$ |
| 187 | Final Cut Pro | 3.0 | $\begin{aligned} & 182 \\ & 183 \end{aligned}$ | Final Cut Pro I Final Cut Pro II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 192 | Digital Audio | 3.0 | $\begin{array}{r} 190 \\ 191 \\ \hline \end{array}$ | Digital Audio I Digital Audio II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 253 | Multimedia Design | 3.0 | $\begin{aligned} & 251 \\ & 252 \end{aligned}$ | Interface Design I Interface Design II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 274 | Flash | 3.0 | $\begin{aligned} & 270 \\ & 271 \\ & \hline \end{aligned}$ | Flash I Flash II | $\begin{array}{r} 1.5 \\ 1.5 \end{array}$ |
| 279 | Flash Actionscript | 3.0 | $\begin{aligned} & 272 \\ & 273 \\ & \hline \end{aligned}$ | Flash III Flash IV | $\begin{array}{r} 1.5 \\ 1.5 \end{array}$ |
| 282 | After Effects | 3.0 | $\begin{aligned} & 280 \\ & 281 \end{aligned}$ | After Effects I After Effects II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 292 | DVD Studio Pro | 3.0 | $\begin{aligned} & 290 \\ & 291 \end{aligned}$ | DVD Studio Pro I DVD Studio Pro II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 297 | Pro Tools LE | 3.0 | $\begin{aligned} & 295 \\ & 296 \end{aligned}$ | Pro Tools LE I Pro Tools LE II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 317 | Digital Studio Recording | 3.0 | $\begin{aligned} & 315 \\ & 316 \end{aligned}$ | Digital Studio Recording I Digital Studio Recording II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 387 | Digital Video Workflow | 3.0 | $\begin{aligned} & 385 \\ & 386 \\ & \hline \end{aligned}$ | Digital Video Workflow I Digital Video Workflow II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 392 | MM Internship | 3.0 | $\begin{array}{r} 390 \\ 391 \\ \hline \end{array}$ | Multimedia Internship I Multimedia Internship II | $\begin{aligned} & 1.5 \\ & 1.5 \\ & \hline \end{aligned}$ |

MULT II3 or equivalent. Students will plan and record a digital audio production. Projects may include music production, voice-over, and foley. Covers digital audio pre-production, small studio set-up, live mincing, and DI (direct input) recording. Pro Tools LE is used for live recording and mixing. Students will be introduced to critical listening, mix down, and mastering to produce an audio CD and will use trans-code the final audio files for web distribution. (May be taken twice for 6 units.) (AA, CSU)

387 DIGITAL VIDEO WORKFLOW (3) (Replacing MULT 385 \& 386) (Pass/ No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus 16 hours by arrangement per term. Prerequisite: MULT 187 or equivalent; eligibility for ENGL 838 or 848 or equivalent. Recommended Preparation: MULT II3 or equivalent. Covers the creation of a smooth digital video production workflow using various projects from pre-production, production, and post-production. Students will shoot digital video and use various software applications such as Photoshop, Final Cut Pro, and After Effects to create their projects. Explore various distribution outlets such as DVD, web, and broadcast. (May be taken twice for a maximum of 6 units.) (AA, CSU)

392 MULTIMEDIA INTERNSHIP (3) (Replacing MULT 390 \& 39I) (Pass/No Pass or letter grade option.) Minimum of 48 lecture and 16 lab hours plus i6 hours by arrangement per term. Prerequisite: MULT 253 or equivalent; and one of the following: MULT 172 or 187 or 274 or equivalent. Recommended Preparation: MULT II3 or equivalent; eligibility for ENGL 838 or 848. This is the capstone courses to the Multimedia program. Create multimedia projects using production and design techniques covered in previous courses. Students are given "real" projects and work directly with a client. Hands-on experience in client interviewing and management. (May be taken twice for a maximum of 6 units.) (AA, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SELECTED TOPICS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.) (AA, CSU)
879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880-889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

## Music

IOo FUNDAMENTALS OF MUSIC (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Designed for students who wish to learn how to read music and perform it at sight. Recommended forstudents with limited or no musical background who wish to begin the formal study of music theory. Also recommended for education majors. (AA: Area E5c, CSU: Area Ci, UC: Area 3A)

IOI MUSICIANSHIP I (3) Minimum of 48 lecture hours per term. Prerequisite: MUS. Ioo or equivalent. Corequisite: concurrentenrollmentinMUS. I3I and MUS. 800. Recommended Preparation: eligibility for ENGL 848. Study of notations, keys, and intervals. Performance at sight of melodic and rhythmic examples. Dictation of melodic, harmonic, and rhythmic examples. Fundamentals of keyboard harmony. (AA, CSU, UC)

102 MUSICIANSHIP II (3) Minimum of 48 lecture hours per term. Prerequisite: MUS. IoI or equivalent. Corequisite: concurrent enrollment in MUS. I32. Recommended Preparation: eligibility for ENGL 848. Continuation and advanced study of topics introduced in Music ior.
(Nine units of Musicianship are recommended for students majoring in Music.) (AA, CSU, UC)

103 MUSICIANSHIP III (3) Minimum of 48 lecture hours per term. Prerequisite: MUS. 102 or equivalent. Corequisite: concurrent enrollment in MUS. I33. Continuation of Music IOI-IO2. (AA, CSU, UC)
IO4 MUSICIANSHIP IV (3) Minimum of 48 lecture hours per term. Prerequisite: MUS. IO3. Corequisite: concurrent enrollment in MUS. I34. Continuation of Music IO3. (AA, CSU, UC)

I3I HARMONY I (3) Minimum of 48 lecture hours per term. Preequisite: MUS. Ioo orequivalent. Concurrentenrollmentrecommendationformusic majors: MUS. IoI and MUS. 800. Other recommendations: concurrent enrollment in MUS. 301 (Piano I); eligibility for ENGL 838 or 848. An indepth exploration into the basic structures of tonal music and how these elements intertwine. Topics include meter, scales, keys, intervals and triads, transposition, phrase structure, Roman numeral analysis, and an introduction to voice leading in 4 parts. Assignments forcus on building solid written skills, contextual analysis of classical and popular music, and creative composition. (AA, CSU, UC)
I32 HARMONY II (3) Minimum for 48 lecture hours per term. Prerequisite: MUS I3I. Concurrentenrollmentrecommendationformusicmajors:MUS IO2 and Mus 800. Continuation of topics introduced in MUS I3I including principles of harmonic progression, 7 th chords, voice leading, harmonization, modulation and secondary/applied chords. Analyze both classical and popular music using Roman numerals and popular lead sheet symbols. Assignments emphasize part writing skills and creative composition. (AA, CSU, UC)

133 HARMONY III (3) Minimum of 48 lecture hours per term. Prerequisite: MUS I32. Concurrent enrollment recommendation for music majors: MUS IO3 and MUS 800. The study of chromatic harmony including borrowed chords, augmented and Neapolitan 6th chords, 9ths/itths and isths, common tone diminished 7 ths, chromatic mediants, and more advanced modulatory techniques. Contextual analysis of classical, jazz, and popular music. Emphasis is on written, analytical, and creative skills. (AA, CSU, UC)

I34 HARMONYIV (3) Minimum of 48lecture hours per term. Prerequisite: MUS I33. Concurrent enrollment recommendation for music majors: MUS IO4 and MUS 800. Study of the gradual dissolution of tonality in PostRomantic and 2oth century music. Topics include impressionism in music, modal and pentatonic music, new scale structures, atonality and I2-tone serialism. Assignments include analysis, composition, and related skills. (AA, CSU, UC)

202 MUSIC LISTENING AND ENJOYMENT (3) Minimum of 48 lecture hours plus selected listening per term. No musical experience required. Recommended Preparation: eligibility for ENGL 848. Survey of the music of Western civilization. Enhancesenjoymentandappreciation oftheworld's great music and develops an understanding of today's concert music in a historical context. Attendance at one ore more off-campus concerts may be required. (AA: Area E5c, CSU: Area CI, UC: Area 3A)

250 WORLDMUSIC (3) Minimum of 48 lecturehoursperterm. Recommended Preparation: eligibility for ENGL 848. A course in comparative music styles of various cultures of the world. Each semester will explore one or more of the musical styles (popular, folk or classical) of Western Hemisphere, European, Asian and African cultures. Wherever possible, guest performers will present, and an opportunity shall be afforded to attend live performances. (AA: Area E5c, CSU: Area Ci, UC: Area 3A)

275 HISTORY OF JAZZ (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Study of jazz since i900, with emphasis on instrumental styles; the development of jazz since 1940 and contemporary trends. Attendance required at four jazz performances. (AA: Area E5c, CSU: Area Ci, UC: Area 3A)

290 ELECTRONIC MUSIC I (3) Minimum of 32 lecture and 48 lab hours per term. Introductory course in the use and implementation of MIDI (Musical InstrumentDigital Interface) musical instruments, including interfacing with computers and MIDI software. Ability to read music is desirable but not essential. (AA, CSU)

29I ELECTRONIC MUSIC II (2) (Pass/No Pass or letter grade option) Minimum of 32 lecture and 32 lab hours per term. Prerequisite: MUS. 290. Advanced MIDI applications, focusing on the uses of MIDI in music composition, music production, and multimedia. MIDI applications include MIDI sequencing programs for both the Macintosh and IBM platforms and music printing software. (May be taken twice for a Minimum of 4 units.) (AA, CSU)

292 SOUND CREATION: SAMPLING AND SYNTHESIS (3) (Pass/No Pass or letter grade option.) Minimum of 32 lecture and 48 lab hours per term. Prerequisite: MUS. 290 or equivalent. Creating original sounds for composition, live performance, and sound effects. Practical musical instruction on fully utilizing the technical and artistic potential of samplers and synthesizers. (May be taken twice for a maximum of 6 units.) (AA, CSU)

293 AUDIO FOR VISUAL MEDIA (2.5) (Pass/No Pass or letter grade option.) Minimum of 32 lecture and 32 lab hours per term. Prerequisite: MUS. $29 I$ or equivalent. Production and synchronization of music, sound effects, and voice-overs for film and video. Study and use of various time codes, including SMPTE and MTC. Arranging, orchestrating, and composing forvisuals using MIDI instruments, computer-based sequencing, and multi-track tape recording techniques. (AA, CSU)

30I PIANO I (I) Minimum of 48 lab hours plus 32 individual practice hours per term. Study in the techniques of piano playing. Individual attention, assignments, and performance in a class situation. Designed only for those students who have no previous piano playing experience. (AA, CSU, UC*)

302 PIANO II (I) Minimum of 48 lab hours plus 32 individual practice hours per term. Prerequisite: MUS. 30 I or equivalent. Continuation of study in the techniques of piano playing. Individual attention, assignments, and performance in a class situation. (AA, CSU, UC*)

303 PIANO III (1) Minimum of 48 lab hours plus 32 individual practice hours per term. Prerequisite: MUS. 302 or equivalent. Continuation of study in the techniques of piano playing. Individual attention, assignments, and performance in a class situation. (AA, CSU, UC*)

304 PIANO IV (I) Minimum of 48 lab hours plus 32 individual practice hoursperterm. Prerequisite:MUS. 303 orequivalent. Continuation ofstudy in the techniques of piano playing. Individual attention, assignments, and performance in a class situation. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU, UC*)

37I GUITAR I (I) Minimum of 48 lab hours plus 32 individual practice hours per term. Techniques of guitar performance and reading music to enable students to play accompaniments to compositions written for the guitar. Students must supply their own instruments. (AA, CSU, UC*)

372 GUITAR II (I) Minimum of 48 lab hours plus 32 individual practice hours per term. Prerequisite: MUS. 37I. Continuation of Music 37I with emphasis on solo performances. Students must supply their own instruments. (AA, CSU, UC*)

373 GUITAR III (I) Minimum of 48 lab hours plus 32 individual practice hours per term. Prerequisite: MUS. 372. Continuation of MUS. 372 with emphasis on solo performances. Students must supply their own instruments. (AA, CSU, UC*)
374 GUITAR IV (I) Minimum of 48 lab hours plus 32 individual practice hours perterm. Prerequisite: MUS. 373. Continuation of Music 373 withemphasisonsoloperformances.Students mustsupplytheirowninstruments. (May be taken four times for a maximum of 4 units.) (AA, CSU, UC*)

40I VOICE I (I) Minimum of 48 lab hours plus 32 practice room hours per term. Elementary vocal problems analyzed and corrected through exercises and songs. (AA, CSU, UC*)

402 VOICE II (I) Minimum of 48 lab hours plus 32 practice room hours per term. Prerequisite: MUS. 401 or equivalent. Intermediate songs and recital performance as ability merits. (AA, CSU, UC*)

403 VOICE III (I) Minimum of 48 lab hours plus 32 practice room hours per term. Prerequisite: MUS. 402 or equivalent. Advanced songs and recital performance as ability merits. (AA, CSU, UC*)

404 VOICE IV (I) Minimum of 48 lab hours plus 32 practice room hours per term. Prerequisite: MUS. 403 or equivalent. Advanced songs and recital performance as ability merits. (May be taken four times for a maximum of 4 units, after which students may petition to audit. See Index: "Audit Policy.") (AA, CSU, UC*)

430 SYMPHONIC BAND (I) Minimum of 48 lecture-critique hours per term. Prerequisite: Demonstration of proficiency. Study and performance of music for concert band. Correct playing techniques as well as group performance will be emphasized. Performance is required. (May be taken four times for a maximum of 4 units.) (AA, CSU, UC*)

45I JAZZ WORKSHOP (I) (Pass/No Pass or letter grade option.) Minimum of 48 lecture-critique hours perterm. Workshop in jazz interpretation and styles. Ensemble experience from "blues" to present-day jazz. (May be taken four times for a maximum of 4 units.) (AA, CSU, UC*)

452 REPERTORY JAZZ BAND (I) Minimum of 48 lecture-critique hours per term. Prerequisite: demonstration of proficiency in advanced reading and interpretation of jazz styles. Evening jazz ensemble for the experienced musician. Emphasizes advanced improvisational techniques. Performance required. (May be taken four times for a maximum of 4 units.) (AA, CSU, UC*)

465 MUSIC FOR MINORS TRAINING (3) (Pass/No Pass or letter grade option.) Minimum of 55 lecture hours for less than II weeks. Recommended Preparation: by audition and interview; ability to volunteer in a public elementary school. Training of volunteers (docents) to teach a comprehensive music program for elementary-age children. (AA, CSU)

470 CSM SINGERS (I) Minimum of 48 lecture-critique hours plus 32 hours by arrangement per term. Prerequisite: MUS. 402 or equivalent; demonstration of proficiency. Study and performance of choral literature for accompanied and unaccompanied choir. Performance may be required. (May be taken four times for a maximum of 4 units.) (AA, CSU, UC*)

665 SPECIAL TOPICS IN MUSIC PERFORMANCE (.5-I) (Pass/No Pass grading.) Minimum of 8 to I6 lecture hours plus up to 96 lab hours by arrangement per term. Prerequisite: demonstration of proficiency. Advanced
study in specialized areas of the performing arts. Designed forvocalists, pianists, and instrumentalists, this course provides for extended indepth study of both performance practice and performance art using selected themes as listed in the Schedule of Classes. (May be taken three times for a maximum of 3 units.) (AA, CSU)

8oo COMPUTER-ASSISTED INSTRUCTION IN MUSIC (.5) Minimum of 24 lab hours per semester per term. Designed primarily for students enrolled in MUS. IOO, IOI, IO2, IO3, IO4, I3I, I32, I33, or 134 to improve their skills in music theory and musicianship through ComputerAssisted Instruction in Music (CAIM). No previous computer experience required; instructor is available for assistance/consultation. (May be taken four times for a maximum of 2 units.) (AA)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Nursing

## Registered Nursing

The courses described are open only to those students accepted in the Associate Degree Nursing Program (see Index: Nursing, A. S. Degree for admission requirements). A grade of C or higher is necessary for progression in thesequence. Upongraduation, the candidate receives an Associate in Science degree and is eligible to take the California Board of Registered Nursing Licensing examination. Satisfactory completion of NURS 21I, 2I2, 22I, and 222 will satisfy the 2 units of Health Science General Education requirement for an A.A./A.S. degree.
Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.
2II INTRODUCTION TO NURSING (4.5) Minimum of 32 to 36 lecture hours and I20 lab hours plus I6 to I8 hours by arrangement for 8 to 9 weeks. Prerequisite: admission to the A.S. Degree Nursing Program. Corequisite: concurrent enrollment in NURS 215. Human health needs and the principles, facts, concepts and skills basic to nursing care. Supervised learning experiences corresponding with classroom instruction in offcampus health care facilities. (Fall only.) (AA: Area E3, CSU)

212 CONCEPTS OF HOMEOSTASIS IN NURSING (4.5) Minimum of 32 to 36 lecture hours and I2O lab hours plus 16 to 18 hours by arrangement for 8 to 9 weeks. Prerequisite: completion of NURS 21I. Corequisite: concurrent enrollment in NURS 215. Continuation of the study of human health needs and the principles, facts, concepts, and skills basic to nursing care using the nursing process to promote homeostasis. Supervised learning experiences corresponding with classroom instruction in off-campus health care facilities. (Fall only.) (AA: Area E3, CSU)

215 NURSING SKILLS LAB I (.5) (Pass/No Pass grading.) Minimum of 24 lab hours per term. Prerequisite: admission to the A.S. Degree Nursing Program. Corequisite: concurrent enrollment in NURS 2II and 212. This course is an adjunct to the corequisite nursing courses listed above. It provides individual and group practice of nursing skills with com-
petency evaluation of the skills identified for the concurrent nursing courses. (Fall only.) (AA)

22I PEDIATRIC NURSING (4.5) Total 40 to 45 lecture and 96 lab hours plus 16 to 88 hours by arrangement for 8 to 9 weeks. Prerequisite: NURS 212.. Corequisite: concurrent enrollment in NURS 225. Developmental assessment and common health issues from infancy to young adulthood. Supervised learning experiences corresponding with classroom instruction in off-campus health care facilities. (Spring only.) (AA: Area E3, CSU)
222 MATERNITY NURSING (4.5) Total 40 to 45 lecture and 96 lab hours plus 16 to 8 hours by arrangement for 8 to 9 weeks. Prerequisite: NURS 212. Corequisite: concurrentenrollment in NURS 225. Needs and problems of the family during the maternity cycle along with identifying needs and problems of male and female reproduction. Supervised learning experiences corresponding with classroom instruction in off-campus health care facilities. (Spring only.) (AA: Area $\mathrm{E} 3, \mathrm{CSU}$ )

225 NURSING SKILLS LAB II (.5) (Pass/No Pass grading.) Minimum of 24 lab hours per term. Prerequisite: NURS 212 or equivalent with a grade of C or higher. Corequisite: concurrent enrollment in NURS 221 and 222. This course is an adjunct to the corequisite nursing courses listed above. It provides individual and group practice of nursing skills with competency evaluation of the skills identified for the concurrent nursing courses. (Spring only.) (AA)

23I PSYCHIATRIC NURSING (5) Minimum of 40 to 45 lecture and I2O lab hours plus 16 to 18 hours by arrangement for 8 to 9 weeks. Prerequisite: NURS 222. Corequisite: concurrent enrollment in NURS 235. Effective and non-effective communication, equilibrium and disequilibrium in life styles and functioning in the adolescent to adult patient. Supervised learning experiences corresponding with classroom instruction in offcampus health care facilities. (Fall only.) (AA, CSU)

232 MEDICAL/SURGICAL NURSING (5) Minimum of 40 to 45 lecture and I2O lab hours plus 16 to 18 hours by arrangement for 8 to 9 weeks. Prerequisite: NURS 231. Corequisite: concurrent enrollment in NURS 235 . Identification of more complex health needs and problems in the adult and special needs of the surgical patient. Supervised learning experiences corresponding with classroom instruction in off-campus health care facilities. (Fall only.) (AA, CSU)

