## I <br> COLLEGE of SANMATEO



## Catalog 2007-2008

## COLLEGE of SANMATEO

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## Calendar of Important Dates

## Summer Session 2007

Matriculation Activities: See Schedule of Classes Placement Testing
College Orientation
Counseling
Registration See Schedule of Classes
June 18 Classes begin
July 4 Independence Day Holiday observed
July 13 Last day to apply for Summer
AA/AS degree or certificate
July 28 Summer session six-week classes close

August 11 Summer session eight-week classes close

## Fall Semester 2007

Matriculation Activities: See Schedule of Classes Placement Testing
College Orientation
Counseling
August 20 \& 21 Faculty Flex Days
August 22 Day and evening classes begin
September 1 \& 2 Declared recess
September 3 Labor Day Holiday
September 5 Last day to add semesterlength classes
September 5 Last day to drop semesterlength classes with eligibility for partial credit/refund
September 14 Last day to drop semesterlength classes without appearing on student record

September 26 Last day to declare CR/NC option for designated semester-long courses

October 1 Last day to file application for admission to the International Student (F-1 visa) Program for Spring 2008
October 5 Last day to apply for Fall AA/AS degree or certificate
November 9 Veterans' Day Holiday observed
November 20 Last day to withdraw from a semester-length class with assurance of a "W" grade
November 21 Declared recess for Evening classes
November 22-25
Thanksgiving recess
Registration for continuing students for Spring 2008
See Schedule of Classes for dates, times and places
December 15-21 Final examinations (day, evening and Saturday classes)
December 22-January 21
Inter-Semester recess

## Spring Semester 2008

Matriculation Activities: See Schedule of Classes Placement Testing College Orientation Counseling
January 17 \& 18 Faculty Flex Days
January 19 \& 20 Declared recess
January 21 Martin Luther King Holiday
January 22 Day and evening classes begin
February 4 Last day to add semester-length classes
February 4 Last day to drop semester-length classes with eligibility for credit/refund

February 15 Lincoln Day Holiday
February 16 \& 17 Declared recess
February 18 President's Day Holiday
February 19 Last day to drop semesterlength classes without appearing on student record
February 26 Last day to declare CR/NC option for designated courses
March 7 Last day to apply for Spring AA/AS degree or certificate
March 17-23 Spring recess
April 15 Last day to file application for admission to the International Student (F-1 visa) Program for Fall 2008
May 1 Last day to withdraw from a semester-length class with assurance of a "W" grade
Placement Tests for Fall Semester 2008 See Schedule of Classes for dates, times and places
Registration for continuing students for Summer 2008 and Fall 2008 See Schedule of Classes for dates, times and places
May 27-June 2 Final examinations (day and evening classes)
May 30 Commencement
May 24 \& 25 Declared recess
May 26 Memorial Day Holiday

## Summer 2008 (Tentative)

Matriculation Activities: See Schedule of Classes Placement Testing College Orientation Counseling
Registration See Schedule of Classes June 16 Day \& evening classes begin
July 4 Independence Day Holiday
July 11 Last day to apply for Summer AA/ AS degree or certificate
July 26 Summer six-week classes close
August 9 Summer eight-week classes close

## Administration

## President

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

## Academic Divisions

Dean, Business/Creative Arts TBA

Dean, Corporate and Continuing Education Sandra L. Mellor

Dean, Language Arts
TBA
Dean, Mathematics and Science
Charlene Frontiera
Dean, Physical Education/Athletics Andreas Wolf

Dean, Social Science TBA

Dean, Technology
Martha Tilmann
Director, Library Services Lorrita Ford

Director, Nursing
Jane McAteer

## Student Services

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

## 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 community 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 nonprejudicial 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 111-acre site west of Skyline Boulevard and south of Sharp Park Road in San Bruno. A third site, of 131 acres west of the Farm Hill subdivision on the Redwood City-Woodside 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 1969. 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 DistrictСаñada 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:

1. 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 $\$ 19.5$ million, the campus opened in its current College Heights location in 1963 and currently serves approximately 11,000 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, (10 Commercial Boulevard, Suite 204, Novato, CA 94949, 415-605-0234), 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 Catalog 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, 32 (Veterans), Chapter 31 (Vocational Rehabilitation), Chapter 35 (Veterans' Spouses or Dependents), and Chapter 1606 (Selected Reserve). All students, except those under Chapter 31, 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 1, 2nd floor) to apply for benefits.

Honorably discharged veterans with at least eighteen months of active military service are 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 Records. Those who have previously attended college must file official copies of all college transcripts with the Veterans' Assistant.
College policy regarding Academic Probation (explained on page 31) 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 ( 6 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 558-2100.

## Transcripts

Official transcripts of a student's academic record will be sent to colleges, universities, employers and other institutions upon written request by the 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 will not be forwarded. Students may also request "issued to student" copies to be sent to themselves.
The first two transcripts requested by a student are free; thereafter a charge of $\$ 5$ is imposed. If a student wants a transcript processed immediately there is an additional "rush" service charge of $\$ 10$. Transcript request forms are available from the Office of Admissions and Records, Building 1, Second Floor, or on the Web at: collegeofsanmateo.edu. The form may be submitted in-person, by mail, fax, or electronically to the Office of Admissions and Records.
Your request must include your current name and any former name you had while attending CSM, your College of San Mateo student identification number or social security number, birth date, approximate dates of attendance, and the complete address to which you request we mail the transcript. Be sure to sign your request. Include a credit card number, the name of the account holder, signature and expiration date or send a check, payable to CSM, with your transcript request. The fax number is 574-6506.
An unofficial copy of a student's academic record reflecting courses taken during or after the Summer 1981 intersession is available via WebSMART.

# 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 101-542 (Student Right-to-Know and Campus Security Act). CSM is an extremely safe campus, a fact confirmed by the most recent FBI-reported 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 1, Room 267 (574-6415).
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 1, Room 251 (574-6196). CSM data is also available at the following website: 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 1, 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 1) 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) who are currently undecided but are considering numbers 1 through 3 , are called "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 called "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:

1. 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/advisor to develop an individual educational plan, 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 precollegiate basic skills courses, and/or who have been placed on academic probation.
Each matriculated student is expected to:
6. 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.
7. Attend classes regularly and complete assigned course work.
8. 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:
9. 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 1, Room 273.
10. 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 1, Room 273.
11. Challenge any prerequisite, filing a petition in the Office of the Vice President for Instruction, Building 1, Room 135, on one
or more of the following grounds:
a. the prerequisite is not valid because it is not necessary for success in the course for which it is required;
b. the student has the knowledge or ability to succeed in the course despite not meeting the prerequisite; or
c. the prerequisite is discriminatory or is being applied in a discriminatory manner.
12. Obtain a waiver from the appropriate instructional division dean of any prerequisite or corequisite course for a particular term because the course is not available during that term.
13. 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 1, Room 211.
14. 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:
15. Students with physical, visual, communication or learning disabilities are advised to contact: Disability Resource Center, Building 16, Room 150 or call 574-6438.
16. Students with difficulty in reading, writing, math and other basic skills are advised to contact: EOPS or Multicultural Center, Building 20, Room 107 or call 574-6154.
17. Students who speak English as their second language may contact: Multicultural Center, Building 20, Room 107 or call 574-6154.
Any student who wishes to challenge any requirement of Matriculation should contact the Dean of Counseling, Advising and Matriculation, Building 1, Room 211.

## 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. 93-112), 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. 93-112); 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 ale－ gada 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 Afirmativa－Faculty and Staff Diversity Ad－ visory Committee－sobre la naturaleza de las reclamaciones，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，ka－ pansanan，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，Rehabilita－ tion Act of 1973 （P．L．93－112），at ng Ameri－ cans 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． 504 ng 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 karapatan．Kung ang mga normal na paraan ay hindi magagamit o hindi matugunan ang mga pangangailangang legal，ang kinakailangang hakbang ay gagawin．Ang opisina ay haha－ wak ng mga rekord ng lahat ng reklamong pang－Title VI at Title IX，at iuulat sa Lupon ng Apirmatibong 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。何有關這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，校方將會探取適當的行動。除記錄所有關扸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：
1．The right to inspect and review the student＇s education records within 45 days of the day the College receives a request for access．Students should submit to the 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 submitted， 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 re－ quest for amendment．Additional informa－ tion regarding the hearing procedures will be provided to the student when notified of the right to a hearing．
3．The right to consent to disclosures of personally identifiable information con－ tained 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 legiti－ mate educational interests．A school official is a person employed by the College in an administrative，supervisory，academic or research，or support staff position（includ－ ing 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 disciplinary or grievance com－ mittee，or assisting another school official
in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the College to comply with the requirements of FERPA.
The Act provides that the College may release certain types of "Directory Information" unless the student submits a request in writing to the Dean of Enrollment Services 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 (1) student's name and city of residence; (2) participation in recognized activities and sports; (3) dates of enrollment; (4) degrees and awards received; (5) the most recent previous educational agency or institution attended; and (6) 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 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 designated outdoor areas only. Designated smoking areas are identified and clearly marked in various locations on campus.

1. 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. 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.
4. 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.
5. This policy does not supercede more restrictive policies which may be in force in compliance with State or Federal regulations.

## 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 1 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 file an application for admission on a form obtained from the College or on the Web at collegeofsanmateo.edu (click on WebSMART).
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 go through the matriculation process to enroll in classes: Step 1) 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/advisor; Step 5) register for classes. Students who are "exempt" from matriculation may choose to participate in matriculation but are not required to do so.
Educational goals that define a "non-exempt" student are: 1) 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: 1) 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 website.
Students planning to enroll in the Cosmetology or Nursing 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), or 574-6219 (Nursing).

## Residence Requirements

It is not necessary to be a legal 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 1, second floor (574-6165).

## High School Students/ Concurrent Enrollment Program

Students attending high school as juniors or seniors may register concurrently for CSM classes with the approval of the Dean of Enrollment Services. Interested students must submit a Concurrent Enrollment Application (available from high school counselors) with the required recommendation, together with their high school transcript.
A high school grade point average (exclusive of physical education courses) of $2.0(\mathrm{C})$ is required for participation in this program. Residency requirements as detailed on this page apply to high school students. Concurrently enrolled high school students are exempted from payment of the enrollment fee and health fee if registered for less than 12 units; this exemption does not cover the $\$ 1$ Student Representation fee. Students classified as California non-residents are required to pay non-resident tuition. Because of enrollment limitations, high school students may not be permitted to enroll in classes in certain impacted programs.
In special cases, with a written statement signed by the high school principal or designee indicating why an exception should be made, high school freshmen and sophomores may be con-
sidered for concurrent enrollment admission.
Concurrent Enrollment Program students will 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, or to a California State University General Education (CSU GE) certification, or an Intersegmental General Education (IGETC) certification should have their transcripts evaluated within the first semester of attendance at CSM.
To utilize the transcript evaluation service students must be actively enrolled at College of San Mateo in a minimum of three units and intend to complete their educational goals from this campus location. Students complete a Transcript Evaluation Request form and have official transcripts from all colleges and/or universities previously attended sent to the Office of Admissions and Records. Once all official transcripts are received and processed, the evaluation is completed. Through the evaluation process, previous coursework is reviewed, analyzed, and applied, as appropriate, to the stated goal. The results of the evaluation allow students to conduct accurate program planning to complete educational goals. Students receive a copy of the results of the official evaluation for their information and records.

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. See page 33 for College of San Mateo's policy on credit by examination.

## 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-1/B-2 visa) to its International (F-1 visa) Student Program. In order to be admitted to the program, an international student must:

1. 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) or 160 (computer 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 2007-2008 academic year is $\$ 184$ per unit of credit and a $\$ 8$ per unit capital outlay 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 special international student application is available from the International Student Center. Telephone: 574-6525. Fax: 574-6166. For priority admission processing, applications for the Fall 2007 semester must be filed by April 15, 2007. Applications for the Spring 2008 semester must be filed by October 1, 2007. Applications for the Fall 2008 semester must be filed by April 15, 2008.

## Choice of College

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

## Special Programs

## Honors Program

The CSM Honors Program was established with one goal in mind: to seek out students of exceptional ability and purpose, and to provide these students with the education they merit. The program is open to all students regardless of major, age, or background, and leads to the Associate of Arts/Science degree and/or transfer to the University of California or California State University systems in the junior year.
Affiliation may be at one of three levels:

1. President's Scholar - completes the full Honors Program curriculum before graduation and/or transfer
2. Associate - takes a minimum of one Honors Program course per semester
3. Member - takes a minimum of one Honors Program course in any semester
Entry requirements vary with level of affiliation, but generally include a grade point average of 3.3 and eligibility for English 100, or other achievements which indicate ability to benefit from honors courses. President's Scholars will complete approximately 18 units in the program, made up of selected general education breadth courses and a Capstone Thesis in their major. Additional units will be needed to satisfy degree requirements, and will be taken outside the program. Students interested in applying should talk with their counselor/advisor and the Honors Program Coordinator, Building 15-121, or call 574-6638.

## Distance Learning

College transfer classes are offered by College of San Mateo online and on television. Distance learning courses present collegelevel 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 Saturday 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 op-
portunity for academic success and career exploration, to students whose needs are not met in a traditional high school environment.
The program started in Fall 1998 with 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. 11, Room 136) at 574-6101 or email middlecollege@smuhsd.k12.ca.us. The Middle College website is smccd.edu/ middlecollege.

## Study Abroad Program

The San Mateo County Community Colleges, in cooperation with the American Institute for Foreign Study, offer students of all ages the opportunity to study and live abroad, earning up to 15 units toward an AA/AS degree which are transferable for Bachelor's degree credit. Current offerings include a London Semester in Fall 2007, a Semester in Paris in Spring 2008, and a summer 2007 program in Costa Rica. Students applying to participate must have completed at least 12 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, contact the Study Abroad Programs Office at 574-6595.

## 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 1, Second Floor (574-6165).

## Registration

New matriculating "non-exempt" students (see definition listed on page 6) complete the following steps to register for classes:
Step 1 - 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
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

Logging on to collegeofsanmateo.edu and clicking on WebSMART will allow you to:

- View the Catalog
- View the Schedule of Classes
- Apply for admission
- Check registration status
- Register for classes
- Add/Drop classes (within published deadlines)
- Print your schedule of classes
- Pay fees by credit card
- Apply for Financial Aid
- Obtain your grades
- Obtain your Placement Test scores
- Print an unofficial transcript
- Update personal information


## Unit Load Limitations

A normal class load for a full-time student is 15 units. No student will be permitted to take more than 19 units during the fall or spring semesters, or 9 units during the summer session without special approval of the counselor/advisor. Students working full time should limit their program to six or fewer units. Combinations of work and college study should be carefully discussed with the counselor/advisor.

A program of 12 units or more during spring and fall terms is considered a full-time load for athletic eligibility, financial aid, international students (F-1 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 (1st 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.

## 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 NC. 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 .
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 1, 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 grade by the instructor.

## Audit Policy

Students are allowed to register as auditors in a limited number of classes to which the course repetition policy applies if they have previously enrolled for credit for the maximum number of times allowed for the particular course.
Students should register for these classes in the normal manner; they will be advised if they have reached the course repetition limit and given the opportunity to register as auditors if space is available.
An auditing fee of $\$ 15$ per unit is payable at the time of enrollment as an auditor. Auditors are not charged the regular enrollment fee which is paid for credit enrollment. Auditors pay the health services fee and student representation fee, but not the non-resident tuition fee. Students enrolled for credit in 10 or more semester units may audit up to 3 units at no charge.
No student auditing a course will be permitted to change enrollment status in that course to receive credit. See the current Schedule of Classes for courses (denoted by an @) that may be audited.

## 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 Non-Resident Tuition Fee.

## Health Services Fee

All students, except concurrently enrolled high school students enrolled in less than 12 units or those registering only for telecourses, offcampus classes or weekend classes, are required to pay a $\$ 15$ health services fee each fall and spring semester at the time of registration for day or evening classes. For the summer session 2007 the health services fee is $\$ 12$. 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 1, Room 226 (574-6396).

## Student Representation Fee

A representation fee of $\$ 1$ 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 $\$ 30$ each for the fall and spring semesters 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. Oneday parking permits ( $\$ 1$ ) for all student lots are available from machines in Lots 1, 2, 10 and 14.
Permits may be purchased during the registration process at the Security Office or 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. The College reserves the right to change parking regulations for special events.

## Special Parking for <br> Students with Disabilities

Blue handicapped parking spaces have been provided in Lots 3A, 4, 5, 6, 7, 11, 13, 14, 17, 20 and 22. 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 16, Room 150, 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 $10 \%$ to $40 \%$ at
participating local businesses, movie theaters, shops and restaurants. On-campus discounts are available at the Café International coffee house, the cosmetology salon, CSM Bookstore (non-book items), and all athletic events. In addition, the card permits free admission to the CSM swimming pool at noon. 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. 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 $\$ 184$ per unit (in 2007-2008) 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 18 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. Special equipment is needed for certain programs such as Electronics, Drafting, Nursing, Cosmetology, Engineering, Art and Architecture, involving an additional initial outlay ranging from $\$ 100$ to $\$ 600$. Please refer to course descriptions for special costs.

## Credit and 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 $10 \%$ 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 1.0. 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 semester-long classes, short courses or summer courses dropped after the first $10 \%$ 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.

## Important Notes:

1. 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 $\$ 10$ 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 $\$ 10$, 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.
10. 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 ( F ) receives 0 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 1
F Failing 0
*CR Credit (at least satisfactory; units awarded not counted in GPA)
*NC No Credit (less than satisfactory or failing; units not counted in GPA)
I Incomplete 0
IP In Progress 0

MW Military Withdrawal 0
RD Report Delayed 0
W Withdrawal 0
*Used in courses in which grades of Credit or No Credit are given. The units earned with a grade of Credit count as units completed. No Credit 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"

## Credit/No Credit Option

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

Students electing a Credit/No Credit option must 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.
The utilization of courses graded on a Credit/ No Credit 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 Credit/No Credit option. Additionally, each division of the College may determine certain courses in which all students are evaluated on a Credit/No Credit 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 Credit/No Credit 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 (12) or more units of letter-graded 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 (12) 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 one-half (11.5) 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 those transfer courses used to meet graduation requirements.
3.30-3.49 Graduation with Honors
3.50-4.00 Graduation with High Honors

If transfer units are needed as electives to meet total unit requirements, units in courses most recently completed are utilized and included in the GPA calculation. If options exist within a semester to select among elective transfer courses, units are selected that most positively benefit the student's GPA.
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: 1) 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 1.5 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 12 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 Com-
munity 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:

1. 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:
3. 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.
4. Assault, battery, or any threat of force or violence upon a student or college personnel.
5. 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).
6. Theft or damage to property (including College property or the property of any person while he/she is on the College campus).
7. 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).
8. 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).
9. Unauthorized entry into, or use of, College facilities.
10. Forgery, falsification, alteration or misuse of College documents, records, or identification.
11. Dishonesty such as cheating, plagiarism, or knowingly furnishing false information to
the College and its officials.
12. 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.
13. Extortion or breach of the peace on College property or at any College sponsored or supervised function.
14. 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.
15. Possession or use of alcoholic beverages on College property, or at any function sponsored or supervised by the College.
16. Illegal possession or use of firearms, explosives, dangerous chemicals, or other weapons on College property or at College sponsored or supervised activities.
17. Smoking within any indoor location within the College or in any location other than those designated smoking areas.
18. Failure to satisfy College financial obligations.
19. Failure to comply with directions of College officials, faculty, staff, or campus security officers who are acting in performance of their duties.
20. 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.
21. Gambling.
22. Sexual harassment; sexual or racial discrimination.
23. Violation of other applicable federal and state statutes and District and College rules and regulations.

## Guidelines for

## campus assembly procedures:

1. 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 activi-
ties 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.

1. 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. Restitu-
tion 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.

1. 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:
3. From one or more classes for a period of up to ten days.
4. From one or more classes for the remainder of the semester or session.
5. From all classes and activities of the college for one or more semesters or sessions.
C. In cases involving disciplinary suspension:
6. The student shall have the opportunity to examine any materials upon which the charges are based.
7. The student shall be informed of the nature of the violations and/or actions which constitute the basis for the suspension.
8. The student shall be allowed to present evidence refuting the charges to the college chief executive officer or his/her designee.
9. A letter explaining the terms and condi-
tions 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 ofTrustees on recommendation of the college President and the Chancel-lor-Superintendent. An expelled student shall not be allowed to register in any subsequent semester without the approval of the College President.
10. 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).
11. 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.
12. 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.
13. 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 1 - 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:

1. 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

1. 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 Presi dent'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 stu dent, 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.

## Student Grievances and Appeals continued on next page

## College Grievance and Appeal Procedure

| Subject.. | 12 | First level for decision or action. $\qquad$ | 108 | Second level for appeal of decision or action |
| :---: | :---: | :---: | :---: | :---: |
| Academic Matters.. | 108 | Instructor | 198 | Division Dean |
|  |  | Division Dean | 108 | Vice President, Instruction |
| Academic Probation or Dismissal.. | $1{ }^{(1)}$ | College Policy | 108 | Dean, Counseling, Advising |
| Admissions. | 0 | Dean, Enrollment Services. | 198 | Vice President, Student Services |
| Attendance. | 0 | Instructor | 19 | Division Dean |
| Discipli | $1{ }^{\text {P }}$ | Vice President, Student Service | $1{ }^{188}$ | President |
|  |  | Disciplinary Advisory Committee |  |  |
| Discrimination Matters. | $1{ }^{2}$ | Vice Chancellor, Human Resources and Employee Relations |  | Chancellor |
| Fee Payments or Refunds and Non-Resident Tuition. | $1{ }^{298}$ | Dean, Enrollment Services........................ | 198 | Vice President, Student Services |
| Financial Aid. | $1{ }^{\text {¢ }}$ | Director of Financial Aid. | 128 | Dean, Enrollment Services |
| Matriculation. | 128 | Matriculation Policy. | 128 | Vice President, Student Services |
| Residency Determination | 19 | Dean, Enrollment Services | 128 | Vice President, Student Services |
| Security and Parking. | 18 | Supervisor of College Security................... | 128 | Dean, Administrative Services |
| Registration | 198 | Dean, Enrollment Services | 19 | Vice President, Student Services |
| Sexual Harassment.................................... | 18 | Vice Chancellor, Human Resources. \& Employee Relations | 128 | Chancellor |
| Student Records. | $1{ }^{\text {P8 }}$ | Dean, Enrollment Services. | 128 | Vice President, Student Services |
| Time, Place and Mann | 19 | College Policy | 198 | Vice President, Student Services |
| Waiver of Academic Requirements................... | 198 | College Policy...................................... | 198 | Academic Review Committee |
| Withdrawal (Late). | 12 | College Policy. | 19 | Dean, Enrollment Services |
| Matters Not Listed..................................... | 128 | College Policy or Appropriate Staff.............. | 128 | Vice President, Student Services |

## 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 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.

## 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 .
See Index: "Program Changes: Dropping Classes" for specific deadlines and procedures.

## 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.

## 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 Instruction Committee (2)
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)
District Auxiliary Services Advisory
Committee (DASAC) (3)
District Shared Governance Council
(DSGA) (1)
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, Building 5-125. Meeting times for Associated Student groups are available through the Student Activities Office in the Student Center, Building 5-125.

## 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 located in the Student Center, Building 5.

## Finance and 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, the California State Association of Community Colleges and the American Student Association of Community Colleges.

## 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, the book exchange service, the free swim and summer swim programs, 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. A major project of this committee is to coordinate the annual Volunteer Fair which matches students with local community agencies and non-profit associations. Members of this committee also serve on the CSM Connects advisory committee which also promotes volunteer and service learning programs for the college through the college curriculum.

## 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 in Bldg. 5, Room 125, 574-6141, before the end of the add/drop period.

## Student Clubs 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 5, Room 125; Telephone: 574-6141) for more information. All that is needed to start a new organization is at least the support 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.

## Academic and Career Oriented

Art Club Promotes appreciation and interest of art around the campus. Advisor: Jude Pittman, 574-6291.

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 Haynes, 574-6509.
Dental Assisting (Epsilon Delta) Provides social activities for dental assisting students and their families. Advisor: Audrey Behrens, 574-6212.
Digital Club A club where digital photography and digital graphic art students come together to share common tools, ideas and theory. Advisor: Richard Lohmann, 5746365.

Electronics Technology Provides activities and information for students in the electronics field. Advisor: Roy Brixen, 574-6135.
Engineering - Union of Student Engineers (USE) Provides information and interaction through activities and a club-run library/ lounge. Advisor: Laura Demsetz, 574-6617.

Floral Design - Students of the American Institute of Floral Design (SAIFD) Provides support and activities for floral design students. Advisor: Wendy Pine, 574-6170.
Horticulture Club Provides activities and fund-raisers for scholarships to help students continue their studies in horticulture. Advisor: Matthew Leddy, 574-6217.
Journalism Club Provides opportunities for journalism students to support student publications and attend local and state competitions. Advisor: Ed Remitz, 574-6330 and 574-6558.
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

French Club Provides support for students wanting to learn more about the French language and culture. Advisor: Susan Petit, 574-6357.

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 and Martin Bednarek, 574-6526.

German Club Provides support for students wanting to learn more about the German language and culture. Advisors: Roslyn Raney, 378-7301 ext. 19361 and Diane Musgrave, 574-6351.

Hip Hop Club Promotes interest and understanding of Hip Hop music as a culture. Advisor: Khalid White, 378-7301 ext. 19046.

Italian Club Promotes interest in the study of the Italian language and culture. Advisor: Guy Marra, 574-6677, ext. 9109.

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: Rudy Ramirez, 574-6496 and Lorena del Mundo, 574-6154.

Persian Club Celebrates Persian culture through special programs and events. Advisor: Mohsen Janatpour, 574-6272.
Polynesian Club Encourages an appreciation for Polynesian culture and provides support for Polynesian students. Advisor: Deborah Laulusa, 574-6461.
Spanish Club For those who want to speak and read Spanish. Advisor: Richard Castillo, 574-6316.
Unity Among Brothers (UAB) Provides ways for African-American males to support each other both socially and educationally. Hosts the annual UAB basketball tournament. Advisor: Zelte Crawford, 574-6145.

## Special Interests

Action Group Advocates social change and improvement through club projects on campus and in the community. Advisor: Erin Scholnick, 378-7301 ext. 19061.
Alpha Gamma Sigma (AGS Honor Society) The CSM Eta chapter began in the 1930's and provides students with support in achieving academic goals. Advisor: Al Acena, 574-6496.
Alumni Association Encourages current and former students to maintain interest in campus programs and activities after they have attended CSM. Advisor: Steve Robison 574-6141.
Anime Club Students come together to share interest in anime as an art form. Advisor: Sam Sanchez, 574-6121.
Body \& Brain Club Promote health and wellness through a combination of martial arts, meditation and yoga. Advisor: Lisa Melnick, 378-7301 ext. 19315.
Cheerleaders Spirit Squad Promotes spirit campuswide through cheerleading and spirit leading. Advisor: Andreas Wolf, 574-6461.
Chess Club Promotes interest in the game of chess. Advisor: Mohsen Janatpour, 574-6272.
Christian Fellowship Promotes academic, social and religious growth among students. Advisor: Kenneth Brown, 574-6249 and Thomas Blinn, 574-6522.
Film Club Promotes interest in film production and appreciation. Advisor: Helen Souranoff, 574-6191.

Performance Dance Ensemble To present dance performances. Advisor: Heidi Eggert, 574-6461 or 574-6243.

Phi Theta Kappa The CSM Beta Xi Eta Chapter began in 2005 and recognizes student scholarly achievements. Advisor: Jeremy Ball, 574-6638.

## Sports

Baseball Club Provides support for the Baseball team and promotes the love of baseball. Advisor: Doug Williams, 574-6875.
Football Club Provides support for the Football team and their fans. Advisor: Larry Owens, 358-6771/6447.
Softball Boosters Provides support for the Softball team and their fans. Advisor: Nicole Borg, 574-6464.
Track and Cross Country Provides support for members of the Track and Cross Country teams and their fans. Advisor: Joe Mangan, 574-6448.

Women's Basketball Club Provides support for the Women's Basketball team and their fans. Advisor: Michelle Warner, 358-6830.

## Support

A.P.E.S - Helping Hands Club Students lend a helping hand to those who need assistance in the adaptive P.E. program. Advisor: Shana Kudo, 378-7219.
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.
CSM Connects Club Provides information and support to students interested in community involvement through volunteer internships. Advisor: Beverley Madden, 574-6538.
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.
Inter-Nations Club Create a social community for International Students and their friends. Advisor: Martin Bednarek, 574-6526.
Transfer Club Provides information and support to students interested in transferring. Advisor: Mike Mitchell, 574-6662.
Transition to College Educate and create awareness about students with psychological disabilities and raise funds for books. Advisor: Debra Brasher, 378-7301 ext. 19113.

## Student Activities Office

The Student Activities Office is a drop-in information office located at the north end of the Student Center 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 college-sponsored 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 <br> 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 Building, including the Recreation/Games area, 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, Building 5, Room 125.

## Vending Refunds

If campus food vending machines are not vending properly, refunds are available through the Cafeteria. 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 5, Room 125, 574-6141.
Career Services Center Events Schedule - A publication prepared and distributed by the Career Development Center each semester which provides a schedule of career-related workshops and seminars.
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 for Student-Sponsored Events

The scope of these regulations extends to all student sponsored events and 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.
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.

## Student Organizations

## I. Activities Sponsored by Recognized Student Organizations

A. Definition: A recognized student organization is defined as a group which:

1. 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 in the CSM Activities Calendar and other publications of general circulation on campus such as The San Matean, Monday Morning Blues, or The Verb.
4. Deposits all organizational funds in a college account as required by established college procedures.
B. Privileges: The privileges of recognized student organizations include:
5. The use of the name of College of San Mateo.
6. The use of the buildings, grounds, equipment and services of the college when available and officially scheduled.
7. Publicity through appropriate college channels.
8. Appropriate advice and assistance from the Student Activities Office.

## C. Procedure for the presentation of programs:

1. 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, the Coordinator of Student Activities will place the event, if approved, on the Student Activities 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 the appropriate authorized areas as listed in Section D.1.
d. Programs will end by 1:00 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.

## D. Reservation of facilities for meetings or other purposes:

1. The sponsor of an approved program must reserve the desired facility in accordance with established procedures. The initial determination of the availability of a facility will be indicated by the personnel listed below:
a. Coordinator of Student Activities, 574-6141:
Student Center Building 5:
Main Cafeteria (400)
South Cafeteria (700)
Balcony Lounge (So. Mezzanine) (100)

Gallery Room (100)
Student Center Plaza (Outdoor)
b. Facilities Utilization Clerk, 574-6220:
All Classrooms
Choral Room (137)
Theatre (400)
Amphitheater (Outdoor)
Building 18, Room 206 (130)
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. (See Section 1.C. 2 for details.) 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 or during the College Hour (Tuesday and Thursday 12 noon to 1 p.m.) may sound amplification equipment be used out of doors. Exceptions to this policy may be granted by the Vice President, Student Services 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 or during the College Hour. Sponsors must also verify that it is impossible to do so.

## E. 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.

1. 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 of the Student Center.
5. Tables may be set up in authorized areas of the Student Center 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.
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.

## F. Posting of materials:

1. All materials to be posted must be dated and stamped by a member of the Student Activities Office staff.
2. Approved materials may be posted in the Student Center 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.
3. Materials may not be posted on doors, painted surfaces, or exterior building walls. All other surfaces (e.g., nonclassroom 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.
4. Permission may be granted to post materials, on a space available basis, to educational institutions or public service agencies.
5. The number and size of posters any one organization 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. Placement of materials on parked vehicles causes a severe litter problem and is expressly prohibited.
7. Exceptions to any of the preceding requirements must be approved in advance by the Coordinator of Student Activities.

## II. Ad-Hoc Student Organizations

## A. Definition:

An ad-hoc student organization is defined as a group which:

1. 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 (see Section 1.B) and must follow the procedural requirements outlined above.

## III. Off-Campus Organizations

Public service agencies and charitable organizations may request approval from the President for a limited number of fund raising or educational programs to be conducted on the campus. Such requests are subject to District policies with respect to use of facilities.