235 NURSING SKILLS LAB III (.5) (Pass/No Pass grading.) Minimum of 24 lab hours per term. Prerequisite: NURS 222 or equivalent. Corequisite: concurrent enrollment in NURS 231 and 232. Provides for nursing skill development with competency evaluation of the skills identified for concurrent nursing courses. Extra supplies may be required. (Fall only.) (AA)

24I ADVANCED MEDICAL/SURGICAL NURSING (5) Minimum of 40 to 45 lecture and I2O lab hours plus I6 to I8 hours by arrangement for 8 to 9 weeks. Prerequisite: NURS 232. Corequisite: concurrent enrollment in NURS 245. Addressing the overt and covert needs of adult patients undergoing threats to homeostasis in a variety of complex situations. Supervised learning experiences corresponding with classroominstruction in off-campus health care facilities. (Spring only.) (AA, CSU)

242 LEADERSHIP/MANAGEMENT IN NURSING (5) Minimum of 40 to 45 lecture and I2O lab hours plus i6 to 88 hours by arrangement for 8 to 9 weeks. Prerequisite: NURS 24I. Corequisite: concurrent enrollment in NURS 245. Transition to the graduate role. Students initiate the nursing process with emphasis on the determination of priorities, on decisionmaking responsibilities, and onpersonalaccountability. Supervised learn-
ing experiences corresponding with classroom instruction in off-campus health care facilities. (Spring only.) (AA, CSU)
245 NURSING SKILLS LAB IV (.5) (Pass/No Pass grading.) Minimum of 24 lab hours per term. Prerequisite: completion of NURS 232 or equivalent. Corequisite: concurrent enrollment in NURS 241 and 242. Provides for nursing skill development with competency evaluation of the skills identified for concurrent nursing courses. Extra supplies may be required. (Spring only.) (AA)
264 PERIOPERATIVE NURSING (8) (Formerly NURS 26I) Minimum of 112 lecture hours and 32 lab practice hours per term. Prerequisite: current $R N$ licenseoracceptance intothecoursebytheNursingDepartment. Recommended Preparation: one year of recent experience in nursing. This semester course provides entry-level knowledge required to work as a novice practitioner in perioperative nursing. Course focuses on the theoretical framework of perioperative nursing and is intended to be taken in conjunction with NURS 265, the clinical preceptorship. Extra supplies may be needed. (Spring only) (AA, CSU)

265 PERIOPERATIVE NURSING PRECEPTORSHIP (io) Minimum of 544 lab hours for 17 weeks. Prerequisite: Current RN license or acceptance into the course by the Nursing Department. Recommended: One year of recent clinical experience in nursing. This course provides entry level knowledge and skills required to work as an entry-level practitioner in perioperative nursing. Focuses on learning in the perioperative clinical setting. Student applies the learned concepts in an operating room under the supervision of assigned preceptors. The course is intended to be taken with NURS 264, the theory component. Extra supplies may be required. (Spring only) (AA, CSU)

610 BASIC MEDICATION DOSAGE CALCULATIONS FOR NURSES (I) (Pass/No Passgrading.)Minimum of 16 lecture hours per term. Prerequisite: MATH I2O or equivalent with a grade of C or higher OR equivalent skill level (as measured by satisfactory score on Math Placement Test Three). Designed to meet the needs of current and potential practitioners of nursing. The safe and accurate administration of medications to a client is an important and primary responsibility of the nurse. A step-by-step approach to medication dosage calculations by various routes of administration will be used. This course will help nurses in applying basic mathematical concepts to real world clinical situations. Dosage accuracy is emphasized in clinical scenarios that apply critical thinking skills. (May be taken four times for a maximum of 4 units) (AA, CSU)

615 PHARMACOLOGY FOR NURSES: PRACTICAL APPLICATIONS (I) (Pass/No Pass grading.) Minimum of 16 lecture hours per term. Course provides practical application of the pharmacological principles of drug therapy to the nursing practice. Discussion will stress the utilization of key drugs prescribed to treat different disease states. Lectures are organized by body system in order to correlate with the nursing pharmacology text currently being used. (AA, CSU)

620 BRIDGE COURSE FOR ADVANCED ENTRY STUDENTS (1.5) (Pass/ No Pass grading) Mnimum of 24 lecture hours per semester per term. This bridge course is designed for students who have been accepted into the CSM Nursing. Program at an advanced entry point. Students for whom this course is appropriate include returning students, transfer students, LVN's, and international RN's. Course will help students adjust to CSM's RN program, develop a learning profile, meet other students, and build a support network. Provides an opportunity for students to demonstrate competency in adult physical assessment, in a timed Medication Dosage Calculation Test and in Oral Medication Administration. (AA, CSU)

630 INTRODUCTION TO MEDICAL TERMINOLOGY (3) Minimum of 48 lecture hours per term. Course is designed to familiarize students with the basics of vocabulary used in the medical and health professions. Medical terminology is taught by using a systematic word-building approach. This four week self-paced course requires excellent time management skills, computer skills and commitment by the student. (May be taken twice for a maximum of 6 units.) (AA, CSU)

64I COOPERATIVE EDUCATION (.5-8) (See first page of Description of Courses section.) (AA, CSU)

666 CAREERS EXPLORATION IN NURSING (I) (Pass/No Pass grading.) Minimum of 16 lecture hours per term. Provides an overview of nursing roles, educational requirements, responsibilities, job opportunities, and settings for nursing practice. Includes the historical evolution of current nursing roles, contemporary health care issues, and career pathways available in nursing. Designed for potential nursing majors and non-nursing majors. (AA: Area E5d, CSU)
680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS ( $\mathbf{( 1 - 3 )}$ ) (See first page of Description of Courses section.) (AA, CSU)

800 SUCCESS STRATEGIES FOR AN RN PROGRAM (I) (Pass/No Pass grading.) Minimum of 16 lecture hours per term. Recommended Preparation: BIOL250;Math IIO;eligibilityforENGL Ioo. Courseallows interested students a safe "transitional time" prior to beginning an RN program to maximize personal and educational strengths, resources, and experiences in preparation to successfully meet the expectations of a Nursing Program. The goal of this course is to offer additional preparation opportunities to socialize students to the student nurse role. Includes preparing for nursing; refining existing educational skills; aspects of the student role; and stress management. (AA)

808 OPEN SKILLS LABORATORY (.5-3) (Pass/No Pass grading.) Minimum of 24 to I44 lab hours per term. Prerequisite: Previous or concurrent enrollment in the A.S. Degree Nursing Program, a transfer nursing student, admission as 30 unit option LVN to Nursing Program and previously or concurrently enrolled in NURS 2II, NURS 212, NURS 22I, NURS 222, NURS 23I, NURS 232, NURS 241 or NURS 242. Students practice skills and receive faculty feedback and evaluation, engage in study sessions with peer tutors, demonstrate competency assessment and receive faculty evaluation, complete clinical or skills laboratory make-up assignments, and learn effective skills in a group setting. Open entry/ open exit. (Units do not apply toward AA/AS degree.)

815 TRANSITIONFROM1STYEARTO2NDYEAR:MEDICALSURGICAL NURSING (.5 to I.5) (Pass/No Pass grading.) Minimum of I6 lecture hours over one week for Medical-Surgical portion. 24 lecture hours over one week forMedical-Surgical portion plus advanced medication dosage calculations. 8 lecture hours for advanced medication dosage calculations. Prerequisite: completion of NURS 212 or equivalent. Grade lower than C in NURS $22 I$ or NURS 222. Course focuses on refining and practicing competency in knowledge and skills application as the first year nursing student transitions to the second year. Areas of focus include multi-system physical assessment skills, communication skills, nursing process, IV therapy and vascularaccesses, wound care and healing, and medication dosage calculations. Knowledge and skills will be used in simulation activities and case scenarios. (May be taken twice for a maximum of 3 units) (Units do not apply to AA/AS degree)

845 REVIEW: REGISTERED NURSE EXAM (.5) (Pass/No Pass grading.) Minimum of 3 lecture and i2 lab hours. Prerequisite: concurrentenrollment in NURS 241 or equivalent OR eligibility to take the State Board exam. This course is designed to assist senior level nursing students to prepare for Nursing State Board examination through the use of a computer program and audio and video tapes which provide content review and test taking skills. (Spring only.)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Nutrition

(See Consumer Arts and Science)

## Oceanography

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.

IOo OCEANOGRAPHY (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term plus one or more field trips may be required. Introduction to marine geology, chemistry, and biology. Includes the hydrologic cycle and properties of sea water and marine organisms; currents, waves, tides, coastal processes, and ecology of the ocean; continental drift; and sea-floor spreading. (AA: Area E5a, CSU: Area BI/Area B2, UC: Area 5A)

IOI OCEANOGRAPHY LABORATORY/FIELD STUDY (I) Minimum of 48 lab hours plus I6 hours by arrangement per term. Prerequisite: concurrent enrollment in or completion of OCEN IOO. Introductory exercises in ocean currents, sedimentation, marine life forms, materials of the oceanic crust and sea floor, physical and chemical properties of sea water, and plate tectonics. Field trips required. (AA: Area E5a, CSU: Area B3, UC: Area 5 A)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880-889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Office Administration

(See Business)

## Paleontology

IIO GENERAL PALEONTOLOGY (3) Minimum of 48 lecture/recitation hours plus I6 hours by arrangement per term. Evolution of life through the past 3.8 billion years of earth history. Includes the study of fossils as evidence of the history of life; animals and plants related to modern and ancient environments; methods of interpreting the fossil record; and the impact of drifting continents on speciation and mass extinction.

Emphasizes the complexity and diversity of life with an environmental and ecological approach. One or more field trips may be required. (AA: Area E5a, CSU: Area BI/Area B2, UC: Area 5A/Area 5B)

III PALEONTOLOGY LABORATORY/FIELD STUDIES (I) Minimum of 48 lab hours per term. Prerequisite: completion of or concurrent enrollment in PALN IIo. Optional introductory paleontology laboratory course designed to be taken concurrently with or following PALN ino. Laboratory exercises in dating methods, fossil preservation, rock, fossil and ecosystemidentification and interpretation, stratigraphic correlation, natural selection and extinction processes, fossil collection and preparation. Field trips to depositional/ecological environments and fossil sites required. (AA: Area E5a, CSU: Area BI/Area B3, UC: 5A/5B)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Philosophy

(Also see Humanities)
Ioo INTRODUCTION TO PHILOSOPHY (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introductory survey of philosophical questions about the nature of reality; the prospects for human knowledge; and moral, political, and religious issues. Intended to help students clarify their own thinking about such questions, through learning and discussing how philosophers have dealt with them. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

103 CRITICAL THINKING (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL IOO and READ 400 or appropriate skill level as indicated by the reading placement tests or other measures. Designed to develop critical thinking. Presents techniques for analyzing arguments used in political rhetoric, advertisements, editorials, scientific claims, and social commentary. Develops the ability to create and refine written arguments. Includes inductive and deductive arguments, the validity and consistency of arguments, the relationship between evidence and conclusions, and the use of arguments in science. (AA: Area E2b, CSU: Area A3, UC)

244 CONTEMPORARY SOCIAL AND MORAL ISSUES (3) (Pass/No Pass orletter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL IOO and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Analysis and discussion of contemporary topics of moral and political significance. An introduction to ethical theories as a framework through which to analyze and judge responses to social and moral controversies. Issues may include universal human rights, welfare and entitlement, paternalism and censorship, civil disobedience, freedoms of speech and press, religious freedom and education, topics in medical ethics (abortion, euthanasia, genetic research and
privacy rights), topics in business ethics, affirmative action, capital punishment, animal rights, and environmental ethics. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

300 INTRODUCTION TO WORLD RELIGIONS (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL IOO and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Survey of major contemporary Eastern and Western religions. Includes theories, practices, history, and leaders of each religion studied. Emphasizes the similarities underlying the differences between various religions. (AA: Area E5c, CSU: Area C2, UC: Area 3B)
680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.) (AA, CSU)
879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
880 - 889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Photography <br> (See Art)

## Physical Education

The Physical Education Division offers a wide variety of physical activities that students can participate in according to individual interests and needs, activities that have carry-over value for the students' leisure time, now and in the future. Instruction is provided in progressive levels of competency, offering opportunities for specialization. A recommended preparation for all physical education courses is a recent physical examination.
Courses will normally be offered for the number of units specified in this catalog. However, units allowed for a given Physical Education class may be adjusted to conform with an increase or a decrease in the number of hours for which the class will be offered. Units are earned on the basis of I unit per three class hours per semester.

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Adapted (ADAP)

IOo ADAPTED AQUATICS (.5 or I) (Pass/No Pass grading.) Minimum of 24 to 48 lab hours plus 16 lab hours by arrangement per term. Offered primarily for students with physical limitations. Disability verification recommended. Students practice techniques to increase range of motion and strengthen weakened extremities through water-oriented exercises and swim instruction. (May be repeated according to results of individual testing.) (AA: Area E4, CSU, UC*)

IIO ADAPTED GENERAL CONDITIONING (.5 or I) (Pass/No Pass grading.) Minimum of 24 to 48 lab hours plus 16 lab hours by arrangement per term. Offered primarily for students with physical limitations. Disability verification recommended. Prescription and implementation of adapted exercises for a number of limiting conditions, ranging from stroke injuries to orthopedic problems. (May be repeated according to results of individual testing.) (AA: Area E4, CSU, UC*)

130 ADAPTED SPORTS (.5 or I) (Pass/No Pass grading.) Minimum of 24 to 48 lab hours per term. Adapted sports for students with and without disabilities. Designed to increase awareness of adapted sports. Focus on the adaptations to the sport, vocabulary specific to the sport, equipment and rules. Class will also involve developing and strengthening sport skills. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU)

I40 ADAPTED WEIGHT TRAINING (.5 or I) (Pass/No Pass grading.) Minimum of 24 to 48 lab hours plus 16 lab hours by arrangement per term. Designed primarily for students with physical disabilities. Instruction includes various weight lifting techniques and exercises to enhance the student's physical well being. An individualized exercise program includes: Circuit weight training, whole body movement lifts, set training, single muscle isolation and stabilization lifts, and stretching techniques. (May be repeated according to results of individual testing for a maximum of 4 units.) (AA: Area E4, CSU, UC*)

155 ADAPTED BACK CARE (.5 or I.o) (Pass/No Pass grading.) Minimum of 24 to 48 lab hours per term. Students will participate in flexibility training and a progressive exercise program to build musculature and correct posture. Students will also learn how to perform daily living activities while maintaining back health. (AA: Area E4, CSU)

165 ADAPTED LIFELONG FITNESS (. 5 or I) (Pass/No Pass grading.) Minimum of 24 to 48 lab hours plus 16 lab hours by arrangement per term. Recommended Preparation: recent physical examination and disability verification. Designed to increase the student's personal fitness through a comprehensive stretching and walking program. Includes proper stretching techniques, proper training principles, correct walking techniques, and heart rate monitoring to assist the student in developing a realistic cardiovascular program. Upon completion of the course, the student will be able to successfully design and implement a cardiovascular training program. (AA: Area E4, CSU, UC*)

875 ADAPTED EVALUATION (.5) (Pass/No Pass grading.) (Open entry/ open exit.) Minimum of 16 hours by arrangement per term. Recommended Preparation: recent physical examination and disability verification form. Course designed to assess the physical ability of students enrolled in Adapted Physical Education class(es). Based on the results of the assessment, an appropriate exercise program will be determined for the student. (Toincrease competencyand continued evaluation of improvement, may be taken four times for a maximum of 2 units.) This is NOT an activity class. (Units do not apply toward AA/AS degree.)

## Aquatics (AQUA)

109 INTERMEDIATE SWIMMING AND BEGINNING WATER POLO
(I) Minimum of 48 lab hours per term. Prerequisite: ability to swim comfortably in deep water. Instruction in the basic swimming strokes, water polo fundamentals, and intra-class competition. Progressive skill development in picking up the ball in water, passing, catching, shooting, dribbling. Introduction to basic strategies and water polo rules. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)

127 SWIM FOR CONDITIONING (. 5 or I) Minimum of 24 to 48 lab hours plus i6 lab hours by arrangement per term. Prerequisite: ability to swim. Endurance swimming for all swimmers at all levels of fitness. Interval training using all strokes. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)

I33 INDIVIDUAL SWIM CONDITIONING (.5 or I.) (Pass/No Pass orletter grade option.) Minimum of 24 to 48 lab hours plus 16 hours by arrangement per term. Prerequisite: must be able to swim one length without touching the bottom or side walls. Students who wish to workout and learn the basic techniques of each stroke at their own pace. Class utilizes a tailored workout that is comprised of various drills and exercises to demonstrate the value of swim fundamentals and training, making swimming easier by becoming more efficient. (May betaken four times for a maximum of 4 units.) (AA, CSU, UC*)

135 AQUA EXERCISE (.5 or 1) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours plus 16 hours by arrangement per term. Instruction includes various lifting, pushing and motion techniques and exercises to enhance the student's physical well being and comfort in the water. Exercises are designed to improve strength, flexibility and endurance. (May be taken four times for a maximum of 4 units). (AA, CSU, UC*)

## Dance (DANC)

117 TAP DANCE (. 5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours plus 16 hours by arrangement per term. Beginning and Intermediate Tap Dance technique. Students will earn tap vocabulary, rhythmic patterns and style while developing strength, musicality and basic performanceskills. Opportunitieswillbe available to play the roles of performerand choreographer, dance criticand historian in order to better appreciatetap dance. Choreography and improvisationalgroup projects/ presentations develop over the course of the semester. (May be repeated four times for a maximum of 4 units). (AA: Area E4, CSU, UC ${ }^{*}$ )

I2I CONTEMPORARY MODERN DANCE (I) Minimum of 48 lab hours plus i6labhours by arrangementperterm. Fundamentals of contemporary dance technique, body alignment, and basic movements. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)

I3IJAZZ DANCEI (I) Minimum of 48lab hours plus I6lab hours by arrangement per term. Beginning techniques in jazz-stage, jazz movements, fast jazz, jazz rock, jazz blues, and various other jazz combinations. (AA: Area E4, CSU, UC*)

132 JAZZ DANCE II (I) Minimum of 48 lab hours plus 16 lab hours by arrangement per term. Prerequisite: DANC I3I or equivalent. Continuation of Dance I3I with more complex routines and refining of basic skills. (May be taken three times for a maximum of 3 units.) (AA: Area E4, CSU, UC*)

I4I BEGINNING BALLET I (I) Minimum of 48 lab hours plus I6 lab hours byarrangement perterm. Beginning study of ballet techniques and style, including barre, center floor, and dance variations. Explores modern ballet works. (AA: Area E4, CSU, UC*)

143 INTERMEDIATE BALLET II (I) Minimum of 48 lab hours plus i6 lab hours by arrangement per term. Prerequisite: DANC I4I. Continuation of Dance I4I, concentrating on barre, center floor, and dance variations. Explores classic ballet works. (May be taken three times for a maximum of 3 units.) (AA: Area E4, CSU, UC*)

15I BEGINNING SOCIAL DANCE (.5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours plus 16 hours by arrangement per term. Geared to beginners and taught with an emphasis on the social aspects of dance. Basics of several dance styles are taught, with attention paid to footwork, posture, and the arts of leading, following and co-creating a dance. Each semester dances are selected from the following list: East Coast Swing, Slow Waltz, Cha cha, Night Club Two- Step, Tango, Foxtrot, Rumba, Merengue and Salsa. Partners are not required; no prior experience needed. (May be taken twice for a maximum of 2 units.) (AA, CSU, UC*)