## IV. Activities Not Sponsored by Recognized Student Organizations

## A. Presentation of Programs

1. 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: Student Center Plaza
Student Center Hallway
Upper Pond Plaza
b. Time: College Hour - request
for other times must be approved in advance by the Coordinator of Student Activities
c. Civic Center use: College facilities may also be available for public use in accordance with District Regulations.
2. Procedure for Presentation of Programs:
a. All programs presented under these guidelines must be open to the public and free of charge.
b. Prior authorization is required. In order to obtain such authorization to present the program, the sponsoring individual or group is required to furnish the Coordinator of Student Activities with appropriate details regarding the planned program, including: 1) nature of the program, 2) date, 3) time, 4) anticipated attendance, 5) preferred location (taken from list of approved locations), and 6) services needed (e.g. sound amplification, custodial, ushering, security).
Upon review of the request, the Coordinator of Student Activities will approve or disapprove the activity, assign a time and location and calculate and collect charges, if any, for use of District equipment, security, custodial or other necessary expenses. In the event that the activity is not approved, the sponsor may appeal the denial to the Vice President, Student Services, whose decision shall be final.
c. Program plans must demonstrate that the program will not present or create undue health or safety risks to students, staff, or the public.
d. Authorization may be denied only in cases where it is reasonably believed that the proposed activity is likely to cause a substantial disruption to the orderly operation of the college, is obscene or pornographic, is pervasively vulgar or indecent, or advertises products or services not permitted for use under the law.
e. Approved programs must be confined to the time and place designated by the Coordinator of Student Activities and limited to the times and places set forth in Section IV.A.1.

## B. Distribution of Materials

1. Pre-approval of materials. 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.
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.
2. 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.
3. 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 14 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 14 days old and may be removed. Materials bearing a date stamp may remain on designated bulletin boards for up to 14 days.
4. Materials may not be posted on doors, painted surfaces, or on building walls. Sponsors are responsible for removing posted materials upon expiration of the approved time period.
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.
7. Placement of materials on parked vehicles causes a severe litter problem and is expressly prohibited.

## Bookstore

The CSM Bookstore is located on the lower level of the Student Center, Building 5, and is open Monday through Thursday from 8 a.m. to $7: 15 \mathrm{p} . \mathrm{m}$. and Friday from 8 a.m. to 3 p.m. when classes are in session. Summer hours vary. Books can also be purchased online at: http://bookstore. collegeofsanmateo.edu.
The standard refund policy allows for the return of any items (except paperbacks, tradebooks, and study aids) with the original receipt within three days of purchase, except during the last five weeks of the semester. The merchandise must be new or in its original condition. Textbook and other merchandise purchased for a new semester may be returned with the receipt any time within the first two weeks of classes. Summer policy varies. Please verify your books with your instructor within the first two weeks of the semester.
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/Cafeteria

The Cafeteria is located in the Student Center, Building 5, and is open Monday through Thursday from 7:30 a.m. to 2 p.m. and Friday from 7:30 a.m. to 1 p.m. when classes are in session. The Cafeteria provides a selection of hot and cold foods including a fresh salad bar, homemade soups, made-to-order deli sandwiches, broiler and grill specialties, and a variety of beverages. Everything served is made fresh daily in the cafeteria's own kitchen. Catering is available for special occasions and meetings by contacting the manager (5746582).

## Food Service/Kiosko

To serve students at the north end of campus, the "Kiosko" snack bar is located near Building 13 and is open Monday through Thursday from 7:30 a.m. to 2 p.m. and 5 to 9 p.m.; and Friday from 7:30 a.m. to 2 p.m. when classes are in session. The manager can be reached at 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 1:30 p.m. and 5:30 to 8:30 p.m.; and Friday from 7:30 a.m. to 1:30 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, 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:

1. 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 postsecondary institution.
3. 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. 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 12 -unit residency rule for previous participants will be waived for a studentathlete 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 $\mathrm{D}, \mathrm{F}$, or NC 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 academic 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: 574-6461.

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 $\quad 574-6161$ |


| A |  |
| :--- | ---: |
| Accounting | $574-6494$ |
| Adapted P.E. | $378-7219$ |
| Administration of Justice | $574-6343$ |
| Admissions and Records | $574-6165$ |
| Dean | $574-6590$ |
| Assistant Registrar | $574-6576$ |
| $\quad$ AA/AS/Certificate Information | $358-6857$ |
| Admissions Information | $574-6165$ |
| $\quad$ Grades/Attendance | $358-6855$ |
| $\quad$ Registration Information | $574-6165$ |
| $\quad$ Transcripts (Outgoing) | $574-6593$ |
| 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 | $574-6141$ |


| Executive Officers: |  |
| :--- | ---: |
| President | $574-6185$ |
|  | or $574-6141$ |
| Vice President | $574-6185$ |
|  | or $574-6141$ |
| Senate Vice Chairperson | $574-6185$ |
|  | or $574-6141$ |
| Secretary | $574-6185$ |
|  | or $574-6141$ |
| Finance Director | $574-6185$ |
|  | or $574-6141$ |


Volunteer Community
Service

| Associated Student |  |
| :--- | ---: |
| $\quad$ Bookkeeper/Cashier | $574-6589$ |
| Astronomy | $574-6268$ |
|  | or $574-6256$ |
| Athletics | $574-6461$ |
| Audio/Visual Services | $574-6103$ |
| B |  |
| Biology | $574-6268$ |
| Building Technology | $574-6228$ |
| Bookstore | $574-6366$ |
| Broadcast and Electronic Media | $574-6521$ |
| Bus Schedules \& Passes | $574-6161$ |
| Business Division | $574-6494$ |
| Business Services/Cashier | $574-6412$ |


| $\mathbf{C}$ |  |
| :--- | ---: |
| Cafeteria | $574-6582$ |


| Career Services Center | $574-6571$ |
| :--- | :--- |
| Cashier's Office | $574-6412$ |

Ceramics Lab 574-6290
Chemistry
574-6268
Child Development Center 574-6279
Clubs \& Organizations 574-6141
Computer \& Information Science 574-6693
or 574-6228
Computer Lab 1 (Business) 574-6489
Computer Lab 2 (Business) 574-6470
Computer Lab (Math/Science) 574-6270
Cooperative Work
Experience Education 574-6171
Community Education 574-6149
Cosmetology Information 574-6361
Hair Appointments
Counseling Services
Counseling Center
Drop-In Counseling
Creative Arts Division
574-6361
574-6400
574-6400
574-6400
574-6494
574-6538
D
Dance
Dental Assisting
Disabled Student Services
Adapted P.E.
Assistive Technology Center
Disability Resource Center
Learning Disabilities
Assessment Center 574-6433
Transition to College 574-6487
Distance Learning 524-6933
Drafting 358-6758

| E |  |
| :---: | :---: |
| E.O.P.S. | 574-6154 |
| Economics | 574-6496 |
| Electronics | 574-6135 |
| Emeritus Information | 574-6149 |
| Engineering | 574-6268 |
| English/Speech | 574-6314 |
| Ethnic Studies | 574-6145 |
| Evening College | 574-6165 |
| $\bar{F}$ |  |
| Facilities Scheduling/Rental | 574-6220 |
| Film | 574-6314 |
| Financial Aid | 574-6146 |
| Fire Technology | 574-6347 |
| Floristry Lab | 574-6170 |
|  | or 574-6217 |
| Foreign Language | 574-6314 |
| G |  |
| Game Room | 574-6141 |
| Geography | 574-6496 |
| Geology | 574-6268 |
| Graphics | 574-6278 |
| H |  |
| Health Center (Nurse) | 574-6396 |
| Health Science | 574-6268 |
| History | 574-6496 |
| Honors Program | 574-6638 |
| Horticulture Lab | 574-6217 |
| Housing Assistance | 574-6141 |
| Humanities | 574-6496 |
| I |  |
| ID Cards | 574-6161 |
| Information (Operator) | 574-6161 |
| On Campus | DIAL "0" |
| Instruction Office | 574-6404 |
| Instructional Media Services | 574-6543 |
| International Student Center | 574-6525 |
| J |  |
| Job Listing (Student) | 574-6151 |
| Job Information (District) | 574-6111 |
| Journalism | 574-6330 |



## 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 $\mathrm{C}(2.0)$, 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:

1. Academic Probation based on grade point average: A student who has attempted at least 12 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 12 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 no longer equals or 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:

1. The student's cumulative grade point average is less than 1.75 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 NC) 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 conditions:

1. A period of at least three years must have elapsed since the course work to be alleviated was completed; and
2. A student seeking alleviation must have met one of the benchmarks listed below:

- Completed 9 units of course work with a 3.5 cumulative grade point average, or
- Completed 15 units of course work with a 3.0 cumulative grade point average, or
- Completed 21 units of course work with a 2.5 cumulative grade point average, or
- Completed 24 units of course work with a 2.0 cumulative grade point average.

3. The substandard course work to be alleviated must have been taken at Ca ñada College, College of San Mateo, or Skyline College. However, the course
work on which the application for alleviation is based may be completed at any college or university accredited by the Western Association of Schools and Colleges or equivalent accrediting agency.
The academic renewal policy may be applied when alleviation of prior course work is necessary to qualify a student for financial aid or admission to a program or transfer to another institution or for completion of a certificate or degree program.
To request Academic Renewal, a student must file a formal petition with the Office of Admissions and Records. 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.

## 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 120 , a student cannot enroll in a lower course (i.e., Spanish 110) 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 111 cannot be taken after successful completion of French 110.

## Credit by Examination

A currently enrolled student in good standing may be permitted to obtain credit for a limited number of specifically designated 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 appropriate division. Interested students should contact the Office of Instruction for a list of courses available for Credit by Examination.

Credit will not be allowed for a course for which credit has been previously granted or for which credit has been earned in a more advanced course in the same sequence. A student may earn up to 12 units through credit by examination, which will be applied toward the A.A./A.S. degree. Units earned by examination will NOT be counted for financial aid purposes and will not count toward the residence required for an associate degree.
A student may challenge a course for credit by examination only one time. A challenge examination may not be used in order to improve a grade already received for a course.

Credit may also be earned through certain Advanced Placement Examinations (see Advanced Placement Examination Credit on next page) and through completion of certain specialized certificate/license programs. The student's academic record shall be clearly annotated to reflect that credit was earned by examination.

## 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

## A. Repeated for Credit

The Board of Trustees of San Mateo County Community College District has adopted a policy (District Rules and Regulations, Section 6.12) which permits a student to repeat certain courses for credit a maximum of 3 times (for a total of four class enrollments). These courses require increasing levels of student performance or provide significantly different course content each subsequent semester. Such courses are designated as "may be repeated for credit" in the College catalog. Courses which are not so designated may not be repeated under this policy. Further information on this policy is available from counselors/advisors.

## B. Grade Alleviation

A student who has received a grade of $\mathrm{D}, \mathrm{F}$, or NC in a course taken at a college of the San Mateo County Community College District may repeat the course one time for the purpose of grade alleviation. The higher of the two grades will be used in the computation of the grade point average.
With extenuating circumstances, a student may petition the Office of Admissions and Records for permission to repeat a course more than once.

The original grade will remain on the transcript, but will no longer affect the grade point average. The permanent academic record shall be annotated in such a way that all courses attempted will be indicated on the transcript in showing a true and complete academic history.
Course repetition completed at any college of the San Mateo County Community College District will be honored; course repetition involving work completed at a non-district institution may be honored. Students may apply for such consideration to the Office of Admissions and Records. In no case will the unit value of a course be counted more than once. Courses in which the student has received grades other than those of $\mathrm{D}, \mathrm{F}$ or NC are not subject to the provisions of this policy.

## C. Remedial Course Work Limit

No student shall receive more than 30 semester units of credit for remedial/basic skills course work. Any student who can show significant progress toward the development of skills appropriate to his/her college enrollment may obtain a waiver of this limitation. However, students enrolled in ESL courses or those with learning disabilities are exempt from this limitation.

## D. Mandated Training Requirement

Course repetition shall be permitted, without petition, in instances when such repetition is necessary for a student to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. 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.

## E. Special Circumstances

Under special educationally justifiable circumstances, repetition of credit courses other than those for which substandard work has been recorded may be permitted. The student must obtain prior written permission from the Dean of Counseling before such course repetition will be authorized. Normally, a student may repeat such a course only once. Under unusual circumstances, a student may petition the Dean of Counseling for permission to repeat a course more than once. When evaluating a student's transcript for graduation, grades awarded for courses repeated under this provision are not considered in calculating the student's grade point average, and in no case is the unit value of the repeated course counted more than once.

## 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: (1) 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

1. 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 truefalse 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 Tools for Teaching, pp. 300-310, or other appropriate 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 shall [are encouraged to] document the details of the alleged incident.
4. Once the instructor is certain that cheating or plagiarism occurred, sanctions should be applied in a timely manner. Further, the instructor shall [should] notify the student, in writing, in those cases where the violation is being reported to the Vice President, Student Services.

## 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:

1. 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.
3. Assign the student an " $F$ " grade in the course. Note that if the student withdraws before the withdrawal deadline, the " F " grade will not appear in the permanent record.
For sanctions 2 and 3, the instructor shall report the violation to the Vice President, Student Services, whose office maintains such information. The instructor should include the following: 1) whether the violation is being reported for: a) information only, or b) possible College discipline, 2) name and identification number of the student, 3) the specific nature of the violation, 4) the date of its occurrence, 5) how the violation was determined, 6) the specific sanction imposed by the instructor, and 7) any additional comments that the instructor wishes to include.
Utilizing such reports, the Vice President may determine that College-level discipline is appropriate based on the magnitude and severity of other documented reports related to the same student. The Vice President shall document any college-level sanction (e.g., suspension or expulsion) that is taken. 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 catalogue.


## Use of College Board Advanced Placement Tests at College of San Mateo for Associate Degree General Education, CSU General Education, and IGETC

The following table shows how College Board Advanced Placement Test (AP) tests are applied to: 1- the College of San Mateo Associate degree general education requirements, 2- the California State University General Education/Breadth Pattern (CSU GE) and 3 - the Intersegmental General Education Transfer Curriculum (IGETC)
This table deals only with general education credit. The application of AP test scores to major requirements varies by transfer school and major. It is essential 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 their placement in a course sequence and affect transfer plans. To receive credit for AP examinations, the student must score a 3, 4 , or 5 . The student is responsible for sending official College Board Advanced Placement results test results to the College of San Mateo Admissions and Records Office.

| Advanced <br> Placement Test* | CSM Associate Degree General Education | CSU** General Ed Certification 9/25/97 | IGETC+ IGETC Application | General UC Policy for AP |
| :---: | :---: | :---: | :---: | :---: |
| Art <br> Art History <br> Studio Art: Drawing <br> Studio Art: General | 3 semester units in the Humanities area/Arts none none | 3 semester units C1 <br> none <br> none | One course in Area 3A none none | *UC 8 quarter units <br> *UC 8 quarter units <br> *UC 8 quarter units |
| Biology | 3 semester units in the Natural Sci Area/Life | 3 semester units B2 | One course in Area 5B | * UC 8 quarter units |
| Chemistry | 6 semester units. GE credit under Natural Science Area w/lab | 6 semester units B1 \& B3 | One course in Area 5B with lab | * UC 8 quarter units |
| Computer Science A <br> Computer Science AB | none none | none <br> none | none none | *UC 2 quarter units <br> *UC 4 quarter units (4 qt. unit max for both tests) |
| Economics <br> Macroeconomics <br> Microeconomics | Each test generates 3 semester units in Social \& Behavioral Science Area/Social Institutions | 3 semester units D <br> 3 semester units D | One course in Area 4 <br> One course in Area 4 | *UC 4 quarter units <br> *UC 4 quarter units |
| English <br> Language \& Comp <br> Literature \& Comp | Meets Eng \& Rd comp. <br> 3 semester units in Language \& Rationality <br> Communication 6 sem units for Language and rationality \& Humanities area | 3 semester units A2 <br> 6 semester units in A2 and C2 | One course in Area 1A <br> One course in Area 1A or 3B | *UC 8 quarter units <br> *UC 8 quarter units |
| Environmental Science | none | none | none | * UC 4 quarter units |
| History <br> European <br> United States <br> World | Each test generates 3 semester units in the area of Social \& Behavioral Science US test meets US History requirement. | 3 semester units in $D$ <br> 3 semester units in D <br> *new test in review | One course in Area 3B or 4 <br> One course in Area 3B or 4 <br> *new test in review | *UC 8 quarter units <br> *UC 8 quarter units <br> *UC new test in review |
| French <br> French Language <br> French Literature | Each test generates 6 semester units in the area of Humanities | 6 semester units in C2 <br> 6 semester units in C2 | Each course meets foreign language proficiency <br> One course in 3B <br> One course in 3B | *UC 8 quarter units <br> *UC 8 quarter units |
| German Language | 6 semester units in the Humanities area | 6 semester units in C2 | One course in 3B and meets foreign language proficiency | * UC 8 quarter units |


| Advanced <br> Placement Test* | CSM Associate Degree General Education | CSU** General Ed Certification 9/25/97 | IGETC+ IGETC Application | General UC Policy for AP |
| :---: | :---: | :---: | :---: | :---: |
| Government \& Politics Comparative United States | Each test generates 3 semester units in the Social Science area US test meets US Constitution requirement | 3 semester units D <br> 3 semester units D | One course in Area 4 <br> One course in Area 4 | *UC 4 quarter units <br> *UC 4 quarter units |
| Latin <br> Latin Literature <br> Latin Vergil | Each test generates 3 semester units in the Humanities Area/Humanities | 3 semester units C2 <br> 3 semester units C2 | Each course meets foreign language proficiency <br> One course in Area 3B <br> One course inn Area 3B | *UC 4 quarter units <br> *UC 4 quarter units |
| Mathematics Calculus AB Calculus BC | Each test generates 3 semester units in the Analytical Thinking area and meets math competency requirement | 3 semester units B4 <br> 3 semester units B4 | One course in Area 2 <br> One course in Area 2 | *UC 4 quarter units <br> *UC 8 quarter units (8 qt units max for Math) |
| Music Theory | 3 semester units in the Humanities area/Arts | 3 semester units C1 | One course in Area 3A | * UC 8 quarter units |
| Physics <br> Physics B <br> Physics C: Electricity <br> Physics C: Mechanics | 6 semester units in Natural Sci/Phys w/lab 3 units Nat. Sci/Physical 3 units Nat. Sci/Physical | 6 semester units B1\&B3 <br> 3 semester units B1\&B3 <br> 3 semester units B1 \& B3 | One course in Area 5A with lab <br> One course in Area 5A <br> One course in Area 5A | *UC 8 quarter units <br> *UC 4 quarter units <br> *UC 4 quarter units (8 qt. max for 3 tests) |
| Psychology | 3 semester units in the Social \& Behavioral area/ Social Institutions | 3 semester units D | One course in Area 4 | * UC 4 quarter units |
| Spanish <br> Language <br> Literature | Each test generates 6 semester units in the Humanities area | 6 semester units C2 <br> 6 semester units C2 | Each course meets foreign language proficiency One course 3B <br> One course 3B | *UC 8 quarter units <br> *UC 8 quarter units |
| Statistics | Meets math competency 3 semester units in Analytical Thinking | 3 semester units B4 | One course in Area 2 | * UC 4 quarter units |

*ADVANCED PLACEMENT TESTS (AP) - College of San Mateo views, as do many colleges and universities, the Advanced Placement Test as a transcript from an independent college. College of San Mateo applies AP credit toward the Associate degree general education requirements in the same manner as the California State University system applies AP credit to CSU General Education/Breadth requirements. The chart above outlines general education application for Advanced Placement credit. Applying Advanced Placement credit to meet specific majors is more complicated. Each instructional division at College of San Mateo determines how AP credit can be applied to majors for Associate degree or certificates. How AP credit is applied to university majors and degree requirements is determined by evaluators at each college or university. Students should be aware that college courses taken after the AP test may duplicate the content of the AP test and, in these cases, College of San Mateo and the university (transfer destination) may not award credit for both the course and the AP test. Space does not permit discussion of how AP credit is granted for every university and program so students are advised to thoroughly investigate this area.
+IGETC - Advanced Placement tests can be used to satisfy all areas of IGETC except for Areas 1B and 1C. This work may be applied toward completion of IGETC but applicability of such coursework toward a major or degree requirements rests with each CSU and UC campus.
${ }^{* *} \mathrm{CSU}$ - A student may earn up to 6 semester units of baccalaureate credit for each Advanced Placement test of the College Entrance Examination Board on which the student receives a score of 3,4 , or 5 . The list above indicates how AP credit it applied to CSU GE/Breadth requirements.
*UC - The University of California system grants credit for all College Board Advanced Placement Tests on which a student scores 3 or higher. The credit may be subject credit, graduation credit, or credit toward general education or breadth requirements as determined by evaluators at each campus.

## International Baccaulaureate Examination (IB)

The following list of International Baccalaureate (IB) Examinations indicates how credit is applied to CSM Associate Degree General Education requirements. Note: If you are planning to use the IB Exams for the CSU General Education/Breadth Pattern (CSU GE), please consult with a CSM counselor/advisor. The IB Exams for which CSM grants credit are listed below. Only scores of 5, 6, or 7 will receive credit.

| IB EXAM | CSM AA/AS Degree Requirements | UC IGETC Certification |
| :---: | :---: | :---: |
| Art/Design | 3 units Area E 5c, Humanities | 3 units Area 3, Arts |
| Biology | 3 units Area E 5a, Natural Science w/lab | 3 units Area 5, Biological Sciences w/lab |
| Chemistry | 3 units Area E 5a, Natural Science w/lab | 3 units Area 5, Physical Sciences w/lab |
| Classical Languages | 3 units Area E 5c, Humanities | 3 units Area 3, Humanities |
| Computer Science | 3 units Area E 5d, Career Exploration | N/A |
| Economics | 3 units Area E 5b, Social Science | 3 units Area 4-Social \& Behavioral Sciences |
| English [Language A1] | -Meets English \& Reading Composition -3 units Area 2a/2b, Language \& Rationality/ Communication \& Analytical Thinking | 3 units Area 1A, English Composition |
| Geography | 3 units Area E 5a, Natural Science | 3 units Area 5, Physical Sciences |
| History | 3 units Area E 5b, Social Science | 3 units Area 3, Humanities |
| History of the Islamic World | 3 units Area E 5b, Social Science | 3 units Area 3, Humanities |
| Languages Other Than English* | Area E 5c, Humanities | 3 units Area 3, Humanities-LOTE |
| Mathematics | 3 units Area C1, Math/Quantitative Reasoning | 3 units Area 2, Math |
| Music | 3 units Area E 5c, Humanities | 3 units Area 3, Arts |
| Philosophy | 3 units Area E 5c, Humanities | 3 units Area 3, Humanities |
| Physics | 3 units Area E 5a, Natural Science | 3 units Area 5, Physical Sciences w/lab |
| Psychology | 3 units Area E 5c, Social Science | 3 units Area 4-Social \& Behavioral Sciences |
| Social Anthropology | 3 units Area E 5c, Social Science | 3 units Area 4-Social \& Behavioral Sciences |
| Theatre Arts | 3 units Area E 5c, Humanities | 3 units Area 3, Arts |

* Languages Other Than English: French, German, Classical Greek, Italian, Japanese, Latin, Portuguese, Russian, and Spanish.

College of San Mateo views, as do most colleges and universities, IB examinations as a transcript from an independent college. In order to receive course credit, students are responsible for sending IB test score transcripts to their transfer institution. Information about the IB Examination is available here: www.ibo.org
The chart above delineates the application of IB examination credit for purposes of satisfying general education or breadth requirements. The application of IB to meet specific major degree requirements is more complicated. Each instructional division at College of San Mateo determines how IB credit is applied to specific majors or certificates. Similarly, how IB credit is applied to university major degree requirements is determined at each college or university. Economy of space does not permit discussion of how IB credit is granted for every university and program; students are advised to thoroughly investigate how IB credit can be used for this purpose.

## 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. 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 two weeks and can be renewed for an additional two 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 in-library 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 workstations 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 81 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 website (collegeofsanmateo.edu/library).

## KCSM TV and FM

KCSMTV 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 17 and KCSM radio broadcasts on 91.1 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 website 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
Career Development Center
Eileen O'Brien
Child Development Center, Coordinator
Louise Piper
Cooperative Work Experience Education Eileen O'Brien
Counseling Center
Gary Booker
CSM Connects
Beverley Madden
Disabled Students Programs and Services
Danita Scott-Taylor
Financial Aid Director
Claudia Menjivar
Health Services
Sharon Bartels
High School Relations
Steve Morehouse
International Student Advisor
Martin Bednarek
Learning Disabilities Specialist
Peggy Ryan
Multicultural Center
Danita Scott-Taylor
Extended Opportunity Programs
and Services (EOPS)
Danita Scott-Taylor
Psychological Services
Makiko Ueda
Scholarships
Nancy Pendergast

## Student Activities Coordinator

## TBA

Student Employment
Eileen O'Brien
Transfer Service
Mike Mitchell

## 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 1) 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
Kathryn Brown
Elaine Burns
Arnett Caviel
Dean Chowenhill
Jacqueline Gamelin
Modesta Garcia
Eileen O'Brien
Carolyn Ramsey
Aisha Upshaw
Mary Valenti
Bilingual Counselors (Spanish)
Sylvia Aguirre-Alberto
Modesta Garcia
CalWORKS Counselor
Aisha Upshaw
CARE Program
Ruth Turner
Career Counseling Specialists
Elaine Burns
Eileen O'Brien
Cooperative Admissions Program
Aisha Upshaw
Disabled Student Services/
Transition to College
Kevin Sinarle
EOPS Counselors
Sylvia Aguirre-Alberto
Arnett Caviel
Ruth Turner
Aisha Upshaw
ESL (Non-native English Speakers)
Sylvia Aguirre-Alberto
Honors, Re-entry
Elaine Burns
Multicultural Center Counselors
Sylvia Aguirre-Alberto
Aisha Upshaw
Technology Areas (CAD, Building Inspection)
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 1) 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.

## Architecture

Laura Demsetz
Arts, Music, Film, Horticulture
Janet Black

## Athletics/Physical Education

TBA

## Business

Rick Ambrose
Patricia Brannock
Janice Willis
Computer Science and Information Systems
Laura Demsetz
Stacey Grasso
Cosmetology
Patricia Brannock
Dental Assisting
Patricia Brannock
Engineering/Mathematics
Laura Demsetz
Barbara Uchida
Fire Science/Administration of Justice
Thurman McGinnis
Language Arts/English
Linda Scholar
Multi-media
Patricia Brannock
Physical \& Natural Science, Nursing
Laura Demsetz
Linda Hand
Barbara Uchida
Philosophy and Social Sciences
David Danielson
(See a College Counselor ifyou are looking for a major that does not appear in the categories listed above.)

## Assessment Center Services

The Assessment Center, located in Building 1, Room 130, conducts the college placement testing program. Testing is offered by appointment year round to students who have completed a CSM admissions application. The Assessment Center provides other selfassessment instruments in cooperation with the Career Development Center.
Career assessment, including occupational interest, personality, values, and skill assessments, are available to assist students with decisions concerning career choices. Combinations of test scores and interest patterns create profiles unique to each person. Students who are undecided about their major, as well as those who would like to verify established goals, may find these services valuable as a source of motivation and in the identification of educational objectives and occupational choices. These career assessment tools are available through many Career and Life Planning classes.

## Self-Assessment Instruments

- Interests Inventories (a fee is assessed for these inventories)
- Personality Surveys (a fee is assessed for these surveys)
- Values Classification
- Skills Assessment
- Learning Styles


## Assessment for learning disability eligibility

 is available through the Learning Disability Assessment Center in Building 16, Room 150, or call 574-6433 for additional information.Placement tests are generally required for all students who plan to enroll at CSM to complete a vocational certificate, an associate degree, transfer to a four-year college or university, or who are undecided about their educational goals. The tests are designed to measure current skills in English, reading and mathematics. Students are advised to discuss their placement test results with a counselor/advisor so that, in combination with other relevant information (e.g., previous academic record), they can assist students in determining their academic program and in the development of an educational plan. Students with questions about placement testing are encouraged to contact the Office of Assessment Services, Bldg. 1, Room 130, 574-6175.

Placement tests are offered year-round in the Assessment Center, Bldg. 1, Room 130. For detailed information, check the website or call 574-6262 or 574-6175.

## Accommodations for the CSM placement

 test for students with physical, psychological, visual, communication or learning disabilities are coordinated through the Disability Resource Center, Building 16, Room 150, or by calling 574-6438.ESL placement testing for students who speak English as a second language is given at selected placement testing sessions. Placement recommendations for Non-Native Speakers of English are based on the results of special English and reading tests for non-native speakers of English. Other students who have questions about ESL tests are encouraged to contact the Multicultural Center, Building 20, Room 107 (574-6154).
Students may take the English and reading test once. They may repeat the same level math test one time only. No fee is charged for testing and pre-registration is not required. Students must bring their CSM student identification number and photo identification (e.g., driver's license) to the testing. For information regarding special exceptions to the policies explained above, please contact the Office of Assessment Services at 574-6175. Any student wishing to request exemption from the placement test requirement should contact the Dean of Counseling/Advising and Matriculation, Building 1, Room 209.
Students enrolling in an English composition class must fulfill the skill level prerequisite for that class if the prerequisite course requirement has not been met. Skill level prerequisites may be satisfied by an appropriate score on the English/Reading placement test. See English and Reading course listings for more information regarding skill level prerequisites. Under specific guidelines from the Language Arts Division, English, Reading and ESL tests may be repeated only after two years.
Students enrolling in any mathematics courses are required to take the appropriate SMCCCD placement test or present proof to their mathematics instructor that they have successfully completed (grade of C or higher) courses at an accredited college or university which are equivalent to the SMCCCD prerequisites as listed in the catalog and class schedule. Taking the mathematics placement test is appropriate when a student has not taken a math course for several years. Students may repeat the same level mathematics test one time only. CSM does not accept alternate placement test scores for mathematics placement.

## 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 107 (574-6154).

## Career Services

Located within the Career Development Center, Building T1, career services is a college resource designed to assist students to make decisions about their college major and/ or career. Current information about career opportunities, a library of college catalogs, audiovisual materials and the EUREKA computerized career information system are available in the Center. The Center is equipped with 10 computer stations for student use. It is important for students who are undecided about their majors and/or career goals to use not only the services available in the Career Development Center, but to also enroll in one or more of the many career and life planning courses (CRER) available each semester.
Through electronic media such as the Internet, students are able to access current bulletins and career descriptions, as well as salary levels and the employment outlook for specific job types. The Center maintains an up-to-date listing of recommended websites for job search and job/college related information. Reference books such as the Occupational Outlook Handbook which gives detailed descriptions of over 12,000 occupations, are available.
Career counseling appointments are offered to help students with academic, personal and career planning. A brochure of scheduled events is available at the beginning of each semester as well as online at collegeofsanmateo.edu/career. These events and classes are designed to provide information to assist students in their academic preparation, career selection, job-hunting, or to enhance current job skills.

## 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 $2 \frac{1}{2}$ through 5 . The Center is open from 7:30 a.m. to 5 p.m. daily. Currently, tuition fees for children $2 \frac{1}{2}$ 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.

## 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: 1) 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 the Counseling Center, Bldg. 5, Room 128, 5746400. The Counseling Center 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 1, Room 226 (5746396).

## CSM Connects

CSM Connects is the volunteer community service program that provides students, faculty, and staff with opportunities to get involved in the community. Service Learning enables students to connect volunteer work and hands-on learning with the academic courses they are taking. Student Leaders in the Community grants are awarded to CSM students for carrying out projects that serve community needs. The Volunteer Fair is an annual event in the spring that brings community agencies on campus to showcase their volunteer opportunities. For more information see Beverley Madden, Bldg. T1, 574-6538 or visit the website at collegeofsanmateo.edu/csmconnects.

## Disabled Student Services

Students entering college with disabilities who need assistance should contact staff for a preenrollment 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 16, 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 16, Room 150 (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 16, Room 151 (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 (378-7219), Adapted Physical Education, Gymnasium, Building 8, Room 109A.

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 in Building 15, Room 127 (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 1) 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: 1) full-time (12 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 107, or call 574-6154. Office hours are Monday through Friday, 8 a.m. to $4: 30$ p.m and evenings by appointment.

## Health Services

In the CSM Health 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, strep, and smoking cessation programs; anonymous HIV counseling and testing; nutrition and stress counseling; and Tetanus and Measles-MumpsRubella immunizations. 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.
In addition to the above mentioned services, physician services are available by appointment for family planning, STD treatment, physicals, and treatment of minor illnesses (some fees may apply). Appointments are made through the Health Center.
The Health Center is located in Bldg. 1, Room 226. Office hours are 8:30 a.m. to 7 p.m., Monday through Thursday and 8:30 a.m. to 12 noon on Friday. For more information, visit the Health Center or call 574-6396.