152 CUBAN ROOTS OF SALSA (. 5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours per term. This course is designed to introduce students to the fundamentals of Cuban popular dances, including Danzon, Son, Cha Cha Cha, Son Montuno, and Salsa Cubana. With African and European influences, these dances are the conscience of modern day Salsa. Because of these roots, students will develop an authentic base which will serve as a foundation for all latin social dances. (May be taken four times for a total of 4 units.) (CSU)
153 INTERMEDIATE SOCIAL DANCE (. 5 or 1) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours per term. Prerequisite: DANC 151 or equivalent. An overview course in Social Dance that goes beyond the basics. Learn variations in Latin, Swing, Waltz and other dance styles with partners who have graduated from the basic levels. No partner required (May be taken twice for a maximum of 2 units.) (AA: Area E4, CSU, UC*)

16I TANGO ARGENTINO (. 5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours plus 8 to 16 hours by arrangement per term. Designed to introduce students to the essence of Argentine Tango (the dance of love) as well as basic improvisational skills. Viewing tango as a language, students will develop musically and focus on the connection between partners so that they will be able to dance confidently in social settings anywhere in the world. (May be taken four times for a maximum of 4 units.) (AA, CSU, UC*)

167 SWING DANCE I (.5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours plus 16 hours by arrangement per term. Introduction, short history, demonstration and instruction of several versions of this popular ballroom dance called Swing. Class emphasizes principles of fitness and enjoyment in a dance and cultural environment. Attention is paid to proper technique in both the lead and follow dance positions, including proper footwork, alignment and posture. Music is varied to broaden experience with different tempos and styles. No prior experience in dance is needed, no partner required. (AA: Area E4, CSU, UC*)
195 DANCING WITHOUT LIMITS (.5 or I) (Pass/No Pass grading.) Minimum of 24 to 48 lab hours plus 16 hours by arrangement per term. Dance for abled and disabled students with or without previous dance experience. Designed to give people an artistic outlet, to reassure them of their range of movement possibilities and to bring music into their lives. Intended to nourish individual creativity in Dance by using the language of everyday bodies to express imagery and to develop choreography for performance. (May be taken four times for a maximum of 4 units.) (AA, CSU, UC*)

400 DANCE PRODUCTION (.5-2) (Open entry/open exit.) (Pass/No Pass grading.) Minimum of 24 to 96 lab hours plus 16 hours by arrangement per term. Recommended Preparation: one semester of dance, or equivalent. Preparation of repertory or new dance works created by students, staff and guest choreographers culminating in performance. Focus
on developing rehearsal skills and achieving performance excellence through the preparation of completed works. Includes individual rehearsal and choreographic studio work as well as group discussions critiquing existing works. (May be taken 4 times for a maximum of 8 units.) (AA: Area E4, CSU)

## Fitness (FITN)

II6 BODY CONDITIONING (.5 or 1) Minimum of 24 to 48 lab hours plus i6 lab hours by arrangement per term. Individual flexibility, agility, strength, aerobic fitness, and relaxation. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)

195 FITNESS LAB (.5-I.5) (Pass/No Pass orletter grade option.) (Openentry/ open exit) Minimum of 24 to 72 lab hours plus 6 to 8 hours by arrangement per term. Weight training, flexibility, and aerobic conditioning for students who wish to develop their own program to achieve personal fitness goals. Allows the student flexibility in selecting a training schedule by offering open lab time. Student will be required to keep a daily exercise log for the semester. (May be taken four times for a maximum of 6 units. (AA, CSU, UC*)

20I BEGINNING WEIGHT TRAINING (.5 or I) (Pass/No Pass or letter grade option.) Minimum or 24 or 48 lab hours per term. Individual weight conditioning for beginning level students. Emphasis will beon selectorized machines, aerobic training, and stretching routines. Instruction on form, technique, safety, and muscle development. Participation will increase muscle size, strength, and endurance. Body composition assessment and fitness related research support achievement of fitness goals. Co-education class format. (AA, CSU)

202 INTERMEDIATE WEIGHT TRAINING (. 5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 or 48 lab hours per term. Recommended Preparation: FITN 2OI. Individual weight conditioning for intermediate level students. Focus will be on free weights, with supplementary exercises utilizing selectorized machines, cardiovascularequipment, and stretching routines. Instruction on form, technique, safety, and muscle development. Participation will increase muscle size, strength, and endurance. Body composition assessment and fitness related research to support acheivement of fitness goals. Co-education class format. (May be taken three times for a maximum of 3 units.) (AA, CSU)

206 CIRCUIT WEIGHT TRAINING (.5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 or 48 hours per term. Circuit weight training, includes anaerobic and aerobic conditioning for students who wish to develop a comprehensive muscle endurance/aerobic base. This class is designed to incorporate a structured, non-stop exercise routine to increase strength and endurance. Student will be required to keep a daily exercise $\log$ for the semester. (May be taken four times for a maximum of 4 units.) (AA, CSU)
215 WEIGHT CONDITIONING FOR VARSITY TRACK (.5-1) (Openentry/ open exit.) Minimum of 24 to 48 lab hours plus 16 lab hours by arrangement per term. Recommended only for members of intercollegiate track and field team. Weight-conditioning course designed for the individual development of the eighteen different events in Track and Field. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)
220 WEIGHT CONDITIONING FOR VARSITY FOOTBALL (.5-2) (Open entry/open exit.) Minimum of 24 to 96 lab hours per term. Recommended only for Varsity Football candidates. Designed to teach students to use overload weight training to build bulk and strength. Students work on major musclegroups, emphasizing leg and upper-body development. (May be taken four times for a maximum of 8 units.) (AA: Area E4, CSU, UC*)

225 ATHLETIC CONDITIONING (.5-2) (Openentry/open exit.) Minimum of 24 to 96 lab hours plus 16 hours by arrangement per term. Prepares studentathlete for varsity-level competition through general and sport specific strength and conditioning exercise. Student athletes engage ingeneral and sport specific strength development, stretching, aerobic conditioning, sportspecific movement and speed development. (May be taken four times for a maximum of 8 units.) (AA: Area E4, CSU, UC*)

235 CROSS TRAINING BOOT CAMP (. 5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours plus 16 hours by arrangement per term. Designed to incorporate various exercises including: dumbbell weights, calisthenics, whole body lifts, abdominal (core) movements, bicycle ergometer intervals, jump rope, speed drills, and flexibility exercises. Emphasizes multiple body aerobic and anaerobic exercises to produce cross training effect. (May be taken four times for a maximum of 4 units.) (AA, CSU, UC*)
237 TOTAL CORE TRAINING (.5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours per term. Designed to incorporate various core movement exercises including: dumb bell weights, calisthenics, whole body lifts, jump rope, speed drills, various agility drills, medicine ball throws and core movements and flexibility exercises. Emphasizes multiple body aerobic and anaerobic exercises to prduce cross training effect. (May be taken 4 times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)
301 SPINNING ${ }^{\circledR}{ }^{\circledR}$ (.5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours plus i6 hours by arrangement per term. Course includes cycling technique, proper bike set up, body positioning, terminology, gearing, cadence, race strategies, breathing, mind training, injury prevention/management, flexibility, hydration and nutrition. Designed for both the beginner spinner as well as advanced spinners which allows all who participate to spin at their own maximum capacity. (May be taken four times for a maximum of 4 units.) (AA, CSU, UC*)
312 SPINNING® HEART RATE (. 5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours per term. Course includes a heart rate monitored cycling technique, proper bike set up, body positioning, terminology, gearing, cadence, race strategies, breathing, mind training, injury prevention/management, flexbility, hydration and nutrition. Designed for both the beginner spinner as well as advanced spinners which allows all who participate to spin at their own maximum capacity. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)

334 YOGA (. 5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours plus 16 hours by arrangement per term. A fitness class using yoga postures to increase flexibility and strength; improve balance and posture, learn breathing techniques to relax the mind and the body. Class is appropriate for all ages and abilities. (May be taken four times for a maximum of 4 units.) (AA, CSU, UC*)

335 PILATES (. 5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours plus I6 hours by arrangement per term. Training of muscles of the torso through controlled exercises that increase core strength and postural stability to optimize performance in athletics, dance and everyday activities. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)

337 DAHN YOGA (.5 or I) (Pass/No Pass or letter grade option.) Minimum or 24 or 48 lab hours per term. Also known as "Energy Yoga for the Body and Brain", Dahn Yoga is designed to develop the practitioner's innate energy to achieve optimum physical and mental well-being. The workout is fun, contains variety of movements provided by a workout comprised of four segments: meridian stretching, meditative breathing postures and
techniques, energy awareness, and martial arts. (May be taken four times for a maximum of 4 units.) (CSU)

## Individual Sports (INDV)

I20 BADMINTON (.5 or I) Minimum of 24 to 48 lab hours plus 16 lab hours by arrangement per term. Skill techniques, proper footwork, rules of play, strategies, and doubles and singles play for various skill levels of ability. Tournaments in singles and doubles. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)

160 GOLF (.5 or I) Minimum of 24 to 48 lab hours plus 16 lab hours by arrangement per term. Lectures on techniques, rules, etiquette, and philosophy for the beginning golfer; practical experience associated with grip, stance, and swings relative to iron and wood shots. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)

25I BEGINNING TENNIS (. 5 or I) Minimum of 24 to 48 lab hours plus i6 lab hours by arrangement per term. Rules and strategies of tennis, including the fundamentals of grip, strokes, footwork, and court coverage through drills and competition. Testing on rules and the various techniques taught. Class play in singles and doubles. (AA: Area E4, CSU, UC*)

252 BEGINNING/INTERMEDIATETENNIS (.5 or I) Minimum of 24 to 48 lab hours plus 16 lab hours by arrangement per term. Emphasizes service, forehand, and backhand strokes. Includes rules of play, net play, and doubles and singles strategy. (AA: Area E4, CSU, UC*)

254 INTERMEDIATE/ADVANCED TENNIS (. 5 or I) Minimum of 24 to 48 lab hours plus 16 lab hours by arrangement per term. Recommended Preparation:successful completion of college level beginning tennis course. Techniques and skills of basic tennisstrokes used in playing doubles and singles. Philosophy and strategy of playing doubles and singles. (May be taken twice for a maximum of 2 units.) (AA: Area E4, CSU, UC*)

## Team Sports (team)

105 ADVANCED BASEBALL (.5-4) (Open entry/open exit.) Minimum of 24 to 192 lab hours plus 16 lab hours by arrangement per term. Recommended Preparation: interscholastic baseball or equivalent. Training class for students seeking to participate in Varsity Baseball. Practice in fundamental as well as advanced skills and techniques in baseball. Written and practical testing. (May be taken four times for a maximum of 16 units.) (AA: Area E4, CSU, UC*)
no BASKETBALL (. 5 or I) Minimum of 24 to 48 lab hours plus 16 lab hours by arrangement per term. Recommended Preparation: high school team play or equivalent. Basketball for students with previous experience and knowledge of basketball. Permanent teams participate in round-robin league concluded by tournament play. Advanced drills to work on and improve skills. Advanced techniques in strategy, team play, and defenses. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)

II8 ADVANCED BASKETBALL: WOMEN (.5-3) (Open entry/open exit.) Minimum of 24 to I44 lab hours plus i6 lab hours by arrangement per term. Recommended Preparation: interscholastic basketballorequivalent. A class for women wishing to compete on Women's Varsity Basketball Team. Advanced skills of basketball play; development of team play. (May be taken four times for a maximum of 12 units.) (AA: Area E4, CSU, UC*)

II9 TOURNAMENT BASKETBALL FOR WOMEN (. 5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours plus 6 to 8 hours
by arrangement per term. Recommended Preparation: High school interscholastic basketball experience. Major concepts of basketball; defense, offense, conditioning, strategies and rules taught in tournament format. Designed for the advanced student with previous interscholastic or intercollegiate experience. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)
135 ADVANCED FOOTBALL AND CONDITIONING (.5-2.5) (Openentry/ open exit.) Minimum of 24 to I20 labhours per term. Recommended Preparation: interscholastic varsity football experience or equivalent. Review of basic skills and introduction to advanced techniques and strategies in offensive and defensive football. Stresses conditioning necessary to play the game and to achieve life-long health goals. Includes weight training. (May be taken four times for a maximum of io units.) (AA: Area E4, CSU, UC*)

I48 INDOOR SOCCER (. 5 or I) (Pass/No Pass or letter grade option.) Minimum of 24 to 48 lab hours plus 16 hours by arrangement per term. Activity course includes instruction and practice in the fundamentals of individual and team play. Emphasis on the skills of dribbling, passing, receiving, heading and defense. Skill development continues through individual and group drills. Individual and team strategy taught through lecture and demonstration. Skills applied in competitive class tournament. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)

150 SOFTBALL (. 5 or I) Minimum of 24 to 48 lab hours plus 16 lab hours by arrangement per term. Basic skills, strategy, and practice in softball. Includes batting, catching, throwing, rules of play, and team strategy through round-robin competition. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)

158 ADVANCED SOFTBALL: WOMEN (.5-2) (Open entry/open exit.) Minimum of 24 to 96 lab hours plus 16 lab hours by arrangement per term. Recommended Preparation: interscholastic softballorequivalent. A training class for women interested in participating on the Women's Varsity Softball team. Emphasizes advanced skills of softball, including team play, offense, and defense. (May be taken four times for a maximum of 8 units.) (AA: Area E4, CSU, UC*)

165 ADVANCED TRACK AND FIELD: MEN AND WOMEN (.5-2) (Open entry/open exit.) Minimum of 24 to 96 hours plus 16 lab hours by arrangement per term. Recommended Preparation: interscholastic participation in track and field or cross country or equivalent. Designed to increase conditioning through weight training, with emphasis on individual needs in specific track events. Includes running and instruction in all aspects of track and field. Designed for athletes planning to participate in Varsity Track and Field in the spring semester. (May be taken four times for a maximum of 8 units.) (AA: Area E4, CSU, UC*)

17I BEGINNING VOLLEYBALL (. 5 or I) Minimum of 24 to 48 lab hours plus i6 lab hours by arrangement per term. Fundamentals of serving, passing, setting, spiking, and team play. Emphasizes knowledge of rules. Round-robin team play, including class-ending tournaments. (AA: Area E4, CSU, UC*)
173 INTERMEDIATE VOLLEYBALL (.5 or I) Minimum of 24 to 48 lab hours plus 16 lab hours by arrangement per term. Prerequisite: TEAM I7I or demonstration of competency. Continuation of Team 171. Emphasizes fundamentals, team set-ups, play, and knowledge of the rules. Round-robin team play with concluding tournament. (AA: Area E4, CSU, UC*)

175 ADVANCED VOLLEYBALL (. 5 or I) Minimum of 24 to 48 lab hours plus 16 lab hours by arrangement per term. Prerequisite: TEAM I73, high school team participation, or demonstration of competency. Volleyball play foradvanced students of superior ability. Continuation of fundamental skills. Emphasizes team play, advanced strategy, court coverage, and rules. Round-robin and tournament play. (May be taken twice for a maximum of 2 units.) (AA: Area E4, CSU, UC*)

## Intercollegiate Sports (VARS)

Participation in varsity sports is available to students who possess the highest level of athletic proficiency. Participation includes competition against colleges in the Coast Conference and other California Community Colleges. Student-athletes must be actively enrolled and attending 12 units during their first semester of competition (9 of which must be academic) including enrollment in the varsity sport class. Student-athletes must maintain a 2.0 grade point average and have passed a cumulative 24 units ( 18 of which must be academic) to qualify for their second season of the same sport. Student-athletes can only compete in two years of the same sport. A student transferring for academic or athletic participation, who has previously participated in intercollegiate athletics at another California Community College, must complete 12 units in residence prior to the beginning of the semester of competition of which a maximum of 8 units may be earned during the summer session. Participants must pass a physical examination prior to being released to compete. See Athletic Director for more information.

IOo VARSITY BASEBALL (.5-2) (Open entry/open exit.) Minimum of 240 lab hours by arrangement per term. Recommended Preparation: interscholastic participation in varsity baseball or equivalent. Intercollegiate varsity baseball competition in the Coast Conference and with other community colleges. (AA: Area E4, CSU, UC*)

105 VARSITY BASEBALL CONDITIONING (.5-I) (Pass/No Pass or letter grade option.) (Open entry/open exity) )Minimum of 24 to 48 lab hours plus 16 hours by arrangement per term. A class for members of the CSM Baseball team to Condition themselves for intercollegiate baseball competition through a program of stretching, weight training and running and other fitness activities related to the physiological development of student-athletes competing in baseball. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC*)

I20 VARSITY CROSS COUNTRY: MEN (.5-2) (Open entry/open exit.) Minimum of 240 lab hours per term. Recommended Preparation: interscholastic participation in varsity cross country or equivalent. Running against local and state-wide competition. Competitive distance: four miles. (AA: Area E4, CSU, UC*)

130 VARSITY FOOTBALL (.5-2) (Open entry/open exit.) Minimum of 240 lab hours per term. Recommended Preparation: interscholastic participation or equivalent. Intercollegiate varsity football competition in the Golden Gate Conference. Studentathletes mustbe ready to start practice in August before the fall semester begins. Students enrolled in twelve or more units at either Skyline or Cañada College can also participate. Participation in pre-fall practice is a prerequisite for playing in the first and second games of the season. (AA: Area E4, CSU, UC*)

133 OFFENSIVE VARSITY FOOTBALL LAB (.5-3) (Pass/No Pass or later grade option.) Minimum of 24 to 144 lab hours plus I6 hours by arrangement per term. Maintenance weight training program for in-season competition. Emphasis will be on free weights, flexibility exercises, and anaerobic training. Instruction on form, technique, and muscle development.