## 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 800 Lab serves students enrolled in ENGL 828, 838 and 848. (Building 18, Room 102; 547-6539)
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.

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 101; 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 18, Room 110; 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 18, Room 104; 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 112 and 113 (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 1, 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 15, Room 127, 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 $\$ 200,000$.
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 12 graded 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 end of January. For specific dates and additional information contact the Scholarship Office, Building 1, Room 271 (574-6434).

## Student Employment Services

Located in the Career Development Center, Bldg. T1, the Student Employment Office assists students and alumni in obtaining internship and job information. Current internship, part-time work, and professional job listings are available for review and follow up. Students may also schedule an individual appointment to develop a personal plan and strategies for finding work.
Students can now expand their job search by going to the Student Employment website at collegeofsanmateo.edu/studentjobs. There students will find information about job listings, CSM job fairs, the job search course and events, and other work-related workshops. Furthermore, students can access job listings through CSM Joblinks, our free on-line jobposting service. Information about these and other employment services is available in the Student Employment Office. Call 574-6151 for more information.

## Transfer Services

Located within the Counseling and Transfer Center in Bldg. 5, Room 128, 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, dis-ability-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 in Building 15, Room 127 (574-6487 or 574-6642).


## College of San Mateo Placement Tests

- Computerized and Manual MDTP (Mathematics Diagnostic Testing Project) for mathematics course placement
- ACCUPLACER Reading Comprehension and sentence structure (computerized Placement Tests) (The College Board)
- CPTS Reading Comprehension and sentence structure (Companion to the Computerized Placement Tests) (The College Board)
- SLEP (Secondary Level English Proficiency Test) - for reading and conversation speech course placement for non-native speakers of English (ETS - Educational Testing Service)
- ESL Writing Test - for non-native speakers of English (ESL)
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

Minimum Score
*SAT-I Verbal 580
*SAT-II 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 <br> Reading score of: | and a Sentence <br> Skills score of: | Take the following <br> English and Reading <br> course(s): |
| :--- | :--- | :--- |
| 0 to $8(0$ to 27)........................ All scores............................ Take READ 812 first |  |  |

15 to 20 ( 42 to 62).................... 0 to 14 ( 0 to 53) ................. Take ENGL 828
15 to 20 ( 42 to 62).................... 15 to 21 ( 54 to 85) ............. Take ENGL 838
15 to 20 ( 42 to 62).................... 22 to 35 ( 86 to 120) ........... Take ENGL 848
21 to 26 (63 to 87).................... 0 to 10 ( 0 to 34) ................. Take ENGL 828
21 to 26 (63 to 87).................... 11 to 18 (35 to 72) ............. Take ENGL 838
21 to 26 (63 to 87)..................... 19 to 35 (73 to 120) ........... Take ENGL 848
27 to 35 ( 88 to 120)................... 0 to 11 ( 0 to 38) .................. Take ENGL 828
27 to 35 ( 88 to 120).................. 12 to 13 (39 to 48) ............. Take ENGL 838
27 to 35 ( 88 to 120).................. 14 to 21 ( 49 to 85) ............. Take ENGL 848
27 to 35 (88 to 120).................. 22 to 25 (86 to 101) ........... Take ENGL 100 + 101
(100 + 101 paired sections must be taken together)

27 to 35 (88 to 120) $\qquad$ 26 to 35 (102 to 120 ) $\qquad$ Take ENGL 100

More detailed information on the determination of English course placements is available in the Office of Testing Services (Building 1, Room 130) during day hours, and in the Counseling Center (Building 5, Room 128) on Monday - Thursday evenings.

## English as a Second Language (ESL) Course Placement Guide

## Placement Results for Writing Courses

Evaluation of the ESL essay determines the following placement:

| ESL Writing Courses (Effective Fall 2003 Semester) | Supplemental Course |
| :---: | :---: |
| See Placement Guide* |  |
| Level 1: ESL 825 | None |
| Level 2: ESL 826 | None |
| Level 3: ESL 827 | ESL 880 (Grammar Review) |
| Level 4: ESL 828 | ESL 880 (Grammar Review) |
| Level 5: ESL 400 | ESL 880 (Grammar Review) |

*An ESL writing placement of "See Placement Guide" means that your writing skills are below the recommended level for placement in ESL writing classes offered at College of San Mateo. You are encouraged to enroll in and complete the conversation and/or reading courses in which you placed prior to enrolling in ESL 825.

## Placement Results for Conversation and Reading Courses

| SLEP <br> Placement Score | Recommended Conversation and Reading Courses (Effective Fall 2003 Semester) |  | Supplemental Course |
| :---: | :---: | :---: | :---: |
| 0 to 19 | ESL 845 | ESL 895 | READ 807 (Basic Phonic Skills) |
| Level 1: 20 to 30 | ESL 845 | ESL 855 | ESL 896 (Essential Vocabulary), READ 807 (Basic Phonic Skills) |
| Level 2: 31 to 41 | ESL 846 | ESL 856 | ESL 897 (Vocabulary), <br> READ 807 (Basic Phonic Skills) |
| Level 3: 42 to 52 | ESL 847 | ESL 857 | ESL 891 (Accent Reduction), ESL 897 or READ 852-855 (Vocabulary), READ 809 (Spelling Improvement) |
| Level 4: 53 to 63 | ESL 885 or SPCH 855 | Take native speakers' reading test | ESL 891 (Accent Reduction), ESL 897 or READ 852-855 (Vocabulary), READ 809 (Spelling Improvement) |
| Level 5: 64 to 75 | None | Take native speakers' reading test | ESL 891 (Accent Reduction), ESL 897 or READ 852-855 (Vocabulary), READ 809 (Spelling Improvement) |

Note: Students who score between 53-75 may take the native speakers' reading test. It is highly recommended that students enroll in Conversation and Reading course(s). Note that it is not uncommon for students to place at different writing, conversation, and reading levels.

## Reading Course Placement Guide

```
If you have a Reading
Comprehension Score of:
```

It is recommended that you take the following Reading course(s):

0 to 8
READ 812
Non-native speakers: Take the ESL Reading Test
9 to $15 \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdot \operatorname{READ} 825$ (READ 814 or 815 optional)* Non-native speakers: READ 825 (READ 809 optional)*
 Non-native speakers: READ 830 (READ 809 optional)*
23 to $28 \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$. $\operatorname{READ} 400$ or READ 405 (recommended)
29 to $35 \cdots \cdots \cdots \cdots \cdots \cdots \cdots$............................... 400 , READ 405, or READ 415 optional $^{*}$
*It is highly recommended that students enroll in Reading course(s) marked as optional.

## Mathematics Course Placement Guide

If your took SMCCCD and Scored: You can take the following Assessment: Math course(s):

Test 1 (Pre-Algebra) . . . . . . . . . . . . 0 to 20 . . . . . .BUS. 810, MATH 811
Test 1 (Pre-Algebra) . . . . . . . . . . 21 to 25. . . . . .BUS. 810, MATH 111
Test 1 (Pre-Algebra) . . . . . . . . . . 26 to 50. . . . . .BUS. 115, MATH 110 or 111
Test 2 (Elementary Algebra) . . . . . 0 to 20 . . . . . .Return and take Test 1
Test 2 (Elementary Algebra) . . . . . 21 to 50. . . . . .MATH 115, 120 or 122
Test 3 (Intermediate Algebra) . . . . . 0 to 20 . . . . . . Return and take Test 2
Test 3 (Intermediate Algebra) . . . . 21 to 25. . . . . . MATH 125, 130, 145, 200, or 241
Test 3 (Intermediate Algebra) . . . . 26 to 45. . . . . .MATH 125, 130, 145, 200, 222, or 241
Test 4 (Pre-Calculus) . . . . . . . . . . . 0 to 19 . . . . . .Return and take Test 3
Test 4 (Pre-Calculus) . . . . . . . . . . 20 to 40. . . . . .MATH 251
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 | 4 or 5 |
| AP Calculus BC | 3,4 , or 5 |

See pages 35 and 36 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/advisor and use the resources of CSM's Transfer Services Office to develop an educational plan which will assure a smooth transition to the transfer institution of their choice. After completing transfer requirements, students may want to continue 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 trasfer preparation.

## CSM Transfer Services collegeofsanmateo.edu/transfer

CSM's Transfer Services Office 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 Agreements 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 consult the Major Preparation Agreements section of the CSM Catalog to determine whether specific CSM courses are listed for their intended
major and university. Students should also check the transfer Website ASSIST (www.assist.org). Transfer Services staff and CSM counselors/advisors 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 5, Room 128. The office is open Monday from 8 a.m. to 7 p.m., Tuesday through Thursday from 8 a.m. to $4: 00$ p.m., and on Friday from 8 a.m. to 12 noon (358-6839).

## 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:

1. Lower Division Preparation for the Major These courses provide the necessary background to prepare the transfer student to enter the major as a junior.
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 56 units for transfer to 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 or the California State University system. 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.
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:

1. 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 websites:

## 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. Registration forms are available in the CSM Assessment Center (Bldg. 1, Room 130).
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.

If students have completed coursework at colleges or universities other than College of San Mateo, it is strongly suggested that the transcripts be evaluated within the first semester of their attendance at CSM. 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.

1. 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 website 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 1,500 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 twenty-three 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 the same requirements for undergraduate admission, they differ in size, enrollment, and in academic programs offered. In addition, the ten 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, Mereced, 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) 445-1000.

## Certification of General Education

College of San Mateo will verify, upon request, the completion of lower division general education requirements for transfer to the University of California or the California State University system. Students should request, through the Office of Admissions and Records, that an IGETC or CSU GE certification be sent with his/her final transcript.

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 necessitates taking additional courses following transfer. The Intersegmental General Education Transfer Curriculum (IGETC) meets the requirements of both the UC and CSU systems. See pages 51 and 52 for details.

## CSM Courses

 Transferable to CSUThe 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:
Accounting 100, 103, 121, 131, 144, 145, 161, 162, 163, 164, 165, 171, 172, 173, 641, 665, 680-689, 690
Administration of Justice 100, 102, 104, $105,106,108,120,125,145,153,165,185$, 641, 680-689, 690
American Sign Language 111, 112, 121, 122, 680-689, 690
Anthropology 110, 180, 350, 370, 680-689, 690
Architecture 100, 112, 120, 130, 140, 145, 210, 220, 230, 240, 641, 666, 680-689, 690 Art 100, 101, 102, 103, 104, 105, 124, 201, 202, 206, 207, 214, 223, 224, 231, 232, 236, $241,242,301,315,349,350,351,352,353$, $354,355,360,365,366,367,374,381,382$, 405, 406, 411, 412, 641, 665, 680-689, 690
Astronomy 100, 101, 103, 115, 125, 680-689, 690
Biology 100, 102, 110, 111, 123, 125, 130, $140,145,160,180,184,195,200,210,220$, 230, 240, 250, 260, 641, 666, 675, 680-689, 690
Broadcasting 110, 210, 220, 230, 240, 310, 312, 316, 320, 410, 420, 450, 680-689, 690
Business 100, 101, 115, 125, 131, 140, 150, $170,180,201,295,315,316,317,326,352$, 353, 354, 355, 356, 401, 641, 680-689, 690
Business Microcomputer Operations 114, 115, 502, 504, 680-689
Business Applications-Windows 105, 114, $115,116,204,205,214,215,313,323,383$, $384,415,416,450,451,464,475,477,530$, 534, 535, 591, 680-689
Career and Life Planning 104, 105, 106, $107,108,112,120,121,122,123,124,125$, $126,127,138,140,141,142,150,152,402$, 404, 406, 680-689
Chemistry 100, 101, 192, 210, 220, 231, 232, 250, 410, 420, 680-689, 690
Chinese 111, 112, 121, 122, 131, 132, 134, 140, 201, 211, 212, 680-689, 690
Computer and Information Science 110, 111, 125, 150, 151, 152, 254, 255, 256, 278, $279,312,313,360 / 361,362,377,379,380$, 381, 382, 383-8, 390, 391, 392, 393-398, 485, 488, 489, 490, 491, 492, 495, 641, 680-689, 690
Consumer Arts and Science 310, 641, 680-689, 690

Cooperative Education 640, 641, 645, 647
Dance 121, 131, 132, 141, 143
Drafting Technology 100, 120, 121, 122, 123, 124, 130, 140, 641, 680-689, 690
Economics 100, 102, 123, 680-689, 690
Electronics 110, 131, 133, 201, 202, 215,
216, 231, 232, 262, 275, 282, 290, 310, 320,
$332,360,362,370,421,422,424,441,442$, 444, 641, 680-689, 690
Engineering 100, 210, 215, 230, 240, 260, 270, 641, 680-689, 690
English 100, 101, 110, 135, 161, 162, 163 , 165, 680-689, 690
English as a Second Language 400
Ethnic Studies 101, 102, 150, 151, 152, 160, 161, 261, 262, 265, 288, 290, 300, 350, 351, 360, 425, 430, 440, 585, 680-689, 690
Film 100, 101, 102, 103, 104, 105, 106, 110, 120, 121, 153, 155, 160, 200, 277, 680-689, 690
Fire Technology 641, 680-689, 690, 705, 714, 715, 720, 725, 730, 740, 745
French 110, 111, 112, 115, 116, 117, 118, 120, 121, 122, 130, 131, 132, 140, 203, 680-689, 690
Geography 100, 110, 150, 680-689, 690
Geology 100, 101, 118, 125, 210, 680-689, 690
German 110, 111, 112, 120, 121, 122, 130, 131, 132, 140, 680-689, 690
Graphics $115,116,135,140,150,151,160$,
161, 170, 225, 235, 242, 255, 260,
680-689, 690
Health Science 100, 101, 102, 103, 105, 106, 109, 111, 112, 113, 114, 119, 125, 641, 680-689, 690
History 100, 101, 102, 104, 106, 110, 201, 202, 242, 260, 270, 310, 315, 350, 680-689, 690
Horticulture 311, 312, 315, 325, 326, 327 , $330,342,350,400,401,404,405,415,417$, $419,421,422,425,426,427,428,429,641$, 680-689, 690, 705, 706, 709, 711, 712, 742, 777, 778
Human Services 100, 110, 115, 130, 131, 150, 151, 262, 264, 680-689, 690
Humanities 101, 102, 111, 112, 114, 125, $127,128,131,133,136,140,680-689,690$ Italian $110,111,112,115,116,117,118$, 120, 121, 122, 680-689, 690
Japanese 110, 111, 112, 120, 121, 122, 680-689, 690
Journalism 110, 120, 300, 641, 680-689, 690
Library Studies 100, 101, 107, 110, 665, 680-689
Literature 101, 105, 111, 113, 151, 201, 202, 220, 231, 232, 256-9, 260, 261-263, $265,271,272,273,276,277,278,430,680-$ 689, 690

Machine Tool Technology 200, 641, 680-689, 690, 701, 702, 750, 755, 760
Management 100, 105, 110, 120, 215, 220, 235, 265, 641, 680-689, 690
Manufacturing and Industrial Technology
$100,120,130,641,680-689,690$
Mathematics $125,130,145,200,222,231$, 241, 242, 251, 252, 253, 268, 270, 275, 680-689, 690
Meteorology 100, 101, 680-689, 690
Military Science 1-2, 1a-b, 12a-b
Multimedia/Web Design 101, 102, 113, 172, 177, 184, 187, 192, 253, 274, 279, 282, 292, 297, 317, 387, 392, 395, 397, 680-689, 690
Music 100, 101, 102, 103, 104, 131, 132, $133,134,170,202,240,250,275,290,291$, 292, 293, 301, 302, 303, 304, 320, 371, 372, $373,374,401,402,403,404,430,451,452$, 453, 465, 470, 490, 641, 680-689, 690
Nursing 211, 212, 221, 222, 231, 232, 241, 242, 261, 262, 264, 265, 610, 620, 641, 666, 680-689, 690
Oceanography 100, 101, 680-689, 690
Paleontology 110, 680-689, 690
Philosophy 100, 103, 160, 175, 200, 244, 246, 300, 320, 680-689, 690
Physical Education All classes in the
following series: 100-199, 200-299, 300-399, 400-499, 600-699
Physical Science 100, 675, 676, 680-689, 690
Physics 100, 101, 210, 211, 220, 221, 250,
260, 270, 680-689, 690
Political Science $100,110,120,130,150$, 200, 210, 212, 215, 220, 250, 255, 260, 310, 680-689, 690
Psychology 100, 105, 108, 110, 121, 200, 201, 220, 225, 300, 330, 410, 675, 680-689, 690
Reading 400, 405, 412, 415, 454, 455, 680-689
Real Estate 100, 105, 110, 121, 131, 141, 142, 143, 145, 200, 210, 215, 220, 641, 680-689
Social Science 111, 220, 221, 301, 302, 303, $304,307,308,309,310,313,314,315,316$, 318, 319, 321, 680-689, 690
Sociology 100, 105, 110, 141, 200, 300, 340, 391, 680-689, 690
Spanish 110, 111, 112, 115, 116, 117, 118, $120,121,122,130,131,132,140,161,162$, 251, 680-689, 690
Speech Communication 100, 111, 112, 120, 140, 150, 170, 180, 680-689, 690
Welding Technology $110,111,120,121$, 210, 211, 220, 221, 250, 300, 350, 641, 680-689, 690

## CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION (CSU GE) WORKSHEET <br> BECAUSE OF PERIODIC OF TRANSFER REQUIRMENTS, USE WWW.ASSIST.ORG FOR THE MOST CURRENT CSU GE INFO

The 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, and D combined. 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 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 1, 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.

ANTH 110, 180, 350, 370 BCST 110 BUS 125 ECON 100, 102 ETHN 101, 102, 150, 151, 152, 160, 261, 262, 290, 300, 360, 425, 430, 440, GEOG 110,150 HIST 100, 101, 102, 104, 106, 110, 201, 202, 242, 260, 270, 310, 315, 350 HUM 125 JOUR 110 PLSC 100, 110, 130, 150, 200, 210, 212, 215, 220, 250, 255, 260, 310 PSYC 100, 105, 108, 110, 200, 201, 220, 225, 300, 330, 410, 675 SOCI 100, 105, 110, 141, 200, 300, 340, 391, SPCH 120, 170

Group 1 US HISTORY
HIST 102, 201, 202, 242, 260
Group 2 US CONSTITUTION
*PLSC 200 (meets both Group 2 \& Group 3)
PLSC 210, 212, 215, 250, 255

Group 3 CA STATE \& LOCAL GOV

* PLSC 200 (meets both Group 2 \& Group 3) ETHN 101, 102 HIST 310 PLSC 200, 310 SOCI 200

Area E: Lifelong Understanding \& Self Development
3 units required

BUS 101 CA\&S 310 CRER 120, 121, 123, 138, 140, 141, 402, 404 ETHN 151, 152, 160 HSCI 100, 101, 102, 103, 105, 106, 109, 111, 112, 113, 114 PSYC 100,108 , 110, 300, 330 SOCI 110, 300, 340, 391 SPCH 120

6/15/07

## Intersegmental General Education Transfer Curriculum (IGETC)

The Academic Senates of the University of California, the California State University, and the California Community Colleges approved the implementation in Fall 1991 of an Intersegmental General Education Transfer Curriculum (IGETC), a series of courses that community college students can use to satisfy lower division general education requirements at any CSU or UC campus.
Completion of the IGETC does not guarantee admission to CSU or UC. The IGETC permits a student to transfer from a community college to a campus in either the CSU or UC system without the need, after transfer, to take additional lower-division general education courses to satisfy campus G.E. requirements.
Completion of the IGETC is not a requirement for admission to a CSU or UC, nor is it the only way to fulfill the lower-division general education requirements of the CSU or UC prior to transfer. Students may find it advantageous to take courses fulfilling CSU's general education requirements or those of a particular UC campus. Students pursuing majors that require extensive lower-division major preparation may not find the IGETC option to be their best choice. The IGETC will probably be most useful for students who want to keep their options open before making a final decision about transferring to a particular CSU or UC campus.
In preparing for transfer to a CSU or UC campus in a specific major, students should consult their counselor/advisor concerning recommended major preparation courses which parallel those taken by freshmen and sophomores at the CSU/UC campus.

## IGETC Advisement

## Students Who Have <br> Attended UC or CSU <br> Prior to Enrolling at CSM

The following limitations on the use of IGETC are applicable:
As a general rule, IGETC can be certified for CSM transfers who have also completed transfer units at a CSU or UC provided that the student has completed most ( $50 \%$ ) of the transfer units at one or more California Community College(s).

For UC: Students who initially enroll at a UC campus, then leave and attend a California Community College, and subsequently return to the same UC campus are considered "readmits" by the UC. Such students CANNOT use the IGETC. However, students who enroll at a UC campus, then leave and attend a California Community College, and subsequently return to a different UC campus may be able to use IGETC. Because students leave the UC system under a variety of circumstances, each case will be evaluated on an individual basis by the UC campus applied to.
In all cases where there may be a question about using IGETC after having been enrolled at a campus of the UC or CSU, please contact the university campus you wish to attend.

## Course Work Taken at Institutions Outside the United States

Because of the degree of training and expertise required to evaluate course work taken at foreign educational institutions, foreign course work is not allowed as part of a student's IGETC certification. Students with a substantial amount of foreign course work are encouraged to follow the CSU GeneralEducation program or UC campus general education program.

## Course Work at Independent or Out-Of-State Institutions

Courses completed at a California independent or out-of-state post-secondary institution may be included in a student's certification if the Instructional Division determines that the course work completed at another institution is equivalent to course work on CSM's approved IGETC list. Given that institutions other than California Community Colleges will not have a combined course in critical thinking-English composition, certification of course work from other institutions to satisfy this requirement is not encouraged by UC and CSU.

## Other UC Requirements

Because all courses used for the IGETC must be completed before entering the University of California, it is sometimes mistakenly considered an admission requirement. The IGETC does not change existing University and campus-specific transfer admission or prerequisite requirements. However, it is important to understand the relationship of UC admission, general education breadth (IGETC or campus-specific), major preparation and graduation requirements.

## UC Transfer Admission Requirements

The University has a common set of requirements which specify minimum eligibility, in terms of subject and scholarship level, for admission as a transfer student. Students must earn at least a 2.40 overall GPA to be minimally eligible to transfer. However, several campuses and majors have additional requirements (i.e., "selection criteria") that may go well beyond minimum eligibility, and usually include a higher GPA and/or completion of lower division major preparation courses. This is particularly true for programs where the number of applications greatly exceeds the number of spaces available. It is imperative that transfers applying to such campuses and majors meet these additional requirements so they are competitive for admission.

## UC General Education/ Breadth Requirements

These requirements are designed to give University undergraduates a broad background in a variety of major academic disciplines. Each school and college at every UC campus has its own set of requirements, accounting for more than 40 general education patterns systemwide. This presents a confusing array of choices for transfer students, especially those applying to more than one UC campus.

## Major Preparation Requirements

These requirements stipulate the courses students need in order to have the appropriate academic background for a particular major. Transfer students who have selected a major should work toward completing all lower division requirements for that major. In fact, in many cases, completing a portion of the major requirements is essential to gain admission to the major at the junior level (See pages 66-67.)
The IGETC is most advantageous for transfers who have not yet decided on a major or a campus. Once a student has identified a major, it is important for him or her to work toward fulfilling any required preparatory courses - particularly in those professional or "high unit" majors that select applicants on the basis of satisfaction of lower division major requirements. It is important to note that this does not preclude a student from following the IGETC; however, the IGETC should not be done to the exclusion of completing any preparatory courses needed for admission.
In general, it is not advisable for transfers to Engineering majors at any UC campus to use the IGETC. Students entering "high unit" majors, such as those in the sciences, can follow the IGETC but must be careful to complete any needed lower division major preparation.

## UC Graduation Requirements

These requirements are campus-specific and include courses that all students, regardless of major, must complete in order to graduate.

## IGETC Limitations:

## UC Campus-Specific Information

The listing below specifies the various majors, by campus, that have substantial lower division prerequisites that may make the IGETC option inappropriate for transfers to follow:

## Berkeley

The Colleges of Engineering, Environmental Design, Chemistry and Natural Resources, and the Haas School of Business all have extensive and very prescribed major requirements. Consequently, the IGETC is not appropriate for majors in these colleges.
Applicants to the College of Letters and Science can follow the IGETC, keeping in mind that preparation for the major is very important. Berkeley requires completion of IGETC by the end of the spring term before entering Berkeley in the fall.

## Davis

The IGETC is not appropriate for students transferring to majors in the College of Engineering and the College of Agriculture and Environmental Sciences. In addition, majors in Biological Sciences, Psychology, and Environmental Policy Analysis and Planning are "high unit" majors with substantial lower division preparation needed for admission. The IGETC can be done, but students must take care to meet the lower division requirements for these majors.

## Irvine

The IGETC is not optimal for transfers to the Schools of Engineering, Biological Sciences or Physical Sciences. Students entering any major can use the IGETC, but should consider lower division degree requirements and major preparation when planning their programs.

## Los Angeles

The IGETC is not appropriate for students transferring to the School of Engineering and Applied Science, and the School of Nursing. All majors in the School of Theater, Film and Television, the School of the Arts, and the College of Letters and Science will honor the IGETC. Students entering majors that require specific or substantial preparation, such as science majors, may use the IGETC but need to carefully plan their programs.

## Riverside

The IGETC is not appropriate for students transferring to the College of Engineering. Students entering the Biological or Physical Sciences should be aware that the IGETC requirements exceed the breadth requirements for the College of Natural and Agricultural Sciences, and that these majors require substantial lower division preparation. The IGETC works well for all majors in the College of Humanities and Social Sciences. Students preparing to study Business Administration are encouraged to complete the IGETC, as well as lower division major preparation, to promote admission to this program.

## San Diego

The IGETC is not appropriate for students transferring to majors in the Division of Engineering. Students entering any other major, however, can successfully use the IGETC. Two of the five colleges at San Diego, Eleanor Roosevelt and Revelle, will not accept the IGETC; students must take their own GE pattern.

## Santa Barbara

The IGETC is not appropriate for students transferring to the College of Engineering. Students planning to major in Biological Sciences, Biopsychology, Chemistry, Environmental Science, Geology, or Geophysics can use the IGETC, but must be careful to complete lower division major prerequisites if they are to make normal, timely progress through the major.

## Santa Cruz

Although all majors at UCSC will honor the IGETC, students planning to major in Biological Sciences, Chemistry, Computer and Information Sciences, Computer Engineering, or Earth Sciences must pay special attention to completing lower division major prerequisites if they are to make normal, timely progress through the major.

## CSM Courses

 Transferable to All University ofCalifornia Campuses
A student planning to transfer to one of the campuses of the University of California can usually complete the first two years of his or her work at College of San Mateo. In some cases, students may wish to make up high school course deficiencies or grade point average deficiencies. Using the general catalog of the University campus to which you plan to transfer, you should work with your counselor/advisor in planning your program. The current issues of the University publications "Prerequisites and Recommended Subjects" and "Answers for Transfers" are helpful planning guides. They list the requirements for admission, breadth requirements and requirements for the major, all of which should be carefully considered in planning your program at College of San Mateo.
NOTE: Courses marked with a $\left({ }^{*}\right),(+)$, (\#), (@), or (^) are transferable with limitations as specified. If you have any questions, see your counselor/advisor.

Accounting 121*, 131*, 161

* Note: Credit limited to 4 units

Administration of Justice 100, 102, 104, 108
American Sign Language 111*, 112*, 121, 122

* Note: Credit limited to 5 units; both 111 and 112 must be taken to transfer.
Anthropology 110, 180, 370
Architecture $100^{*}, 112^{*}, 120^{*}, 130^{*}, 140^{*}$, 145*, 220*
*Any or all of these courses combined: maximum credit, 18 semester units per UC Berkeley's College of Environmental Design.
Art 101, 102, 103, 104, 105, 124, 201, 202, 206, 207, 214, 223, 224, 231, 232, 241, 242, $301,315,349,351,352,353,365,381,405$, 406, 411, 412
Astronomy 100, 101, 103, 115
Biology 100\#, 102, 110, 111, 125, 130*, $140,145+, 160,180,184,195,200,210$, $220+, 230,240,250^{*}, 260^{*}$
\# Note: No credit for BIOL 100 if taken after BIOL 110.
* Note: Credit limited to either BIOL 130 or 250/260.
+ Note: No credit for BIOL 145 if taken after BIOL 220.

Business 100, 201
Career and Life Planning 105, 120
Chemistry $100^{*}, 101^{*}, 192^{*}, 210,220,231$, 232, 250

* Note: Credit limited to either CHEM 100/101 or CHEM 192. No credit if taken after CHEM 210.
Chinese $111^{*}$ and $112^{*}, 121+, 122+, 131 \#$, 132\#, 140
* Note: Credit limited to 5 units; both 111 and 112 must be taken to transfer.
+ Note: Credit limited to 5 units.
\# Note: Credit limited to 5 units.
Computer and Information Science 110, 125, 126, 255, 256, 278, 279, 372/373, 381/382


## Consumer Arts and Science 310

Dance 121, 131, 132, 141, 143
Drafting 100*, $121^{*}$

* Note: Credit limited to either 100 or 121.

Economics 100, 102, 123*

* Note: Credit limited to only one of the following courses: ECON 123, MATH 200, or PSYC 121.
Engineering 210, 215, 230, 240, 260, 270
English 100, 110, 135, 161, 162, 163, 165
English as a Second Language 400
Ethnic Studies 101, 102, 150, 151*, 152, $160,261,262,265,288,290,300,350,351$, 360, 425, 430, 440, 585
* Note: Credit limited to either ETHN 151 or SOCI 141.
Film 100, 120, 121, 160, 200, 277
French $110,111^{*}$ and $112^{*}, 120,121+, 122+$, 130, 131\#, 132\#, 140, 161, 162, 203
* Note: Credit limited to 5 units; both 111 and 112 must be taken to transfer.
+ Note: Credit limited to 5 units.
\# Note: Credit limited to 5 units.
Geography 100, 110, 150
Geology $100^{*}, 101^{*}, 118,125,210^{*}$
* Note: Combined credit for GEOL 100, 101 and 210 limited to 4 units.
German 110, 111* and 112*, 120, 121+, 122+, 130, 131\#, 132\#, 140
* Note: Credit limited to 5 units; both 111 and 112 must be taken to transfer.
+ Note: Credit limited to 5 units.
\# Note: Credit limited to 5 units.


## Health Science 100

History 100, 101, 102*, 104, 106, 110, 201*, 202*, 242, 260, 270, 310, 350

* Note: No credit for HIST 102 if taken after HIST 201/202 taken.
Horticulture 311, 312
Humanities 101, 102, 111, 112, 114, 125, 127, 128, 131, 133, 136
Italian $110,111^{*}$ and $112^{*}, 120,121+, 122+$
* Note: Credit limited to 5 units; both 111 and 112 must be taken to transfer.
+ Note: Credit limited to 5 units.
Japanese $110,111^{*}$ and $112^{*}$ and 120 ,
121+, 122+
* Note: Credit limited to 5 units; both 111 and 112 must be taken to transfer.
+ Note: Credit limited to 5 units.
Journalism 110
Library Studies 100, 110
Literature 101, 105, 111, 113, 151, 201,
202, 231, 232, 251, 265, 277, 430
Mathematics 125, 145, 200*, 222\#, 241+, 242+, 251+, 252+, 253+, 268, 270, 275
* Note: Credit limited to only one of the following courses: ECON 123, MATH 200, or PSYC 121.
+ Note: Credit limited to MATH 241/242 or $251 / 252 / 253$
\# Note: Maximum credit 4 units.
Meteorology 100, 101
Music 100*, 101, 102, 103, 104, 131, 132,
$133,134,170,202,240,250,275,301,302$,
$303,304,320,371,372,373,374,401,402$,
403, 404, 430, 451, 452, 453, 470, 490
* Note: No credit for MUS. 100 if taken after MUS. 101 or 131.
Oceanography 100, 101
Paleontology 110
Philosophy 100, 103, 160, 175, 200, 244, 300, 320
Physical Education All classes in the following series: 100-199*, 200-299*, 300-399*
* Note: Credit limited to 4 units.


## Physical Science 100*

* Note: No credit if a transferable course in Astronomy, Chemistry, or Physics taken.