Participation will increase muscle size, strength, and endurance. (May be taken four times for a maximum of I2 units.) (AA, CSU)

134 DEFENSIVE VARSITY FOOTBALL LAB (.5-3) (Pass/No Pass or letter grade option.) (Open entry/open exit) Minimum of 24 to I44 lab hours plus I6 hours by arrangement per term. Maintenance weight training program for in-season competition. Emphasis will be on free weights, flexibility exercises, and anaerobic training. Instruction on form, techniques, and muscle development. Participation will increase muscle size, strength, and endurance. (May be taken four times for a maximum of I2 units). (AA, CSU, UC*)

I60 VARSITY SWIM (.5-2.) (Pass/No Pass or letter grade option.) (Open entry/open exit) Minimum of 240 lab hours per term. Prerequisite: This is an intercollegiate swim class that requires extensive swimming. Must be able to swim one length without touching the bottom or side walls. Intercollegiate swim competition. Emphasizes both the conditioning and the proper technique of all strokes with emphasis on how to swim efficiently, effectively and faster. (May be taken four times for a maximum of 8 units.) (AA: Area E4, CSU)

185 VARSITY TRACK AND FIELD: MEN AND WOMEN (.5-2) (Open entry/open exit.) Minimum of 240 lab hours. Recommended Preparation: interscholastic participation in track andfield or cross countryor equivalent. Varsity Track and Field competition for men and women in the Coast Conference. (AA: Area E4, CSU, UC*)

300 VARSITY BASKETBALL: WOMEN (.5-2) (Open entry/open exit.) Minimum of 240 lab hours per term. Recommended Preparation: interscholastic participation in basketball or equivalent. Intercollegiate competition in the Coast Conference and California Championships. (AA: Area E4, CSU, UC*)

3IO VARSITY CROSS COUNTRY: WOMEN (.5-2) (Open entry/open exit.) Minimum of 240 lab hours by arrangement per term. Recommended Preparation: interscholastic participation in cross country or track or equivalent. Cross-country and distance running competition on an intercollegiate level in the Coast Conference; participation in conference meets, invitational meets, and State Championship meets for those who qualify. Racing distance is three miles. (AA: Area E4, CSU, UC*)

320 VARSITY SOFTBALL: WOMEN (.5-2) (Open entry/open exit.) Minimum of 240 lab hours per term. Recommended Preparation: interscholastic participation in softball and completion of Team I58, Advanced Softball for Women. Intercollegiate women's varsity softball competition in the Coast Conference and State championships. (AA: Area E4, CSU, UC*)

330 VARSITY TENNIS: WOMEN (.5-2) (Open entry/open exit.) Minimum of 240 lab hours per term. Recommended Preparation: interscholastic participation in tennis or equivalent. Intercollegiate competition in the Coast Conference, Northern California championships, and California State championships. (AA: Area E4, CSU, UC*)

340 VARSITY VOLLEYBALL: WOMEN (2) (Openentry/open exit.) Intercollegiatewomen's varsity volleyball competition in the Coast Conference and participation in regional tournaments. (May be taken four times for a maximum of 8 units. However for eligibility purposes, students may only compete intercollegiately for two years.) (AA, CSU)

400 VARSITY WATER POLO: WOMEN (.5-2) (Pass/No Pass or letter grade option.) (Open/entry/open exit) Minimum of 240 lab hours per term. Prerequisite: This is an intercollegiate water polo class that requires extensive swimming. Must be able to swim one length without touching the bottom or side walls. Intercollegiate competition in water polo for women. Daily
practice and competitions as scheduled. (May be taken four times for a maximum of 8 units.) (AA: Area E4, CSU, UC ${ }^{*}$ )
Students interested in participating in the following varsity sports not offered at CSM may attend CSM and participate at Cañada or Skyline. The student must be enrolled in a minimum of i2 units to establish eligibility.

| Cañada | Skyline |
| :--- | :--- |
| Men's Golf | Men's Basketball |
| Men's Basketball | Men's Soccer |
| Men's Soccer | Men's Wrestling |
| Women's Golf | Women's Badminton |
| Women's Soccer | Women's Soccer |
| Women's Volleyball | Women's Volleyball |

## Theory (P.E.)

Ioi THEORY OF BASEBALL (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Concepts of modern baseball are explored including: strategy, coaching techniques, history, game rules and umpiring; developmental drills, theory of strength and conditioning programs and fundamentals of coaching youth baseball. This is NOT an activity class. (AA, CSU, UC*)

102 THEORY OF OFFENSIVE FOOTBALL (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Current concepts of offense are examined using game footage, practices, and computer assisted analysis. Concepts are examined and applied to attack opponent's offensive strategies. Strategy, techniques, game rules, developmental drills, strength and conditioning programs are covered. This is NOT an activity class. (AA, CSU, UC*)

103 THEORY OF DEFENSIVE FOOTBALL (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Current concepts of defense are examined using game footage, practice, and computer assisted analysis. Concepts are examined and applied to attack opponent's defensive strategies. Strategy, techniques, game rules, development drills, strength and conditioning programs are covered. This is NOT an activity class. (AA, CSU, UC*)

104 THEORY OF SPECIAL TEAMS (3) (Pass/No Pass or letter grade option.) Minimum of 48lecture hours plus i6 hours by arrangement per term. Current concepts of special teams are examined using game footage, practices, and computer assisted analysis. Concepts are examined and applied to attack opponent's special teams strategies. Strategy, techniques, game rules, developmental drills, strength and conditioning programs are covered. This is NOT an activity class. (AA, CSU, UC*)

IO6 THEORETICAL ANAYLSIS OF SOFTBALL (3) Minimum of 48 lecture hours per term. Current concepts of softball are examined using game footage, practices, and computer assisted analysis. Strategy to be covered include, but are not limited to: the short game (bunting, hit and run, squeeze play), when to play for the big inning, batting in differentcounts, batting in differentscenarios. Techniques, game rules, developmental drills, and proper softball strength and conditioning programs are covered. (May be taken twice for a maximum of 6 units.) This is not an activity class. (AA, CSU)

I20 FIRST AID/CPR (I) (Pass/No Pass or letter grade option) Minimum of 16 lecture hours. Recognizing and caring for breathing and cardiac emergencies for life threatening bleeding, sudden illness and injuries, heart disease prevention. This course is taught in compliance with the American Red Cross, and students may earn a CPR/First Aid Certificate. This is NOT an activity class. (AA, CSU, UC)

135 INTRODUCTION TO COLLEGE AND INTERCOLLEGIATE ATHLETICS (2) (Pass/No Pass or letter grade option.) Minimum of 32 lecture hours plus 16 hours by arrangement per term. Designed for student athletes. Instruction on how to get organized; take effect notes, prepare for tests and quizzes. Provides organizational skills for a lifetime. Teaches attitude development while building self-esteem. Course can also address various college services, community college eligibility requirements, and NCAA/NAIA transfer regulations. Study skills instruction and academic planning. Extra supplies may be required. This is NOT an activity class. (AA, CSU, UC*)

30I INTRODUCTIONTO PERSONALTRAINING (3) (Pass/No Pass orletter grade option.) Minimum of 48 lecture hours plus I6 hours by arrangement per term. Recommended Preparation: eligibility for ENGL 828. Prepares students to take the National Council of Strength and Fitness Certified Personal Trainer Exam. Study of basichuman anatomy, exercise physiology, health screening and assessment, nutrition, aerobic and anaerobic conditioning. This is NOT an activity class. (AA: Area E4, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Physical Science

(Also see Humanities 127 and I28)
676 PHYSICAL REALITY AND MEASUREMENT - HONORS COLLOQUIUM (I) Minimum of 16 lecture hours. Prerequisite: eligibility for the Honors Program and completion of or enrollment in any physical science course that includes a laboratory. Covers the nature of measurement, particularly the effects of objectivity versus subjectivity upon the observer and hence upon the observed. Discusses the reality of concepts, the quantum dilemma, and the prospect of having a perfect "God's-Eye" view of the physical universe. (AA: Area E5a, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880-889 SELECTED TOPICS ( $\mathbf{1}-\mathbf{3}$ ) (See first page of Description of Courses section.)

## Physics

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.
IOo DESCRIPTIVE INTRODUCTION TO PHYSICS (3) Minimum of 48 lecture hours plus i6 hours by arrangement per term. Recommended Preparation: one semester of algebra. Open to all students except those who have completed or are taking PHYS 210 or 250 . Description with
experimental demonstrations of the more important phenomena of physics. (AA: Area E5a, CSU: Area Bi, UC: Area 5A*)
IOI CONCEPTUAL PHYSICS LAB (I) Minimum of 48 lab hours per term. Prerequisite: Math IIO or equivalent. Corequisite: concurrentenrollmentor passing grade in PHYS Ioo or equivalent. Students become familiar in this laboratory course with the basic laws of physics by semi-quantitative experiments. (AA, CSU)

126 TEACHING SCIENCE I: K-5 CLASSROOM EXPERIENCE \& SEMINAR (I) Minimum of 16 lecture hour per term plus one hour per week in $K$-5 school classroom with a mentor. Investigation of elementary school teaching careers and requirements for earning a California $\mathrm{K}-5$ school teaching credential; study of California Department of Education standards in science for grades $\mathrm{K}-5$; development and teaching class lessons in physical and life sciences. Same as Biol I26. (AA, CSU)

127 TEACHING SCIENCE II: MIDDLE SCHOOL CLASSROOM EXPERIENCE \& SEMINAR (I) Minimum of 16 lecture hours per term plus I hour per week in middle school classroom with a mentor. Prerequisite: completion of one college course in Physics, Chemistry or Biology with a grade of $C$ or better. Investigation of middle school teaching careers and requirements for earning a California middle school teaching credential; study of California Department of Education standards in science for grades $6,7,8$; development and teaching class lessons in physical and life sciences. Same as Biol I27. (AA, CSU)

I28TEACHING SCIENCE III: HIGH SCHOOLCLASSROOM EXPERIENCE \& SEMINAR ( $\mathbf{I}$ ) Minimum of 16 lecture hours perterm plus 2 hours perweek in high school classroom with a mentor. Prerequisite: completion of Biology I26 or 127 or Physics I26 or I27. Investigation of high school teaching careers and requirements for earning a California high school teaching credential; study of California Department of Education standards in science for grades 9-12; development and teaching class lessons in physical and life sciences. Prerequisite: completion of Biology I26 or I27 or Physics I26 or I27. Same as Physics I28. (AA, CSU)

150 PREPARATION FOR PHYSICS (4) (Pass/No Pass grading.) Minimum of 48 lecture and 48 lab hours plus 16 hours by arrangement per term. Prerequisite: completion of or concurrent enrollment in MATH I3O or equivalent. Focuses on review of algebra and trigonometry required for physics; problem solving; study skills; description of motion; and Newton's Laws of Motion. Designed for students planning to take PHYS 2IO or 250. (AA)

ThePhysics 2IO-220 sequence is designed forstudents majoring in some field of letters and science. It is required for students planning to enter Medicine, Dentistry, Pharmacy, Optometry, Agriculture, or Forestry. Some programs require completion of Physics 210-21I-220-22I.
210 GENERAL PHYSICS I (4) Minimum of 48 lecture and 48 lab hours plus i6 hours by arrangement per term. Prerequisite: MATH I3O; PHYS 150 or equivalent. Mechanics, heat, and sound. (AA: Area E5a, CSU: Area BI/Area B3, UC: Area 5A)

2 II GENERAL PHYSICS I - CALCULUS SUPPLEMENT (I) Minimum of I6 lecture hours per term. Prerequisite: completion of or concurrent enrollment in MATH 242 or 252; completion of or concurrent enrollment in PHYS 210. Application of calculus to topics in Physics 210. Primarily intended for majors requiring one year of calculus-based physics. (AA, CSU, UC)

220 GENERAL PHYSICS II (4) Minimum of 48 lecture and 48 lab hours plus 16 hours by arrangementperterm. Prerequisite: PHYS 210. Electricity and magnetism, light, modern physics. Extra supplies required. (AA: Area E5a, CSU, UC: Area 5A)

221 GENERAL PHYSICS II - CALCULUS SUPPLEMENT (I) Minimum of 16 lecture hours per term. Prerequisite: MATH 242 or 252; PHYS 2II; completion of or concurrent enrollment in PHYS 220. Application of calculus to topics in Physics 220. Primarily intended for majors requiring one year of calculus-based physics. (AA, CSU,UC)
Physics 250-260-270 constitute a three-semester program designed to give students majoring in Engineering, Physics or Chemistry a thorough foundation in the fundamentals of physics. Students in other majors should consider Physics 2IO-2II-220-22I sequence.

250 PHYSICS WITH CALCULUSI (4) Minimum of 48 lecture, 16 recitation hours, and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: PHYS 150 or equivalent and completion of or concurrent enrollment in MATH 252. Mechanics, wave motion, and special relativity. Extra supplies required. (AA: Area E5a, CSU: Area BI/Area B3, UC: Area 5A)
260 Physics with Calculus II (4) Minimum of 48 lecture and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: PHYS 250; completion of or concurrent enrollment in MATH 253. Electricity and magnetism. Extra supplies required. (AA: Area E5a, CSU: Area BI/Area B3, UC: Area 5a)
270 PHYSICS WITH CALCULUS III (4) Minimum of 48 lecture and 48 lab hours plus 32 hours by arrangement per term. Prerequisite: PHYS 250; completion of or concurrent enrollment in MATH 253. Heat, light, and modern physics. Extra supplies required. (AA: Area E5a, CSU, UC: Area 5a)
680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Political Science

IOOINTRODUCTION TO POLITICALSCIENCE (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to the nature of politics and to political science as a field of study. Examines the nature of the state, forms of government and political institutions, political theory and ideology, public law and administration, and international relations. (AA: Area E5b, CSU: Area D, UC: Area 4)
IIO CONTEMPORARY FOREIGN GOVERNMENTS (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: previous course in political science and eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to representative foreign political systems. Comparative analysis
of how varied governments reconcile stability and change, power and responsibility, freedom and efficiency. Stresses interrelationships of social patterns, ideology, and political institutions. (AA: Area E5b, CSU: Area D, UC: Area 4)

120 AREA STUDIES (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of the government and politics of selected nations within a distinct geopolitical area of the world in order to gain understanding of the institutions and dynamics of the area. Examines dominant political institutions, actors, processes, and belief systems within the context of history and political culture. Analyzes area political economy and foreign policy in the environment of global interdependence. (AA: Area E5b, CSU)

I3O INTERNATIONAL RELATIONS (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 4 I5 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to the nature of relations among nation-states, and non state actors within the global system. Basic forces affecting the formulation of foreign policy and the dynamics of international politics will be analyzed. Covers the nation-state system, sources of national power, instruments of national policy, international law and organization, and 2ist Century challenges presented by globalization and terrorism. (AA: Area E5b, CSU: Area D, UC: Area 4)

I50 INTRODUCTION TO POLITICAL THOUGHT (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 4 I5 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of classical and modern political thought designed to develop understanding of various theoretical approaches to politics, basic political problems, and proposed solutions to these problems. (AA: Area E5b, CSU: Area D, UC: Area 4)

200 NATIONAL, STATE AND LOCAL GOVERNMENTS (5) Minimum of 80 lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400, 405 or 415 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Not open to students who have taken PLSC 210 or 310 or a comparable course in American or state institutions. Established primarily for students whose major is political science, prelaw, criminology, or allied behavioral and social sciences. Introduction to the principles and problems of American government at the national, state, and local levels. Examines intergovernmental relationships from a functional point of view. Emphasizes American federalism, judicial review, the political process in the nation and state, civil liberties, foreign policy, and the role of the citizen at all levels of government. (AA: Area EI/Area E5b, CSU: Area D/Area F2/F3, UC: Area 4/Area 7B/Area 7C*)

210 AMERICAN POLITICS (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. A thorough study of the U.S. Constitution, a survey of the organization and functions of the branches of the
federal government, an examination of the dynamics of the American political process. (Satisfies the American Institutions requirement.) (AA: Area Eia/Area E5b, CSU: Area D/Area F2, UC: Area 4/Area 7B*)

212 INTRODUCTION TO AMERICAN POLITICS AND SOCIETY (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 844 or ESL 828 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Recommended for international students and recent immigrants but designed to meet the needs of all students. Introduction to the institutions, constitutional framework, and dynamic processes of American democracy and to unique aspects of American society, culture, and historical development which are relevant to American politics and to the formation of national values and character. (Satisfies the American Institutions requirement.) (AA: Area Eia/Area E5b, CSU: Area D/Area F2, UC: Area 4/Area 7B)
215 CONTEMPORARY ISSUES IN AMERICAN POLITICS (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skilllevel as indicated by the reading placement tests or other measures. Explores, within the constitutional framework, current issues of importance to well-informed citizens in a democracy, including goals and tactics of American foreign policy, presidential elections and campaigns, corporate power, criminal justice and individual rights, interpretations of the Founders' political philosophy, Congress.(SatisfiestheAmericanInstitutions requirement.) (AA: Area Eia/Area E5b, CSU: Area D/Area F2, UC: Area 4/Area 7B)

250 CIVIL LIBERTIES AND CIVIL RIGHTS (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 4 I5 OR appropriate skill level as indicated by the reading placement tests or other measures. Survey and analysis of the Constitution in light of the issues and problems considered by the U.S. Supreme Court in the area of civil liberties and civil rights. The rights of political, racial, religious, and sexual minorities, of women, of the disabled, and of criminal defendants; the concepts of due process and equal protection of the law; the interaction of the Supreme Court with the President, Congress, the States, political parties, and interest groups. (Satisfies the American Institutions requirement.) (AA: Area Eia/Area E5b, CSU: Area D/Area F2, UC: Area 4/Area 7B)

3Io CALIFORNIA STATE ANDLOCALGOVERNMENT (2) (Pass/No Pass or lettergradeoption.)Minimumof32 lecturehours. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 4 I5 OR appropriate skill level as indicated by the reading placement tests or other measures. The study of the institutions and problems of state and local government in California; California in the federal system. (Satisfies the California State and Local Government requirement.) (AA: Area Eib/Area E5b, CSU: Area D/Area F3, UC: Area 7C)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880 - $\mathbf{8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Psychology

## (Also see Sociology)

IOO GENERAL PSYCHOLOGY (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 or 415 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Survey of major topics, theories, and research methods of contemporary psychology. Covers personality, social behavior, memory, motivation, emotion, perception, learning, and biological basis of behavior. (AA: Area E5b, CSU: Area D/Area E, UC: Area 4)

105 EXPERIMENTAL PSYCHOLOGY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: PSYC ioo with a grade of $C$ or higher. Recommended Preparation: PSYC I2I. Philosophy and aims of scientific inquiry and its application to questions in psychology. Students conduct experiments using the methods discussed. (AA: Area E5b, CSU: Area B2/Area D, UC: Area 4)

IO8 PSYCHOLOGY IN PRACTICE (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Application of psychological principles to problems of everyday living, in contrast to the technical-scientific approach of Psychology ioo. Intended for students who want a general picture of human psychology. (May not be taken for credit following PSYC ioo.) (AA: Area E5b, CSU: Area D/Area E)
ino COURTSHIP, MARRIAGE, AND THE FAMILY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. History and development of marriage as a social institution, including dating; courtship; love; mate selection; personality adjustment in marriage; children; parenthood; the family; anatomical, physiological, psychological, and sociological aspects of sex; religious factors; and divorce. (May not be taken for credit following SOCI ino.) (AA: Area E5b, CSU: Area D/Area E, UC: Area 4)

I2I BASIC STATISTICALCONCEPTS (3) Minimum of 48 lecture hoursper term. Prerequisite: MATH I2O or I23 or the equivalent at a postsecondary institution OR equivalent skill level as measured by a satisfactory score on a math placement test. Recommended Preparation: PSYC Iоо or SOCI Iоо; eligibility for ENGL 838 or 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to the basic descriptive techniques and statistical inferences used in the behavioral sciences. (AA: Area Ci, CSU: Area B4, UC: Area 2A*)

200 DEVELOPMENTAL PSYCHOLOGY (3) Minimum of 48 lecture hours per term. Prerequisite: PSYC Iоо with a grade of C orhigher. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or

415 OR appropriate skill level as indicated by the reading placement tests or other measures. Psychological development from birth through old age. Examines physical, cognitive, and social changes throughout the lifespan. Particular emphasis is placed on research studies that illustrate principles of developmental psychology. (UC credit limited to either PSYC 200 or 201.) (AA: Area E5b, CSU: Area D, UC: Area 4*)
201 CHILD DEVELOPMENT (3) Minimum of 48 lecture hours per term. Prerequisite: PSYC Iоо. Recommended Preparation: eligibilityfor ENGL848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of the physical, perceptual, cognitive, linguistic, social, and emotional development from conception through adolescence. Emphasizes current research and theory. (UC credit limited to either PSYC 200 or 201.) (AA: Area E5b, CSU: Area D, UC: Area 4*)
220 INTRODUCTION TO PSYCHOBIOLOGY (3) Minimum of 48 lecture hours per term. Prerequisite: PSYC Ioo. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of C or higher OR concurrentenrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Survey of central and peripheral nervous system processes underlying the behavior of humans and animals. Emphasizes evolutionary, genetic, and gender differences underlying social behavior; anatomical and physiological substrates of behavior and consciousness; and neural mechanisms and sensory processes associated with learning, language, perception, motivation, emotion, sleep, speech, and sexuality. (AA: Area E5b, CSU: Area B2/Area D, UC: Area 4/Area 5B*)

225 THEORIES OF PERSONALITY (3) Minimum of 48 lecture hours per term. Recommended Preparation: PSYC Ioo; eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Covers major theories of personality, including psychodynamic, trait, type, humanistic, existential, learning, and social cognitive. Describes and evaluates these major theories; provides a review of personality assessment, and looks at cultural and gender differences as they relate to the development of personality. (AA: Area E5b, CSU: Area D, UC: Area 4)

300 SOCIAL PSYCHOLOGY (3) Minimum of 48 lecture hours per term. Prerequisite: PSYC Ioо. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of human interaction, with emphasis on social patterning and process of perception, identity, roles, and attitudes. (May not be taken forcredit following SOCI 300.) (AA: Area E5b, CSU: Area D/Area E, UC: Area 4*)

4IO ABNORMAL PSYCHOLOGY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of abnormal behavior and personality. Covers neuroses, psychoses, and other psychological problems, along with their etiology, dynamics, principal symptoms, and treatments. Explores the relationship between theory of personality and psychotherapy. (AA: Area E5b, CSU: Area D, UC: Area 4)

675 HONORS COLLOQUIUM IN PSYCHOLOGY (I) Minimum of I6 lecture hours per term. Prerequisite: limited to students in the Honors

Program who have completed or are concurrently enrolled in an associated non-honors course in Psychology. Recommended Preparation: Completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Readings, discussion, and lectures covering selected advanced topics in Psychology to be determined by the Psychology Department and the Honors Program. (AA: Area E5b, CSU: Area D)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.)

## Reading

400 ACADEMIC TEXTBOOK READING (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: READ 830 with a grade of C or higher (or appropriate skill level indicated by the reading placement tests and other measures). Experience the reading of full-length textbook chapters and accompanying tests in a variety of college academic disciplines. Emphasizes the application of advanced study reading strategies to actual college chapters/tests; evaluation of textbook materials as critical and analytical readers; reading a book related to an academic area; and intensive work with college-level vocabulary. (AA, CSU)

405 COLLEGE ANALYTICAL READING (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Prerequisite: READ 830 with a grade of $C$ or higher (or appropriate skill level indicated by the reading placement tests and other measures). Overview of the theory and practice of college-level critical reading skills needed for successful academic performance. Emphasizes critical and analytical evaluation of college-level expository and argumentative texts; critical analysis and evaluation of research and Internet material; application of the skills to articles, fiction, and nonfiction reading; and college-level vocabulary development. (AA, CSU)

412 COLLEGE-LEVEL INDIVIDUALIZED READING IMPROVEMENT (.5-3) (Pass/No Pass grading) (Open entry/open exit) Minimum of 24 to I44 hours by arrangement per term. Recommended Preparation: eligibility for READ 400 or 405 or ENGL IOO. Practice methods of increasing comprehension, vocabulary, critical reading, study-reading strategies, and/or speed using college-level reading materials. May include internet, computer-assisted, and/or DVD assignments. Uses self-paced programs based on individual diagnostic test results to meet specific student needs. Students may enroll any time through the twelfth week of the semester. (May be taken four times for a maximum of i2 units.) (AA, CSU)

415 READING ACROSS THE DISCIPLINES: INDIVIDUALIZED PREPARATION (.5-I.5) (Pass/No Pass grading.) Open entry/open exit. Minimum of 24 to 80 lab hours by arrangement per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400 or 405 or appropriate skill level as indicated by the Reading placement tests and
other measures. Corequisite: concurrent enrollment in a specific transferlevel course in collaboration with this course. Individualized instruction designed to acquire or improve reading strategies/skills in the various content area classes. Course offerings vary, depending upon the needs and abilities of the student. Designed/coordinated with ongoing academic courses in content areas such as, but not limited to, sociology, psychology, history political science, biology, philosophy and nursing. Weekly scheduled readingappointment required. May includetextbook comprehension, principles of learning and retention, note-taking, annotating, discipline-based vocabulary, paraphrasing, reading graphics, test taking, and research techniques. Registration is open through the i2th week of the semester. (May be taken four times for a maximum of 6 units.) (AA, CSU)

454 COLLEGE-LEVEL VOCABULARY IMPROVEMENT I (.5-I.5) (Pass/ No Pass grading) (Open entry/open exit) Minimum of 24 to 80 hours by arrangement per term. Recommended Preparation: eligibility for READ 400 or 405 or ENGL IOO. A self-paced, individualized course designed to improve college-level vocabulary skills through a words-in-context approach. Students will use textbooks and computer programs to study up to 300 words. (May be taken three times for a maximum of 4.5 units.) (AA, CSU)

455COLLEGE-LEVEL VOCABULARY IMPROVEMENTII (.5-I.5) (Pass/No Pass) Minimum of 24 to 80 hours by arrangement per term. Recommended Preparation: eligibility for READ 400 or 405 or ENGL IOO. Continuation of READ 454. A self-paced, individualized course designed to improve college-level vocabulary skills through a words-in-context approach. Students will use textbooks and computer programs to study up to 300 words. (May be taken three times for a maximum of 4.5 units.) (AA, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

807 BASIC PHONIC SKILLS FOR NON-NATIVE SPEAKERS (3) (Pass/ No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. It is recommended that students enroll concurrently in ESL 825 or higher course, ESL 845 or higher course, and ESL 855 or higher course. Introduction to the study of basic speech sounds and practice in techniques for pronouncing unknown words. Group and individual review of dictionary symbols, diacritical marks, syllabication, and fundamental phonic generalizations. (May be taken twice for a maximum of 6 units.) (Units do not apply toward AA/AS degree.)

808 BASIC PHONIC SKILLS (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Introduction to basic speech sounds and practice in techniques for pronouncing unknown words. Group and individual review of dictionary symbols, diacritical marks, syllabication, and fundamental phonic generalizations. (May be taken twice for a maximum of 6 units.) (Units do not apply toward AA/AS degree.)

809 SPELLING IMPROVEMENT FOR NON-NATIVE SPEAKERS OF ENGLISH (3) Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus I6 lab hours by arrangement per term. Recommended Preparation: READ 807 or 808 with Pass or a grade of $C$ or higher or eligibility for ESL 857, READ 825, or higher (as indicated by the Reading placement tests and other measures). Improvement or spelling skills for academic, professional, and personal needs. Includes basic and advanced rules of spelling, commonly misspelled words, and individualized spelling word lists. (May be taken twice for a maximum of 6 units.) (Units do not apply toward AA/AS degree.)

8I2 INDIVIDUALIZED READING IMPROVEMENT (.5-3) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of 24 to I44 lab hours by arrangement per term. Practice methods of increasing comprehension, vocabulary, critical reading, study-reading strategies, and/or speed using a variety of reading materials. May include Internet, computerassisted, and/or DVD assignments. Uses self-paced programs based on individualdiagnostictestresults to meetspecificstudentneeds.Students may enroll any time through the twelfth week of the semester. (May be taken up to four times for a maximum of i2 units.) (Units do not apply toward AA/AS degree.)

8I4 BASIC SPELLING MASTERY (.5-I) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of 24 to 48 hours by arrangement per term. Self-paced, individualized course to facilitate basic spelling mastery. Includes basic plural rules, final e rules, ie/ei rules, silent letters, and basic homonyms. (May be taken twice for a maximum of 2 units.) (Units do not apply toward AA/AS degree.)

8I5 ADVANCED SPELLING MASTERY (.5-I) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of 24 to 48 hours by arrangement per term. Self-paced course to facilitate advanced spelling mastery. Includes advanced plural rules for doubling final consonants, rules for words ending in able/ible, ance/ence, ceid, sede, and cede, advanced homonyms, and higher-level misspelled words. (Units do not apply toward AA/AS degree.)

825 INTRODUCTION TO COLLEGE READING (3) (Pass/No Pass or letter grade option) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Recommended Preparation: ESL 857 (or appropriate skill level indicated by the Reading placement tests and other measures). Instruction in techniques for improving skills basic to college reading. Focus on comprehension, vocabulary building, and college study reading skills using a variety of nonfiction and fiction materials. Includes reading books for enjoyment, written responses to text, and use of computers. Qualifies as preparation for READ 830. (May be taken twice for a maximum of 6 units.) (Units do not apply toward AA/AS degree.)

830 COLLEGE AND CAREER READING (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Recommended Preparation: READ 825 with a grade of C (or higher or appropriate skill level indicated by the Reading placement tests and other measures). Emphasis on applying reading strategies to comprehend and retain textbook information and perform better on academic and career-related tests. Analysis of expository writing, including extended textbook passages, work documents, and fictional writing, essential to proficient reading in college courses and job-related reading. Additional focus on recognition of an author's thesis, supporting details, point of view, purpose, tone, bias, and conclusions through in-depth analysis of essays, textbook excerpts, and book-length works. Intensive work with vocabulary and word origins. Qualifies as preparation for READ 400 and READ 405. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA)

852 VOCABULARY IMPROVEMENT I (.5-I.5) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of 24 to 80 lab hours per term. A selfpaced, individualized course designed to improve vocabulary skills through a words-in-context approach. Students will use textbooks and computer programs to study 300 basic words. (Units do not apply toward AA/AS degree.)

853 VOCABULARY IMPROVEMENT II (.5-I.5) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of 24 to 80 lab hours per term. A selfpaced, individualized course designed to improve their vocabulary
skills through a words-in-contextapproach. Studentswill use textbooks and computer programs to study 300 basic words. (Units do not apply toward AA/AS degree.)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880 - 889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Real Estate

For licensed real estate agents, R.E. Ioo and io5 may be waived as prerequisites for all real estate courses.

IOO REALESTATE PRINCIPLES (3) Minimum of 48 lecture hours per term. Property, contracts, agency, financing, liens and encumbrances, taxes, escrows, land description. (Meets State requirements for admission to the salesperson's license exam.) (AA: Area E5d, CSU)

105 PROPERTY INVESTMENTS, VALUATION, AND MANAGEMENT (3) Minimum of 48 lecture hours per term. Real estate markets, financing investment purchases, value of money and a well-diversified investmentstrategy, estimating costs and revenues of real estate investments, depreciation and tax considerations. (Meets the State requirements as one of two additional courses to move from the initial or temporary salesperson's license to a regular renewable salesperson's license. Also accepted for credit for the broker's license.) (AA, CSU)

IIO REAL ESTATE PRACTICE (3) Minimum of 48 lecture hours per term. Comprehensive presentation of real estate brokerage skills in California, emphasizing the daily activities of agents and brokers. (Meets the State requirements as one of two additional courses to move from the initial or temporary salesperson's license to a regular renewable salesperson's license. Accepted for credit for the broker's license.) (AA, CSU)

I2I LEGAL ASPECTS OF REAL ESTATE I (3) Minimum of 48 lecture hours per term. Legal aspects of real estate brokerage, real estate sales, property management, real estate ownership, building of an estate, and related topics, along with a study of the facts and principles of California Real EstateLaw. (Meets the State requirements as one of twoadditional courses to move from the initial or temporary salesperson's license to a regular renewable salesperson's license. Accepted for credit for the broker's license.) (May be taken twice for a maximum of 6 units.) (AA, CSU)

I3I REAL ESTATE FINANCE I (3) Minimum of 48 lecture hours per term. Practices, customs, and laws relating to mortgagelending and the financing of real estate, with emphasis on financing private houses. (Meets the State requirements as one of two additional courses to move from the initial or temporary salesperson's license to a regular renewable salesperson's license. Accepted for credit for the broker's license.) (May be taken twice for a maximum of 6 units.) (AA, CSU)

I4I REAL ESTATE APPRAISAL: BASIC (3) Minimum of 48 lecture hours per term. Basic real estate appraisal, including the analysis of residential and commercial properties. Techniques for determination of loan, market, and insurance values. (Meets the State requirements as one of two additional courses to move from the initial or temporary salesperson's license to a regular renewable salesperson's license. Accepted for credit for the broker's license.) (AA, CSU)

200 REAL ESTATE ECONOMICS (3) Minimum of 48 lecture hours per term. Economic aspects of real estate designed to provide a grasp of the dynamic economic conditions and related factors underlying the
real estate business. (Meets the State requirements for the salesperson's and broker's licenses.) (May be taken twice for a maximum of 6 units.) (AA, CSU)

215 COMMERCIAL AND INVESTMENT PROPERTY (3) Minimum of 48 lecture hours per term. For licensed real estate agents and brokers, financing officials, and investors. Emphasizes the process of selecting properties for investment, including analyzing income, operating expenses, and income tax implications. (Meets the State requirements for the salesperson's and broker's licenses.) (May be taken twice for a maximum of 6 units.) (AA, CSU)

220 REALESTATE PROPERTY MANAGEMENT (3) Minimum of 48 lecture hours per term. Basic elements of investment property management. Covers cash flow projection and valuation, merchandising, maintenance, and evictions. Emphasizes apartment property. (Meets the State requirements as one of two additional courses to move from the initial or temporary salesperson's license to a regular renewable salesperson's license. Accepted for credit for the broker's license.) (May be taken twice for a maximum of 6 units.) (AA, CSU)

301 ESCROW PROCEDURES: BASIC (3) Minimum of 48 lecture hours per term. Methods and techniques of escrow procedure for various types of business transactions with emphasis on real estate. (Meets the State requirements for the salesperson's and broker's licenses.) (AA)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)
690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

8oi REAL ESTATE LICENSE EXAM PREPARATION (I.5) Minimum of 24 lecture hours. Preparation for the California Real Estate License Exam. Includes the following topics: agency, ethics, contract, ownership, encumbrances, taxation, escrow, and land descriptions. (Units do not apply toward AA/AS degree.) (May be taken twice for a maximum of 3 units.)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Social Science

III CRITICAL THINKING AND WRITING (3) Minimum of 48 lecture hours per term. Prerequisite: ENGL Ioo. Recommended Preparation: completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Designed to develop critical thinking and critical writing skills. Presents techniques for analyzing arguments used in political rhetoric, advertising, editorials, scientific claims, and social commentary. Develops the ability to create and refine written arguments, with particular emphasis on advanced composition techniques. Includes inductive and deductive arguments, the validity and consistency of arguments, the relationship between evidence and conclusions, the use of arguments in science, persuasive writing strategies, the concerns of style and audience, and impediments to good writing. (AA: Area E2b, CSU: Area A3, UC: Area IB)

220 BRITISH LIFE AND CULTURE (3) (Pass/No Pass or letter grade option.) Minimum of 24 lecture hours and 80 lab hours per term. Recom-
mended Preparation: completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to British societyand civilization through lectures and field trips offered by the London Semester program of the SMCCCD. Takes a social, historical, and cultural approach to the study of contemporary British society. Required for enrollees in the London Semester. (AA: Area E5b, CSU)

22I FRENCH LIFE AND CULTURE (3) (Pass/No Pass or letter grade option.) Minimum of 24 lecture hours and 80 lab hours per term. Recommended Preparation: completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to French society and civilization by various lecturers in the Paris Semester program of the SMCCCD. Combines lectures with visits to and briefings atseveral cultural and political centers. Required for enrollees in the Paris Semester. (AA: Area E5b, CSU)

30I INTRODUCTION TO ALCOHOL AND OTHER DRUG STUDIES (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 or 415 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. An introductory course for students who are interested in any area of human services and who wish to increase their knowledge of substance abuse (alcohol and other drugs) in society. Covers the history of alcohol and other drug abuse, its impact on the community and the community's responses. Includes cultural factors of use and abuse of chemical prevention strategies and individual/society intervention. Also covers theories of substance abuse and identification of signs and symptomatology, as well as treatment resources and myths of use. (AA: Area E5d, CSU)

302 PHARMACOLOGY AND PHYSIOLOGICAL EFFECTS OF ALCOHOL AND OTHER DRUG ABUSE (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 or 415 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 4 I5 OR appropriate skill level as indicated by the reading placementtests or other measures. A theory course focusing on the effects of alcohol and other drugs upon the body and studying the physiology of alcohol and other drugs in two areas: physical effects of alcohol and other drugs on the body and the physiological effects of the disease of alcoholism and of drug abuse. (AA, CSU)

304 INTERVENTION, TREATMENT AND RECOVERY (3) Minimum of 48 lecture hours perterm. Recommended Preparation: eligibilityfor ENGL 838 or ENGL 848 and completion of or concurrentenrollment in READ 400, 405, or 415 with a grade of $C$ or higher OR skill level as indicated by the reading placement tests or other measures. Introduction to the recovery process in chemical dependency; covers intervention strategies, dependency in its clinical and social contexts, and philosophical, organizational and clinical approaches in treatment. (AA, CSU)
307 FAMILY SYSTEMS IN ADDICTION (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 or 415 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Designed to assist the significant persons (family, employer, etc.) in the lives of chemically dependent persons. The AOD (alcohol and other drug) counselor will develop strategies to address the dynamics of the interrelationships of the family members. (AA, CSU)

308 GROUP AOD (Alcohol and Other Drug) COUNSELING PROCESS (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion ofor concurrent enrollment in READ 400, 405, or 415 with a grade of C or higher OR skill level as indicated by the reading placement tests or other measures. Explores individual AOD (alcoholand otherdrug) counseling techniques, intervention skills, and relapse prevention strategies. Theories of group counseling process and group interactions will be practiced. (AA, CSU)

310 SPECIAL POPULATION GROUPS IN ALCOHOL AND OTHER DRUG STUDIES (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 or ENGL 838 and completion of or concurrent enrollment in READ 400, 405, or 415 with a grade of C or higher OR skill level as indicated by the reading placement tests or other measures. Survey of special populationgroups in alcohol and other drug studies (AOD) and their characteristics, particular intervention needs, and individual responses to treatment. Particular attention given to ethnic/racial, gender, age, economic, sexual orientation, and disabled issues. (AA, Area E5b, CSU)
$3 I 4$ INDIVIDUAL AOD (Alcohol and Other Drug) COUNSELING PROCESS (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 or ENGL 838 and completion of or concurrent enrollment in READ 400, 405, or 415 with a grade of C or higher OR skill level as indicated by the reading placement tests or other measures. Explores beginning counseling techniques as well as interviewing and referral skills. Also, includes intervention skills and relapse prevention strategies. Using the experiential format, participants study and practice skills in attentive listening and recognizing and responding to different levels of client communication. (AA, CSU)

315 FIELD STUDIES AND SEMINAR I (3) Minimum of 48 lecture hours plus completion of at least 150 hours of documented work in an agency or organization in the alcohol/drug abuse field (255 hours if CAADAC certification is sought) per term. Prerequisite: SOSC 3OI and 302. Recommended Preparation: eligibility for ENG 848 or ENGL 838 and completion of or concurrent enrollment in READ 400, 405, or 415 with a grade of C or higher OR skill level as indicated by the reading placement tests or other measures. Supervised practicium/internship. The first semester of a two-semestersequenceplacing students inalcohol/drugabuseagencies or ogranizations. Participants must already be knowledgeable about chemical dependency. (AA, CSU)

316 FIELD STUDIES AND SEMINAR II (3) Minimum of 48 lecture hours plus completion of at least 150 hours of documented work in an agency or organization in the alcohol and drug abuse field ( 255 hours if CAADAC certification is sought) per term. Prerequisite: SOSC 315. Recommended Preparation: eligibility for ENGL 838 or ENGL 848 and completion of or concurrent enrollment in READ 400, 405, or 415 with a grade of C or higher OR skill level as indicated by the reading placement tests or other measures. Supervised practicum/internship. The second semester of a two-semester sequence placing students in alcohol/drug abuse agencies/organizations. Participants must already be knowledgeable about chemical dependency. (AA, CSU)

318 DOMESTIC VIOLENCE AND AOD ISSUES (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 4I5 OR appropriate skill level as indicated by the reading placement tests or other measures. Overview of domestic violence and its impact on the family and on the social and criminal justice systems involved with violent families. Examines the history and the law regarding domestic violence and the psychological,
sociological, and cultural aspects of domestic violence. Examines the relationship of chemical dependency and family violence, assessment/ interventions, and current resources in the community. (AA, CSU)