Physics 100*, 210+, 211+, 220+, 221+, 250+, 260+, 270+

* Note: No credit if taken after PHYS 210 or 250.
+ Note: Credit limited to PHYS $210 / 211 / 220 / 221$ or $250 / 260 / 270$.
Political Science 100, 110, 130, 150, 200*, 210*, 212*, 215, 220, 250, 255, 260
* Note: Credit limited to either PLSC 200, 210, or 212.
Psychology 100, 105, 110@, 121*, 200+, 201+, 220, 225, 300^, 410
* Note: Credit limited to only one of the following courses: ECON 123, MATH 200, or PSYC 121.
@ Note: Credit limited to either PSYC 110 or SOCI 110.
+ Note: Credit limited to either PSYC 200 or 201.
$\wedge$ Note: Credit limited to PSYC 300 or SOCI 300.

Social Science 111
Sociology 100, 105, 110+, 141*, 200, 300@, 340

* Note: Credit limited to either ETHN 151 or SOCI 141.
+ Note: Credit limited to either SOCI 110 or PSYC 110.
@Note: Credit limited to PSYC 300 or SOCI 300.

Spanish 110, 111* and $112^{*}$ and 120, 121+, 122+, 130, 131\#, 132\#, 140, 161, 162, 251

* Note: Credit limited to 5 units; both 111 and 112 must be taken to transfer.
+ Note: Credit limited to 5 units.
\# Note: Credit limited to 5 units.
Speech Communication 100, 111, 112,
120, 140, 150


## SPECIAL NOTE:

The following courses are also 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 5, Room 128; 358-6839) or CSM's Transfer website 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.

```
AREA 1 - ENGLISH COMMUNICATION
                    6-9 semester units required
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 100
Group B - 3 units: Critical Thinking-English Composition ENGL 110, 135, 165 SOSC 111
Group C-3 units CSU only: Oral Communication SPCH 100, 140,150
AREA 2 - MATHEMATICAL CONCEPTS & QUANTITATIVE REASONING
                                    3 semester units required
ECON }123\mathrm{ MATH 125, 145, 200, 222, 241, 242, 251, 252, 253, 268, 270, 275 PSYC 121
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

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ART 101, 102, 103, 104, 105, 124, 349 ETHN 288, 585 FILM 100, 120, 121, 160, 200, 277 LIT 277 MUS 100, 202, 240, 250, 275
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## Group B: Humanities

```
ETHN \(265,350,351,440\) FREN \(130,131,132,140,203\) CHIN 131, 132 GERM 130, 131, 132, 140 HIST 100, 101, 102, 104, 106 HUM 101, 102, 111, 112, 114, 125, \(127,128,131,133,136\) LIT 101, 105, 113, 151, 201, 202, 231, 232, 265, 430 PHIL 100, 160, 175, 244, 300, 320 SPAN 130, 131, 132, 140, 161, 162, 251
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## AREA 4 - SOCIAL \& BEHAVIORAL SCIENCES

9 semester units required
3 courses selected from at least two disciplines
ANTH 110, 180, 370 ECON 100, 102 ETHN 101, 102, 150, 151, 152, 160, 261, 262, 290, 300, 351, 360, 425, 430, 440 GEOG 110, 150 HIST 104, 106, 110, 201, 202, $242,260,270,310,350$ JOUR 110 PLSC $100,110,130,150,200,210,212215,220,250,255,260$ PSYC $100,105,110,200,201,220,225,300,410$ SOCI 100,105 , 110, 141, 200, 300, 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 $100,101^{*}(1), 103^{*}(1), 115$ BIOL $111^{*}$ CHEM $100,101^{*}(1), 210^{*}, 220^{*}, 231^{*}, 232^{*}$ GEOG 100 GEOL $100,101^{*}(1), 118,125^{*} 210^{*}$ METE $100,101^{*}(1) \quad$ OCEN
100, 101*(1) PALN 110 PHYS 100, 210*, 220*, 250*, 260*, 270* PSCI 100

## Group B: Biological Science

BIOL 100, 102, 110*, 125, 140, 145, 160, 184, 195*(1), 200*, 210*, 220*, 230*, 240*, 250*, 260 PALN 110 PSYC 220

## AREA 6 - LANGUAGE OTHER THAN ENGLISH - LOTE (UC requirement only)

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 112, 121,122 CHIN $122,131,132,140$ FREN 120, $122,130,131,132,140,203$ GERM $120,122,130,131,132,140$ ITAL 120,122 JAPN 120,122 SPAN 120,122 ,
130, 131, 132, 140, 161, 162, 251
CSU GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION \& AMERICAN IDEALS (CSU REQUIREMENTONLY)
Not part of IGETC; may be completed prior to transfer. One course from each group except PLSC 200 meets two groups.
Group 1 US HISTORY Group 2 US CONSTITUTION Group 3 CA STATE \& LOCAL GOV
HIST 102, 201, 202, 242, 260
${ }^{*}$ PLSC 200 (meets both Group 2 \& Group 3)
*PLSC 200 (meets both Group 2 \& Group 3) PLSC 210, 212, 215, 250, 255 ETHN 101, 102 HIST 310 PLSC 310 SOCI 200

## California Articulation Number System (CAN)

The California Articulation Number System (CAN) identifies CSM coursework which is equivalent to and can be used in "in lieu" of lower division coursework at participating California State University [CSU], University of California [UC], and Private/Independent colleges and universities. Each college uses its own course numbers; but when a course meets the CAN criteria, it is given a CAN number. CSM students can then use the CAN numbers to identify courses that meet the same lower division requirements at the various colleges.
Information about participating CAN Colleges and Universities is available online at www.can.csus.edu.

| College of San Mateo CAN number | College of San Mateo course |
| :---: | :---: |
| CAN AJ 2 ................... | . ADMJ 100 |
| CAN AJ 8 ................... | . ADMJ 120 |
| CAN ANTH 2 .............. | . BIOL 125 |
| CAN ANTH 4 .............. | . ANTH 110 |
| CAN ART 2 ................. | . ART 101 |
| CAN ART 6................. | . ART 411 |
| CAN ART 8................. | . ART 201 |
| CAN ART 10 ............... | . ART 223 |
| CAN ART 12............... | . ART 405 |
| CAN ART 18 ............ | . ART 351 |
| CAN ART SEQ A ......... | . ART 101+102+103 |
| CAN BIOL 2 ................ | . BIOL 110 |
| CAN BIOL $4 . . . . . . . . . . . . . .$. | . BIOL 210 |
| CAN BIOL 6 ............... | . BIOL 220 |
| CAN BIOL 12 .............. | . BIOL 260 |
| CAN BIOL $14 . . . . . . . . . . . .$. | . BIOL 240 |
| CAN BIOL SEQ A ......... | . BIOL 110+210+220 |
| CAN BIOL SEQ B ........ | . BIOL 250+260 |
| CAN BUS 2 ................ | . ACTG 121 |
| CAN BUS 4 ................ | . ACTG 131 |
| CAN BUS 6 ................ | . BUS 295 |
| CAN BUS 8 ................ | . BUS 201 |


| College of San Mateo CAN number | College of San Mateo course |
| :---: | :---: |
| CAN CHEM $2 . . . . . . . . . .$. | .. CHEM 210 |
| CAN CHEM 4............ | .. CHEM 220 |
| CAN CHEM 6........... | .. CHEM 410 |
| CAN CHEM 8 ........... | .. CHEM 420 |
| CAN CHEM 12.......... | .. CHEM 250 |
| CAN CHEM SEQ A .... | CHEM 210+220 |
| CAN CHEM SEQ B | CHEM 410+420 |
| CAN CHIN 2 ............ | .. CHIN 111+112 |
| CAN CHIN $4 . . . . . . . . . . .$. | .. CHIN 121+122 |
| CAN CHIN $8 . . . . . . . . . . .$. | CHIN 131+132 |
| CAN CHIN SEQ A ..... | .. CHIN 111+112+121+122 |
| CAN CSCI 2 ............. | .. CIS 110 |
| CAN ECON 2 ............ | .. ECON 100 |
| CAN ECON 4 ........... | .. ECON 102 |
| CAN ENGL $2 . . . . . . . . . . .$. | .. ENGL 100 |
| CAN ENGL 4............. | .. ENGL 110; or ENGL 165 |
| CAN ENGL 6 ............ | .. ENGL 161 |
| CAN ENGL 8............ | .. LIT 231 |
| CAN ENGL 10 ........... | ...LIT 232 |
| CAN ENGL 14........... | .. LIT 201 |
| CAN ENGL 16........... | .. LIT 202 |
| CAN ENGL SEQ A ...... | .. ENGL 100+110; or ENGL 100 |
| CAN ENGL SEQ B ..... | .. LIT 231+232 |
| CAN ENGL SEQ C ...... | ...LIT 201+202 |


| College of San Mateo CAN number | College of San Mateo course | College of San Mateo CAN number | College of San Mateo course |
| :---: | :---: | :---: | :---: |
| CAN ENGR 2 .............. | . ENGR 210 | CAN MATH $8 . . . . . . . . . . .$. | .. MATH 130 |
| CAN ENGR 4 .............. | . ENGR 270 | CAN MATH $12 . . . . . . . .$. | .. MATH 125 |
| CAN ENGR 6 .............. | . ENGR 260 | CAN MATH 16 .......... | .. MATH 222 |
| CAN ENGR 8 .............. | . ENGR 230 | CAN MATH $18 . . . . . . . . .$. | .. MATH 251 |
| CAN FCS 2 .................. | . CA\&S 310 | CAN MATH $20 . . . . . . . . .$. | .. MATH 252 |
| CAN FREN 10 ............. | . FREN 140 | CAN MATH 22 ........... | .. MATH 253 |
| CAN GEOG 2 .............. | . GEOG 100 | CAN MATH $24 . . . . . . . . .$. | .. MATH 275 |
| CAN GEOG 4.............. | . GEOG 110 | CAN MATH $26 . . . . . . . .$. | .. MATH 270 |
| CAN GEOL 2............... | . GEOL 210 | CAN MATH 30 ......... | MATH 241 |
| CAN GOVT 2 .............. | . PLSC 210 | CAN MATH 32 .......... | MATH 242 |
| CAN HIST 2 ................ | . HIST 100 | CAN MATH SEQ C...... | .. MATH 251+252+253 |
| CAN HIST 4 ................ | . HIST 101 | CAN MATH SEQ D ..... | .. MATH 241+242 |
| CAN HIST 8 ................ | . HIST 201 | CAN MUS 8 ............. | .. MUS 202 |
| CAN HIST 10 .............. | . HIST 202 | CAN PHIL 2 ............... | .. PHIL 100 |
| CAN HIST SEQ A........... | . HIST 100+101 | CAN PHIL 4 ............ | .. PHIL 246 |
| CAN HIST SEQ B.......... | . HIST 201+202 | CAN PHIL 6 ............... | . SOSC 111 |
| CAN ITAL 2 ................ | . ITAL 110 OR ITAL 111+112 | CAN PHYS 2 ............... | . PHYS 210 |
| CAN JAPN 2 ................. | . JAPN 110 OR JAPN 111+112 | CAN PHYS 4 ............. | .. PHYS 220 |
| CAN JAPN $4 . . . . . . . . . . . . . .$. | . JAPN 120 OR JAPN 121+122 | CAN PHYS 8 .............. | .. PHYS 250 |
| CAN JAPN SEQ A $\qquad$ JAPN 110+120 OR JAPN $111+112+121+122$ |  | CAN PHYS 12 .......... | .. PHYS 260 |
| CAN JOUR 2 ................. JOUR 120 |  | CAN PHYS $14 . . . . . . . .$. | . PHYS 270 |
|  |  | CAN PHYS SEQ A ..... | .. PHYS 210+220 |
| CAN JOUR 4 ................. JOUR 110 |  | CAN PHYS SEQ B ....... | .. PHYS 250+260+270 |
|  |  | CAN PSY 2 ................. | .. PSYC 100 |
|  |  | CAN PSY 6 ................. | .. PSYC 121 |
|  |  | CAN SOC 2 ................ | .. SOCI 100 |
|  |  | CAN SOC 4................ | .. SOCI 105 |
|  |  | CAN SPAN 10 ............ | .. SPAN 140 |
|  |  | CAN SPCH 4 .............. | .. SPCH 100 |
|  |  | CAN SPCH 8 .............. | .. SPCH 120 |
|  |  | CAN STAT 2 ............... | .. MATH 200 |

## TRANSFER TO PRIVATE COLLEGES AND UNIVERSITIES

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

The following institutions have identified specific CSM courses thatstudents 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: www.apu.edu/registrar/ undergraduate/policies/transferring

## Biola University

Homepage: www.biola.edu
CSM Information: www.biola.edu/undergrad/ admissions/transfer/process.cfm
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: www.cogswell.edu/ textpage $/ 628 . \mathrm{html}$
Golden Gate University
Homepage: www.ggu.edu
CSM Information: www.ggu.edu/admissions and costs/admissions/undergraduate/ undergraduate transfer/articulation references

## Menlo College

Homepage: www.menlo.edu
CSM Information: www.menlo.edu/admissions/ transfers.htm

## 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: www.ndnu.edu/future/ undergraduate/transfer/csm.html
Saint Mary's College of California
Homepage: www.stmarys-ca.edu
CSM Information: www.stmarys-ca.edu/ prospective/undergraduate admissions/transfer students/articulation/ sanmateo.html

## Santa Clara University

Homepage: www.scu.edu
CSM Information: www.scu.edu/ugrad/ requirements/transfer/CSM/index.cfm

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: https://camel2.usc.edu/ articagrmt/artic.aspx

University of the Pacific
Homepage: www.uop.edu
CSM Information: www.uop.edu/admission/ admissioninfo/transfer credit/ articulations.asp

## Other Colleges <br> and Universities

Students planning to transfer to the following private colleges and universities are advised to follow the IGETC-UC pattern of lower-division 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.mckenna.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 College of California
Homepage: www.newcollege.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.ptloma.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 College
Homepage: www.simpsonca.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

The following is a listing of contact information for the individual campuses comprising the University of California system. For information about the UC system in general, visit www. ucop.edu.

Berkeley
University of California
Berkeley, CA 94720-1500
(510) 642-6000
www.berkeley.edu
Davis
University of California
One Shields Avenue
Davis, CA 95616-8558
(530) 752-1011
www.ucdavis.edu
Irvine
University of California
Irvine, CA 92697
(949) 824-5011
www.uci.edu
Los Angeles
University of California
Los Angeles, CA 90095-1405
(310) 825-4321
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
(951) 827-1012
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 94143-0402
(415) 476-9000
www.ucsf.edu

## Santa Barbara

University of California
Santa Barbara, CA 93106
(805) 893-8000
www.ucsb.edu

## Santa Cruz

University of California
1156 High Street
Santa Cruz, CA 95064
(831) 459-0111
www.ucsc.edu

## California State University (CSU)

The following is a listing of contact information for the individual campuses comprising the California State University system. System-wide information is available at: www.calstate.edu.

California State University, Bakersfield 9001 Stockdale Highway
Bakersfield, CA 93311-1099
(661) 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
1000 East Victoria Street
Carson, CA 90747
(310) 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
(714) 278-2011
www.fullerton.edu
Humboldt State University
1 Harpst Street
Arcata, CA 95521-4957
(707) 826-4402
www.humboldt.edu

California State University, Long Beach
1250 Bellfower Blvd.
Long Beach, CA 90840-0106
(562) 985-4111
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) 654-1000
www.csum.edu
California State University, Monterey Bay
100 Campus Center Drive
Seaside, CA 93955-8001
(831) 582-5100
csumb.edu
California State University, Northridge
18111 Nordhoff Street Northridge, CA
91330-8207
(818) 677-1200
www.csun.edu
California State Polytechnic University,
Pomona
3801 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) 278-6011
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

1600 Holloway Ave.
San Francisco, CA 94132-4002
(415) 338-1111
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) 756-1111
www.calpoly.edu
California State University, San Marcos
333 S. Twin Oaks Valley Road
San Marcos, CA 92096-0001
(760) 750-4848
www.csusm.edu
Sonoma State University
1801 East Cotati Ave.
Rohnert Park, CA 94928-3609
(707) 664-2880
www.sonoma.edu
California State University, Stanislaus
801 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 63 and 64. 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 67 through 128. A minimum of 18 units must be completed in a major. Some majors require more than 18 units. A student must have an overall grade point average of 2.0 in the major. Some majors require a grade of "C" or better in each course. Student must complete at least 12 units of the required major courses in residence at College of San Mateo. A Liberal Studies major is available for those students who want the maximum amount of flexibility regarding degree completion. See the Associate in Arts with a major in Liberal Studies Option I and Option 2 in this catalog. A maximum of 12 units from courses in which the student has elected a Credit/No Credit 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 will be posted to the student's academic record and the student will receive diplomas for each degree and certificate 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 Cata$\log$ 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 tabular listing on page 65) 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 Credit/No Credit 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.
Certificates 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 18 units or more in designated courses.

## Certificates of Completion

Certificates of Completion are awarded upon successful completion of designated courses (usually between 8-13 units) in a specific occupational field. Some Certificates of Completion can be earned in eight- or sixteen-week accelerated programs that prepare students for entry-level positions.

## Program Planning and Enrollement 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 and advising 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, email 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

Either 48 units of the 60 units required or the last 12 units must be completed at College of San Mateo.

## B-SCHOLARSHIP

A minimum grade point average of 2.0 in the last 60 units, and a minimum grade point average of 2.0 in courses taken at College of San Mateo and submitted as part of the 60 units.

| C-COMPETENCY REQUIREMENTS |  |
| :---: | :---: |
| 1: Math/Quantitative Reasoning |  |
| This competency requirement may be satisfied with any of the following: | c. Completion of any one of the following courses with a grade of C or higher: |
| a. Appropriate scores on ACT Math, SAT Math, or CSM Math Placement Test as follows: | - Any course with MATH 110 or higher math prerequisite or |
| - ACT - standard score of 15 or above on math test <br> - SAT I - quantitative score of 400 or above (test taken prior to May 1995); score of 440 or above (test taken during or after May 1995) | -ACTG 121; BUS 115; CIS 255, 278, 279, 290, 381/382, 383, 384, 385, 386, 387, 388, 391, 392; CHEM 192; ECON 123; ELEC 231 \& 232; PLUM 702, 742; PSYC 121; R.E. 131 |
| - CSM Math Test $2-21$ or above | 2: English |
| - CSM Math Test $3-21$ or above | This competency requirement may be satisfied with the following: |
| - CSM Math Test $4-20$ or above | a. Completion of ENGL 100 with a grade of C or higher, or by |
| b. Completion with a grade of C or higher of an elementary algebra (MATH 110 or both MATH 111 and 112) or higher math course at CSM or other college or university | satisfying both $\mathbf{b}$ and $\mathbf{c}$ below: |
|  | b. Completion of one of the following courses with a grade of C or higher: |
|  | ENGL 838, or 848 |
|  | (ESL 400 in the case of non-native speakers), and |
|  | c. Placement in READ 405 based upon the Reading Placement Test or completion of READ 400 or 405 with a grade of C or higher |

## D-MAJOR

A minimum of 18 units, 12 of which must be taken at College of San Mateo, from a list of courses specified for the major by the division involved. Some majors require more than 18 units. A grade point average of 2.0 in the major coursework is required. 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 satisfied in three different ways:
a. by completing PLSC 200 (5) or
b. by completing one of the options in each of the groups listed below:

GROUP 1: American History and Institutions
PLSC 210, 212, 215, 220, 250, 255, or 260 or
HIST 100 and 102; or HIST 101 and 102; or HIST 201 and 202; or either HIST 201 or 202 plus any one of the following 3-unit history courses:

GROUP 2: CA State and Local Government
PLSC 310 (2) or
HIST 315 or 310 or
SOCI 200 or
ETHN 101 or 102

HIS T 242, 260, 270 or 350
c. by completing the American History and Institutions (U.S. Constitution, U.S. History, California State and Local Government) requirement at a California Community College or CSU.
NOTE: Courses used to satisfy the American and CA History and Government requirements (GROUP 1 and GROUP 2) may not be used to satisfy the E5b Social Science G.E. requirements.
2: Language and Rationality
a. English, Literature, Speech Communication

Two courses (3 units each) are required. One of these must be a composition course selected from ENGL 100, 836, 838, or 848; ENGL 400 or ESL 400; the other must be selected from the following list. (Courses marked below with an asterisk [*] also satisfy Communication and Analytical Thinking (2b)
ENGL 100*, 110*, 135*, 161, 162, 163, 165*; ESL 400* (for non-native speakers); LIT 101*, 105*, 111*, 113*, 151*, 201*, 202*, 220, 231*, 232*, 256*, 257*, 258*, 259*, 260*, 261*, 262*, 263*, 265*, 271*, 272*, 273*, 275*, 276*, 277*, 278*, 430*; SPCH 100*, 111, 112, 120*, 140*, 150, 170, 180, 855 (for non-native speakers).

## E-GENERAL EDUCATION (CONTINUED)

b. Communication and Analytical Thinking

This requirement may be satisfied by either completing one of the English, Literature, or Speech Communication courses indicated by $*$ in the above listing or by completing one of the following courses: BUS. 295, 401; CIS. 110, 125, 254, 255, 278, 292; ECON 123; LIT. 220; MATH 125, 130, 200, 222, 241, 251; PHIL 103, 200; SOSC 111
3: Health Science
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 101-125). 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
Students must complete two activity courses in Physical Education or Dance, unless excused, to complete the requirements for the Associate in Arts or Associate in Science degree. 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:
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 Admissionsn\& Records.
Students wishing to request a waiver of this requirement for any reason not specifically provided for above, may petition for consideration through regularly established college procedures. Inquiries should be directed to the Office of Admissions and Records.
5: Additional General Education Requirements
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. (Students majoring in Liberal Studies may elect to have area $\mathrm{a}, \mathrm{b}$, or c satisfied provided they complete at least 6 units in the area fulfilling their major.)
a. Natural Science (at least 3 units)

ASTR 100, 101, 103, 115, 125; BIOL 100, 102, 110, 111, 125, 130, 140, 145, 160, 180, 184, 195, 200, 210, 220, 230, 240, 250, 260, 666, 675; CA\&S 310, CHEM 100, 101, 192, 210, 220, 231, 232, 410, 420; ELEC 110; GEOG 100;
GEOL 118, 125, 210; HORT 311, 312, 350; HUM 127-128 (When both HUM 127 and 128 are taken, 3 units will fulfill the Natural Science requirement and 3 units are allowed toward the Humanities requirement.); MANU 100;
METE 100, 101; OCEN 100, 101; PALN 110; PHYS 100, 101, 210, 220, 250, 260, 270; PSCI 100, 675, 676. Majors fulfilling Area A: 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; ECON 100, 102; ETHN 101, 102, 150, 151, 152, 160, 161, 261, 262, 265, 290, 300, 360, 425, 430, 440; GEOG 110, 150; HIST 100, 101, 102, 104, 106, 110, 201, 202, 242, 260, 270, $310,315,350$; HMSV 100, 115, 120, 130, 131, 150, 151; PLSC 100, 110, 120, 130, 150, 200, 210, 212, 215, 220, 250, 255, 260, 310; PSYC 100, 105, 108, 110, 200, 201, 220, 225, 300, 330, 410, 675; SOSC 220, 221, 310, 313; SOCI 100, 105, 110, 141, 200, 300, 340, 391
Majors fulfilling Area B: Ethnic Studies, Social Science
c. Humanities (at least 3 units)

ARCH 100; ART 100, 101, 102, 103, 104, 105, 124, 141, 349, 350, 351; ASL 111, 112, 121, 122; CHIN 111, 112, 121, 122, 131, 132, 134; 140, 211, 212; ENGL 110, 130; ETHN 288, 350, 351, 585; FILM 100, 101, 102, 103, 104, 105, 106, 110, 120, 121, 200; FREN 110, 111, 112, 115, 116, 117, 118, 120, 121, 122, 130, 131, 132, 140, 203; GERM 110, 111, 112, 120, 121, 122, 130, 131, 132, 140; HUM 101, 102, 111, 112, 114, 125, 127, 128, 131, 133, 136, 140, 675, 676; ITAL 110, 111, 112, 115, 116, 117, 118, 120, 121, 122; JAPN 110, 111, 112, 120, 121, 122; LIT 101, 105, 111, 113, 151, 153, 201, 202, 220, 231, 232, 256, 257, 258, 259, 260, 261, 262, 263, 265, 271, 272, 273, 276, 277, 278, 430; MUS 100, 170, 202, 240, 250, 275; PHIL
$100,160,175,244,300,320$; SPAN $110,111,112,115,116,117,118,120,121,122,130,131,132,140,161,162,251$;
SPCH 111, 112
Majors fulfilling Area C: 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 666; BCST 110; BLDG 700; BUS 201, 315, 316, 317; any BUSD or BUSW series; CRER 104, 105, 106, 107, 108, 112, 120, 121, 122, 123, 124, 125, 126, 127, 138, 140, 141, 142, 152, 402, 404, 406; CIS 110; COOP 640, 641, 645; DRAF 120; ELEL 701; ENGR 100; ESYS 100; FIRE 715; GRA 150, 160; HORT 400; HMSV 100; JOUR 110; LIBR 101, 107, 110; MANU 130; MGMT 100; MTT 750; MULT 102; NURS 666; PLUM 701 or 741; R.E. 100; SOSC 301; SPFI 701; SPCH 100, 120, 140, 150; WELD 300, 350
Majors fulfilling Area D: Accounting, Admin. of Justice, Alcohol/Other Drug Studies, Architecture, Broadcast \& Electronic Media, Building Inspection, Business, Bus. Inform. Processing, Computer Info Science, Cosmetology, Drafting Tech., Electrical Tech., Electronics Tech., Engineering, Filmmaking, Fire Sprinkler Tech., Fire Tech., Graphics, Human Services, Journalism, Life Sciences: Biotechnology, Management, Mathematics, Medical Assisting, Multimedia, Nursing, Plumbing/Pipe Fitting, Real Estate, Refrig./Air Cond. Mech., Welding Tech.
e. Electives - All courses not included in the major requirements or specified above in the G.E. requirements are considered electives, with the exception of those courses listed in the CSM Catalog with the notation "units do not apply toward AA/AS degree."

## A.A./A.S. Degree \& Certificate Programs Offered at CSM

College of San Mateo offers a wide range of Associate Degree and Certificate programs. An Associate of Arts (A.A.) or an Associate of Science (A.S.) degree is based upon completion of 60 units of coursework. Certificate programs entail one year of full-time study or less. Coursework requirements vary by program. Certificates of Achievement are 18 or more units; Certificates of Completion are less than 18 units. Please consult with a counselor or see the CSM Catalog for detailed A.A./A.S and Certificate requirements and contact information.

## A.A. Degrees

## Accounting

Alcohol \& Other Drug Studies
Art: Commercial
Art: Fine Arts
Drawing
General Studio Art
Painting
Printmaking
Art: Photography
Broadcast \& Electronic Media
Business Information Processing
Microcomputer/Database \& Spreadsheet
Microcomputer/Office Assistant
Business: Insurance (Property and Casualty)
Business: Merchandising (Management)
Business Administration
Cosmetology
English
Ethnic Studies
Film
Foreign Languages
French
German
Spanish
Graphics
Horticulture
Floristry
Humanities
Human Services
Journalism
Liberal Studies
Life Sciences: General
Management
Business Management
Marketing Management
Retail Management
Multimedia
Digital Audio
Digital Video
Web Design
Music
Electronic Music
Real Estate
Social Science
Speech Communication
A.S. Degrees

Administration of Justice
Architecture
Building Inspection Technology
Chemistry
Computer \& Information Science
Computer \& Network Forensics
Computer Science Applications
Computer Support Specialist
Network Support
PC Hardware \& System Support
Dental Assisting
CAD/Drafting

Electronics Technology
General Electronics
Industrial Electronics
Microcomputer Systems
Wireless Communication Systems
Engineering Technology
Electronics
General
Fire Technology
Geological Sciences
Horticulture: Environmental
Landscape Construction/Design
Landscape Management
Nursery Management
Life Sciences
Biological
Biotechnology
Medical
Pre-Nursing
Mathematics
Nursing
Physical Science
Physics
Welding Technology

## Certificate Programs

Certificates of Achievement (indicated by "+") and
Certificates of Completion (no notation)

+ Accounting
Accounting Assistant
CPA Exam Preparation: Finance Accounting and Auditing
CPA Exam Preparation: Business Environment and Regulation
Enrolled Agent Exam Preparation
Tax Preparer I
Tax Preparer II
+ Administration of Justice
+ Basic Police Academy
+ POST Certification
+ Alcohol \& Other Drug Studies
Biotechnology
+ Broadcast \& Electronic Media
+ Broadcast Audio
+ Television Producing
+ Television Production
Lighting
On-Air Editing
+ Building Inspection Technology
+ Business
+ Insurance - Property and Casualty
+ Merchandising (General)
+ Merchandising (Management)
+ Microcomputer/Database \& Spreadsheet
+ Microcomputer/Office Assistant
Office Assistant I
Office Assistant II
+ Certificate of Achievement
\# Certificates of Achievement \& Completion

Career and Life Planning
College Peer Advisor
Leadership for Service

+ Computer \& Information Science
C++ Programming
Computer Forensics
Internet Programming
Java Programming
Network + Basics
Network Security Specialist
Visual Basic Programming
Visual Studio.NET
Cosmetology
+ Dental Assisting
+ CAD/Drafting
+ Electronics Technology
Electronics Assembly
+ General Electronics
+ Industrial Electronics
+ Microcomputer Systems
Network Cabling Specialist
+ Wireless Communication Systems
+ Fire Technology
+ Foreign Languages
American Sign Language
Chinese (Mandarin)
French
German
Italian
Japanese
Spanish
Global Studies
+ Graphics
+ Horticulture
+ Floristry
+ Landscape Construction/Design
+ Landscape Management
+ Nursery Management
+ Human Services
College Peer Advisor
Community Health Worker
Family Development
Peer Support Services
Psychosocial Rehabilitation (PSRC)
+ Management
+ Business Management
Human Resources Management
+ Marketing Management
Project Management
+ Retail Management
+ Multimedia
+ Digital Audio
\# Digital Video
\# Web Design
+ Music: Electronic Music
+ Nursing
Perioperative Nursing
Perioperative Nursing Preceptorship
+ Real Estate
Speech Communication
+ Welding Technology
+ General Welder
+ Welding Technician


## 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 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 |
| Mircobiology |
| Molecular \& Cell Biology |
| Neurobiology \& Physiology |
| Neuroscience |
| Plant Sciences |
| Zoology |

## Business \& Public Administration

Accountancy
Agricultural Business
Business Administration
Business Economics
Healthcare Management
Hotel \& Restaurant Management
Information Systems
Managerial Economics
Public Administration
Recreation Administration
Taxation

## Communication

Communication Studies
Film
Interpersonal Communication
Literary Journalism
Mass Communication
Public Relations
Radio-Television
Technical \& Professional Writing
TV, Film \& Media Production
Computer Science,

## Engineering \& Technology

Aeronautical Science \& Engineering
Aerospace Engineering
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
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 | Human Development <br> Law \& Society <br> Art History |
| :--- | :--- |
| Arts Management | Multiculturial Studies |
| Classical Civilizations | Peace \& Conflict Studies |
| Comparative Literature | Political Science |
| Dance | Psychology |
| Design/Media Arts | Public Policy |
| Dramatic Art | Social Welfare |
| English | Sociology |
| Ethnomusicology | Women's Studies |
| Film \& Digital Media |  |
| Humanities |  |
| Linguistics |  |
| Medieval Studies |  |
| Music \& Culture |  |
| Music History |  |
| Philosophy |  |
| Religious Studies |  |
| Renaissance Studies |  |
| Rhetoric |  |

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

For students who wish to transfer as a Business Administration major, refer to Business Administration on page 77.

## AA Associate in Arts Degree <br> Accounting 60 units

## CA Certificate of Achievement

Accounting . . . . . . . . . . . . . . . . . . . . . . . . . 22 units

## CC Certificates of Completion

Accounting Assistant. . . . . . . . . . . . . . . . . . 8.5 units
CPA Exam Preparation:
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
Enrolled Agent Exam Preparation . . . . . .

## 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-of-state 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 of " C " or higher is required for all courses in the major. Complete 16 units listed below

> ACTG 100 Accounting Procedures. . . . . . . . . . . . . . . . . . . . . . 5 units
> ACTG 103 unit Ten Key Skills . . . . . . . . . . . . . . . . . . . . 4-5 units
> ACTG 121 Financial Accounting . . . . . . . . . . . . . . $4-5$ units
> ACTG 131 Managerial Accounting. . . . . . . . . . 1.5 units
> ACTG 144 QuickBooks Set up and Services. . . . . . 1.5 units
> ACTG 145 QuickBooks Payroll and Merchandising . . . 1.5 units
> BUSW 415 Spreadsheet I . . . . . . . . . . . . . . . . . . .