319 CO-OCCURING SUBSTANCE ABUSE AND MENTAL DISORDERS (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400, 405 or 415 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Covers the relationship between alcohol and other drug dependency/addiction and psychological/mental disorders. Focuses on identification and assessment of individuals diagnosed with multiple/dual disorders, current treatment approaches, medication, referral procedures, and interface with the professional mental health community. (AA, CSU)

32 I ADOLESCENT ALCOHOL AND OTHER DRUG PREVENTION, TREATMENT AND RECOVERY (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for English 848.This course is designed to explore current adolescent AOD prevention strategies, AOD substance use and abuse problems, and AOD treatment and recovery strategies. The emphasis will be place on adolescent biological, psychological, emotional and social growth issues as related to the abuse of drugs, and other addictions. (AA, CSU)

382 BRITISH LIFE AND CULTURE (I-3) (Pass/No Pass orletter grade option.) Minimum of 8 to 24 lecture and 26 to 80 lab hours per term. This course is required forallstudents participating in the Study Abroad Program. Each version of this course provides an introduction to the culture, society, and civilization of the country in which the Study Abroad Program is hosted. Lectures and field trips provide a social, historical, and cultural approach to the study of contemporary society. (May be taken three times for a maximum of 9 units.) (AA: Area E5b, CSU)

383 ITALIANLIFE AND CULTURE (I-3) (Pass/No Pass orletter grade option.) Minimum 8 to 24 lecture and 26 to 80 lab hours per term. This course is required forallstudents participating in the Study Abroad Program. Each version of this course provides an introduction to the culture, society, and civilization of the country in which the Study Abroad Program is hosted. Lectures and field trips provide a social, historical, and cultural approach to the study of contemporary society. (May be taken three times for a maximum of 9 units.) (AA: Area E5b, CSU)

384 FRENCH LIFE AND CULTURE (I-3) (Pass/No Pass or letter grade option.) Minimum of 8 to 24 lecture hours and 26 to 80 lab hours per term. This course is required for all students participating in the Study Abroad Program. Each version of this course provides an introduction to the culture, society, and civilization of the country in which the Study Abroad Program is hosted. Lectures and field trips provide a social, historical, and cultural approach to the study of contemporary society. (May be taken three times for a maximum of 9 units.) (AA: Area E5b, CSU)

385 SPANISH LIFE AND CULTURE (I-3) (Pass/No Pass or letter grade option.) Minimum of 8 to 24 lecture hours and 26 to 80 lab hours per term. This course is required for all students participating in the Study Abroad Program. Each version of this course provides an introduction to the culture, society, and civilization of the country in which the Study Abroad Program is hosted. Lectures and field trips provide a social, historical, and cultural approach to the study of contemporary society. (May be taken three times for a maximum of 9 units.) (AA: Area E5b, CSU)

386 SOUTH AFRICAN LIFE AND CULTURE (I-3) (Pass/No Pass or letter grade option.) Minimum of 8 to 24 lecture hours and 26 to 80 lab hours per term. This course is required for all students participating in the Study

Abroad Program. Each version of this course provides an introduction to the culture, society, and civilization of the country in which the Study Abroad Program is hosted. Lectures and field trips provide a social, historical, and cultural approach to the study of contemporary society. (May be taken three times for a maximum of 9 units.) (AA: Area E5b, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS ( $\mathbf{( 1 - 3 )}$ ) (See first page of Description of Courses section.) (AA, CSU)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880 - $\mathbf{8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Sociology

IOo INTRODUCTION TO SOCIOLOGY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848; and completion of READ 400, 405, or 415 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Group behavior and interaction of the individual and society; personality development in different cultures as shaped by customs, attitudes and values. Study of family, politico-economic, educational, and religious institutions; social movements; population; mass society and communications; community structure; social class and status; ethnic and racial minorities; work and leisure. (AA: Area E5b, CSU: Area D, UC: Area 4)

105 SOCIAL PROBLEMS (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400, 405 or 415 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. This course in contemporary social issues uses the methodology and paradigms of sociology to examine the nature and types of social problems. Topics included are the nature and definition of social problems, theory and research in social problems, race, social inequality, gender population growth, urbanization deviance, world economy, and family, etc. Course contains theoretical and descriptive studies, of crime delinquency, mental illness, drug abuse, suicide, and other social problems of mass society. (AA: Area E5b, CSU: Area D, UC: Area 4)

IIo COURTSHIP, MARRIAGE AND THE FAMILY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 or 415 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skilllevel as indicated by the reading placement tests or other measures. History and development of marriage as a social institution, including dating; courtship; love; mate selection; personality adjustment in marriage; children; parenthood; the family; anatomical, psychological, and sociological aspects of sex; class and religious factors; divorce; and remarriage. (May not be taken for credit following PSYC ino.) (AA: Area E5b, CSU: Area D/Area E, UC: Area 4)

I4I RACE AND ETHNIC RELATIONS (3) Minimum of 48 lecture hours perterm. Recommended Preparation: eligibilityfor ENGL848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by
the reading placement tests or other measures. Sociological analysis of ethnic relations in the United States, concentrating on the roles, status, and efficacy of major ethnic groups. Brief socio-historical sketch of their backgrounds, ethnic group contacts, competition, conflict, acculturation, assimilation, and discrimination. (AA: Area E5b, CSU: Area D, UC: Area $4^{*}$ )
200 URBAN SOCIOLOGY (3) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of cities, suburbs and neighborhoods. California state constitutional provisions for city, county and state governments. Effects of federal policies and interest group pressures. Population, city history, immigration, race relations, education, social class, ecology, urban sprawl and planning. (Satisfies the California State and Local Government requirement.) (AA:Area Eıb/ Area E5b, CSU: Area D/Area F3, UC: Area 4/Area 7C)

340 HUMAN SEXUALITY (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. A look at human sexuality from a psychological, physiological, and cultural point of view. Survey of sexual research; emphasizes the need for affiliation, commitment, and intimacy. (AA: Area E5b, CSU: Area D/Area E, UC: Area 4)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)
879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880-889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Spanish

Language Laboratory and Listening Requirement: since imitation, response, and independent practice are integral features of the study of a foreign language at the College, students enrolled in certain courses in foreign language are required to use the language laboratory as prescribed by each department.
Note: To be transferable to UC, Spanish courses must be taken for letter grade.

IIo ELEMENTARY SPANISH (5) (Pass/No Pass or letter grade option.) Minimum of 80 lecture hours plus 32 lab hours by arrangement per term. Recommended Preparation: eligibility for ENGL 838 or a higher English course. Study of elementary spanish structures and active vocabulary based on oral and written pattern drills. Conversation based on short readings containing only the structures already practiced. (AA: Area E5c, CSU: Area C2, UC)
III ELEMENTARY SPANISH I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Recommended Preparation: eligibility for ENGL 838 or a higher English course. Study of elementary Spanish structures and active vocabulary
based on oral and written pattern drills. Conversation based on short readings containing only the structures already practiced. This course covers approximately the first half of the material covered in SPAN iIO. (AA: Area E5c, CSU: Area C2, UC*)

112 ELEMENTARY SPANISH II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: SPAN III or equivalent with Pass or a grade of $C$ or higher. Continued study of elementary Spanish structures and active vocabulary based on oral and written pattern drills. Conversation based on short readings containing only the structures already practiced. SPAN II2 is the second half of SPAN iir. (AA: Area E5c, CSU: Area C2, UC*)

115 BEGINNING SPANISH I (3) (Telecourse) (Pass/No Pass or letter grade option.) Entry-level course that introduces basic Spanish vocabulary and language structures and enhances appreciation of worldwide Hispanic culture. Workbook and audio tape exercises focus on reading, writing, and aural comprehension. This course parallels Spanish in but without the oral component. (AA: Area E5c, CSU)

116 BEGINNING SPANISH II (3) (Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: SPAN II5. Second half of an entry-level course that introduces basic Spanish vocabulary and language structures and enhances appreciation of worldwide Hispanic culture. Workbook and audio tape exercises focus on reading, writing, and aural comprehension. This course parallels Spanish iI2 but without the oral component. (AA: Area E5c, CSU)
117 ADVANCED BEGINNING SPANISH I (3) (Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: SPAN II6 or equivalent. First half of a second-semester course that continues to introduce basic Spanish vocabulary and language structures and enhances appreciation of worldwide Hispanic culture. Workbook and audio tape exercises focus on reading, writing, and aural comprehension. This course parallels Spanish I2I but without the oral component. (AA: Area E5c, CSU)
118 ADVANCED BEGINNING SPANISH II (3) (Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: SPAN II7 or equivalent. Second half of a second-semester course that completes the introduction of Spanish vocabulary and language structures traditionally taught in a firstyear course, including a comprehensive overview and appreciation of worldwide Hispanic culture. Workbook and audio tape exercises focus on reading, writing, and aural comprehension. This course parallels Spanish 122 but without the oral component. (AA: Area E5c, CSU)

120 ADVANCED ELEMENTARY SPANISH (5) (Pass/No Pass or letter grade option.) Minimum of 80 lecture hours plus 32 lab hours by arrangement per term. Prerequisite: SPAN IIO or II2 or equivalent with Pass or a grade of C or higher. Continuation of Spanish ino. Includes short readings that serve as a basis for classroom conversation. (AA: Area E5c, CSU: Area C2, UC: Area 6)

I2I ADVANCED ELEMENTARY SPANISH I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: SPAN IIO or 112 or equivalent with Pass or a grade of C or higher. Includes short readings that serve as a basis for classroom conversation. Covers approximately the first half of the semester's work in Spanish I20. (AA: Area E5c, CSU: Area C2, UC)

122 ADVANCED ELEMENTARY SPANISH II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: SPAN I2I or equivalent with Pass or a grade of C or higher. Includes short readings that serve as a basis for classroom conversation. Covers approximately the second half of the semester's
work in Spanish I2O. (Spanish I2I and I22 are equivalent to Spanish 120.) (AA: Area E5c, CSU: Area C2, UC: Area 6*)

I30 INTERMEDIATE SPANISH (5) (Pass/No Pass or letter grade option.) Minimum of 80 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: SPAN I2O or I22 or equivalent with Pass or a grade of C or higher. Practice of conversation and composition; review of grammar; in-class and collateral reading of Spanish and Spanish-American literature. Equivalent to Spanish I3I and I32. (AA: Area E5C, CSU: Area C2, CSU: Area 3B/Area 6)
I3I INTERMEDIATE SPANISH I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: SPAN I2O or I22 or equivalent with Pass or a grade of $C$ or higher. Practice of conversation and composition; review of grammar; in-class and collateral readings of Spanish and Spanish-American literature. Covers approximately the first half of the semester's work in Spanish I30. (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area 6*)
132 INTERMEDIATE SPANISHII (3) (Pass/No Pass orlettergradeoption.) Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Prerequisite: SPAN I3I or equivalent with Pass or a grade of $C$ or higher. Practice of conversation and composition; review of grammar; in-class and collateral readings of Spanish and Spanish-American literature. Covers approximately the second half of the semester's work in Spanish I3O. (Spanish I3I and I32 are equivalent to Spanish I30.) (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area $6^{*}$ )
I40 ADVANCED INTERMEDIATE SPANISH (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Prerequisite: SPAN I3O or I32 or equivalent with Pass or a grade of C or higher. Further practice in conversation and composition based on in-class reading of modern Spanish and Latin American authors; review of grammar; collateral reading of Spanish and Spanish-American literature. (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area 6)

16I READING IN SPANISH LITERATURE I (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Prerequisite: SPAN I4O or equivalent with Pass or a grade of C or higher. Oral and written composition; in-class reading and discussion of Spanish, SpanishAmerican, and Hispanic literature; extensive collateral reading of Spanish and Spanish-American literature; and review of grammar. (AA: Area E5c, CSU: Area C2, CSU: Area 3B)

162 READING IN SPANISH LITERATURE II (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Prerequisite: SPAN 16I or equivalent with Pass or a grade of $C$ or higher. Further oral and written composition; in-class reading ofSpanishand Spanish American literature; extensive collateral reading ofSpanish andSpanish-American literature, and review of grammar. (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area 6)
25 I HISPANOAMERICA CONTEMPORANEA (3) (Pass/No Pass or letter grade option.) Minimum of 48 lecture hours per term. Prerequisites: SPAN 140 with Pass or a grade of $C$ or higher or equivalent. An overview and study of contemporary Spanish American issues, concerns, problems and culture through the collateral study of Spanish American Literature, e.g. essay, short story, poetry, drama, novel and periodicals. Conducted in Spanish. Note: For transfer, course must be taken for a letter grade. (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area 6)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS ( $\mathbf{I}-\mathbf{3}$ ) (See first page of Description of Courses section.) (AA, CSU)
8oi CONVERSATIONAL SPANISH I, ELEMENTARY (2) (Pass/No Pass grading.) Minimum of 48 lecture hours perterm. Intensive drill in the patterns and idioms of daily speech, supported by sufficient grammar to give flexibility in the spoken language. May be considered an excellent preparatory course for students who have not taken a foreign language before. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)

802 CONVERSATIONAL SPANISH II, ADVANCED ELEMENTARY (2) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Prerequisite: SPAN 8OI or equivalent with Pass. Further work in conversation following the model of Spanish 8oI. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)
803 CONVERSATIONAL SPANISH III, INTERMEDIATE (2) (Pass/ No Pass grading.) Minimum of 48 lecture hours per term. Prerequisite: SPAN 802 or equivalent with Pass. More advanced work in conversation following the model of Spanish 802. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)
804 CONVERSATIONAL SPANISH IV, ADVANCED INTERMEDIATE (2) (Pass/No Pass grading.) Minimum of 48 lecture hours per term. Prerequisite: SPAN 803 or equivalent with Pass. Further advanced work in conversation following the model of Spanish 803. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)

879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
880-889 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Speech Communication

The Speech Communication program includes courses in public speaking, small group communication, interpersonal communication, intercultural communication, organizational communication, and oral interpretation of literature. The English requirement may be partially satisfied by 3 units of Speech ioo or Speech I20.

IOo PUBLIC SPEAKING (3) Minimum of 48 lecture hours plus if lab hours by arrangement perterm. Recommended Preparation: eligibility for ENGL Ioo. Practice in delivering extemporaneous speeches; study of basic principles of effective communication; techniques of organizing and outlining; structure and content of basic speech types; development of critical listening; analysis and evaluation of speeches. (AA: Area E2/ Area E5d, CSU: Area Ai, UC: Area IC)

III ORAL INTERPRETATION I (3) Minimum of 48 lecture hours plus I6 labhours byarrangement per term. Recommended Preparation: eligibility for ENGL IOO. Oral reading of different forms of literature (poetry, short story, drama); analysis of meaning; analysis of voice quality; enunciation, pronunciation and expressiveness; recordings and performances for audiences. (AA: Area E2/Area E5c, CSU: Area C2, UC)

II2 ORAL INTERPRETATION II (3) Minimum of 48 lecture hours plus I6 lab hours by arrangement per term. Prerequisite: SPCH III with a grade of $C$ or higher. Continuation of oral reading of different forms of
literature (poetry, short story, drama); analysis of meaning; analysis of voice quality; enunciation, pronunciation, and expressiveness; recordings and performances for audiences. (AA: Area E2/Area E5c, CSU: Area C2, UC)

I2O INTERPERSONAL COMMUNICATION (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Recommended Preparation: eligibility for ENGL IOO. Interpersonal communication, rational dialogue, and cooperative analysis of communicative events. Study of communicative interactions, the symbolic process, reasoning and advocacy, and the effects of communication on people and society. (AA: Area E2/Area E5d, CSU: Area AI/Area D, UC: Area IC)
I40 SMALL GROUP COMMUNICATION (3) Minimum of 48lecture hours plus i6 hours byarrangementperterm. Recommended Preparation: eligibility for ENGL IOO. Understanding of the principles of group interaction and decision making, including study of leadership, types of authority, teamwork, and conflict resolution. Participation in discussion groups to share information, solve problems, and reach consensus. (AA: Area E2/Area E5d, CSU: Area Ai, UC: Area IC)
I5O INTERCULTURAL COMMUNICATION (3) Minimum of 48 lecture hours plus 16 hours by arrangement per term. Recommended Preparation: eligibility for ENGL IOO. Designed for students of all cultural backgrounds. Study of the relationship of communication to culture, cultural components of life within and outside the U.S., verbal and nonverbal differences, the effect of prejudice on society. Emphasizes the sensitivity and empathy required for intercultural competence. (AA: Area E2/Area E5d, CSU: Area AI, UC: Area IC)

I80 FAMILY COMMUNICATION (3) (Telecourse) Recommended Preparation: SPCH I2O and eligibility for ENGL Ioo. Through the televised segments, this course explores family interaction patterns through discussion, exercises, videoguests, and in-studioguests. Examines the ways in which family members communicate, make decisions, settle conflict, and learn to relate to one another. (AA: Area E2, CSU)

680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

855 SPEECH FOR NON-NATIVE SPEAKERS (3) (Pass/No Pass or letter grade option.)Minimum of 48 lecture hours plus 16 lab hours by arrangement per term. Recommended Preparation: ESL 847 with Pass or a grade of $C$ or higher (or appropriate skill level indicated by placement tests and other measures). It is recommended that students enroll concurrently in ESL 828 or higher course and READ 825 or higher course. Practice in using pitch, rate, volume, and vocal quality to convey accurate meaning and emotion; practice in discussion, interviews, and extemporaneous public speaking; listening skills appropriate for discussions, interviews, and public speaking. (AA: Area E2b)
860 COMMUNICATION IN THE WORKPLACE (I) (Pass/No Pass grading.) Minimum of 16 lecture hours per term. Covers development of successful job interviewing skills and assertiveness skills; methods for reducing workplace stress; and strategies to help clients feel at ease in uncomfortable situations. (AA)

86I SPEECH COMMUNICATION (I) (Pass/No Pass grading.) Minimum of 16 lecture hours plus 4 hours by arrangement per term. Examination of important concepts of communication for increasing communication competence in the healthcare setting. Includes assertiveness
skills, presentational skills, conflict management, and collaborative information gathering methods. (AA)
879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

880 - $\mathbf{8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## Welding Technology

(Also see Machine Tool Technology and Manufacturing and Industrial Technology)
Extra supplies may be required in all Welding Technology courses.
IIo ELEMENTARY WELDING THEORY I (4) Minimum of 64 lecture hours per term. Corequisite: concurrent enrollment in WELD III. Recommended Preparation: keyboarding or word processing. Introduction to gas welding of ferrous and non-ferrous metals, brazing and soldering. Instruction on the theory of flamecutting; introduction to metallurgy and blueprint reading for welding. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA, CSU)
III ELEMENTARY WELDING PRACTICE I (3) Minimum of I44 lab hours plus i6 lab hours by arrangement per term. Corequisite: concurrent enrollment in WELD IIO. Practical experience in gas and conventional arc welding of ferrous metals, brazing, and soldering. (AA, CSU)

120 ELEMENTARY WELDING THEORY II (4) Minimum of 64 lecture hours per term. Prerequisites: WELD IIO/III. Corequisite: concurrent enrollment in WELD I2I. Introduction to conventional arc welding of steel and TIG (GTAW) welding of aluminum. Study of metallurgy and blueprint reading for welders. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA, CSU)

12I ELEMENTARY WELDING PRACTICE II (3) Minimum of I44 lab hours plus 16 lab hours by arrangement per term. Corequisite: concurrent enrollment in WELD I2O. Advanced experience in conventional arc welding of steel in flat, vertical, and overhead positions. Introduction to manual TIG (GTAW) welding of aluminum. Inspection of welded assemblies. (AA, CSU)