Plus, select a minimum of 6 units from the following courses:

| ACTG 161 |  | 4 units |
| :---: | :---: | :---: |
| ACTG 162 | Intermediate Accounting II | , |
| ACTG 163 | Auditing | 3 units |
| ACTG 164 | Governmental and Nonpro | 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 | 15 unis |
| BUS 100 | Contemporary American Bus | 3 units |
| BUS 201 | Business Law I. | 3 units |
| BUS 295 | Computer Systems in Busi |  |

## 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.

## CC Accounting Assistant

## 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 Skill. . . . . . . . . . . . . . . . 5 unit
ACTG 144 QuickBooks: Set Up and Service $\quad 1.5$ units
ACTG 145 QuickBooks: Payroll and Merchandising. . 1.5 units
BUSW 415 Spreadsheet I. . . . . . . . . . . . . . . . . . . . . 1.5 units
CRER 127 Career Choices: Job Search. . . . . . . . .

## CC 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\mathrm{ units
ACTG 163 Auditing . . . . . . . . . . . . . . . . . . . . . . . . }3\mathrm{ units
ACTG164 Governmental and Nonprofit Accounting. }3\mathrm{ units
```


## CC 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 . . . . . . . . . . . . . . . . . . . }3\mathrm{ units
ACTG 171 Individual Income Taxes . . . . . . . . . . . . . . }3\mathrm{ units
ACTG 172 Business Income Taxes . . . . . . . . . . . . . . }3\mathrm{ units
ACTG 173 Trust, Estate, Gift Taxes . . . . . . . . . . . . . . . . 1.5 units
BUS 201 Business Law I. . . . . . . . . . . . . . . . . . . . . . }3\mathrm{ units
```


## CC 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 5 unit
ACTG 103 Ten Key Skills . . . . . . . . . . . . . . . . . . 3 units
ACTG 171 Individual Income Taxes . . . . . . . . . . . . 1.5 units
BUSW 415 Spreadsheet I . . . . . . . . . . . . . . . . . . 5 unit

ACTG 103 Ten Key Skills . . . . . . . . . . . . . . . . . . . . . . . 5 unit
ACTG 171 Individual Income Taxes . . . . . . . . . . . . . . 3 units

CRER 127 Career Choices: Job Search . . . . . . . . . . . . . 5 unit

## CC Tax Preparer II

15.5-16.5 semester units

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


## CC Enrolled Agent Exam Preparation

 14.5-15.5 semester unitsA grade of " C " or higher is required for each course applied to the certificate.
ACTG 121 Financial Accounting . . . . . . . . . . . . . . . . $4-5$ units
ACTG 171 Individual Income Taxes . . . . . . . . . . . . . 3 units 3 units
ACTG 172 Business Income Taxes . . . . . . . . . . . . . 1.5 units
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 Option 1 <br> 60 units <br> Administration of Justice Option 2 <br> 60 units

## CA Certificate of Achievement

Administration of Justice Option 1 . . . . . . . . 27 units
Administration of Justice Option 2 . . . . . . . 27 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 Option 1

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

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

A grade point average of 2.0 is required for the major courses.

$$
\text { ADMJ } 100 \text { Introduction to Criminal Justice . . . . . . . . } 3 \text { units }
$$

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 $120,125,153,185$, SOSC 301, 302
Group 2: ACTG 100, 121, ECON 100, 102,
ECON 123 OR MATH 200
Group 3: PSYC 225, SOCI 105, 141, 200, PSYC 300 OR SOCI 300
Group 4: ETHN 150, 151, 160, ANTH 105, 110, 120, GEOG 110
Group 5: SPCH 120, 140, 150, 170
Group 6: CIS 479, 488, 489, 490, 491

## AS Major in Administration of Justice Option 2 (For Peace Officers Only)

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

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

A grade point average of 2.0 is required for the major courses.
ADMJ 100 Introduction to Criminal Justice . . . . . . . . 3 units
ADMJ 102 Principles and Procedures of the Justice System . 3 units
ADMJ 108 Community Relations/Multi-Cultural Policy Issues

Plus current valid POST Certification - Basic Academy Certificate with transcripts signifying completion through any accredited California college. The certification and transcripts must be approved by the Administration of Justice Program Coordinator.

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, 125, 153, 185, SOSC 301, 302
Group 2: ACTG 100, 121, ECON 100, 102,
ECON 123 OR MATH 200
Group 3: PSYC 225, SOCI 105, 141, 200, PSYC 300 OR SOCI 300
Group 4: ETHN 150, 151, 160, ANTH 105, 110, 120, GEOG 110
Group 5: SPCH 120, 140, 150, 170
Group 6: CIS 479, 488, 489, 490, 491

## CA Administration of Justice Option I

## 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 Administration of Justice Option 2

## 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 2.

## 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. . . . . . . . . . . 5 units

Regular Basic Course Modular Format
ADMJ 778 Regular Basic Course Level III 10 units
ADMJ 779 Regular Basic Course Level II . . . . . . . . . . . 15.5 units

## Regular Basic Course Standard Format

ADMJ 145 Basic Police Academy. $\qquad$ 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.

## 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
60-70 transferable units
California State University
University of California
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 point average of 2.0 is required for the major courses.
SOSC 301 Intro to Alcohol and Other Drug Studies . . 3 units
SOSC 302 Pharmacology/Physiological Effects of Alcohol \& Other Drug Abuse

3 units
SOSC 304 Intervention, Treatment, Recovery 3 units
SOSC 307 Counseling the Family of the
Addicted Person . . . . . . . . . . . . . . . . . . 3 units
SOSC 308 Group AOD Counseling Process . . . . . . . . 3 units
SOSC 314 Individual AOD Counseling Process . . . . . 3 units
SOSC 315 Field Studies and Seminar I . . . . . . . . . . . . 3 units
SOSC 316 Field Studies and Seminar II . . . . . . . . . . . . 3 units
SOSC 319 Co-occuring Substance Abuse
and Mental Disorders . . . . . . . . . . . . . . . . 3 units
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 303 Alcohol \& Other Drug Abuse Prevention
and Education. . . . . . . . . . . . . . . . . . . 3 units
SOSC $310 \begin{aligned} & \text { Special Population Groups in Alcohol } \\ & \text { and Other Drug Studies ..... }\end{aligned} 3$ units
SOSC 313 AOD Treatment for Incarcerated
Populations . . . . . . . . . . . . . . . . . . . . . . 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

## CC Certificate of Completion

American Sign Language.<br>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 Liberal Studies Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Deaf Studies, Communicative Disorders, Speech and Language Pathology, or the like, should consider completing an Associate Degree with a major in University Studies. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) will meet the major requirements for this degree.

## CC American Sign Language <br> 12 semester units

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

$$
\text { ASL } 111 \text { Elementary American Sign Language I . . . . . } 3 \text { units }
$$

ASL 112 Elementary American Sign Language II. . . . . 3 units
ASL 121 Advanced Elementary American Sign Language I . . . . . . . . . . . . . . . . . . . . . 3 units
ASL $122 \begin{aligned} & \text { Advanced Elementary American } \\ & \text { Sign Language II. . . . . . . . . . . . . . . . . . . . } 3 \text { units }\end{aligned}$
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 - $\mathbf{7 0}$ transferable units
California State University
University of California
Independent Colleges and Universities

## AS Associate in Science Degree

Anthropology/Liberal Studies Option 2 . . . . . 60 units

## Recommended high school preparation:

Coursework in Sociology, History, 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. 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.

## AA Liberal Studies: Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Anthropology should consider completing an Associate in Arts with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) meet the major requirements for this degree.

## 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 <br> 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: $\mathbf{2 6}$ semester units

A grade point average of 2.0 is required for the major courses.
ARCH 100 Survey of Contemporary Architecture . . . . 3 units
ARCH 120 Architecture and Design Drawing 1:
Drawing and Visual Thinking . . . . . . . . . . 2 units
ARCH 130 Color Graphics. . . . . . . . . . . . . . . . . . . . 1 unit
ARCH 140 Architecture and Design Drawing $2 \ldots$. . . . 2 units
ARCH 145 Delineation . . . . . . . . . . . . . . . . . . . . . . 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 . . . . . . . . . . . . . . . . . . . . . . . . . 4 units
ARCH 240 Design IV . . . . . . . . . . . . . . . . . . . . . . . . . 4 units


#### Abstract

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. . . . .
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 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 point average of 2.0 is required for the major courses.
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 Illustrator . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
GRA 160 Photoshop . . . . . . . . . . . . . . . . . . . . . . . . . 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 point average of 2.0 is required for the major courses.
ART 101 Art \& Architecture from the Ancient World to Medieval Times. . . . . . . . . OR
ART 102 Art \& Architecture of
Renaissance and Baroque Europe . . . . . . . . 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
ART 223 Oil Painting I . . . . . . . . . . . . . . . . . . . . . . . . 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 Art

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

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

A grade point average of 2.0 is required for the major courses.
ART 101 Art \& Architecture from the Ancient World to Medieval Times OR
ART 102 Art \& Architecture of Renaissance and Baroque Europe

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
ART 223 Oil Painting I . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ART 241 Silkscreen I . . . . . . . . . . . . . . . . . . . . . . . . . 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 point average of 2.0 is required for the major courses.
ART 101 Art \& Architecture from the Ancient World to Medieval Times OR
ART 102 Art \& Architecture of Renaissance and
Baroque Europe . . . . . . . . . . . . . . . . . . . . 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
ART 223 Oil Painting I . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ART 224 Oil Painting II . . . . . . . . . . . . . . . . . . . . . . . 6 units

## AA Major in Fine Arts Option 4: Printmaking

Complete General Education and other requirements listed for the Associate degree and
Major requirements: $\mathbf{3 0}$ semester units
A grade point average of 2.0 is required for the major courses.ART 101 Art \& Architecture from the Ancient Worldto Medieval Times ORART 102 Art \& Architecture of Renaissance andBaroque Europe3 units
ART 103 Art of Europe and America from theRococo 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
ART 241 Silkscreen I ..... 3 units
ART 242 Silkscreen I ..... 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 point average of 2.0 is required for the major courses.
ART 350 Visual Perception $\qquad$ 3 units ART 351 Beginning Black and White Photography . . . 3 units ART 352 Intermediate Black and White Photography. 3 units ART 354 Color Photography I. . . . . . . . . . . . . . . . . . . 3 units ART 360 Experimental Photography. . . . . . . . . . . . . . 3 units
ART 381 Beginning Digital Photography . . . . . . . . . . 3 units ART 353 Advanced Black and White Photography OR ART 355 Color Photography II 3 units

## 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, 105, 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 its

## CA Certificate of Achievement

## Broadcast and Electronic Media

Option 1: Television Production . . . . . . . . . . . 36 units
Option 2: Broadcast Audio . . . . . . . . . . . . . . 35.5 units
Option 3: Television Producing . . . . . . . . . . . . 33 units

## CC Certificates of Completion

| Lighting. | 15 units |
| :---: | :---: |
| On-Air | . 16.5 units |
| Editing I | . . . . . . 15 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

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

A grade of " C " or higher is required for all courses in the major.
BCST 110 Media in Society . . . . . . . . . . . . . . . . . . . . 3 units
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
BCST 410 Advanced Production
Techniques (replaces 233 )
3 units
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
MULT 292 DVD Studio Pro (replaces 290/291) . . . . . 3 units
MULT 387 Digital Video Workflow (replaces 385/386) 3 units
MULT 395 Multimedia Portfolio Design . . . . . . . . . . . 1.5 units
MULT 397 Multimedia Careers . . . . . . . . . . . . . . . . . . . 1.5 units
Strongly Recommended: BCST 450 (replaces 244)

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

 36 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.

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

A grade of " C " or higher is required for all courses in the major.

| ST 1 | Media in Society |  |
| :---: | :---: | :---: |
| BCST 2 | Television Studio Techniques (replaces 231 ) | its |
| BCST 4 | Advanced Audio Operations (replaces 132) | 3 units |
| MULT 1 | Digital Video (replaces 180/181) | units |
| MULT 19 | Digital Audio (replaces 190/191) | 3 units |
| MULT 292 | DVD Studio Pro (replaces 290/291) | ts |
| MULT 297 | Pro Tools LEI (replaces 295/296) | 3 units |
| MULT 31 | Digital Recording Studio (replaces 315/316) | 3 units |
| MULT 38 | Digital Video Workflow (replaces 385/386) | 3 units |
| MULT 39 | Multimedia Portfolio Design |  |
| MULT 39 | Multimedia Careers | $.5 \text { u }$ |
| MUS 292 | Sound Creation: Sampling and Synthesis | 3 units |
| MUS 293 | Audio for Visual Med |  |

Strongly Recommended: BCST 450 (replaces 244)

## CA Broadcast and Electronic Media Option 2: Broadcast Audio 35.5 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.

## 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: 33 semester units

A grade of " C " or higher is required for all courses in 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

MULT 395 Multimedia Portfolio Design. . . . . . . . . . . 1.5 units
MULT 397 Multimedia Careers . . . . . . . . . . . . . . . . . 1.5 units
Strongly Recommended: BCST 450 (replaces 244)

## CA Broadcast and Electronic Media Option 3: Television Producing 33 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.

## CC Lighting

15 semester units
A grade of " C " or higher is required for each course.
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

## CC On-Air

16.5 semester units

A grade of " C " or higher is required for each course.
BCST 210 Television Studio Techniques (replaces 231) . 3 units
BCST 220 Broadcast Writing (replaces 194) . . . . . . . . 3 units
BCST 230 On-Air Talent (replaces 120) . . . . . . . . . . . 3 units
BCST 240 Directing Talent. . . . . . . . . . . . . . . . . . . . . 1.5 units
SPCH 100 Public Speaking . . . . . . . . . . . . . . . . . . . . 3 units
SPCH 111 Oral Interpretation I . . . . . . . . . . . . . . . . . . 3 units

## CC Editing

15 semester units
A grade of " C " or higher is required for each course.
BCST 210 Television Studio Techniques (replaces 231). . OR
BCST 320 Digital Television Field
Production (replaces 241) . . . . . . . . . . . . . 3 units
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

## CA Certificate of Achievement

Building Inspection
30 units

## AS Major in Building Inspection

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 all courses in 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 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, select one course from the following list:
ENGL 848 Introduction to Composition and Reading. . 4 units
ENGL 100 Composition and Reading. . . . . . . . . . . . . 3 units
MGMT 110 Report Writing . . . . . . . . . . . . . . . . . . . . 3 units
Suggested electives:
BLDG 790; COOP 641; MGMT 120, 235, 265; PHYS 100

## Building Inspection <br> 30 semester units

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

## BUSINESS ADMINISTRATION

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
Refer also to ACCOUNTING Major on page 67.

## AA Associate in Arts Degree and/or University Transfer in Business Administration

Business Administration . . . . . . . . . . . . . . . . . 60 units

## Recommended high school preparation:

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

## University Transfer Program

Use Assist (www.assist.org) to identify all lower division major preparation for Business 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 Business Administration for University Transfer

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

Major requirements: 21-28 semester units
A grade of " C " or higher is required for all courses in the major. Complete 18-20 units listed below
ACTG 121 Financial Accounting ..... 4-5 units
ACTG 131 Managerial Accounting. ..... 4-5 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 3-8 units from the following courses:
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

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

## AA Associate in Arts Degree

Business: General 60 units
Business: Insurance - Property and Casualty . 60 units
Business: Merchandising - Management. . . . 60 units
Management: Business Management . . . . . . 60 units
Management: Marketing Management ..... 60 units
Management: Retail Management ..... 60 units
Microcomputer Applications
Option 1: Microcomputer/Office Assistant ..... 60 units
Microcomputer Applications
Option 2: Microcomputer/Database and Spreadsheet Functions ..... 60 units
CA Certificate of Achievement
Business: Insurance - Property and Casualty . 32 units
Business: Merchandising - General ..... 24 units
Business: Merchandising - Managemen ..... 24-26 units
Management: Business Management ..... 24 units
Management: Marketing Management ..... 24 units
Management: Retail Management . ..... 31-32 units
Microcomputer Applications
Option 1: Microcomputer/Office Assistant . . 23-24.5 units
Microcomputer ApplicationsOption 2: Microcomputer/Database andSpreadsheet Functions27 units
CC Certificates of Completion
Human Resources Management ..... 9 units
Insurance: Property and Casualty ..... 12 units
Office Assistant I ..... 8-9.5 units
Office Assistant II ..... 11 units
Project Management ..... 12 units

## Recommended high school preparation:

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

## AA Major in Business: General

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

## Major requirements: 24-27 semester units

A grade point average of 2.0 is required for the major courses.
ACTG 100 Accounting Procedures. . . . . . . . 3 units. . OR
ACTG 121 Financial Accounting. . . . . . . . . . . . . . . . . 4-5 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 BUSD or a BUSW series

## AA Major in Business: Insurance Property and Casualty

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

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

A grade point average of 2.0 is required for the major courses.

| ACTG 121 Financial Accounting | units |
| :---: | :---: |
| BUS 100 Contemporary American Business. | 3 units |
| BUS 201 Business Law I. | 3 units |
| BUS 295 Computer Systems in Business | 4 units |
| 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 |
| BUS 401 Business Communications. | 3 units |
| BUS 641 Business Cooperative Education | 1 unit |
| BUSW 415 Spreadsheet I Using Excel for Windows. | 1.5 units |
| BUSW 416 Spreadsheet II Using Excel for Windows | 1.5 units |

## CA Business: Insurance Property and Casualty 32 semester units

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.

## CC Insurance: Property and Casualty

 12 semester units| BUS 352 | Introduction to Insurance | 1 unit |
| :---: | :---: | :---: |
| BUS 353 | Property and Liability Insurance Principles | 3 units |
| BUS 354 | Personal Insurance | nits |
| BUS 355 | Commercial Insurance | 3 units |
| BUS 356 | Code and Ethics | 1 unit |
| BUS 641 | Business Cooperative Education | 1 un |

## CA Business: Merchandising - General

 24 semester unitsA grade of " C " or higher is required for each course.

$$
\text { BUS } 100 \text { Contemporary American Business . . . . . . . . } 3 \text { units }
$$

BUS 101 Human Relations I . . . . . . . . . . . . . . . . . . . 3 units
BUS 115 Business Mathematics...................... 3 units
BUS 170 Salesmanship Fundamentals . . . . . . . . . . . 3 units
BUS 180 Marketing . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 641 Business Cooperative 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: 24-26 semester units

A grade point average of 2.0 is required for the major courses.
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
BUS 641 Business Cooperative Education . . . . . . . . . 6 units
ACTG 100 Accounting Procedures. . . . . . . . 3 units . OR
ACTG 121 Financial Accounting . . . . . . . . . . . . . . . 4-5 units

## CA Business: Merchandising - Management <br> 24-26 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.


## AA Major in Management: Business Management

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

## Major requirements: 24 semester units

A grade point average of 2.0 is required for the major courses. 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 BUSD or 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 170 Salesmanship Fundamentals . . . . . . . . . . . . 3 units
BUS 180 Marketing . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
CIS 110 Introduction to CIS . . . . . . . . . . . . . . . . . . . 3 units
MGMT 105 Financial Management...... 3 units
MGMT 110 Report Writing . . . . . . . . . . . . . . . . . . . . 3 units
MGMT 120 Management Communication. . . . . . . . . 3 units
MGMT 215 Management of Human Resources . . . . . 3 units
MGMT 220 Organizational Behavior. . . . . . . . . . . . . 3 units
MGMT 265 Project Management. . . . . . . . . . . . . . . . 3 units
MGMT 641 Cooperative Education . . . . . 3 units

## CA Management: Business Management 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.

## 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 point average of 2.0 is required for the major courses.
MGMT 100 Intro 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:
BUS 170 Salesmanship Fundamentals . . . . . . . . . . . . 3 units
CIS 110 Introduction to CIS . . . . . . . . . . . . . . . . . . . . 3 units
MGMT 105 Financial Management ...... 3 units
MGMT 110 Report Writing . . . . . . . . . . . . . . . . . . . . 3 units
MGMT 120 Management Communications . . . . . . . . 3 units
MGMT 215 Management of Human Resources . . . . . 3 units
MGMT 220 Organizational Behavior. . . . . . . . . . . . . 3 units
MGMT 265 Project Management. . . . . . . . . . . . . . . . . 3 units
BUSD or BUSW series . . . . . . . . . . . . . . . . . . . . . .1.5-3 units

## CA Management: Marketing Management 24 semester units

Complete major requirements listed under Associate in Arts - Major in Marketing Management. A grade of "C" or higher is required for each course.

## AA Major in Management: Retail Management

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

| Major requirements: 31-32 semester units |  |
| :---: | :---: |
| A grade point average of 2.0 is required for the major courses. |  |
| ACTG 100 Accounting Procedures. . . . . . . 3 uni | OR |
| ACTG 121 Financial Accounting | 4-5 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 Supervisio | 3 units |
| MGMT 120 Management Communications | OR |
| SPCH 120 Interpersonal Communication. | 3 units |
| MGMT 215 Management of Human Resources | 3 units |

## CA Management: Retail Management

 31-32 semester unitsComplete major requirements listed under Associate in Arts Major in Retail Management. A grade of "C" or higher is required for each course.

## CC Human Resources Management 9 semester units

A grade of " C " or higher is required for each course.
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 $\qquad$ 3 units
MGMT 220 Organizational Behavior. . . . . . . . . . . . . 3 units

MGMT 235 Techniques of Supervision. . . . . . . . . . . . 3 units

## CC Project Management

12 semester units
A grade of " $C$ " or higher is required for each course.
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 three units from the following courses:
BUS 101 Human Relations I . . . . . . . . . . . . . . . . . . . 3 units
MGMT 220 Organizational Behavior . . . . . . . . . . . . . 3 units

## AA Major in Business: <br> Microcomputer Applications 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 point average of 2.0 is required for the major courses.
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 ....... OR
MGMT 120 Management Communications . . . . . . . . 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 . . . . . . . . . . . . . 5 unit

## CA Microcomputer Applications Option 1 Microcomputer/Office Assistant <br> 23-24.5 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.

## AA Major in Business: Microcomputer Applications Option 2 Microcomputer/Data Base and Spreadsheet Functions <br> Complete General Education and other requirements listed for the Associate degree and

Major requirements: $\mathbf{2 7}$ semester units
A grade point average of 2.0 is required for the major courses.
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
BUSD 114 DOS Fundamentals I . . . . . . . . . . . . . 1.5 units
BUSD 115 DOS Fundamentals II . . . . . . . . . . . 1.5 units
BUSW 105 Introduction to Microcomputers
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 1.5 units

A grade point average of 2.0 is required for the major courses.
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
BUSD 114 DOS Fundamentals I ................... . . 1.5 units
BUSD 115 DOS Fundamentals II................... . . 1.5 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
1.5 units

CA Business: Microcomputer Applications Option 2 Microcomputer/Data Base and Spreadsheet Functions

27 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.

## CC Office Assistant I <br> 8.5-10 semester units

A grade of "C" or higher is required for each course.
BUS 317 Micro/Keyboarding: Skillbuilding . . . . . . . . 1.5 units
BUS 316 Keyboarding II. . . . . . . . . . . . . . . . 3 units . OR
BUSW 214 Word Processing Using WORD for Windows 1.5 units

BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . . 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 . . . . . . . . . . . . . 5 unit

## CC Office Assistant II

## 11.5 semester units

A grade of " C " or higher is required for each course.
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

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. . . . . . . . . . . . . . 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

## AA Associate in Arts 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.

## AA 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 all courses in the major.
CHEM 210 General Chemistry I . . . . . . . . . . . . . . . . . 5 unitsCHEM 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

## CC Certificates of Completion

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.

## AA Major in Liberal Studies Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Chinese should consider completing an Associate Degree with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) will meet the major requirements for this degree.

## CC Chinese

## 12 semester units

A grade of " C " or higher is required for each course.
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<br>60 - 70 transferable units<br>California State University<br>University of California<br>Independent Colleges and Universities

## AS Associate in Science Degree <br> Computer and Information Science. . . . . . . . 60 units <br> Computer and Network Forensics 60 units <br> Computer Science Applications and Development 60 units <br> Computer Support Specialist <br> Option 1 Network Support <br> 60 units <br> Computer Support Specialist <br> 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 units Computer Support Specialist Option 2 PC Hardware and System Support . . 31 units

## CC Certificates of Completion

| VisualStudio.NET Programming | nits |
| :---: | :---: |
| C++ Programming. | 8 units |
| CIS Network Security Specialist. | 7.5 units |
| Computer Forensics | 13.5 units |
| Internet Programming | 14 units |
| Java Programming - Option 1 | 8 units |
| Java Programming - Option 2 | 8 units |
| Network + Basics | 6 units |
| Visual Basic 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: 31 semester units
A grade point average of 2.0 is required for the major courses.
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 ..... 5 units
MATH 252 Calculus with Analytic Geometry I ..... 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

Major requirements: $\mathbf{3 1 . 5}$ semester units
A grade point average of 2.0 is required for the major courses.
CIS 151 Networks and Digital Communications. . . . . 3 units
CIS 479 Network Security Fundamentals . . . . . . . . . . 3 units
CIS 488 Firewalls and Network Security. . . . . . . . . . . . 1.5 units
CIS 489 Computer Forensics . . . . . . . . . . . . . . . . . . 3 units
CIS 490 Computer Forensics:
Network Analysis and Defense . . . . . . . . . . . 3 units
CIS 491 Computer Forensics: Search and Seizure . . . . 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 120 Criminal Investigation. . . . . . . . . . . . . . . . 3 units
ELEC 215 Introduction to PC Hardware . . . . . . . . . . . 3 units

## CA Computer and Network Forensics

37 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.

## 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 point average of 2.0 is required for the major courses.
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:


## CA Computer Science Applications and Development 30 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.

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

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

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

A grade point average of 2.0 is required for the major courses.


Plus, select 9 units from the following courses:
CIS 479 Network Security Fundamentals . . . . . . . . . . 3 units
CIS 485 Wireless Network Design and Implementation 3 units
CIS 489 Computer Forensics . . . . . . . . . . . . . . . . . . 3 units

CIS 490 Computer Forensics: Network Analysis and Defense . . . . . . . . . . . 3 units
CIS 491 Computer Forensics: Search and Seizure. . . . 3 units

## CA Computer Support Specialist Option I Network Support 28 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.

## 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 point average of 2.0 is required for the major courses.

| CIS 110 | Introduction to Computer and Information Science . | 3 units |
| :---: | :---: | :---: |
| CIS 151 | Networks and Digital Commun | 3 units |
| CIS 125 | Visual Basic I. |  |
| CIS 254 | Introduction to Object-Oriented Program Design | 4 units |
| ELEC 110 | Introduction to Fundamentals of Electronics | 3 units |
| ELEC 215 | 5 Introduction to PC Hardware | 3 units |
| ELEC 216 | 6 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
CIS 315 Survey of Contemporary Operating Systems . 3 units
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 units

Complete 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.
CC VisualStudio.NET Programming 8 units
CIS 391 Visual Studio.NET I ..... 2 units
CIS 392 Visual Studio.NET II ..... 2 units
Plus, select 4 units from the following courses:
CIS 393-398 Visual Studio.NET: Advanced Topics. ..... 4 units
CC C++ Programming
8 units
CIS 278 (CSI) Programming Methods: C++. ..... 4 units
CIS 279 (CS2) Data Structures: C++ ..... 4 units
CC CIS Network Security Specialist
7.5 units
CIS 479 Network Security Fundamentals ..... 3 units
CIS 488 Firewalls and Network Security. ..... 1.5 units
CIS 489 Computer Forensics ..... 3 units
CC Computer Forensics
13.5 units
CIS 479 Network Security Fundamentals ..... 3 units
CIS 488 Firewalls and Network Security. ..... 1.5 units
CIS 489 Computer Forensics ..... 3 units
CIS 490 Computer Forensics:Network Analysis and Defense3 units
CIS 491 Computer Forensics: Search and Seizure ..... 3 units
CC Internet Programming
14 units
CIS 362 Enterprise Database Management ..... 4 units
CIS 377Internet 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
CC Java Programming - Option 18 units
CIS 255 (CS1) Programming Methods: Java ..... 4 units
CIS 256 (CS2) Data Structures: Java ..... 4 units
CC Java Programming - Option 2
8 units
CIS 381 Java Programming Language I. ..... 2 units
CIS 382 Java Programming Language II. ..... 2 units
Plus, select 4 units from the following courses
CIS 383-388 Advanced Java Programming Topics. ..... 4 units
CC Network + Basics
6 units
CIS 150 Networks and Digital Communications. ..... 3 units
CIS 152 Principles of Network
Design and Management ..... 3 units
CC Visual Basic Programming
8 units
CIS 125 Visual Basic I ..... 4 units
CIS 126 Visual Basic II. ..... 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. . . . . . . . . . . . . . . . . . . . . . . . . 60 units

## CA Certificate of Achievement

Cosmetology. . . . . . . . . . . . . . . . . . . . . . . . . 45 units

## Certificates of Completion

Esthetician . . . . . . . . . . . . . . . . . . 16 units and 600 hours

## 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: 54 semester units

A grade of " C " or higher is required in all major courses.
COSM 712 Fundamentals of Cosmetology I. . . . . . . . 9 units
COSM 722 Fundamentals of Cosmetology II 9 units
COSM 732 Advanced Cosmetology I . . . . . . . . . . . . 18 units
COSM 742 Advanced Cosmetology II . . . . . . . . . . 18 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

54 semester units required
Complete major requirements listed under Associate in Arts Major in Cosmetology. A grade of "C" or better for each course is required.

## CC Esthetician

Completion of 600 hours and 16 semester units required with a " C " grade or higher. This prepares student to take the California State Board of Cosmetology Examination for Esthetician and for subsequent employment in this field only.

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COSM 752 Esthetics I
8 units
COSM 753 Esthetics II 8 units
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## Special Courses in Cosmetology:

COSM 750 - Brush-Up
Refresher course to upgrade skills for students who have satisfactorily completed an approved course of training with a minimum of 1600 hours or for out-of-state cosmetologists in preparation for the State Board of Cosmetology Examination

COSM 760 - Cosmetology Instruction Preparation
Cosmetology instructor training program which requires the student to complete a 600 hour instructor training certificate program or equivalent work experience and individualized instruction as required.

## 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

## CC Certificates of Completion

Leadership for Service . . . . . . . . . . . . . . . . . . . 8 units 5.5 units
College Peer Advisor . . . . . . . . . . . . . .

## 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.

## AA Major in Liberal Studies Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Psychology/Career and Life Planning should consider completing an Associate in Arts with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) meet the major requirements for this degree.

## CC Leadership for Service <br> <br> 8 semester units

 <br> <br> 8 semester units}A grade of " C " or higher is required for each course.
Select 2 units from the following courses:

$$
\begin{aligned}
& \text { CRER } 150 \text { Leadership for Service . . . . . . . . . . . . . . } 1 \text { unit } \\
& \text { CRER } 141 \text { Peer Relations and Community Service . . . } 1 \text { unit }
\end{aligned}
$$

Select 3 units from the following courses:
SPCH 100 Public Speaking . . . . . . . . . . . . . . . . . . . . 3 units
SPCH 120 Interpersonal Communications . . . . . . . . . . 3 units
SPCH 140 Small Group Communication . . . . . . . . . . 3 units
SPCH 150 Intercultural Communication . . . . . . . . . . 3 units
SPCH 170 Organizational 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 3 units
SOCI 300 Social Psychology . . . . . . . . . . . . . . . 3 units
PSYC 100 General Psychology . . . . . . . . . . . . . . . 3 units

## CC College Peer Advisor 5.5 semester units

A grade of "C" or higher is required for each course. Select 3 units from the following courses:
CRER 120 College and Career Success. . . . . . . . . . . . OR
CRER 121 Planning for Sudent Success . . . . . . . . . . . 1 unit AND
CRER 122 Strategies for Achieving Education Success 1 unit CRER 123 Career Exploration for Sudent Success . . . . 1 unit Plus:
CRER 104 Transfer Essentials and Planning. . . . . . . . . . 5 unit
CRER 107 Introduction to Choosing a College Major . . 5 unit
CRER 108 Achieving an Associate Degree and/or Vocational Certificate . 5 unit
CRER 152 Service Learning and Leadership Practicum CSM Connects ..... 1.5 units

## 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
31-32 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 all major courses.


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

## CA Dental Assisting

31-32 semester units
A grade of " C " or higher is required for each course.
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) . . . . . . . . . . . . . . . . 5 unit
DENT 749 Pre-Clinical Science (Fall) . . . . . . . . . . . . . . . 5 unit
DENT 751 Dental Clinic (Fall) . . . . . . . . . . . . . . . . . . 1.5 units
DENT 763 Dental Radiology (Fall and Spring) . . . . . 2 units
DENT 647 Work Experience (Spring). . . . . . . . . . . . 4 units
SPCH 860 or 100 or 120 Communication in the Workplace. . . . . . . . . . 1-3 units
Select $1-1.5$ units from the following courses:
ENGL 865 Project in Workplace Writing 1 units
Read 812 Individualized Reading Improvement .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
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

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

## CA Certificates of Achievement

CAD/Drafting Technology . . . . . . . . . . . . . . . 21 units

## CC Certificates of Completion <br> Computer-Aided Design . . . . . . . . . . . . . . . . 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 point average of 2.0 is required for the major courses.
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 three units from any course in:
ARCH (Architecture)
BUSW (Business Applications Windows Platform)
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.

## CC Computer-Aided Design

16-18 semester units
A grade of " C " or higher is required in each course.
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 838 Intensive Introduction to Composition and Reading . . . . . . 5 units . . OR
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

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

## Recommended high school preparation:

Coursework in Economics, Mathematics, English, Government

## 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 Liberal Studies: Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Economics should consider completing an Associate in Arts with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) meet the major requirements for this degree.

## ELECTRICAL 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

Electrical Technology: Inside Wireman . . . . . 60 units<br>Electrical: Sound and<br>Communications Installer<br>60 units

## CA Certificate of Achievement

Electrical Technology: Inside Wireman . . . . . 30 units
Electrical: Sound and
Communications Installer
18 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'.

## As Major in Electrical Technology: Inside Wireman

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

## Major Requirements: 30 semester units

A grade point average of 2.0 is required for the major courses.
ELEL 701 Electrical Apprenticeship I . . . . . . . . . . . . 3 units
ELEL 702 Electrical Apprenticeship II . . . . . . . . . . . . 3 units 3 units
ELEL 703 Electrical Apprenticeship III . . . . . . . . . . 3 units
ELEL 704 Electrical Apprenticeship IV . . . . . . . . . . 3 units
ELEL 705 Electrical Apprenticeship V . . . . . . . . . . . 3 units
ELEL 706 Electrical Apprenticeship VI . . . . . . . . 3 units
ELEL 707 Electrical Apprenticeship VII . . . . . . . . . . 3 units
ELEL 708 Electrical Apprenticeship VIII . . . . . . . . . 3 units
ELEL 709 Electrical Apprenticeship IX . . . . . . . . . 3 units
ELEL 710 Electrical Apprenticeship X . . . . . . .

## CA Electrical Technology: Inside Wireman <br> 30 semester units

Complete major requirements listed under Associate in Science - Major Electrical Technology. A grade of " C " or higher is required in each course.

## AS Major in Electrical: Sound and Communications Installer

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

Major Requirements: 18 semester units
A grade point average of 2.0 is required for the major courses.

ELEL 721 Sound and Communications
Apprenticeship I
3 units

ELEL 722 Sound and Communications Apprenticeship II. . . . . . . . . . . . . . . . . . . . . . 3 units
ELEL 723 Sound and Communications Apprenticeship III . . . . . . . . . . . . . . . . . . . . 3 units
ELEL 724 Sound and Communications Apprenticeship IV . . . . . . . . . . . . . . . . . . . . 3 units
ELEL 725 Sound and Communications Apprenticeship V 3 units

ELEL 726 Sound and Communications Apprenticeship VI 3 units

## CA Electrical: Sound and Communications Installer

18 semester units
Complete major requirements listed under Associate in Science - Major Electrical: Sound and Communications Installer. A grade of " C " or higher is required in each course.

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

## CA Certificate of Achievement

Electronics Technology
Option 1: Wireless Communications Systems 38 units
Option 2: Industrial Electronics. . . . . . . . . . 46 units
Option 3: Microcomputer Systems 43 units
Option 4: General Electronics . . . . . . . . . . . 44 units
Electronics Technology Advanced Placement . 22 units

## CC Certificates of Completion

Network Cabling Specialist . . . . . . . . . . . . . 10.5 units
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 point average of 2.0 is required for the major courses.


## 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.

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

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

Major Requirements: $\mathbf{4 6}$ semester units
A grade point average of 2.0 is required for the major courses.
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

46 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.

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

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


## CA Electronics Technology Option 3: Microcomputer Systems

46 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 point average of 2.0 is required for the major courses.
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 310 Introduction to Microprocessors. . . . . . . . . 3 units
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.

## 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 G.P.A of 2.0 or higher and a grade of " C " or higher in each course is required.
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . 1.5 units
BUSW 530 Introduction to Internet . . . .
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 G.P.A. of 2.0 or higher and no grade lower than a " C " required.
CC Network Cabling Specialist10.5 semester units
A grade of "C" or higher is required for each course.
ELEC 110 Introduction to Fundamentals of Electronics 3 units
ELEC 131 Copper-Based Network Cabling Fundamentals4.5 units
CIS 110 Introduction to Computer and Information Science ..... 3 units
CC Electronics Assembly
7 semester units
A grade of " C " or higher is required for each course.
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 <br> 60-70 transferable units

California State University
University of California
Independent Colleges and Universities
AS Associate in Science Degree
Engineering. .......................... 60 units
Engineering Technology: Electronics $\quad 60$ units
Engineering Technology: General . . . . . . . . 60 units

## 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

## Major Requirements: 19 semester units

A grade point average of 2.0 is required for the major courses.
ENGR 210 Engineering Graphics . . . . . . . . . . . . . . . . . . . . . . . 3 units 3 units
ENGR 230 Engineering Statics . . . . . . . . . . . . . . 4 units
ENGR 260 Circuits and Devices. . . . . . . . . . . . . . . . 3 units

Plus, select 5 units from the following courses:

| 220 G |  |
| :---: | :---: |
| CHEM 231 Organic Chemistry I. | 5 units |
| CIS 278 (CS1) Programming Methods: C+ | its |
| ECON 100 Principles of Macroeconomics | , |
| ECON 102 Principles of Microeconomics | ts |
| ENGR 140 Introduction to Engineering | unit |
| GEOL 210 General Geology | 4 units |
| MATH 200 Elementary Probability and Statistics | 4 units |
| MATH 270 Linear Algebra | 3 units |
| MATH 275 Ordinary Differential Equations | its |
| PHYS 270 Physics with Calculus | 4 |

## Major in Engineering Technology: Electronics

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

## Major Requirements: $\mathbf{2 6}$ semester units

A grade point average of 2.0 is required for the major courses.


## 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 point average of 2.0 is required for the major courses.
ENGR 210 Engineering Graphics . . . . . . . . . . . . . . . . 4 units

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
MATH 200 Elementary Probability and Statistics . . . . 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 <br> .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: 18 semester units

A grade point average of 2.0 is required for the major courses.
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
Complete 15 units in Group A or 15 units in Group B:
Group A Literature courses in the 100 or 200 series or LIT 430
Group B Select 9-12 units from literature courses in the 100 or 200 series or LIT 430.

And select 3-6 units from the following courses:
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: 18 semester units

A grade point average of 2.0 is required for the major courses.
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 290 Law and the African-American Community 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 425 History of the Asian People in the United States . . . . . . . . . . . . . . . . . 3 units
ETHN 430 Asian-American Communities
in the United States . . . . . . . . . . . . . . . . 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

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 point average of 2.0 is required for the major courses.
FILM 100 Introduction to Film . . . . . . . . . . . . . . . . . . . 3 units
FILM 120 Film History I . . . . . . . . . . . . . . . . . . . . . . . 3 units
FILM 121 Film History II . . . . . . . . . . . . . . . . . . . . . 3 units
Plus, select 12 units from the following courses (maximum of 3 units from FILM 101-106):
FILM 101 Film Studies Focus . . . . . . . . . . . . . . . . . . . 1 unit
FILM 102 Film Studies Focus . . . . . . . . . . . . . . . . . . . 1 unit
FILM 103 Film Studies Focus . . . . . . . . . . . . . . . . . . . 1 unit
FILM 104 Film Studies Focus . . . . . . . . . . . . . . . . . . . 1 unit
FILM 105 Film Studies Focus . . . . . . . . . . . . . . . . . . . 1 unit
FILM 106 Film Studies Focus . . . . . . . . . . . . . . . . . . . 1 unit
FILM 110 American Cinema . . . . . . . . . . . . . . . . . . . 3 units
FILM 153 Screenwriting. . . . . . . . . . . . . . . . . . . . . . . 3 units
FILM 155 Narrative Digital Filmmaking . . . . . . . . . . . 3 units
FILM 160 Documentary Digital Filmmaking. . . . . . . . 3 units
FILM 200 Advanced Film Study . . . . . . . . . . . . . . . . . 3 units
FILM 277 Film and Literature . . . . . . . . . . . . . . . . . . . 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 SPRINKLER TECHNOLOGY

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<br>Associate in Science Degree<br>Fire Sprinkler Technology . . . . . . . . . . . . . . . 60 units

## CA Certificate of Achievement <br> Fire Sprinkler Technology 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 <br> Major in Fire Sprinkler Technology

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

| Major Requirements: $\mathbf{3 0}$ semester units |  |  |
| :---: | :---: | :---: |
| A grade point average of 2.0 is required for the major courses. |  |  |
| SPFI 70 | Sprinkler Fitter Appr | 3 units |
| SPFI 70 | Sprinkler Fitter Apprentice II |  |
| SPFI 70 | Sprinkler Fitter Apprentice III | 3 units |
| SPFI 70 | Sprinkler Fitter Apprentice IV | 3 units |
| SPFI 70 | Sprinkler Fitter Apprentice V | 3 units |
| SPFI 70 | Sprinkler Fitter Apprentice V | 3 units |
| SPFI 70 | Sprinkler Fitter Apprentice VII | 3 units |
| SPFI 708 | Sprinkler Fitter Apprentice VIII | 3 units |
| SPFI 70 | Sprinkler Fitter Apprentice IX | its |
| SPFI 71 | Sprinkler Fitter Apprentice X | 3 units |

## Fire Sprinkler Technology

30 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.

## 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 <br> Fire Technology

CA Certificate of Achievement
Fire Technology.
31-34 units

## FA Firefighter I Academy EMI Emergency Medical Technician

## 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: 31-32 semester units

A grade of " C " or higher is required in all major courses.

$$
\text { FIRE } 715 \text { (FT1) Fire Protection Organization. . . . . . . . } 3 \text { units }
$$

FIRE 720 (FT2) Fire Prevention Technology. . . . . . . . . 3 units
FIRE 730 (FT5) Fire Behavior and Combustion . . . . . . 3 units
FIRE 740 (FT4) Building Construction for Fire Protection 3 units
FIRE 745 (FT3) Fire Protection Systems and Equipment. . 3 units
ENGL 838 Intensive Introduction to
Composition and Reading. . . . . . 5 units . OR
ENGL 848 Introduction to
Composition and Reading. . . . . . 4 units . OR
ENGL 100 Composition and Reading. . . . . . . . . . . . . 3 units
Plus, select 13-14 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 783 Firefighter I Academy . . . . . . . . . . . 9 units
FIRE 795 Emergency Medical Technician - Basic . . . 7 units
Other FIRE courses may be used with permission from the Fire faculty and with an official course substitution approval on file in the Admissions and Records Office.

## CA Fire Technology

## 31-32 semester units

Complete major requirements listed under Associate in Science - Major in Fire Technology. A grade of " C " or higher is required for each course.

In all Fire Technology programs, FIRE 715 may be waived for those students who have three of more years of certified service as professional fire fighters. Verification is required and need faculty approval and must be on file in the Admissions and Records Office.

## 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.

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

## AA Associate in Arts Degree

French. . . . . . . . . . . . . . . . . . . . . . . 60 units

## CC Certificate of Completion

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: 18 semester units
A grade point average of 2.0 is required for the major courses.

| FREN 110 | Ele | S |
| :---: | :---: | :---: |
| FREN 11 | Elementary French I. | units |
| FREN 11 | Elementary French II | 3 units |
| FREN 11 | Beginning French I | its |
| FREN 116 | Beginning French II | its |
| FREN 11 | Advanced Beginning French I | 3 units |
| FREN 118 | Advanced Beginning French II | 3 units |
| FREN 120 | Advanced Elementary French. | 5 units |
| FREN 12 | Advanced Elementary French I. | 3 units |
| FREN 12 | Advanced Elementary French II | 3 units |
| FREN 130 | Intermediate French. | 5 units |
| FREN 13 | Intermediate French I. | 3 units |
| FREN 13 | Intermediate French II | 3 units |
| FREN 140 | Advanced Intermediate French | 3 units |
| FREN 203 | French in Translation | 3 |

With Language Arts Division approval, ART 103 and HIST 101 may be accepted as part of the 18 units.

## CC French

## 12 semester units

"Credit" or grade of " C " or higher is required for all courses.
I: Select at least 5 units from the following courses:
FREN 110 Elementary French. . . . . . . . . . . . . . . . . . . . . 5 units
FREN 111 units
FREN 112 Elementary French I. . . . . . . . . . . . . . 3 units
FREN 120 Advanced Elementary French. . . . . . . . . . . . 5 units
FREN 121 Advanced Elementary French I. . . . . . . . . . 3 units
FREN 122 units
FREN 130 Invanced Elementary French II . . . . . . . . . 5 units
FREN 131 Intermediate French. . . . . . . . . . . . . . . . 3 units
FREN 132 Intermediate French II . . . . . . . . . . . . . . . . . . 3 units
FREN 140 Advanced Intermediate French . . . . . . . 3 units

II: The balance of units may be from the following courses:
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 801 Conversational French I, Elementary . . . . . 2 units
FREN 802 Conversational French II,
Advanced Elementary. . . . . . . . . . . . . . . . . 2 units
FREN 803 Conversational French III, Intermediate . . . 2 units
FREN 804 Conversational French IV,
Advanced Intermediate . . . . . . . . . . . . . . . 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.

## 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 <br> 60-70 transferable units

California State University
University of California
Independent Colleges and Universities

## Recommended high school preparation:

Coursework in Geography, History, English, Science

## 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 Liberal Studies: Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Geography should consider completing an Associate in Arts with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) meet the major requirements for this degree.

## 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 <br> Geological Science. <br> . 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: 21 semester units

A grade point average of 2.0 is required for the major courses.
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

## AA Associate in Arts Degree

German
.60 units

## CC Certificate of Completion

German
.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 German

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

## Major Requirements: $\mathbf{1 8}$ semester units

A grade point average of 2.0 is required for the major courses.


With Language Arts Division approval, ART 103 and HIST 101 may be accepted as part of the 18 units.

## CC German

12 semester units
"Credit" or grade of "C" or higher is required for all courses.
Select at least 5 units from the following courses:


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.

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

## CC Certificate of Completion

Global Studies.<br>17 units

## Recommended high school preparation:

Coursework in Political Science, Economics, Geography, 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 Liberal Studies: Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Global Studies should consider completing an Associate in Arts with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) meet the major requirements for this degree.

## CC Global Studies

## 17 semester units.

A grade of " C " or higher is required for each course.
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, select 3 units from the following courses:
SPCH 150 Intercultural Communication . . . . . . . . . . 3 units
SPCH 170 Organizational 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 point average of 2.0 is required for the major courses.
GRA 115 Designing with Type I: Essentials of Typographic Expression ..... 3 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 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.

## 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

## Recommended high school preparation:

Coursework in History, Political Science, Economics, English, Government

## 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 Liberal Studies: Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in History should consider completing an Associate in Arts with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) meet the major requirements for this degree.

## 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 60 units

## CA Certificate of Achievement

Horticulture: Environmental Option 1:
Landscape Constructional Design . . . . . . . 21-29 units
Horticulture: Environmental Option 2:
Nursery Management . . . . . . . . . . . . . . . 21-30 units
Horticulture: Environmental Option 3:
Landscape Management . . . . . . . . . . . . . . 21-29 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-of-state 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: 21-29 semester units

A grade of " C " or higher is required in all major courses:
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:
HORT 320 Introductory Plant Science . . . . . . . . . . . . 3 units
BIOL 145 Plants, People, Environment. . . . . . . . . . . . 3 units
BIOL 110 General Principles of Biology. . . . . . . . . . . 4 units
Plus, two courses form the following selections:
HORT 342 Landscape Construction............... . . 3 units
AND
HORT 350 Principles of Landscape Design . . . . . . . . OR
HORT 709 Landscaping. . . . . . . . . . . . . . . . . . . . 3 units

## CA Horticulture: Environmental Option 1:

 Landscape Construction/Design21-29 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.

## AS Major in Horticulture: Environmental Option 2: Nursery Management

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

## Major Requirements: 21-30 semester units

A grade of " C " or higher is required in all major courses:
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:
HORT 320 Introductory Plant Science ..... 3 units
BIOL 145 Plants, People, Environment ..... 3 units
BIOL 110 General Principles of Biology ..... 4 units
Plus, select one of the following courses:
HORT 330 Integrated Pest Management ..... 3 units
HORT 350 Principles of Landscape Design ..... 3 units
HORT 709 Landscaping. ..... 3 units

## CA Horticulture: Environmental Option 2: Nursery Management 21-30 semester units

Complete 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


## CA Horticulture: Environmental Option 3: Landscape Management 21-29 semester units

Complete major requirements listed under Associate in Science - Major in Horticulture: Environmental Option 3. A grade of "C" or higher is required for each course.

## AS Major in Horticulture: Floristry

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 in all major courses
HORT 400 Floral Arranging I . . . . . . . . . . . . . . . . . . . 1.5 units
HORT 401 Floral Arranging II . . . . . . . . . . . . . . . . . . 1.5 units
HORT 404 Flowers to Wear and Carry I. . . . . . . . . . . . . 5 unit
HORT 405 Flowers to Wear and Carry II . . . . . . . . . . . 5 unit
HORT 415 Retail Floristry Management. . . . . . . . . . . 3 units
HORT 417 European Floral Design ....... 1.5 units
HORT 419 Bridal and Party Designs . . . . . . . . . . . . 1.5 units
HORT 421 Contemporary Ikebana. . . . . . . . . . . . . . . 1.5 units
HORT 425 Cut Flower Identification . . . . . . . . . . . . . 1 unit
HORT 426 Sympathy Floral Design . . . . . 1.5 units
HORT 427 Floral Design with Everlasting Flowers . . . 1.5 units
HORT 428 Display Design for Florists
. 5 unit
Plus, select 3 units from the following courses:
HORT 325 Interior Plantscape . . . . . . . . . . . . . . . . . . . 3 units
HORT 327 Nursery Management. . . . . . . . . . . . . . . . . 3 units
HORT 742 Greenhouse Management . . . . . . . . . . . 3 units
Plus, select 2 units from the following courses:

| ORT 326 | G | 1 unit |
| :---: | :---: | :---: |
| HORT 421 | Contemporary Ikebana. | . 5 units |
| HORT 422 | Designs for Entertaining | 5 unit |
| HORT 425 | Cut Flower Identification | 1 unit |
| HORT 429 | Corporate Accounts and Tropical Designs | . 5 unit |
| HORT 641 | Cooperative Education | -4 |
| HORT 69 | Special Proje |  |

## CA Horticulture: Floristry <br> 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.

## 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

Humanities 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 point average of 2.0 is required for the major courses.
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 112 Art and Architecture -
Late Roman Empire to Renaissance. . . . . . 3 units
HUM 114 Film and Literature as
Communication in the Modern Era . . . . . . 3 units
Select 3 units from:
HUM 125 Technology/Contemporary Society/ Human Values. 3 units

HUM 127 Science and Art I:
Prehistoric to Renaissance. . . . . . . . . . . . . 3 units
HUM 128 Science and Art II:
Renaissance to 20th Century . . . . . . . . . . . 3 units
Major in Humanities continued on next page

Select 3 units from:

HUM 131 | Culture and Achievement |
| :--- |
| of African-Americans $\ldots \ldots \ldots \ldots . \ldots$ |

HUM 133 | Culture and Achievement of |
| :--- |

Asian Americans . . . . . . . . . . . . . . . . . . 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

Human Services . . . . . . . . . . . . . . . . . . . . . . 60 units

## CA Certificate of Achievement

Human Services . . . . . . . . . . . . . . . . . . . . . . 19 units


Certificates of Completion
Community Health Worker . . . . . . . . . . . . . . . 17 units
Family Development. . . . . . . . . . . . . . . . . . . 9 units
Peer Support Services . . . . . . . . . . . . . . . . . . . 12 units
Psychosocial Rehabilitation. . . . . . . . . . . . . . 9 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 point average of 2.0 is required for the major courses.
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:
Any COOP and/or CRER 152 . . . . . . . . . . . . . . . . . . 3 units
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 131 Job Development. . . . . . . . . . . . . . . . . . . 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

## 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.

## CC Community Health Worker

## 17 semester units

A grade of " C " or higher is required for each course.
HMSV 262 Empowerment Skills for Family Worker . . 3 units
HMSV 264 Supporting Family Success . . . . . . . . . . . . 3 units
Any COOP and/or CRER 152 . . . . . . . . . . . . . . . . . . . 3 units
HSCI 100 General Health Education . . . . . . . . . . . . . 2 units
Plus 3 units of
Any HSCI (Health Science courses) . . . . . . . . . . . . . . . 3 units
Plus 3 units elective units selected from
HMSV 100 or 110 or 115
3 units

## CC Family Development

9 semester units
A grade of " C " or higher is required for each course.
HMSV 262 Empowerment Skills for Family Worker. . 3 units
HMSV 264 Support Family Success . . . . . . 3 units
Any COOP and/or CRER 152 . . . . . . . . . . . . . . . . . . 3 units

## CC Peer Support Services

## 12 semester units

A grade of "C" or higher is required for each course.
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. . . . . . .1-3 units CRER 152 Service Learning \& Leadership Practicum .5-3 units

## CC Psychosocial Rehabilitation 9 semester units

A grade of " C " or higher is required for each course.
HMSV 150 Rehabilitation and Recovery . . . . . . . . . . 3 units
HMSV 151 Current Trends and Issues in Psychosocial Rehabilitation . . . . . . . . . . . 3 units

Plus 3 units from
Any COOP and/or CRER 152
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
$\mathbf{6 0 - 7 0}$ transferable units
California State University
University of California
Independent Colleges and Universities

## CC Certificate of Completion

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.

## AA Major in Liberal Studies Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Italian should consider completing an Associate Degree with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) will meet the major requirements for this degree.

## CC Italian

12 semester units
"Credit" or grade of " C " or higher is required for all courses.
Select at least 5 units from the following courses:

| ITAL 110 | Ele | 5 units |
| :---: | :---: | :---: |
| ITAL 11 | Elementary Italian I | ts |
| ITAL 112 | Elementary Italian II | ts |
| ITAL 120 | Advanced Elementary Italian | is |
| ITAL 12 | Advanced Elementary Italian I |  |
| ITAL 12 | Advanced Elementary Italian | s |
| The bal | e of units may be from the followi | urses: |
| ITAL 115 | Beginning Itali |  |
| ITAL 116 | Beginning Italian II | 3 units |
| ITAL 1 | Advanced Beginning Italian I. | its |
| ITAL 118 | Advanced Beginning Italian II |  |
| ITAL 80 | Conversational Italian I, Elementary | 2 units |
| ITAL 802 | 2 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<br>60-70 transferable units<br>California State University<br>University of California<br>Independent Colleges and Universities

## CC Certificates of Completion <br> Japanese <br> 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 Liberal Studies Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Japanese should consider completing an Associate Degree with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) will meet the major requirements for this degree.

## CC Japanese

12 semester units
"Credit" or grade of "C" or higher is required for all courses.
Select at least 12 units from the following courses:
JAPN 110 Elementary Japanese . . . . . . . . . . . . . . . . . . 5 units 3 units
JAPN 111 Elementary Japanese I. . . . . . . . . . . . 3 units
JAPN 112 Elementary Japanese II . . . . . . . . . . . 5 units
JAPN 120 Advanced Elementary Japanese . . . . . . . 3 units
JAPN 121 Advanced Elementary Japanese I . . . . 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
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree <br> 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 point average of 2.0 is required for the major courses.

$$
\begin{aligned}
& \text { JOUR } 110 \text { Mass Media in Society . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { JOUR } 120 \text { Newswriting . . . . . . . . . . . . . . . . . . . . . . . } 4 \text { units } \\
& \text { JOUR } 300 \text { Newspaper Production . . . . . . . . . . . . . . . } 3 \text { units }
\end{aligned}
$$

Plus, select 9 units from English and/or literature courses

## LIFE 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 <br> Life Science: Biological . . . . . . . . . . . . . . . . . 60 units <br> Life Science: Biotechnology . . . . . . . . . . . . . . . . 60 units <br> Life Science: General . . . . . . . . . . . . . . . . . . . 60 units <br> Life Science: Medical <br> (Pre-Med, Pre-Dental, Pre-Vet) . . . . . . . . . . 60 units <br> Life Science: Pre-Nursing . . . . . . . . . . . . . . . 60 units

## CC Certificate of Completion

Biotechnology. . . . . . . . . . . . . . . . . . . . . . . . 11-12 units

## 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.

## AS Major in Life Science: 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 in all major courses.
BIOL 210 General Zoology . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 units
BIOL 220 General Botany . . . . . . . . . . . . 4 units
BIOL 230 Introductory Cell Biology . . . . . . . . . . . 5 units
CHEM 210 General Chemistry I. . . . . . . . . . . . . 5 units

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 Science: Biotechnology

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

Major requirements: $\mathbf{2 5}$ semester units
A grade of " C " or higher is required in all major courses.

| 23 Bi |  |
| :---: | :---: |
| BIOL 210 or 220 General Zoology or General Botany. | 5 units 5 units |
| BIOL 230 Introductory Cell Biology | 4 units |
| BIOL 240 General Microbiology | its |
| BIOL 666 Careers in Biotechnology | 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.

## CC Biotechnology

## 11-12 units

A grade of " C " or higher is required for each course.
BIOL 123 Biotechnology Workshop . . . . . . . . . . . . . . 1 unit
BIOL 666 Careers in Biotechnology and Biology . . . . 1 unit
CHEM 210 or 220 General Chemistry I/II . . . . . . . . 5 units
Plus select one course from the following:
BIOL 110, 210, 220, 230, 240

## AS Major in Life Science: 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 in all major courses.
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 111 Natural History of California . . . . . . . . . . 4 units
BIOL 125 Physical Anthropology . . . . . . . . . . . . . . . . 3 units
BIOL 130 Human Biology . . . . . . . . . . . . . . . . . . . . 3 units
BIOL 140 Animals, People, and Environment . . . . . . 3 units
BIOL 145 Plants, People, and Environment . . . . . . . . 3 units
BOL 160 Genetics . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
BIOL 180 Introduction to Forestry . . . . . . . . . . . . . . . . 3 units
BIOL 184 Wildlife Biology . . . . . . . . . . . . . . . . . . . . 3 units 3 unit
BIOL 195 Biology Field Laboratory . . . . . . . . . . . . . . 4 units
BIOL 200 General Ecology. . . . . . . . . . . . . . . . . . . . 5 units
BIOL 210 General Zoology . . . . . . . . . . . . . . . . . . 5 units
BIOL 220 General Botany . . . . . . . . . . . . . . 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, 125, 130, 160 CHEM 410 or 210
Marine Biology: BIOL 110, 111, 200, OCEN 100 or GEOL 100
Natural History: BIOL 110, 111, 200,GEOL 100 or METE 100 or GEOG 100
Wildlife/Forestry: BIOL102, 110,111, 200, 180 or 184, GEOL100 or METE 100

## AS Major in Life Science: Medical

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 in all major courses.
BIOL 210 General Zoology . . . . . . . . . . . . . . . . . . . 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 Science: 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 in all major courses.
BIOL 240 General Microbiology . . . . . . . . . . . . . . . 4 units
BIOL 250 Human Anatomy . . . . . . . . . . . . . . . . . . . . 4 units
BIOL 260 Introduction to Physiology . . . . . . . . . . . . . 5 units
Plus 8 or 10 units from one of the following groups
Group 1 CHEM 210 and 220 . . . . . . . . . . . . . . . . . . . 10 units
Group 2 CHEM 410 and $420 \ldots .$. . . . . . . . . . . . . . 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
60-70 transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree <br> Business Management . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 60 units units Marketing Management

## CA Certificate of Achievement

Business Management . . . . . . . . . . . . . . . . . . . . . . . . . . . 24 units units
Marketing Management . . . . . . . . . . . . . $31-32$ units
Retail Management . . . . . . . . .

## CC Certificates of Completion

Human Resource Management . . . . . . . . . . . 9 units 12 units
Project Management. . . . . . . . . . . . . . .

## 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 point average of 2.0 is required for the major courses.
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 BUSD or 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 170 Salesmanship Fundamentals . . . . . . . . . . . . 3 units
BUS 180 Marketing . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
CIS 110 Introduction to CIS . . . . . . . . . . . . . . . . . . . . 3 units
MGMT 105 Financial Management . . . . . 3 units
MGMT 110 Report Writing . . . . . . . . . . . . . . . . . . . 3 units
Major in Management continued on next page
MGMT 120 Management Communication. . . . . . . . 3 units 3 units
MGMT 215 Management of Human Resources . . . . 3 units
MGMT 220 Organizational Behavior . . . . . . . . . . . 3 units
MGMT 265 Project Management. . . . . . . . . . . 3 units

## CA Business Management

Complete major requirements listed under Associate in Arts - Major in Business Management A grade of "C" or higher is required for each course.

## AA Major Management: Marketing Management

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

## Major requirements: 24 semester units

A grade point average of 2.0 is required for the major courses.
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:
BUS 170 Salesmanship Fundamentals . . . . . . . . . . . 3 units
CIS 110 Introduction to CIS . . . . . . . . . . . . . . . . . . . . 3 units
MGMT 105 Financial Management . . . . . 3 units
MGMT 110 Report Writing . . . . . . . . . . . . . . . . . . . . 3 units
MGMT 120 Management Communications . . . . . . . . 3 units
MGMT 215 Management of Human Resources . . . . . 3 units
MGMT 220 Organizational Behavior. . . . . . . . . . . . . 3 units
MGMT 265 Project Management. . . . . . . . . . . . . . . . 3 units
BUSD or BUSW series . . . . . . . . . . . . . . . . . . . . . 1.5-3 units

## CA Marketing Management

Complete major requirements listed under Associate in Arts - Major in Marketing Management. A grade of "C" or higher is required for each course.

## AA Management: Retail Management

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

## Major requirements: 31-32 semester units

A grade point average of 2.0 is required for the major courses.

| ACTG 100 Accounting Procedures. . . . . . . 3 units | OR |
| :---: | :---: |
| ACTG 121 Financial Accounting | 4-5 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 |  |
| MGMT 235 Techniques of Supervision. | 3 units |
| MGMT 120 Management Communications | OR |
| SPCH 120 Interpersonal Communication | 3 units |
| MGMT 215 Management of Human Resources . | 3 units |

## CA Retail Management

Complete major requirements listed under Associate in Arts - Major in Retail Management. A grade of "C" or higher is required for each course.

## CC Human Resources Management 9 semester units

A grade of " C " or higher is required for each course.
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

## CC Project Management

12 semester units.
A grade of " C " or higher is required for each course.
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 three 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).

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

## Recommended high school preparation: <br> Coursework in Mathematics, English, Drafting, Drawing, Applied

 Technology
## 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 Liberal Studies Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in an area related to manufacturing technology, should consider completing an Associate in Arts with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) meet the major requirements for this degree.