210 ADVANCED WELDING THEORY I (4) Minimum of 64 lecture hours perterm. Prerequisites: WELD I2O/I2I. Recommended Preparation: DRAF I20; MTT 200; MANU IOO or PHYS Ioo. Corequisite: concurrent enrollment in WELD 2II. TIG (GTAW) and MIG (GMAW) welding of carbon steel, alloy steel, and stainless steel. Advanced problems in all phases of welding. Study in the theory of metallurgy and heat treating as applied to welding technology. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA, CSU)
2 II ADVANCED WELDING PRACTICE I (5) Minimum of 240 lab hours plus i6 lab hours by arrangement per term. Corequisite: concurrent enrollment in WELD 2IO. Practical experience in TIG (GTAW), MIG (GMAW), and low-hydrogen arc welding with emphasis on steel, stainless steel, and aluminum. (AA, CSU)

220 ADVANCED WELDING THEORY II (4) Minimum of 64 lecture hours per term. Prerequisite: WELD 2IO/2II. Corequisite: concurrentenrollment in WELD 22I. Theory of MIG (GMAW), pulsed MIG (GMAW), and TIG (GTAW welding, electron-beam welding, sub-arc welding, electro-slag/ gas welding, and pipe welding. Study of the A.W.S. Structural Code DI.I and A.S.M.E. Boiler Code and Pressure Vessel Code Section IX. Study
of the fundamentals of robotics, hazardous materials in welding, and welding symbols as they apply to blueprints, welding inspection, laser welding and inverter technology. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA, CSU)

221 ADVANCED WELDING PRACTICE II (5) Minimum of 240 lab hours plus i6 lab hours by arrangement per term. Corequisite: concurrent enrollment in WELD 220. Practical experience in the welding of exotic metals, flame spraying, and pulsed TIG (GTAW), pipe, and MIG (GMAW) welding. Practical experience in job estimation, production welding techniques, and maintenance welding techniques. Instruction in manipulative skills required in metal fabrication processes: hand and power shearing, punching, forming, mechanical fastening, and sheet metal layout. (AA, CSU)

250 FUNDAMENTALS OFNON-DESTRUCTIVETESTING (2) Minimum of 32 lecture hours per term. Introduction to nondestructive testing: types, methods, materials, costs, limitations, and personal requirements. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA, CSU)
300 WELDING FOR TECHNOLOGY (2) Minimum of 16 lecture hours and 48 lab hours plus 16 lab hours by arrangement per term. Introduction to welding for the non-welding major. Covers theory and practice of oxyacetylene welding, bronze brazing, silver soldering, and conventional shielded metal arc, low-hydrogen shielded metal arc, and resistance welding. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU)

350 BEGINNING WELDING AND METAL FABRICATION (3) Minimum of 32 lecture and 64 labhoursplusi6 hours by arrangement per term. Designed to inform students about metal joining processes, materials, and equipment. Demonstrations and hands-on lab covers sheetmetal fabrication; arc welding processes (Stick, Mig, and Tig) and oxy-acetelyne welding, brazing and cutting. Students are encouraged to design and fabricate a final project that encompasses skills learned during the semester. Materials for final project supplied by the student. A materials fee as shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 6 units.) (AA: Area E5d, CSU)
680-689 SELECTED TOPICS (I-3) (See first page of Description of Courses section.) (AA, CSU)

690 SPECIAL PROJECTS (I-3) (See first page of Description of Courses section.) (AA, CSU)

700 TIG WELDING TECHNOLOGY (4) Minimum of 32 lecture and 96 lab hours plus i6 lab hours by arrangement per term. Practical experience in corner, fillet, and butt welding of aluminum, steel, and stainless steel. Study of TIG (GTAW) welding of aluminum, steel, and stainless steel; basic metallurgy; and welding symbols as they apply to blueprints. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA)
879 SELECTED TOPICS (I-3) (See first page of Description of Courses section.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ SELECTED TOPICS (I-3) (See first page of Description of Courses section.)

## ARTICULATION ATTRIBUTE LEGEND

Identifies how each course meets associate degree general education requirements, California State University General Education certification, IGETC certification. For the most current information on how CSM coursework is applied to the CSU and UC systems (CSU General Education, IGETC, American History and Institutions), go to www.assist.org.

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    AA - Associate Degree applicable
    CSU - transferable to the California State University system
    UC - transferable to the University of California system
Course notations indicate how course is applied to CSM AA/AS degree general education requirements
    AA Area C1 - Math/Quantitative Reasoning competency
    AA Area C2 - English/Reading competency
    AA Area E1 - American History and Institutions, CA State and Local Government
    AA Area E1a - American History and Institutions (US History and US Constitution)
    AA Area E1b - CA State and Local Government
    AA Area E2a - English, Literature, Speech Communication
    AA Area E2b - Communication and Analytical Thinking
    AA Area E3 - Health Science
    AA Area E4 - Physical Education
    AA Area E5a - Natural Science
    AA Area E5b - Social Science
    AA Area E5c - Humanities
    AA Area E5d - Career Exploration and Self-Development
Course notations indicate how course is applied to the Intersegmental General Education Transfer Curriculum (IGETC)
    UC Area 1A - English Composition
    UC Area 1B - Critical Thinking
    UC Area 1C - Oral Communication
    UC Area 2-Mathematical Concepts and Quantitative Reasoning
    UC Area 3A - Arts
    UC Area 3B - Humanities
    UC Area 4-Social and Behavioral Sciences
    UC Area 5A - Physical Science
    UC Area 5B - Biological Science
    UC Area 6- Language Other than English (LOTE)
    UC Area 7A - U.S. History and American Ideals
    UC Area 7B - U.S. Constitution
    UC Area 7C - CA State and Local Government
Course notations indicate how course is applied to the California State University General Education/Breadth (CSU)
    CSU Area A1 - Oral Communication
    CSU Area A2 - Written Communication
    CSU Area A3 - Critical Thinking
    CSU Area B1 - Physical Science
    CSU Area B2 - Life Science
    CSU Area B3 - Lab Course
    CSU Area B4 - Math Concepts, Quantitative Reasoning and Application
    CSU Area C1 - Arts
    CSU Area C2 - Humanities
    CSU Area D - Social, Political and Economic Institutions
    CSU Area E - Lifelong Understanding and Self Development
    CSU Area F1 - U.S. History and American Ideals (can be used to satisfy CSU GE Area D)
    CSU Area F2 - U.S. Constitution (can be used to satisfy CSU GE Area D)
    CSU Area F3 - CA State and Local Government (can be used to satisfy CSU GE Area D)
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The course descriptions marked with a (*) are transferable with limitations. See a counselor for information about course applicability to educational goals. Additional articulation and university transfer information is located on the College of San Mateo website and Project Assist www.assist.org.

## Faculty

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Professor, Speech Communication
B.A., University of Hawaii
M.A., Ph.D., University of Washington

Murphy, Madeleine (1997)
Professor, English
B.A., King's College, Cambridge
M. Litt., Edinburgh University

Nakata, Rory (1990)
Professor, Art
B.A., San Francisco State University
M.A., Sacramento State University

Nishanian, Harutiun (2006)
Associate Professor, Mathematics
B.A., University of California, Berkeley
M.S., Los Angeles State University

Nurre, Rosemary A. (1993)
Professor, Business
B.S., California State University, Chico
M.B.A., University of Santa Clara

O'Brien, Eileen (2000)
Counselor, Professor, Career \& Life Planning
A.A., Foothill College
B.A., University of California, Santa Barbara
M.S., San Francisco State University

O'Connell, Kathryn M. (1985)
Professor, Political Science
B.A., University of Minnesota
M.A., San Francisco State University

Owens, Larry (1990)
Professor, Physical Education
B.S., California State University, Fullerton
M.A., St. Mary's College

Paoli, Patricia J. (1979)
Professor, Speech Communication
A.B., University of California, Berkeley
M.A., California State University, Hayward

Paolini, Nancy M. (1988)
Professor, Reading; English as a
Second Language
B.A., California State University, Sacramento
M.S.Ed., University of Southern California

Petromilli, James (1973)
Director, Center for Teaching and Learning
A.A., College of San Mateo
B.A., M.A., San Francisco State University

Phipps, Linda M. (1985)
Professor, Mathematics
B.A., Barnard College
M.A., Columbia University

Piper, Louise (1990)
Child Development Services Coordinator
B.A., University of Michigan
M.A., San Francisco State University

Pittman, Judith (200I)
Professor, Art
B.A., University of Massachusetts
M.A., San Francisco State University

Pollack, Bret (2000)
Assistant Football Coach
B.S., University of California, Berkeley
M.A., St. Mary's College

Ramezane, Marsha (2004)
Dean, Counseling/Advising and
Matriculation
A.A., Canada College
B.S., University of Utah
M.A., JFK University

Remitz, Edward F. (1989)
Professor, Journalism
B.A., San Francisco State University

Reynolds, Roberta M. (1985)
Professor, English
A.A., College of San Mateo
B.A., College of Notre Dame
M.A., D.A., Ph.D., University of Oregon

Ridgway, Kristiane M. (2005)
Associate Professor, English as
a Second Language
B.A., Drake University
M.S., University of Southern California

Robertson, James (2005)
Associate Professor, History
B.A., Yale University
M.A., Stanford University

Robinson, David G. (1985)
Professor, Mathematics; Meteorology
B.S., M.S., San Jose State University

Ross, Kathleen (2008)
Dean, Business, Technology
B.A., California State University, Long Beach
M.B.A., Pepperdine University

Russell, Suzanne (1998)
Professor, Cosmetology
A.A., College of San Mateo

Ryan, Janis (1994)
Professor, Nursing
A.A., Skyline College
B.S., M.S., University of San Francisco

Sanchez, Samuel (2000)
Associate Professor, Multimedia

Schmidt, Mikel (2000)
Professor, Adapted P.E./P.E.; Health Science B.A., University of California, Davis
M.A., San Francisco State University

Schulze, Frances (1990)
Professor, English as a Second Language
B.A., M.A., San Francisco State University

Scott-Taylor, Danita L. (2002)
Director, Student Support
B.A., University of Cincinnati
M.A., College of Notre Dame

Seubert, Edwin A. (1980)
Professor, Graphics
A.A., College of San Mateo

Sewart, John J. (1991)
Dean, Articulation and Research
B.A., University of California, Berkeley
M.A., Ph.D., University of California, Davis

Sinarle, Kevin (2006)
Counselor, Professor, Career \& Life Planning
B.A., Fresno State University
M.S., San Francisco State University

Smith, Brandon (2005)
Associate Professor,
English as a Second Language
B.A., M.A., San Jose State University

Smith, Elizabeth M. (1988)
Professor, Nursing
B.S.N., University of Missouri
M.S.N., Yale University

Sobel, Amy (1997)
Professor, English as a Second Language
B.A., Stanford University
M.A., San Francisco State University

Stafford, Anne (2000)
Professor, English
B.A., University of California, Berkeley
M.A., San Francisco State University

Stanford, Darryl (200I)
Professor, Astronomy/Physics
B.S., Polytechnic University
M.S., Concordia College
M.S., University of Toledo

Stanford, Virgil (2003)
Dean, Administrative Services/Business Services
B.A., Northwestern State University,

Louisiana
M.A., University of Louisiana, Lafayette
M.P.A., Drake University

Steele, Kathleen (199I)
Professor, English
B.A., M.A., University of Michigan

Still, Mark S. (1989)
Professor, History
B.A., M.A., University of Arizona

Ph.D., Claremont Graduate School

Svanevik, Michael (1969)
Professor, History
B.S., M.A., University of San Francisco

Tilmann, Martha (1989)
Dean, Coastside \& Special Projects
B.F.A., M.S., Michigan State University

Tonini-Boutacoff, Carlene (1990)
Professor, Biology
B.S., University of California, Davis
M.S., California Polytechnic State University, San Luis Obispo
Tran, Huy H. (2005)
Assistant Professor, Biology
B.S., University of California, San Diego
M.S., California State University, Hayward

Turner, Ruth (1990)
EOPS Counselor, Professor, Career \& Life Planning
B.A., Wichita State University
M.S., San Francisco State University

Uchida, Barbara (1990)
Professor, Physics
B.A., University of California, Berkeley
M.S., University of California, San Diego

Ueda, Makiko (2007)
Counselor, Psychological Services
B.A., Meisei University
M.A., California Institute of Integral Studies

Upshaw, D. Aisha (1975)
Counselor, Professor, Career \& Life Planning B.S., Central State University
M.Ed., University of Cincinnati

Valenti, Mary (1996)
Counselor, Professor, Career \& Life Planning B.S., Notre Dame de Namur University
M.A., San Jose State University

Villareal, Henry (200I)
Dean, Enrollment Services
B.S., M.S., University of Wisconsin

Ed.D., Arizona State University
Vorobey, Lilya (2000)
Associate Professor, Drafting Technology;
Machine Tool Technology; Manufacturing
Technology; Welding Technology
B.F.A., California College of Arts and Crafts

Warner, Michelle (1998)
Professor, Physical Education;
Head Women's Basketball Coach
B.A., University of California, Davis
M.A., University of Iowa

Williams, Douglas (1997)
Head Baseball Coach
A.A., College of San Mateo
B.A., University of California, Santa Barbara
M.A., St. Mary's College

Willis, Janice M. (1977)
Professor, Business
B.S., Pennsylvania State University
M.A., San Francisco State University

Wills, Carole R. T. (1982)
Professor, Reading
B.A., M.A., San Francisco State University

Wolf, Andreas R. (2006)
Dean, Physical Education
B.A. M.A., San Francisco State University

Wong, Alyssa (2007)
Assistant Professor, Mathematics
B.A., University of California, Santa Barbara
M.A., San Francisco State University

Wright, Randy S. (2002)
Associate Professor, Physical Education
B.A., University of California, Los Angeles
M.E., Azusa Pacific University

Wu, Jing (1998)
Professor, Mandarin Chinese
B.A., Shanghai Normal University
M.A., San Francisco State University

Young, Shana Kudo (2007)
Assistant Professor, Physical Education, Adapted
A.A./A.S., College of San Mateo
B.S., University of California, Davis
M.A., San Jose State University

## Emeriti

(Date of retirement follows name.)
Albert A. Acena (2007)
Dean, Social Science
Roland K. Abercrombie (1963)
Business
Marvin Alexander (1975)
Chairperson, Social Sciences
Division

Alvin A. Alexandre (1988)
English; Journalism
Garlan Andrews (1989)
Music
Marian R. Anenson (1984) Nursing

Robert D. Anderson (1997) Physics

George Angerbauer (1984) Electronics Technology; Counselor

Jeanne Angier (1996)
English
Marlene C. Arnold (1994) Nursing

John S. Avakian (2009)
Director, Economic and Workforce Development, Multimedia/Entertainment Initiative

Linda J. Avelar (2007) Dean, Business/Creative Arts Division

Leo N. Bardes (1992)
Dean, Creative Arts Division
Dr. Rex J. Bartges (1977)
Biology
Elizabeth L. Bassi (1998)
Dental Assisting
James K. Bell (200I)
English
Robert Bennett (1994)
Counselor
Barbara Jean Berensmeier (1990)

Physical Education

Daniel A. Berry (199I) Business Administration

Frederick J. Berry (2003) Music

John B. Bestall (1978)
Engineering
Rose Marie P. Beuttler (1989) French

Lou S. Bitton (1993)
Electronics
Jeanne Blanchette (1977)
Nursing
George A. Blitz (1989) Biology; Landscape Design

Dale W. Blust (1987) Aeronautics

Kenneth E. Blust (1982) Aeronautics

Roy E. Brixen (2008) Electronics

Michael Brusin (1995)
History; Economics
Michael C. Bucher (2008) Biology

Elizabeth Burdash (1995) Psychology

Elaine M. Burns (2007) Counselor

Virginia Burton (198I)
Physical Education
Lorraine Bush (1975)
Cosmetology
D. Bruce Cameron (1993)

English; Film
Albert Camps (1995)
Electronics
Blanca Candamil (2001)
Spanish
Jewell Casstevens (1982)
Cosmetology
Patricia Castro (2004)
Cosmetology

Gladys Chaw (2006)
Librarian
Dean Chowenhill (2008)
Counselor; Drafting
Michael Chriss (1993)
Astronomy; Humanities
Peter Chroman (1996)
Anthropology; Sociology
Rosalee Clarke (1996)
Mathematics
J. Kyle Clinkscales (198I)

Chemistry; Counselor
Dr. Adrian Cohn (1986)
English
Dr. Jean M. Cons (1993)
Anatomy; Physiology
William W. Crandall (2003)
Business
Douglas B. Crawford (1993)
Mathematics
Zelte Crawford (2005)
Ethnic Studies; Humanities;
Sociology
Richard L. Crest (1982)
Music
John A. Cron (1992)
Business
Dr. Dorothy J. Crouch (1983)
Biology
James A. Cullen (2005)
Manufacturing \& Industrial
Technology
Terence B. Curren (1990)
Zoology; Physical Anthropology
Brad Datson (1999)
Business
Gregory Davis (1999)
Humanities; Political Science
Louis De Freitas (1995)
Welding
Dr. George S. Dehnel (1987)
Biology; Health Science

Dr. Clifford O. Denney (2002) Chemistry

William J. Dickey (2002)
Physical Education/Athletics
Gary Dilley (2006)
Dean, Physical Education/Athletics

Thomas R. Diskin (2008)
Electronics
Richard C. Donner (1998)
Physical Education/Athletics
John B. Dooley (1979)
Librarian
Roland H. Fark (2000)
Biology
Emile L. Faure (2004)
Mathematics
Dr. John C. Fiedler (200I)
English
Dr. Anita Fisher (200I)
Psychology
Dr. Maurice J. Fitzgerald (1993)
English
Aline Fountain (1983)
Director of Counseling Services
Gerald J. Frassetti (2005)
English; International Student Advisor

Donald V. Galindo (1987)
Art
Eric Gattmann (1991)
Education; Emeritus Institute
Dr. Thomas W. George (1984)
Business
Ellen Ross Gibson (1990)
Photography, Art
Ann Giniere (2000)
Cosmetology
Dr. William Glen (1999)
Geology
Gilbert B. Gossett (1985)
Dean of Instruction

| Alexander Graham (1990) | John H. Hogan (2007) |
| :---: | :---: |
| Horticulture | Physical Education |
| Georgia Grant (2007) | Paul C. Holmes (1987) |
| Computer \& Information Science | English |
|  | Roy H. Holmgren (1989) |
| Dr. Patricia Griffin (2006) | Mathematics |
| Vice President, Student Services |  |
|  | Dr. Cecilia A. Hopkins (1986) |
| Anne M. Grubbs (1974) | Director, Business Division |
| Chairperson, Health Occupations Division | Dee L. Howard (2002) Counselor |
| Dr. H. Sanford Gum (1984) |  |
| Drafting | Robert S. Howe (1990) |
|  | Career and Life Planning |
| Peter K. Gunderson (2003) |  |
| Geography | Joeann J. Ingraham (1986) |
|  | Physical Education |
| Martha Gutierrez (2007) |  |
| Counselor | James E. Innis (2000) |
|  | Health Science |
| Joe C. Hagerty (1983) |  |
| Director, Health \& ServiceCareers Division | William A. Janssen (1999) Business |
| Jennie Halualani (1995) | Joseph R. Johnson (2002) |
| Health Services | Welding |
| John Hancock (1995) | Dr. John E. Karl, Jr. (1993) |
| Music | Anatomy; Physiology |
| Jane E. Hanigan (1984) | Dr. Walter M. Kaufmann (1990) |
| English; Re-Entry Program | Sociology; Psychology |
| Dr. William Harriman (1983) | Robert Kellejian (1992) |
| English | Electronics |
| Edward M. Harris (1985) | Dr. Shirley J. Kelly (2006) |
| Mathematics | President |
| Richard V. Harris (1992) | Kenneth D. Kennedy (2004) |
| Physical Education/Athletics | Political Science |
| Kenneth W. Harrison (1999) | Vance A. Kennedy (2008) |
| Music | Business |
| Carol Rhodabarger Heitz (1985) | Dr. Noel W. Keys (1995) |
| Career and Personal Development; Counselor | Psychological Services |
|  | Michael B. Kimball (2004) |
| Mary M. Herman (1989) | English |
| Speech Pathologist |  |
|  | John R. Kirk (2008) |
| Robin Heyeck (2000) | Economics |
| English | Theodore W. Kirsch (2002) |
| Woodson F. Hocker (1972) | Theodore W. Kirsch (2002) Electronics |
| Spanish |  |
|  | Robert C. Kowerski (2007) |
|  | Chemistry |