## 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 <br> Mathematics . . . . . . . . . . . . . . . . . . . . . . . . . 12 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: 22-25 semester units
A grade point average of 2.0 is required for the major courses. MATH 251 Calculus with Analytical Geometry I . . . . 5 units MATH 252 Calculus with Analytical Geometry II. . . . 5 units 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 231 Symbolic Logic and Mathematical Proof . 1 unit
MATH 268 Discrete Mathematics . . . . . . . . . . . . . . . 4 units
MATH 270 Linear Algebra . . . . . . . . . . . . . . . . . . . . . 3 units
MATH 275 Ordinary Differential Equations . . . . . . . . 3 units
CIS 278 Programming Methods C++ . . . . . . . . . . . . . 4 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 $\ldots \ldots 60$ units |  |
| Multimedia Option 3: Digital Audio | 60 units |

## CA Certificate of Achievement

Multimedia Web Design . . . . . . . . . . . . . . . . . . . 33 units
Multimedia Digital Video . . . . . . . . . . . . . . 27 units

CC Certificates of Completion
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: 33 semester units

A grade point average of 2.0 is required for the major courses.
MULT 102 Introduction to Multimedia (replaces 105 \& 107). . . . . . . . . . . . . . . . . 3 units
MULT 397 Multimedia Careers . . . . . . . . . . . . . . . . . 1.5 units
MULT 172 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
MULT 279 Flash Actionscript . . . . . . . . . . . . . . . . . . 3 units
CIS 111 Introduction to Internet Programming . . . . . . 3 units
MULT 392 Multimedia Internship (replaces 390 \& 391) 3 units
MULT 395 Multimedia Portfolio Design . . . . . . . . . . . 1.5 units

Design Electives: choose 6 units from the following:
MULT 113, BCST 110, GRA 120/121, GRA 110/111
Developer Electives: choose 6 units from the following: CIS 254, 377, 380.

## CA Multimedia Web Design 33 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: $\mathbf{3 1 . 5}$ semester units

A grade point average of 2.0 is required for the major courses.
MULT 102 Introduction to Multimedia
(replaces 105 \& 107). . . . . . . . . . . . . . . . . 3 units
MULT 177 Multimedia Graphics - Photoshop . . . . . . 3 units
BCST 312 Field Lighting/Studio Lighting. . . . . . . . . . . 1.5 units
MULT 397 Multimedia Careers . . . . . . . . . . . . . . . . 1.5 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
MULT 387 Digital Video Workflow
(replaces 385 \& 386). . . . . . . . . . . . . . . . . . 3 units
MULT 395 Multimedia Portfolio Design . . . . . . . . . . . 1.5 units
Electives - choose 3 units form the following: MULT 113, BCST 110, FILM 155, 160

Strongly recommended: MULT 392

## CA Multimedia Digital Video

## 36 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.

## AA Multimedia Option 3: Digital Audio

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

| Major requirements: $\mathbf{2 7}$ semester units |  |
| :---: | :---: |
| A grade point average of 2.0 is required for the major courses. |  |
| MULT 102 | Introduction to Multimedia (replaces 105 \& 107). 3 units |
| MULT 397 | Multimedia Careers . . . . . . . . . . . . . . . . 1.5 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 <br> (replaces 315 \& 316). 3 units |
| MUS 290 E | Electronic Music I . . . . . . . . . . . . . . . . . 3 units |
| MUS 291 E | Electronic Music II . . . . . . . . . . . . . . . . . . 2 units |
| MUS 292 S | Sound Creation: Sampling and Synthesis . . 3 units |
| MUS 293 A | udio for Visual Media . . . . . . . . . . . . . . . . 2.5 |

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
Strongly recommended: MULT 395

## CA Multimedia Digital Audio

## 27 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.

## CC Multimedia Web Design

## 12 semester units

A grade of " C " or higher is required for each course.
MULT 172 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

## CC Multimedia Digital Video

## 12 semester units

A grade of "C" or higher is required for each course.
MULT 184 Digital Video (replaces 180 \& 181) . . . . . 3 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 <br> Music <br> 60 units <br> Electronic Music <br> 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: $\mathbf{3 3 . 5}$ semester units

A grade point average of 2.0 is required for the major courses. Theory and Musicianship Core, 19.5 units:

| MUS 131 | Harmony I | 3 units |
| :---: | :---: | :---: |
|  | AND |  |
| 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 of MUS 800 for a total of 1.5 units
(It is recommended that students complete a 4th semester of Theory and Musicianship: MUS 134 and MUS 104)

Plus, Ensemble, select 4 units from the following courses:
MUS 170 Improvisation. . . . . . . . . . . . . . . . . . . . . . . 3 units
MUS 451 Jazz Workshop . . . . . . . . . . . . . . . . . . . . . . . 1 unit
MUS 452 Repertory Jazz Band . . . . . . . . . . . . . . . . . 1 unit
MUS 430 Symphonic Band . . . . . . . . . . . . . . . . . . . . 1 unit
Major in Music continued on next page

| MUS 470 CSM Singers. . . . . . . . . . . . . . . . . . . . . . . 1 unit |  |
| :---: | :---: |
| MUS 490 Masterworks Chorale |  |
| MUS 665 Special topics in Music Performance . . . . . .5-1 unit |  |
| Plus, History, select 6 units from the following courses: |  |
| MUS 202 Music Listening and Enjo (required course) . . . . . | 3 units |
| And 3 units from: |  |
| MUS 240 Music of the Americas | 3 units |
| MUS 250 World Music | 3 units |
| MUS 275 History of Jazz | 3 units |
| Plus, Instrumental/Voice, select 3 units from the following courses: |  |
| MUS 301-304 Piano I, II, III, IV . . . . . . . . . . . . . 1 unit each |  |
| MUS 371-374 Guitar I, II, III, IV. . . . . . . . . . . . . 1 unit each |  |
| MUS 401-404 Voice I, II, III, IV . . . . . . . . . . . . . 1 unit each |  |
| Plus, Keyboard Proficiency, 1 unit |  |
| MUS 301 Piano I (required course) | 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 point average of 2.0 is required for the major courses.

| 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 |
| CIS 110 | Introduction to Computer and Information Science . . . . . . | 3 units |

Plus, select 6 units from the following courses:

| MUS 100 | Fundamentals of Music AND | 3 units |
| :---: | :---: | :---: |
| MUS 101 | Musicianship I | OR |
| MUS 101 | Musicianship I . . . . <br> AND | 3 units |
| MUS 131 | Harmony I | OR |
| MUS 102 | Musicianship II. . AND | 3 units |
| MUS 132 | Harmony II. | OR |
| MUS 103 | Musicianship III . AND | 3 units |
| MUS 133 | Harmony III | OR |
| MUS 104 | Musicianship IV . . <br> AND | 3 units |
| 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 170 Improvisation. . . . . . . . . . . . . . . . . . . . . . 3 units
MUS 202 Music Listening and Enjoyment . . . . . . . . . 3 units
MUS 240 Music of the Americas . . . . . . . . . . . . . . . . 3 units
MUS 250 World Music . . . . . . . . . . . . . . . . . . . . . . . 3 units
MUS 275 History of Jazz . . . . . . . . . . . . . . . . . . . . . . 3 units

## CA Electronic Music

## 26.5 units

Complete major requirements listed under Associate in Arts - Major in Electronic Music. A grade of "C" or better is required for each course.

## 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 <br> Nursing . . . . . . . . . . . . . . . . . . . . . . . . . . . 68 units

## CA Certificate of Achievement

Nursing<br>68 units

## CC Certificates of Completion

Perioperative Nursing<br>8 units<br>Perioperative Nursing Preceptorship 10 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 website for the current admissions information. At this site print the Nursing Program Information Sheet which provides detailed information about the admissions requirements and process. Contact the Nursing Department if additional information is requested, 650-574-6218.

## Admissions Requirements

Courses must be completed with a grade of " C " or higher.

1. Completion of Math 110 or 111 and 112 or the equivalent or placement in a math course higher than Math 110 on the College of San Mateo Math Placement Test
2. Completion of Chemistry 410 or 192 or 210 or the equivalent
3. Completion of Biology 250 or the equivalent
4. Completion of Biology 260 or the equivalent
5. Completion of Biology 240 or the equivalent
6. Completion of English 100 or the equivalent
7. Completion of Psychology 100 or the equivalent
8. Completion of Psychology 200 or the equivalent
9. Completion of Speech 100 or 120 or 150 or the equivalent
10. Completion of Sociology 100 or Anthropology 100 or the equivalent

If there are more applicants than spaces available, the following applicants are given priority.

1. Residents of San Mateo County.
2. Applicants who have completed the Admission requirements.
3. Applicants with a grade point average of 2.5 or higher for all admissions and major course requirements. Anatomy, physiology and microbiology must have a cumulative GPA of 2.5 or better with no grade less than C in each course and no more than one repetition of any of these courses.
4. Applicants with equal priority will be selected by a computerized random number system method.
5. Applicants for Fall 2008 will be required to successfully complete an assessment test prior to entry into the program. In the event that the applicant does not pass the test, they will need to successfully complete remediation course work prior to entry into the program.

## AS Major in Nursing

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

## Major requirements: 68 semester units

A grade of " C " or higher is required in all major courses
NURS 211 Introduction to Nursing ....... 4.5 units
NURS 212 Concepts of Homeostasis in Nursing . . . . 4.5 units
NURS 215 Nursing Skills Lab I . . . . . . . . . . . . . . . . . . 5 unit
NURS 221 Pediatric Nursing . . . . . . . . . . . . . . . . . . . 4.5 units
NURS 222 Maternity Nursing . . . . . . . . . . . . . . . . . . 4.5 units
NURS 225 Nursing Skills Lab II . . . . . . . . . . . . . . . . . . 5 unit
NURS 231 Psychiatric Nursing. . . . . . . . . . . . . . . . . . 5 units
NURS 232 Medical/Surgical Nursing . . . . . . . . . . . . . . 5 units
NURS 235 Nursing Skills Lab III. . . . . . . . . . . . . . . . . . 5 unit
NURS 241 Advanced Medical/Surgical Nursing. . . . . 5 units
NURS 242 Leadership/Management in Nursing . . . . . 5 units
NURS 245 Nursing Skills Lab IV . . . . . . . . . . . . . . . . 5 unit
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

## CA Nursing

68 units
Complete major requirements listed under Associate in Science - Major in Nursing. A grade of "C" or better for each course is required.

## CC Perioperative Nursing

 8 unitsNURS 264 Perioperative Nursing
8 units

## CC Perioperative Nursing Preceptorship

 10 unitsNURS 265 Perioperative Nursing Preceptorship . . . . . 10 units

## Requirements for R.N. Licensing Exam:

1. Graduation from high school or equivalent
2. All admission requirements and major course requirements must be completed with a grade of C or higher.
3. If an individual has been convicted of a crime, evidence of rehabilitation will be required before taking the R.N. exam.

Students interested in an LVN upgrade through the ADN plan or 30 Unit Option should call the Nursing Department at (650) 574-6218 for additional information. Students who wish to transfer into the nursing program or challenge nursing courses should also call the Nursing Department.

## 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 <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.

## AA Major in Liberal Studies Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Philosphy should consider completing an Associate in Arts with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) meet the major requirements for this degree.

## 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 <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.

## AA Major in Liberal Studies Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Physical Education, Kinesiology, or Human Development should consider completing an Associate in Arts with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) meet the major requirements for this degree.

## 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

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

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

 <br> <br> 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: 18 semester units

A grade point average of 2.0 is required for the major courses.
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 100 Survey of Chemistry. . . . . . . . . . . . . . . . . 3 units
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 125 History of Life. . . . . . . . . . . . . . . . . . . . . . 4 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
Major in Physical Science continued on next page

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.

| EM 231 Organic Chemistry I. . . . . . . . . . . . . . . . 5 units |  |
| :---: | :---: |
| M 125 Technology/Contemporary Society |  |
| HUM 127 Science and Art: Prehistory to Renaissance 3 units |  |
| HUM 128 Science and Art: <br> Renaissance to 20th Century. . . . . . . . . . . 3 units |  |
|  |  |
| CIS 255 Programming Meth |  |
| CIS 278 Programming Methods: |  |
| MATH 251 Calculus w/ Analytical Geome |  |
| MATH 252 Calculus w/ Analytical Geometry |  |
| MATH 253 Calculus w/ Analytical Geometr |  |
| MATH 275 Ordinary Differential Equations |  |
| METE 100 Elementary Meteorology | 3 |
| METE 101 Meteorology Laboratory |  |
| PHYS 250 Physics with Calculus I |  |
| PHYS 260 Physics with Calculus II |  |
| PHYS 270 Physics with Calculus |  |
| PSCI 100 Introduction to Physical Scien |  |

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

## AS Associate in Science Degree

Physics . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 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 point average of 2.0 is required for the major courses.
PHYS 250 Physics with Calculus I ................ . . 4 units 4 units
PHYS 260 Physics with Calculus II. . . . . . . . . . . 4 units
PHYS 270 Physics with Calculus III . . . . $\quad 4$ un

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

## PLUMBING AND PIPE FITTING

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).
The courses required for this degree are administered by College of San Mateo in conjunction with the Joint Apprenticeship and Training Committee (JATC). 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 <br> Plumbing and Pipe Fitting . . . . . . . . . . . . . . 60 units

## CA Certificate of Achievement

Plumbing and Pipe Fitting . . . . . . . . . . . . . . 35 units

## Recommended high school preparation:

Coursework in Mathematics. At least 18 years of age, High School graduate or GED.

## Pre-requisite Requirements

Indenture in the Plumbing Apprenticeship Program, approved by the California State Division of Apprenticeship Standards.

## AS Major in Plumbing and Pipe Fitting

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

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

A grade point average of 2.0 is required for the major courses.
PLUM 701 Plumbing Apprenticeship I . . . . . . . . . . . . 3.5 units
PLUM 702 Plumbing Apprenticeship II . . . . . . . . . . 3.5 units
PLUM 703 Plumbing Apprenticeship III . . . . . . . . . . . 3.5 units
PLUM 704 Plumbing Apprenticeship IV . . . . . . . . . . . 3.5 units
PLUM 705 Plumbing Apprenticeship V . . . . . . . . . . . 3.5 units
PLUM 706 Plumbing Apprenticeship VI . . . . . . . . . . . 3.5 units
PLUM 707 Plumbing Apprenticeship VII . . . . . . . . . . 3.5 units
PLUM 708 Plumbing Apprenticeship VIII . . . . . . . . . . 3.5 units
PLUM 709 Plumbing Apprenticeship IX . . . . . . . . . . 3.5 units
PLUM 710 Plumbing Apprenticeship X . . . . . . . . . . 3.5 units

## CA Plumbing and Pipe Fitting

35 units
Complete major requirements listed under Associate in ScienceMajor in Plumbing and Pipe Fitting. A grade of " C " or higher is required for each course.

## 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

## Recommended high school preparation:

Coursework in History, Government, English, Economics, 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.

## AA Major in Liberal Studies Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Political Science should consider completing an Associate in Arts with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) meet the major requirements for this degree.

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

## Recommended high school preparation:

Coursework in Psychology, Sociology, English, 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.

## AA Major in Liberal Studies Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Psychology should consider completing an Associate in Arts with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) meet the major requirements for this degree.

## 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

Real Estate
60 units

## CA Certificate of Achievement

Real Estate 18-21 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: 18-21 semester units

A grade point average of 2.0 is required for the major courses.
BUS 100 Contemporary American Business . . . . . . . . OR
MGMT 100 Introduction to Business Management . . 3 units
R.E. 100 Real Estate Principles . . . . . . . . . . . . . . . . . 3 units
R.E. 110 Real Estate Practice . . . . . . . . . . . . . . . . . . . 3 units
R.E. 121 Legal Aspects of Real Estate . . . . . . . . . . . . . 3 units
R.E. 131 Real Estate Finance I . . . . . . . . . . . . . . . . . . 3 units
R.E. 141 Real Estate Appraisal: Basic . . . . . . . . . . . . . . 3 units
R.E. 200 Real Estate Economics . . . . . . . . . . . . . . . . . . 3 units

## CA Real Estate

18-21 units
Complete major requirements listed under Associate in Arts - Major in Real Estate. A grade of " C " or higher is required for each course.

## REFRIGERATION AND AIR CONDITIONING MECHANICS

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

The courses required for this degree are administered by College of San Mateo in conjunction with the Joint Apprenticeship and Training Committee (JATC). Registration is limited to those individuals fulfilling the related instruction requirements of the State of California as an indentured apprentice. For information contact the Plumbers JATC or the Technology Division Office.

## AS Associate in Science Degree

Refrigeration and Air Conditioning Mechanics 60 units

## CA Certificate of Achievement

Refrigeration and Air Conditioning Mechanics 35 units

## Recommended high school preparation:

Coursework in Mathematics. At least 18 years of age, High School graduate or GED.

## AS Major in Refrigeration and Air Conditioning Mechanics

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

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

A grade point average of 2.0 is required for the major courses.
Prerequisite: Indenture in the Refrigeration and Air Conditioning Apprenticeship Program, approved by the California State Division of Apprenticeship Standards.
PLUM $741 \begin{aligned} & \text { Refrigeration \& Air Conditioning } \\ & \\ & \text { Apprenticeship I. . . . . . . . . . . . . . . . . } 3.5 \text { units }\end{aligned}$
PLUM 742 Refrigeration \& Air Conditioning Apprenticeship II 3.5 units

PLUM 743 Refrigeration \& Air Conditioning Apprenticeship III.
3.5 units
PLUM 744 Refrigeration \& Air Conditioning Apprenticeship IV ..... 3.5 units
PLUM 745 Refrigeration \& Air Conditioning Apprenticeship V ..... 3.5 units
PLUM 746 Refrigeration \& Air Conditioning Apprenticeship VI. ..... 3.5 units
PLUM 747 Refrigeration \& Air ConditioningApprenticeship VII3.5 units
PLUM 748 Refrigeration \& Air Conditioning Apprenticeship VIII ..... 3.5 units
PLUM 749 Refrigeration\& Air Conditioning Apprenticeship IX. Apprenticeship X

## CA Refrigeration and Air Conditioning Mechanics <br> 35 semester units

Complete major requirements listed under Associate in Science with a major in Refrigeration and Air Conditioning. A grade of " $C$ " or higher is required for each course.

## SOCIAL SCIENCE

> Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan $(S E P)$.

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

## AA <br> Associate in Arts Degree <br> Social Science. <br> 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 Social Science

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

## Major requirements: 18 semester units

A grade point average of 2.0 is required for the major courses.
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 <br> 60-70 transferable units

California State University
University of California
Independent Colleges and Universities

## Recommended high school preparation:

Coursework in Sociology, Psychology, History, 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 Liberal Studies Option 2

Students who plan to transfer to a college or university and complete a Bachelor's degree with a major in Sociology should consider completing an Associate in Arts with a major in Liberal Studies Option 2. This degree allows students to prepare for transfer and concurrently receive an Associate's degree. Fulfillment of the California State University General Education requirements or fulfillment of the Intersegmental General Education Transfer Curriculum (IGETC) meet the major requirements for this degree.

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

## AA Associate in Arts Degree

Spanish . . . . . . . . . . . . . . . . . . . . . . . . . . . 60 units

## CC Certificate of Completion

$$
\text { Spanish . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 12 \text { units }
$$

## 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 point average of 2.0 is required for the major courses. SPAN 110 Elementary Spanish 5 units
SPAN 111 Elementary Spanish I 3 units
SPAN 112 Elementary Spanish II . . . . . . . . . . . . . . . 3 units
SPAN 115 Beginning Spanish I. . . . . . . . . . . . . . . . . . 3 units
SPAN 116 Beginning Spanish II . . . . . . . . . . . . . . . . 3 units
SPAN 117 Advanced Beginning Spanish I . . . . . . . . . 3 units
SPAN 118 Advanced Beginning Spanish II . . . . . . . . . 3 units
SPAN 120 Advanced Elementary Spanish. . . . . . . . . . 5 units
SPAN 121 Advanced Elementary Spanish I . . . . . . . . 3 units
SPAN 122 Advanced Elementary Spanish II . . . . . . . . . 3 units
SPAN 130 Intermediate Spanish. . . . . . . . . . . . . . . . . 5 units
SPAN 131 Intermediate Spanish I. . . . . . . . . . . . . . . . . 3 units
SPAN 132 Intermediate Spanish II . . . . . . . . . . . . . . . 3 units
SPAN 140 Advanced Intermediate Spanish. . . . . . . . . 3 units
SPAN 161 Reading in Spanish Literature I . . . . . . . . 3 units
SPAN 162 Reading in Spanish Literature II. . . . . . . . . 3 units
SPAN 251 Hispanoamerica Contemporanea 3 units
With Language Arts Division approval, ANTH 110 may be accepted as part of the 18 units.

## CC Spanish

12 semester units
"Credit" or grade of "C" or higher is required for all courses.
Select at least 5 of the 12 units from the following courses
SPAN 110 Elementary Spanish . . . . . . . . . . . . . . . . . . 5 units
SPAN 111 Elementary Spanish I . . . . . . . . . . . . . . . . . 3 units
SPAN 112 Elementary Spanish II . . . . . . . . . . . . . . . . 3 units
SPAN 120 Advanced Elementary Spanish. . . . . . . . . . 5 units
SPAN 121 Advanced Elementary Spanish I. . . . . . . . . . 3 units
SPAN 122 Advanced Elementary Spanish II . . . . . . . . . 3 units
SPAN 130 Intermediate Spanish. . . . . . . . . . . . . . . . . 5 units
SPAN 131 Intermediate Spanish I. . . . . . . . . . . . . . . . . 3 units
SPAN 132 Intermediate Spanish II . . . . . . . . . . . . . . . 3 units
SPAN 140 Advanced Intermediate Spanish. . . . . . . . . 3 units
SPAN 161 Reading in Spanish Literature I . . . . . . . . . 3 units
SPAN 162 Reading in Spanish Literature II. . . . . . . . . 3 units
SPAN 251 Hispanoamerica Contemporanea 3 units
The balance of units may be from the following courses:
SPAN 115 Beginning Spanish I. . . . . . . . . . . . . . . . . . 3 units
SPAN 116 Beginning Spanish II . . . . . . . . . . . . . . . . . 3 units
SPAN 117 Advanced Beginning Spanish I . . . . . . . . . 3 units
SPAN 118 Advanced Beginning Spanish II . . . . . . . . . 3 units
SPAN 801 Conversational Spanish I, Elementary . . . 2 units
SPAN 802 Conversational Spanish II, Advanced Elementary . . . . . . . . . . . . . . . 2 units
SPAN 803 Conversational Spanish III, Intermediate . . 2 units
SPAN 804 Conversational Spanish IV, Advanced Intermediate 2 units
SPAN 805 Conversational Spanish V, Advanced . . . . 2 units
SPAN 806 Conversational Spanish VI, Upper 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.

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

## AA Associate in Arts Degree <br> Speech Communication <br> 60 units

## CC Certificate of Completion

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 point average of 2.0 is required for the major courses.
Select 15 units from the following courses:

$$
\begin{aligned}
& \text { SPCH } 100 \text { Public Speaking . . . . . . . . . . . . . . . . . . . . . . } 3 \text { units } 3 \text { units } \\
& \text { SPCH } 111 \text { Oral Interpretation I . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPCH } 112 \text { Oral Interpretation II . . . . . . . . . . } 3 \text { units } \\
& \text { SPCH } 120 \text { Interpersonal Communication. . . . . . . . } 3 \text { units } \\
& \text { SPCH } 140 \text { Small Group Communication . . . . . . . . . } 3 \text { units } \\
& \text { SPCH } 150 \text { Intercultural Communication . . . . . . . } 3 \text { units } \\
& \text { SPCH } 170 \text { Organizational Communication . . . . . . . } 3 \text { units } \\
& \text { SPCH } 180 \text { Family Communication. . . . . . . . . . }
\end{aligned}
$$

Plus, select 6 units from English and/or literature courses.

## 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. These units are posted to an individual's college transcript after completion of at least 6 units of course work with an overall G.P.A. of 2.0 or better. The 6 units may be completed at College of San Mateo, Cañada, or Skyline.

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.

## 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<br>60-70 transferable units<br>California State University<br>University of California<br>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-of-state 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 point average of 2.0 is required for the major courses.
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 210 Advanced Welding Theory I . . . . . . . . . . . 4 units
WELD 211 Advanced Welding Practice I . . . . . . . . . . 5 units
WELD 220 Advanced Welding Theory II . . . . . . . . . . 4 units
WELD 221 Advanced Welding Practice II. . . . . . . . . . 5 units
WELD 250 Fundamentals of Non-Destructive Testing. 2 units
DRAF 120 Principles of Technical Drawing . . . . . . . 3 units
ELEC 110 Introduction to Fundamentals of Electronics . 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

## CA Welding Technology: Welding Technician <br> 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.

## CA Welding Technology: General Welder 29 semester units

A grade of "C" or higher is required for each course.
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 94061
(650) 306-3100

## 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) 355-7000 (day) • (650) 738-4251 (evening)

## Programs

Arabic
Automotive Technology
Cosmetician/Esthetician (Eve. \& Sat.)
Early Childhood Education
Family and Consumer Sciences
Fashion Merchandising
Fiber Optics/Telecommunications
International Studies
International Trade
Image Consulting
Japanese Automotive Technology
Paralegal
Respiratory Therapy
Surgical Technology
Telecommunications and Network
Information Technology
Toyota Technical Education Network

## 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.

## 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.

641 Cooperative Work Experience Education (1-4) (Credit/No Credit 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 (1-3) 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 communitystudent need and/or available staff. May be offered as a seminar, lecture, or lecture/laboratory class. (CSU)

690 Special Projects (1-2) 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.) (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 credit allowed in Selected Topics and Special Projects is 3 units per term, with 6 units total in any or all subject areas combined.

## California Articulation Number (CAN)

The California Articulation Number (CAN) identifies some of the transferable lower-division introductory courses commonly taught within each academic discipline on college campuses.
CANs are listed parenthetically after the course description in the section which follows.

879 Selected Topics (1-3) Hours by arrangement. Nontransferable degreeapplicable 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.
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ Selected Topics (1-3) Hours by arrangement. Nontransferable 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 commu-nity-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.
100 Accounting Procedures (3) Three lecture hours plus two hours by arrangement per week. Recommended Preparation: BUS. 115; BUSW 105 or equivalent; eligibility for ENGL 848. Study of the accounting cycle for service and merchandising businesses. Preparation of journals, ledgers and financial statements using manual work papers and accounting software. (AA, CSU)

103 Ten-Key Skills (0.5) (Credit/No Credit grading) (Open Entry/Open Exit) Total of twenty-four lab hours per semester. Selfpaced course covering development of speed and accuracy using a ten-key calculator and the ten-key pad on a computer keyboard. (AA, CSU)

121 Financial Accounting (4-5) Four or five lecture hours plus two lab hours by arrangement per week. Prerequisite: BUSW 105 or equivalent. Recommended Preparation: ACTG 100; BUSW 415 or equivalent; ENGL 100. Preparation and interpretation of accounting information. Topics include application of generally accepted accounting principles to value assets, liabilities, and equity; accounting systems; use of software applications to prepare and analyze accounting information; use of accounting information by decision makers. (AA: Area C1, CSU, UC) (CAN BUS 2)

131 Managerial Accounting (4-5) Four or five lecture hours plus two lab hours by arrangement per week. Prerequisite: $A C T G$ 121; BUSW 105 or equivalent. Recommended Preparation: BUSW 415 or equivalent. 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-profit analysis, responsibility accounting, budgeting, and capital budgeting. (AA, CSU, UC) (CAN BUS 4)

## 144 QuickBooks: Set-up and Service

 Business (1.5) Three lecture hours plus two hours by arrangement per week for eight weeks. Practical, hands-on introduction to QuickBooks accounting software. Covers set-up and service business transactions, including sales, receivables, cash collections, purchases, payables, cash payments, and end-of-period procedures. ACTG 144 and 145 are independent courses and may be taken in either order or concurrently. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)
## 145 QuickBooks: Payroll and Merchan-

 dising Business (1.5) Three lecture hours plus two hours by arrangement per week for eight weeks. Practical, hands-on introduction to QuickBooks accounting software. Covers payroll and merchandising business transactions, including sales, receivables, cash collections, purchases, payables, cash payments, and end-of-period procedures. ACTG 144 and 145 are independent courses and may be taken in either order or concurrently. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)161 Intermediate Accounting I (4) Four lecture hours plus two hours by arrangement per week. Prerquisite: ACTG 121 with a C or better. Application of generally accepted accounting principles (GAAP) and guidelines from the Financial Accounting Standards Board (FASB) to value of assets, liabilities, and equity. Advanced-level 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) Four lecture hours plus two hours by arrangement per week. Prerquisite: ACTG 161. Application of generally accepted accounting principles (GAAP) and guidelines from the Financial Accounting Standards Board (FASB) to value of assests, liabilities, and equity. Advanced-level analysis of liabilities, 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) Three lecture hours plus two hours by arrangement per week. Prerequisite: $A C T G$ 121. 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) Three lecture hours plus two hours by arrangement per week. Prerequisite: ACTG 121. 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)

165 Cost Accounting (3) Three lecture hours plus two hours by arrangement per week. Prerequisite: ACTG 131. 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) Three lecture hours and one lab hour plus two lab hours by arrangement per week. 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 the CTEC, the California Tax Education Council, to become a Registered Tax Preparer in California. (AA, CSU)

172 Business Income Taxes (3) Three lecture hours plus two hours by arrangement per week. Prerequisite: ACTG 100 or 121. Recommended Preparation: ACTG 171.Preparation of Federal and California income tax returns for corporations, partnerships, and sole proprietorships. Successful completion of Accounting 171 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 (1.5) (Credit/No Credit or letter grade option) Three lecture hours plus two hours by arrangement per week for eight weeks. Recommended Preparation: ACTG 171. Study of Federal and California income tax regulations and their application to trusts, estates, and gifts. Covers preparation of Form 1041 (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 and 171 and 172 , 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)

641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)

665 Special Topics in Taxation (.5-3) (Credit/No/Credit or letter grade option) Total of eight to forty eight lecture hours plus zero to two hours by arrangement. Prerequisite: ACTG 171 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 1.5 to 9 units.) (AA, CSU)
680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Administration of Justice (Law Enforcement)

100 Introduction to the Criminal Justice System (3) Three lecture hours per week. Required of all Administration of Justice majors. Recommended Preparation: eligibility for ENGL 848. 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 training for professionalism in the system. Includes POST Basic Learning Domains. (This course is part of the core curriculum.) (AA: Area E5d, CSU, UC) (CAN AJ 2)

## 102 Principles and Procedures of the

 Justice System (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 838, 848 or equivalent. Legal processes from pre-arrest, arrest through trial and sentencing; federal and state court jurisdiction; 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 14th 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) Three lecture hours per week. Required of all Administration of Justice majors. Recommended Preparation: eligibility for ENGL 848. Historical development; philosophy of law and 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)

106 Legal Aspects of Evidence (3) Three lecture hours per week. 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 their admissibility; judicial decisions interpreting individual rights and case studies. Includes POST Basic Learning Domains. (This course is part of the core curriculum.) (AA, CSU)

## 108 Community Relations/Multi-Cul-

 tural Policing Issues (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. Study of relationships between the Criminal Justice System and diverse culture groups 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 culture group 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)120 Criminal Investigation (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 838, 848 or equivalent; and ADMJ 102, 104, and 106. 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) (CAN AJ 8)

125 Juvenile Procedures (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. Study of extent, causes, and prevention of juvenile delinquency; analysis of juvenile courts, probation, institutional treatment, and parole and prevention programs. The sociological and anthropological approaches to juvenile delinquency in terms of their relation to the administration of justice systems. Includes POST Basic Learning Domains. (AA, CSU)
145 Basic Police Academy (22) Seventeen and one-half lecture and twenty-two and one-half lab hours per week for twenty weeks. Prerequisites: 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) Three lecture hours per week. Recommended Preparation: eligibility for $E N G L$ 838, 848 or equivalent. 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)
Two lecture and three lab hours per week. 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 110 or 111 . 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. 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. Extra supplies may be required. (AA, CSU)

641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
710 Police Report Writing (3) Three lecture hours per week. Recommended Preparation: ENGL 838 or 848 or equivalent; $A D M J$ 102, 104, 106. 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)

## 771 Penal Code 832: Arrest and Control

Training (3) (Credit/No Credit grading.) Forty-eight lecture hours per semester. 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) (1). (AA)

## 775 Penal Code 832: Firearms Training

 (.5) (Credit/No Credit grading.) Total of eight lecture and sixteen lab hours per semester. Prerequisite: Per Penal Code 13511.5, 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. Prerequisite: successful completion of or concurrent enrollment in ADMJ 771 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 two times for a maximum of 1 unit.) (AA)778 Regular Basic Course Level III (10)
(Formerly ADMJ 776) (Credit/No Credit Grading) One hundred thirty-six lecture and seventy-two lab hours per offering. Prerequisite: per Penal Code 13511.5, written clearance from the California Department of Justice granting approval for firearms training. Possession of a current, valid driver license. Recommended Preparation: eligibility for ENGL 838/848 or higher. First level of training in the Modular Format of the Regular Basic Course as prescribed by the California Commission on Peace Officer Standards and Training (POST). Includes PC832 Certification. (May be taken twice for a maximum of 20 units)

779 Regular Basic Course Level II (15.5) (Formerly ADMJ 777) (Credit/No Credit Grading ) Two hundred thirty-six lecture and fifty-two lab hours per offering. Prerequisite: possession of a valid, current Level III Certification. Per Penal Code 13511.5, written clearance from the California Department of Justice granting approval for firearms training. Recommended Preparation: eligibility for ENGL 838/848 or higher. Second level of training in the Modular Format of the Regular Basic Course as prescribed by the California Commission on Peace Officer Standards and Training (POST).