Edward A. Kusich (1977)
Engineering; Mathematics
Eva M. Landmann (1987)
Nursing
Frank B. Leroi (2003)
Economics
Lorne MacDonald (1999)
Electronics; Engineering
George A. Mangan (200I)
Broadcast \& Electronic Media
Jack Markus (1996)
Aeronautics
R. Galen Marshall (1996)

Music
Chauncey J. Martin (1979)
Machine Tool Technology;
Welding Technology
Thomas A. Martinez (2007) Physical Education /Athletics

Ruth McCracken (2003)
Nursing
Mary J. McCue (i999)
English
Dr. Joseph M. McDonough (1995)
Psychology
Thurman McGinnis (2008)
Administration of Justice
Pamela N. McGlasson (2008) Business

Virginia A. McMillin (1984) Nursing

Sandra L. Mellor (2009)
Dean, Corporate and
Continuing Education
Valdemer A. Mendenhall (1982) Aeronautics

Robert E. Michael (1986)
Business Administration; Counselor

Howard C. Monroe (1996)
Anthropology; Biology; Botany
Dr. John A. Montgomery (1977)
Business Administration

Judith Morley (2002)
Art

John F. Mullen (2000)
Dean, Admissions \& Records
Ernest L. Multhaup (1996)
Engineering; Counselor
Jean B. Multhaup (1996)
Dental Assisting
Diane W. Musgrave (2008)
English; German
Robert C. Newell (1992)
Electronics
John L. Noce (1992)
Physical Education/Athletics
Colette J. Norman (2003)
Librarian
Daniel C. Odum (1989)
Broadcasting Arts
Robert A. Olson (1988)
Speech
Dr. Rosalie M. O'Mahony (2003)
Mathematics
Adrian Orozco (2002)
Director, EOPS
William H. Owen (1996)
Manufacturing \& Industrial
Technology
Peter H. Owens (1994)
Chemistry
Marie T. Paparelli (2006)
Learning Disabilities Specialist
Susan Y. Petit (2008)
English; French
Betty C. Pex (1990)
English
Richard S. Phipps (1984)
Political Science; Career and
Personal Development; Counselor

Wilson G. Pinney (1986)
Director, Language Arts
Rosemary Piserchio (1999)
Business; Counselor

| Dr. Stephen H. Polansky (2003) | Edward G. Schoenstein (1996) | Dr. James Upton (200I) |
| :---: | :---: | :---: |
| Political Science | Technical Art \& Graphics | Mathematics; Humanities; Philosophy |
| Robert D. Pounds (2002) | Linda K. Scholer (2008) |  |
| Physical Education/Athletics | English | Duane A. Wakeham (1986) |
|  |  | Art |
| Dolores I. Price (1985) | Edwin A. Schwartz (1993) |  |
| Physical Education | Psychology | Herbert R. Warne (1983) |
|  |  |  |
| Joe A. Price (1994) | John B. Searle (2005) | Records |
| Art | Chemistry; Biology |  |
|  |  | Barlow Weaver (1987) |
| Jean Pumphrey (1993) | Caroline R. Silva (1996) | Librarian |
| English | Physical Education; Counselor |  |
|  |  | Dr. Alan L. Weintraub (1999) |
| Carolyn O. Ramsey (2009) | Dr. Balbir Singh (2005) | Geography |
| Counselor | Mathematics |  |
|  |  | Dr. David West (1999) |
| Theodore L. Rankin (1987) | Robert W. Smith (1997) | Sociology |
| Administration of Justice | Mathematics; Humanities |  |
|  |  | Agnes Williams (1996) |
| Vincent P. Rascon (1988) | Grace Sonner (2005) | Cosmetology |
| Art | Vice President, Instruction |  |
|  |  | John C. Williams (1992) |
| Dr. Edward H. Rategan (1989) | Dennis Stack (1999) | Biology |
| Computer \& Information Science | Drafting |  |
|  |  | Richard A. Williamson (1991) |
| Robert Ratto (2008) | Richard G. Statler (2005) | English; Film |
| Cosmetology | Physical Education; Health |  |
|  | Science | Stuart Williamson (2000) |
| Elizabeth K. Rempel (1977) |  | Biology |
| Art | Nancy J. Stock (2002) |  |
|  | Cosmetology | Arlene Wiltberger (2006) |
| James Roach (2003) |  | Psychological Services |
| Psychology | Angela R. Stocker (2003) |  |
|  | Physical Education; Social | Dr. Irving M. Witt (1993) |
| JoAnn C. Rock (2000) | Science | Sociology |
| Cooperative Education |  |  |
|  | Lawrence T. Stringari (2006) | Betty J. Wittwer (1990) |
| Ernest Rodriguez (2008) | Human Services; Psychological | Business |
| Psychology | Services |  |
|  |  | Dr. Frank H. Young (1996) |
| Richard W. Rohrbacher (1987) | Leah Tarleton (1994) | Mathematics |
| Speech; English; Broadcasting | Health Services |  |
| Arts |  | Yoneo Yoshimura (1998) |
|  | Jack Thur (1996) | Counselor |
| Samuel S. Rolph (1979) | Physical Education/Athletics |  |
| Play Production |  | William H. Zempel (1990) |
|  | Lora B. Todesco (2000) | Meteorology; Physics |
| Jacquelyn Rose (1993) | Business |  |
| Coordinator of Services for |  | Paul C. Zimmerman (2002) |
| the Physically Disabled | Patricia A. Tollefson (2009) | Architecture |
|  | English |  |
| William B. Rundberg (2000) |  | Christe P. Zones (1992) |
| Mathematics; Earth Systems | Allen Tracy (1982) | Geology |
|  | Chemistry |  |
| Robert D. Rush (1995) |  |  |
| Physical Education/Athletics | Ronald R. Trouse (1993) |  |
|  | English |  |
| Dr. Rosa I. Sausjord (1983) |  |  |
| Spanish | John Turner (1985) |  |
|  | English |  |

## Parking Regulations <br> (summary)

Students are responsible for knowing and following campus parking regulations. Complete parking regulations are available online at collegeofsanmateo.edu/parking, or a copy may be obtained at CSM's Security Office (Bldg. I, Room 269) or CSM's Business Office (Bldg. I, Room I47).

All persons driving motor vehicles (except motorcycles) onto campus and utilizing the parking facilities during regular class hours (Monday-Friday; 7 a.m.-Io p.m.), including final examinations, are required to obtain a parking permit. A parking permit is not required for students riding motorcycles and parking must be in designated Motorcycle Parking in Lots 7A and iIA. Student parking permits are available for $\$ 40$ each for the Fall and Spring terms, and $\$ 20$ for the summer term. A two-term (Fall/Spring) permit is available for $\$ 70$. Parking permits for students with California Board of Governors (BOG) waivers are $\$ 20$ per term. If a term-length parking permit is lost or stolen, replacements are available at full price. Two-term permits are replaced on a sliding scale, depending on the point in the academic year. Permits lost during the Fall term costs $\$ 60$ to replace and permits lost during the Spring term costs $\$ 30$ to replace.

Students who intend to purchase a parking permit may do so online using WebSMART. For information on how to obtain your paid parking permit, please visit our website.

Daily parking permits (\$2) are available from machines in Lots I, 2, IO and i4. Parking permits for disabled students who have paid the parking fee are issued only by the Disability Resource Center (Bldg. 16, Room 150, 5746438).

A grace period allowing for the purchase of permits will be in effect during the first two weeks of the Fall/Spring terms, and the first week of the Summer term. The grace period pertains only to permits, with all other parking regulations enforced at all times in
all parking lots. After the grace period, permit requirements will be strictly enforced in all lots. (Please see website or Schedule of Classes for specific dates.)
Parking spaces are available on a first-come, first-served basis. Therefore, a permit is not a guarantee of a parking space. The College and San Mateo County Community College District accept no liability for vandalism, theft or accidents. Use of parking facilities is at the user's risk.

## Visitor Parking

Visitors to campus may park in metered Visitor Parking Lot 2 using the pay-by-space meter. After parking the car, the visitor notes the number of the parking space, enters the number into the meter and deposits coin or currency. The receipt does NOT need to be displayed in the vehicle. Visitors may also park in a student lot after purchasing a daily permit For location of parking permit machines, please refer to campus map on next page.

## Public Transit

SamTrans bus service has two direct routes to the campus (\#250 and \#260) and connecting bus routes from the Hillsdale Shopping Center and the Caltrain Station serving the CSM campus throughout the day. All buses have wheelchair lifts and also serve students attending evening classes. Routing information is available by calling I-800-660-4BUS or via the Web at www. samtrans.com and www.caltrain.com. Printed schedules and maps are also available at the College of San Mateo Student Activities Office (Building I9).

## Elevators

Elevator access is available in the following buildings: $\mathrm{I}, 2,4,8,9, \mathrm{I} 2, \mathrm{I} 4, \mathrm{I} 8$ and 36 .

```
Parking by Permit Only During Class Hours (See Campus Map, next page)
One-day Permits
    $2 per day - Permit machine locations indicated by D (Lots 1, 2, 10, 14 and 15)
Visitor Parking
    Visitors may park in Lot 2C (permit machine location indicated by V}\mathbf{V}\mathrm{ ) or in a student lot
    after purchasing a daily permit. The visitors lot is open to students after 5pm; permit
    required.
Student Parking
    Lots 1, 2, 9, 10, 11A, 14, 15, 16, 18, 19, 21, 22
Staff Parking
    Lots 2A, 2B, 3, 5, 6, 7A, 7B*, 11, 12A*, 13, 17, 20*, 20A, 20M, }2
    (*Indicates lots available for student parking, after 5 pm only)
Disabled Parking
    By special permit only. Students with a state-issued disabled placard or license plate in
    conjunction with a student parking permit may park in both disabled and regular spaces
    in any parking lot. Holders of a CSM disabled person parking permit may not park in a
    disabled space without a state-issued disabled placard or license plate. (contact Disability
    Resource Center, Bldg. 16, Room 150, 574-6438)
Motorcycle Parking
    Lots 7A, 11A
```



## Index

## A

Absence 20
Academic Advising 38
Academic Freedom Statement 4
Academic Policies 30
Academic Renewal Policy 30
Academic Review Committee 3I
Academic Standards Policy 30
Accounting 62, I23
Accreditation 5
Accuracy Statement 2
Activities, Student 24
Adapted Physical Education 39, I83
Adding classes (see Program
Changes) I2
Administration 2
Administration of Justice 64, I26
Admission Procedures io
Advanced Placement Examination Credit 33
Advising/Counseling 37
Advisors 37
Alcohol and Other Drug Studies 65, I94
Alpha Gamma Sigma I6
American Sign Language 66, I26
Anthropology 66, I26
Apprenticeship Training I27
Aquatics (Physical Education) I83
Architecture 67, I28
Art 67, I30
Assistive Technology Center 39
Associate in Arts/Associate
in Science Degree 56, 58-60
Associated Students 22
Astronomy 133
Attendance Regulations 30
Audit Policy I3

## B

Biology IO3, I33
Biotechnology IO4, I33
Bookstore 27
Broadcast and Electronic Media 69, I35
Building Inspection Technology 71, 136
Business 72, 137
Business Administration 72
Business Information Processing 74, 137

## C

Cafeteria (see Food Service) 27
Calendar 2
California State University 46-48
Campus Security Policy 6
CARE Program 38
Career and Life Planning 75, I39
Career Planning 38
Career Services Center 38
Certificate Programs 57-60
Certificate Requirements 58
Changes, Program I2
Cheating and Plagiarism 32
Chemistry 76, I4I
Child Development Center 39
Chinese 77, I4I
Choice of College II
Clubs and Organizations, Student 23
College Policies 6
College, The 5
Computer-Aided Drafting 82, I48
Computer and Information
Science 77, I42
Computer Support Specialist 82
Conduct, Student I7
Consumer Arts and Science I45
Cooperative Work Experience Education I45

Cosmetology 80, I45
Counseling/Advising 37
Counselors/Advisors 37
Course Placement Guide 42
Course Repetition 3I
Courses, Description of 123
Courses, Sequential 3I
Credit and Refund Policy 15
Credit by Examination 3I
Pass/No Pass Option 16
Crime Awareness 6

## D

Dance 182
Degree (A.A./A.S.) 60
Degree Requirements 56,58-59
Dental Assisting 8I, I46
Description of Courses I23
Developmental Skills I47
Disabled Student Services 39
Disabled Student Parking I4
Dismissal 30
Distance Learning II
District Mission Statement 4
District Programs Not Offered at CSM I22
District, The 4
Diversity Statement 3
Drafting Technology 82, I48
Dropping classes (see Program
Changes) I2
Drug-Free Campus Policy 6

## E

Economics 83, I48
Electrical Technology 84, I49
Electronic Music I09, I79
Electronics Technology 84, I49
Eligibility Requirements io
Employment Services (see Student
Employment Services) 38
Engineering 87, 15I
Engineering Technology 87
English and Literature 88, 15I
English as a Second Language (ESL) 154
English Placement Test 2,42
English 800 Lab 40
Enrollment Fee I4
Enrollment, Open 30
Environmental Horticulture 94, I67
Escrow 192
ESL Placement Guide 43
Ethnic Studies 88, I56
Expenses (Other) I4
Extended Opportunity Programs and
Services (EOPS) 39

## F

Faculty 201
Faculty, Emeriti 205
Federal Funds, Repayment 22
Fees I4
Film 89, 157
Filmmaking 157
Final Examinations I6
Financial Aid 2I
Fines 20
Fire Sprinkler Technology 89, I28
Fire Technology 89, I58
Fitness (Physical Education) 185
Floristry (see Horticulture) 96, 166
Food Service 27
Foreign Languages 159
Foreign Study Program (see Study
Abroad Program) II
Former Students io
French 90, 159

## G

General Education 48-49, 58-59
General Information 4
Geography 9I, I6I
Geological Sciences 92, I6I
German 92, I6I
Global Studies 93
Grade Alleviation Policy 3I
Grades, Change of I6
Grades, Grade Point Average, and Grading Symbols 15
Grade Reports 16
Grades and Scholarship I5
Graduation Requirements 58
Graphics 93, 162-I64
Grievance and Appeal Procedure i9
Guidelines Addressing Cheating and Plagiarism 32


## H

Health Insurance 40
Health Science 164
Health Services 40
Health Services Fee I4
High School Diplomas 5
High School Students Io
History 94, I65
Holidays (see Calendar) 2
Honors at Graduation 16
Honors Program II
Horticulture 94, I66
Housing 24
Humanities 97, I68
Human Services 97, I69
I
Incompletes I 5
Independent Colleges and
Universities 46,55
Individual Sports 186
Information Processing (see Business) 73, 137
Instructional Resources 36
Instructional Television (see Distance Learning) II
Insurance 40
Intercollegiate Sports 187
International Students II
Intersegmental General Education
Transfer Curriculum (IGETC) 49,52
Italian IOI, I70
J
Japanese IO2, I70
Job Placement (see Student
Employment Services) 38
Journalism 102, I7I
K
KCSM TV and FM 36

## L

Language Arts Centers 40
Law Enforcement 64, I24
Learning Disabilities Assessment Center 38
Library 36
Library Studies I7I
Life Sciences IO3, I7I
Literature 172
Loans 2I

## M

Machine Tool Technology $\quad$ I72
Major Fields of Study 6I
Management (see Business) 73, ino
Mandated Training Requirement 32
Manufacturing and Industrial
Technology 106, I72
Map of Campus 209
Mathematics IO6, I73
Mathematics Placement Test 2,38
Matriculation 6
Merchandising, Business 75
Meteorology 175
Middle College High School, San Mateo II
Military Science 175
Military Service Credit 5
Military Withdrawal 15
Mission Statement 3
Multimedia IO7, I75
Multicultural Center 40
Music 108, 178

## N

Naval ROTC (see Military Science) I75
Newspaper, College 24
Nondiscrimination Policy 7
Nursing IIO, I80
Nutrition 180

## 0

Occupational Programs 57
Oceanography 182
Online Courses (see Distance Learning) II
Online Registration (WebSMART) I2
Open Enrollment 30
Organizations, Secret 20
Organizations, Student 23

## P

Paleontology 182
Parking Fee 14,208
PC Technical Support
(see Electronics Technology) 84
Philosophy III, I82
Phi Theta Kappa 16, 24
Photography (see Art) 69, 183
Physical Education II2, 183
Physical Education Requirement 59
Physical Science II2, I88
Physics II3, I88
Placement Tests 2, 6, 38,42
Plumbing and Pipe Fitting I28, I36
Political Science II4, I89
Privacy Rights of Students 8
Probation 30
Program Changes 12
Program Planning 57
Psychological Services 40
Psychology II4, I9I
Publications 24

## R

Radio 69, I35
Reading 192
Reading Center 40
Reading Placement Test $\quad 2,6,42$
Real Estate II6, 193
Refund Policy 15
Registration I2
Remedial Course Work Limit 30
Repeat for Credit 3I
Residence Requirements IO, I3
Revision of Regulations 5
ROTC (see Military Science) I75

## S

San Matean (Publication) 24
Scholarship Honors I6
Scholarships 40
Sequential Courses 3I
Sexual Harassment Policy 9
Sign Language (American) 66, I26
Smoking Policy 9
Social Science II5, I94
Sociology II6, I96
Spanish iI6, 196
Special Programs
Speech Communication II7, I98
Speech Lab 40
Sports 186, 187
Sprinkler Fitter Apprenticeship II8, I28
State Universities 46-48, 55
Student Activities Office 24
Student Body Card 23
Student Body Fee I4
Student Clubs and Organizations 24
Student Committees 23
Student Employment Services 38
Student Handbook 17-29
Student Representation Fee I4
Student Rights and Responsibilities
Student Right-to-Know Policy 6
Student Senate 23
Student Services 37
Study Abroad Program II
Student Sponsored Events 24
Summer Session II

## T

Team Sports 185
Technical Preparation II9
Technology (see Machine Tool
Technology, Manufacturing
Technology) $\quad$ I72
Telecommunications (see Broadcast and
Electronic Media) 69, I35
Telephone Directory 28
Television 70, I35
Television, Instructional
(see Distance Learning) II
Testing 2, 6, 38, 42
Trade and Industrial Courses
(see Apprenticeship Training)
127
Transcripts 6
Transcript Evaluation 46
Transfer Admission Procedures 45
Transfer Services 4I, 45
Transfer Credits io
Transfer of Credits 45
Transfer Information 45-57
Transfer Planning 45
Transfer Program Requirements 62
Transfer Programs 6I
Transfer Students, Requirements 45
Transferable Courses, CSU 47
Transferable Courses, UC 50
Transition to College Program 4I
Tuition (Non-Residents) I4

## U

Unit Load Limitations I2
Units of Work and Credit 15
Universities 46,55
University of California 46, 49-5I
University Transfer 50, 5I, 55
V
Values Statement 3
Varsity Sports 187
Veterans and Dependents 5
Vision Statement 3

## W

WebSMART I2
Welding Technology I2I, 199
Withdrawal 20
Word Processing (see Business Information Processing) 74, I38
Writing Center 40


Notes


## Notes

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## Notes

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