879 Selected Topics (1-3) (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.)

## 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 100)
100 Private Pilot Ground School (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. Preparation to take FAA Private Pilot written examination. Principles of flight, Federal Aviation Regulations, flight environment, aircraft performance, and aviation weather. Weather charts, navigation, cross country flight planning, emergency procedures, and aviation medical considerations. (AA, CSU)

680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (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 (1-3) (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.

## 111 Elementary American Sign

Language I (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. 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) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: ASL 111 or equivalent with Credit 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)

121 Advanced Elementary American Sign
Language I (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: ASL 112 or equivalent with Credit 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) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: ASL 121 or equivalent with Credit 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*)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Anthropology

(Also see Biology 125)
110 Cultural Anthropology (3) (Credit/ No Credit or letter grade option.) Three lecture hours per week. 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 manmade 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) (CAN ANTH 4)

180 Magic, Science \& Religion (3)
(Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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) (Credit/No Credit or letter grade option.) Recommended Preparation: ANTH 110 and eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher $O R$ 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, UC)

370 Olmec, Maya, and Aztec People and Cultures of Mexico and Central America (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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 traditions survive today in the Mexican and Central American cultures. (AA: Area E5b, CSU: Area D, UC: Area 4)

680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ Selected Topics (1-3) (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 of California as indentured apprentices. For more information contact the Technology Division Office.
641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)

879 Selected Topics (1-3) (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.)

## Electrical Apprenticeship: Inside Wireman (ELEL)

Prerequisite: indenture in the Electrical Apprenticeship Program, approved by the California State Division of Apprenticeship Standards.

701 Electrical Apprenticeship I (3) Two and one-half lecture and two and one-half lab hours per week. Safety, wiring methods, tools, introduction to the code, structure of matter, wire, electron theory, resistance, Ohm's Law, electrical math, power, fastening devices, conduit, series and parallel circuits, combination circuits, and over-current protection devices.

702 Electrical Apprenticeship II (3) Two and one-half lecture and two and one-half lab hours per week. Safety, wiring methods, voltage drop, magnetism, grounding, principles of generation, electrical plans, circuit calculations, DC motors and generators, threephase AC, resistive circuits, general lighting, and first aid.
703 Electrical Apprenticeship III (3) Two and one-half lecture and two and one-half lab hours per week. Safety, wiring methods, math of AC circuits, incandescent lamps, electrical testing, inductance, AC and DC meters, rectifiers, transformers, reactance, capacitance, capacitors, Wholt job, projection, and isometric line sketching.
704 Electrical Apprenticeship IV (3) Two and one-half lecture and two and one-half lab hours per week. Safety, wiring methods, series and parallel RC \& RL circuits, rigging, motor drives, calculations, LC circuits, fire alarms, refrigeration cycle, basic air conditioning, short circuit calculations, and T.I.

705 Electrical Apprenticeship V (3) Two and one-half lecture and two and one-half lab hours per week. Safety, theory, wiring systems, distribution systems, basic principles of A/C motors, power in A/C circuits (power factor) capacitors, split phase motors, repulsion motors including pole shaded, universal and three-phase and electrical riser diagrams, service and feeders, and three-phase transformers.
706 Electrical Apprenticeship VI (3) Two and one-half lecture and two and one-half lab hours per week. Motor starting, protective controls, hazardous locations, starters and relays, developing simple circuits, sequence control circuits, current analysis, trouble shooting, fluorescent lamps, wiring and piping, and circuit economics.
707 Electrical Apprenticeship VII (3)
Two and one-half lecture and two and onehalf lab hours per week. Nuclear safety, foremanship, resonance (series and parallel), semiconductors, busways, transistors, wiring roughing, amplifiers, electric closets, coupling networks, and oscillators.
708 Electrical Apprenticeship VIII (3) Two and one-half lecture and two and onehalf lab hours per week. Application of electronics, measurement and control, emergency lighting, temperature, pressure and levels, metric system, static control, metrication, journeyman status, and code review.

709 Electrical Apprenticeship IX (3) Two and one-half lecture and two and one-half lab hours per week. Prerequisite: ELEL 708 with a grade of C or higher. NEBF; blueprint reading; sexual harassment; basic fire alarms and installation; advanced technology systems; maintenance and troubleshooting; principles of process and process control; process time lags; basic manual and feedback control; proportional control action and review; sensors and transmission systems; basic telephone wiring and installation; high voltage testing and safety; insulation quality testing (use of a megohmmeter).
710 Electrical Apprenticeship X (3) Two and one-half lecture and two and one-half lab hours per week. Prerequisite: ELEL 709 with a grade of $C$ or higher. Air conditioning and refrigeration (introduction, heat-temperature, and pressure); refrigerants and ozone depletion-vapor compression refrigeration systems; refrigeration loads; tools and piping; introduction to cable faults; locating cable faults (terminal method, tracing method, and magnetic detection); basic security systems;
alarms; processors and memory; programmable devices, controllers, timers, and counters; data manipulation and arithmetic; start-up and troubleshooting.

## Electrical Apprenticeship: Sound and Communications

721 Sound and Communications Apprenticeship I (3) Two and one-half lecture and two and one-half lab hours per week. Prerequisite: Indenture in the Electrical Apprenticeship Program, approved by the California State Division of Apprenticeship Standards. Introductory course that covers workplace safety, the installation and use of fastener devices, an overview of telecommunications systems (including premises wiring and fiber-optic systems), cabling performance and attributes, and blueprint drawing and interpretation.

722 Sound and Communications Apprenticeship II (3) Two and one-half lecture and two and one-half lab hours per week. Prerequisite: Indenture in the Electrical Apprenticeship Program, approved by the California State Division of Apprenticeship Standards. Study of basic applied electronics with an emphasis on series and parallel circuits. Covers Ohm's Law, resistance, current, voltage, and power as well as basic applications of algebra to solve problems involving direct current circuits.

723 Sound and Communications Apprenticeship III (3) Two and one-half lecture and two and one-half lab hours per week. Prerequisite: Indenture in the Electrical Apprenticeship Program, approved by the California State Division of Apprenticeship Standards. Covers DC combination circuits and provides an in-depth review of basic AC circuit theory and related topics. Includes telephone and paging systems and industry workmanship standards of wiring installation.

724 Sound and Communications Apprenticeship IV (3) Two and one-half lecture and two and one-half lab hours per week. Prerequisite: Indenture in the Electrical Apprenticeship Program, approved by the California State Division of Apprenticeship Standards. Covers the design, installation, and troubleshooting of Security Systems, Fire Alarm Systems, and Local Area Networks (including topologies and protocols). Also includes NEC requirements for grounding and bonding electrical systems as well as NEC installation requirements for various systems.

725 Sound and Communications Apprenticeship V (3) Two and one-half lecture and two and one-half lab hours per week. Prerequisite: Indenture in the Electrical Apprenticeship Program, approved by the California State Division of Apprenticeship Standards. Provides an overview of electrical components such as semiconductors, amplifiers, oscillators, transistors, power supplies and LEDs. Also covers the concepts of inductance and capacitance. Students design, install, and test a Nurse-Call system.
726 Sound and Communications Apprenticeship VI (3) Two and one-half lecture and two and one-half lab hours per week. Prerequisite: Indenture in the Electrical Apprenticeship Program, approved by the California State Division of Apprenticeship Standards. Covers the design, installation, and troubleshooting of CCTV systems, Home Automation Systems, and Building Automation Networks.

## Plumbing Apprenticeship (PLUM)

## Plumbing and Pipefitting

Prerequisite: indenture in the Plumbing Apprenticeship Program, approved by the California State Division of Apprenticeship Standards.

701 Plumbing Apprenticeship I (3.5)
Three lecture and three lab hours per week. Safety, first aid, use and care of tools, history of and materials used in the plumbing industry, and shop assembly.

702 Plumbing Apprenticeship II (3.5) Three lecture and three lab hours per week. Mathematics, science, and mechanics applying to plumbing.

703 Plumbing Apprenticeship III (3.5)
Three lecture and three lab hours per week.
Plumbing codes and water supply systems.
704 Plumbing Apprenticeship IV (3.5)
Three lecture and three lab hours per week. Introduction to drawing and plumbing fixtures.

705 Plumbing Apprenticeship V (3.5)
Three lecture and three lab hours per week. Advanced plumbing and piping layout, pipe fixtures and supports, and drainage.
706 Plumbing Apprenticeship VI (3.5) Three lecture and three lab hours per week. Aspects of plumbing service work.
707 Plumbing Apprenticeship VII (3.5) Three lecture and three lab hours per week. Cutting; gas and arc welding.

708 Plumbing Apprenticeship VIII (3.5) Three lecture and three lab hours per week. Hydronic and solar heating.
709 Plumbing Apprenticeship IX (3.5) Three lecture and three lab hours per week. Further instruction in drawing and plan reading.

710 Plumbing Apprenticeship X (3.5) Three lecture and three lab hours per week. Further instruction in plumbing codes, builders' transit levels, and basic heating.

## Steamfitting/Pipefitting

Prerequisite: indenture in the Steamfitter, Pipefitter Apprenticeship Program, approved by the California State Division of Apprenticeship Standards.

721 Steamfitter, Pipefitter Apprenticeship I (3.5) Three lecture and three lab hours per week. Safety and health; use and care of tools; soldering and brazing.

722 Steamfitter, Pipefitter Apprenticeship
II (3.5) Three lecture and three lab hours per week. Mathematics and pipe measurements.

723 Steamfitter, Pipefitter Apprenticeship III (3.5) Three lecture and three lab hours per week. Oxyacetylene cutting and burning; basic shielded metal arc welding.
724 Steamfitter, Pipefitter Apprenticeship IV (3.5) Three lecture and three lab hours per week. Drawing interpretation.
725 Steamfitter, Pipefitter Apprenticeship V (3.5) Three lecture and three lab hours per week. Rigging and signaling, pipe materials, and basic science.

726 Steamfitter, Pipefitter Apprenticeship VI (3.5) Three lecture and three lab hours per week. Pumps and steam systems.
727 Steamfitter, Pipefitter Apprenticeship VII (3.5) Three lecture and three lab hours per week. Introduction to industrial pipe fitting and hydronic heating systems.

728 Steamfitter, Pipefitter Apprenticeship VIII (3.5) Three lecture and three lab hours per week. Pipe drafting and blueprint reading.
729 Steamfitter, Pipefitter Apprenticeship
IX (3.5) Three lecture and three lab hours per week. Advanced welding.
730 Steamfitter, Pipefitter Apprenticeship
X (3.5) Three lecture and three lab hours per week. Gas-tungsten arc welding.

## Refrigeration and Air Conditioning <br> Prerequisite: indenture in the Refrigeration and Air Conditioning Apprenticeship Program, approved by the California State Division of Apprenticeship Standards.

## 741 Refrigeration \& Air Conditioning

 Apprenticeship I (3.5) Three lecture and three lab hours per week. Basic refrigeration.
## 742 Refrigeration \& Air Conditioning

 Apprenticeship II (3.5) Three lecture and three lab hours per week. Basic electricity.
## 743 Refrigeration \& Air Conditioning

 Apprenticeship III (3.5) Three lecture and three lab hours per week. Refrigerant controls.
## 744 Refrigeration \& Air Conditioning

 Apprenticeship IV (3.5) Three lecture and three lab hours per week. Basic and pneumatic controls.745 Refrigeration \& Air Conditioning Apprenticeship V (3.5) Three lecture and three lab hours per week. Brazing, piping, and hydronics.

746 Refrigeration \& Air Conditioning Apprenticeship VI (3.5) Three lecture and three lab hours per week. Advanced electricity.

## 747 Refrigeration \& Air Conditioning

 Apprenticeship VII (3.5) Three lecture and three lab hours per week. Electrical controls and wiring diagrams.
## 748 Refrigeration \& Air Conditioning

 Apprenticeship VIII (3.5) Three lecture and three lab hours per week. Heat pumps.
## 749 Refrigeration \& Air Conditioning

 Apprenticeship IX (3.5) Three lecture and three lab hours per week. Supermarket installations and refrigerator box load.750 Refrigeration \& Air Conditioning Apprenticeship X (3.5) Three lecture and three lab hours per week. Start-up testing and air balance.

## Sprinkler Fitter Apprenticeship (SPFI)

Prerequisite: indenture in the Sprinkler Fitter Apprenticeship Program, approved by the California State Division of Apprenticeship Standards.

701 Sprinkler Fitter Apprenticeship I (3) Three lecture hours and one lab hour per week. Safety and health; introduction to hand tools, ladders, scaffolds, and the Rigid 300 machine; introduction to reading sprinkler drawings (part 1); 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) Three lecture hours and one lab hour per week. Prerequisite: SPFI 701 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; CPR Certification; 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) Three lecture hours and one lab hour per week. 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 1); heritage and future in the pipe trades.

## 704 Sprinkler Fitter Apprenticeship IV

(3) Three lecture hours and one lab hour per week. Prerequisite: SPFI 703 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 13 standard; wet pipe alarm valves; maintenance and inspection of automatic fire protection systems.

## 705 Sprinkler Fitter Apprenticeship V

(3) Three lecture hours and one lab hour per week. Prerequisite: SPFI 704 with a grade of C or higher. Safety and health issues related to underground construction; underground piping installation (NFPA 24); oxygenacetylene safety (part 2); fundamentals of gas welding and flame cutting.
706 Sprinkler Fitter Apprenticeship VI (3) Three lecture hours and one lab hour per week. 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) Three lecture hours and one lab hour per week. Prerequisite: SPFI 706 with a grade of $C$ or higher. 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) Three lecture hours and one lab hour per week. Prerequisite: SPFI 707 with a grade of C or bigher. Use of the T-Drill; automatic fire pump installation, start-up, certification and maintenance; combined sprinkler standpipe systems; technical reports; fire protection supply.
709 Sprinkler Fitter Apprenticeship IX
(3) Three lecture hours and one lab hour per week. 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 1); backflow protection.
710 Sprinkler Fitter Apprenticeship X
(3) Three lecture hours and one lab hour per week. 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.
100 Survey of Contemporary Architecture (3) Three lecture hours plus one hour by arrangement per week.
Basic values in contemporary architecture; its relationship to the environment, the individual and society, the home, the neighborhood, and the urban structure in general. A survey of the contributions of outstanding architects, engineers, and planners. Films, slides, lectures, and individual research. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA: Area E5c, CSU: Area C1, UC)

112 Surveying (2) Two lecture and three lab hours per week for twelve weeks. Prerequisite: MATH 130. Theory of measurements in surveying: measurement of distance, differential leveling and measurements of angles and directions, stadia techniques, and topographic mapping. (AA, CSU, UC*)

120 Architectural + Design Drawing I: Drawing and Visual Thinking (2) One lecture hour and three lab hours plus two hours by arrangement per week. Presents the basic techniques 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. (To increase competency, may be taken twice for a maximum of 4 units. (Fall only) (AA, CSU, UC*)
130 Color Graphics (1) One lecture hour and two lab hours plus one hour by arrangement per week. Representational freehand drawing involving water color and ink. Further development in composition, visual perspective, and three-dimensional thinking related to form and space. Graphic supplies will be required. (To increase competency, may be taken twice for a maximum of 2 units.) (Spring only.) (AA, CSU, UC*)

140 Architectural + Design Drawing II: Design Communication (2) One lecture and three lab hours plus two hours by arrangement per week. Prerequisite: ARCH 120 or MATH 115 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*)
145 Delineation (2) One lecture and three lab hours plus one hour by arrangement per week. Prerequisite: ARCH 140 or equivalent. Presentation of architectural ideas and designs, using various media and techniques. Graphic supplies will be required. 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 4 units.) (Fall only.) (AA, CSU, UC*)

210 Design I: Introduction to Architecture, Environmental Design, and the Design Process (4) Three lecture and three lab hours plus three hours by arrangement per week. Corequisites: concurrent enrollment or completion of ARCH 120 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) Three lecture and three lab hours plus three hours by arrangement per week. Prerequisites: ARCH 120. Corequisite: concurrent enrollment in or completion of ARCH 140. Continuation of the architectural design studio methodology introduced in Arch 210. 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. Sudents explore and manipulate ordering 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 (4) Three lecture and three lab hours plus three hours by arrangement per week. Prerequisites: ARCH 140 and 220. Corequisite: concurrent enrollment in ARCH 145. Transfers admitted by portfolio evaluation only. Continuation of ARCH 220, but on a more complex and higher plane. Introduction to design determinants as they relate to the ordering process. Advanced studies in spatial and visual relationships involving human, environmental, and architectural criteria. Investigation into how design affects the environment and human existence therein. Research into peripheral areas through the use of architecturally related problems. Graphic and photographic 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 (4) Three lecture and three lab hours plus three hours by arrangement per week. Prerequisites: ARCH 145 and 230. Transfers admitted by portfolio evaluation only. Continuation of ARCH 230, but on a more complex and higher plane. Advanced studies in the application of design determinants to architectural problems with an emphasis on integrated design solutions. Continued exploration of the language of graphics, visual perception, and spacial analysis as a means of architectural communication. Graphic and photographic supplies will be required. (Spring only.) (AA, CSU)
641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)

666 Introduction to Architecture (1) (Credit/No Credit grading.) Three lecture hours plus one hour by arrangement per week for six weeks. An intensive introductory exploration of the academic and professional opportunities and requirements within architecture, architectural education, and environmental design. Intended to assist the beginning student contemplating a future in architecture or a related field within the built environment. A materials fee as shown in the Schedule of Classes is payable upon registration. (Fall only.) (AA, CSU)

680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Art

100 Art of the Western World (3) (Telecourse) (Credit/No Credit 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 C1)

## 101 Art \& Architecture from the Ancient

 World to Medieval Times, (c. 1400) (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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 C1, UC: Area 3A) (CAN ART 2) (ART 101, 102, and $103=$ CAN ART SEQ A)
## 102 Art \& Architecture of Renaissance and Baroque Europe, (c. 1300-1700) (3)

 (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. Survey of artistic expression during the Proto-Renaissance, Renaissance, High Renaissance, and Baroque periods (c. 1300-1700).Emphasizes developments in painting and sculpture and their relationship to their historical and cultural context. (AA: Area E5c, CSU: Area C1, UC: Area 3A) (ART 101, 102, and $103=$ CAN ART SEQ A)
103 Art of Europe and America from the Rococo to the Present, (c. 1700 to the Present.) (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. 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: Area E5c, CSU: Area C1, UC: Area 3A) (ART 101, 102, and $103=$ CAN ART SEQ A)

104 Art of the 20th Century (3) (Credit/ No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. Survey of principal styles in Western art from 1888 to 1999, from Post-Impressionism to Modernism and Post-Modernism, from Paris to New York and the West Coast. (AA: Area E5c, CSU: Area C1, UC: Area 3A)

105 Art of Asia and the Near East (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. 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 and the societies, values, and ideals that stimulated their creation. (AA: Area E5c, CSU: Area C1, UC: Area 3A)

124 Old Masters' Aesthetics and Techniques (3) (Credit/No Credit or letter grade option.) Three lecture and three lab hours per week. Plus three hours by arrangment. 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 sixteenth 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 C1, UC: Area 3A)
201 Drawing and Composition I (3) Three lecture-critique and three lab hours plus three lab hours by arrangement per week. 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*) (CAN ART 8)

## 202 Drawing and Composition II (3)

Three lecture-critique and three lab hours plus three lab hours by arrangement per week. Prerequisite: ART 201. Advanced composition; further study of three-dimensional 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)
(Credit/No Credit or letter grade option.) Three lecture-critique and three lab hours plus three lab hours by arrangement per week. Recommended preparation: ART 201. Drawing the human figure and 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, after which students may petition to audit. See Index: "Audit Policy.") (AA, CSU, UC*)

207 Life Drawing (3) (Credit/No Credit or letter grade option.) Three lecture-critique and three lab hours plus three lab hours by arrangement per week. Prerequisite: ART 201. 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 12 units, after which students may petition to audit. See Index: "Audit Policy") (AA, CSU: Area C1, UC*)
214 Color (3) Three lecture-critique and three lab hours plus two lab hours by arrangement per week. 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) (Credit/No Credit or letter grade option.) Three lecture-critique and three lab hours plus three lab hours by arrangement per week. Recommended Preparation: ART 214 and 301. 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*) (CAN ART 10)

224 Oil Painting II (3) (Credit/No Credit or letter grade option.) Three lecture-critique and three lab hours plus three lab hours by arrangement per week. 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, after which students may petition to audit. See Index: "Audit Policy.) (AA, CSU, UC*)
231 Watercolor I (3) (Credit/No Credit or letter grade option.) Three lecture-critique and three lab hours per week. Prerequisite: ART 201. 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) (Credit/No Credit or letter grade option.) Three lecture-critique and three lab hours per week. Prerequisite: ART 231. Continuation of ART 231, 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, after which students may petition to audit. See Index: "Audit Policy.") (AA, CSU, UC*)
236 Chinese Brush Painting (2-3) (Credit/ No Credit or letter grade option.) Two-three lecture and two-three lab hours per week. 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 12 units.) (AA, CSU)
241 Silkscreen I (2-3) Two-tbree lecturecritique and one-three lab hours per week. Introduction to the fine art application of the silkscreen with non-toxic water-base inks, including screen-building, basic stencils, printing technique, and concepts required to develop a completed print. Extra supplies may be required. (AA, CSU, UC*)
242 Silkscreen II (2-3) Two-three lecturecritique and one-three lab hours per week. Prerequisite: ART 241. Advanced serigraphy; individualized instruction in water-based inks for the fine art use of the silkscreen. Extra supplies may be required. (To increase competency, may be taken three times for a maximum of 9 units, after which students may petition to audit. See Index: "Audit Policy.") (AA, CSU, UC*)

301 Design (3) Three lecture-critique and three lab hours plus three lab hours by arrangement per week. 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 Sketchbook: Contemporary

 Creativity and Design (3) (Credit/No Credit or letter grade option.) Three lecture-critique and three lab hours plus three lab hours by arrangement per week. Recommended Preparation: GRA 120 or equivalent and one college studio art course. A hybrid approach to twodimensional art making, combining technique, theory and creative exploration in both digital and traditional art media. Student will make an art portfolio using multiple approaches to creative problem solving and experimentation with diverse media to develop a unique artistic voice. Digital technology will be used as a tool to enrich visual art practice with applications in contemporary art and design. A materials fee as shown the Schedule of Classes is payable upon registration. (To increase competency, may be taken up to four times for a maximum of 12 units.) (AA, CSU, UC)349 History of Photography (3) (Credit/ No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: ENGL 848. Survey of photography from inception to present. Emphasizes photography's evolution in relation to historic timeline, cultural attitudes, and its impact on the arts. (AA: Area E5c, CSU: Area C1, UC: Area 3A)
350 Visual Perception (3) Three lecturecritique hours per week. 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 aesthetic, 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 C1)
351 Beginning Black and White Photography (3) Three lecture-critique and three lab hours plus one lab hour by arrangement per week. Recommended Preparation: ART 201, 301, or 350. Introduction to basic black and white photographic skills and equipment. Precise methods of negative
developing, printing, and finishing the fine photograph. Extensive darkroom work. Portfolio is produced. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (AA, CSU: Area C1, UC*) (CAN ART 18)

## 352 Intermediate Black and White Pho-

 tography (3) Three lecture-critique and three lab hours plus two lab hours by arrangement per week. Prerequisite: ART 351. 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) Three lecture-critique and three lab hours plus two lab hours by arrangement per week. 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. (To increase competency, may be taken twice for a maximum of 6 units.) (AA, CSU, UC)

354 Color Photography I (3) Three lec-ture-critique and three lab hours plus two lab hours by arrangement per week. Prerequisite: ART 351. 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) Three lec-ture-critique and three lab hours plus two lab hours by arrangement per week. 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. (To increase competency may be taken three times for a maximum of 9 units.) (AA, CSU)

360 Experimental Photography (3) Three lecture-critique and three lab hours plus three lab hours by arrangement per week. Prerequisite: ART 351. 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, multipleimagery, 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. (To increase competency, may be taken four times for a maximum of 12 units.) (AA, CSU)
365 Intermediate Digital Photography (4) Three lecture and three lab hours plus three lab hours by arrangement per week. Prerequisite: ART 381. 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. (To increase competency, may be taken two times for a maximum of 8 units.) (AA, CSU, UC)
366 Advanced Digital Photography (4) Three lecture and three lab hours plus three lab hours by arrangement per week. 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)

367 Digital Imaging Workshop (.5) One lecture and two lab hours plus two lab hours by arrangement per week for eight weeks. Prerequisite: ART 365. Review of scanning, image editing, and available print technology leading to advanced techniques and theory in a workshop environment. Development of a portfolio. A materials fee as shown in the Schedule of Classes is payable upon registration. (May be taken three times for a total of 1.5 units.) (AA, CSU)

374 Master Portfolio (2) One lecture and five lab hours plus two lab hours by arrangement per week. 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. (To increase competency, may be taken four times for a total of 8 units of credit.) (AA, CSU)
381 Beginning Digital Photography (3) Three-lecture critique plus three lab hours by arrangement per week. 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. (To increase competency, may be taken twice for a maximum of 6 units.) (AA, CSU, UC)
382 Digital Photography Portfolio (3) Three lecture-critique and three lab hours by arrangement per week. Prerequisite: Art 366. Designed for students who have intermediate digital imaging skills. Covers advanced editing techniques, advanced RAW development, exposure and editing techniques applied to fine digital printmaking, archival printing, portfolio presentation and use of color management, and stresses development of theme and style. Portfolio is produced. A materials fee as shown the Schedule of Classes is payable upon registration. Extra supplies may be required. (To increase competency, may be taken twice for a maximum of 6 units.) (AA, CSU)
405 Sculpture I (3) (Credit/No Credit or letter grade option.) Three lecture-critique and three lab hours plus two lab hours by arrangement per week. 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) (Credit/No Credit or letter grade option.) Three lecture-critique and three lab hours plus two lab hours by arrangement per week. 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. (To increase competency, may be taken three times for a maximum of 9 units, after which students may petition to audit. See Index: "Audit Policy.") (AA, CSU, UC*)

411 Ceramics I (3) (Credit/No Credit or letter grade option.) Three lecture-critique and three lab hours plus two lab hours by arrangement per week. 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*) (CAN ART 6)

## 412 Ceramics II (3) (Credit/No Credit

 or letter grade option.) Three lecture-critique and three lab hours plus two lab hours by arrangement per week. Prerequisite: ART 411. Continuation and advanced study of topics introduced in ART 411. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (To increase competency, may be taken three times for a maximum of 9 units, after which students may petition to audit. See Index: "Audit Policy.") (AA, CSU, UC*)641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
665 Special Topics in Art (.5-3) (Credit/No Credit or letter grade option.) One lecture to nine lab hours or combination of lecture and lab hours per week to equate to .5- 3 units; plus additional lab hours by arrangement per week for certain topics. 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 two times per topic.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

801 Art \& Architecture from the Ancient World to Medieval Times, (c. 1400) (3) (Credit/No Credit grading.) Three lecture hours per week. 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) (Credit/No Credit grading.) Three lecture hours per week. Survey of artistic expression during the Proto-Renaissance, Renaissance, High Renaissance, and Baroque periods (c. 1300-1700). 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. 1700 to the Present.) (3) (Credit/No Credit grading.) Three lecture hours per week. 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) (Credit/ No Credit grading.) Three lecture hours per week. Survey of principal styles in Western art from 1888 to 1999, from Post-Impressionism to Modernism and Post-Modernism, from Paris to New York and the West Coast. (AA)
805 Art of Asia and the Near East (3) (Credit/No Credit grading.) Three lecture hours per week. 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) (Credit/No Credit grading.) Three lecture and three lab hours per week. Plus three hours by arrangement. 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 Hu manism during the fourteenth, fifteenth, and sixteenth 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 (1-3) (See first page of Description of Courses section.)
880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## Astronomy

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.
100 Introduction to Astronomy (3) Two lecture hours and one recitation hour plus one hour by arrangement per week. 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 in gathering information. (AA: Area E5a, CSU: Area B1, UC: Area 5A)
101 Astronomy Laboratory (1) Three lab hours per week. Prerequisites: MATH 110 or equivalent AND completion of or concurrent enrollment in ASTR 100. 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 100, 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)

## 103 Observational Astronomy Lab (1)

 Three lab hours per week. Recommended Preparation: completion of or concurrent enrollment in ASTR 100 or equivalent. An alternative to Astronomy 101. 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 projector assists students in becoming familiar with the sky. Focus is on observational techniques. Extra supplies may be required. (May be taken twice for a total of 2 units.) (AA: Area E5a, CSU: Area B3, UC: Area 5A)115 The Solar System (3) Three lecture hours, plus one hour by arrangement per week. 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 B1, UC: Area 5A)
125 Stars and Galaxies (3) Three lecture hours. 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, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Biology

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.

100 Introduction to the Life Sciences (3) Three lecture hours plus one hour by arrangement per week. 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) Three lecture hours plus one hour by arrangement per week. 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)
110 General Principles of Biology (4) Three lecture and three lab hours plus one hour by arrangement per week. 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) (CAN BIOL 2)
111 Natural History of California (4) Three lecture and three lablfield hours plus one hour by arrangement per week. Recommended Preparation: eligibility for ENGL 848. Investigates the functioning of ecosystems, adaptations of organisms to their environment, and natural history of selected organisms. Covers natural ecosystems of California, with a primary focus on the San Francisco Bay Area. Laboratory and field investigations are conducted using the scientific methods. Emphasizes critical thinking skills. Recommended for non-science majors. (AA: Area E5a, CSU: Area B2/Area B3, UC: Area 5A)

## 123 Biotechnology Workshop: Tech-

 niques and Applications of the Polymerase Chain Reaction (1) Total of sixteen lecture hours. Recommended Preparation: BIOL 110 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)125 Physical Anthropology (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. Man's place in nature; man's evolution, genetics, and racial variation. Evolutionary basis of man's behavior and social systems. One or more field trips may be required. (Fall only.) (AA: Area E5a, CSU: Area B2, UC: Area 5B) (CAN ANTH 2)
130 Human Biology (3) Three lecture hours plus one hour by arrangement per week. 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*)
140 Animals, People, and Environment (3) Three lecture hours plus one hour by arrangement per week. Recommended Preparation: eligibility for ENGL 848. Introduction to animals around us and their relationship to man. Includes basic principles of animal biology and ecology. Views animals as predators, prey, servants, companions, and bearers of disease. Emphasizes historical and traditional viewpoints, contemporary issues, animal rights and human obligations. (General education course for non-science majors.) One or more field trips may be required. (AA: Area E5a, CSU: Area B2, UC: Area 5B)
145 Plants, People, and Environment (3) Three lecture hours plus one hour by arrangement per week. 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 of living organisms, their structure-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*)

160 Genetics: Principles and Applications (3) Three lecture hours per week. Prerequisite: a course in biology. Recommended Preparation: eligibility for ENGL 848. Integrates the principles of Mendelian and molecular genetics, including current knowledge of gene activities, regulation, and their function in relation to health and disease. Explores methods of genetic engineering with applications relevant to human societies. (Spring only.) (AA: Area E5a, CSU: Area B2, UC: Area 5B)
180 Introduction to Forestry (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. Study of the forest as a biological community; scientific and economic basis of forestry, including topics from ecology, dendrology, entomology, pathology, silviculture, mensuration, utilization, economics, and careers in forestry. One or more field trips may be required. (Fall only.) (AA: Area E5a, CSU, UC)
184 Wildlife Biology (3) Three lecture hours plus one hour by arrangement per week. 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 5B)
195 Biology Field Laboratory (1) Three lab hours plus one hour by arrangement per week. Prerequisite: completion of or concurrent enrollment in BIOL 100, 102, 140 , 145, 180, or 184. 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)

200 General Ecology (4) Three lecture and three lab/field hours per week. Prerequisite: one course in the biological sciences. Recommended Preparation: eligibility for ENGL 848. Introduction to the principles of ecology and field methodology. Includes diversity and distribution of flora and fauna, interrelationships of organisms and behavioral evolution, and energy flow relationships to ecosystems and population dynamics. Emphasizes global communities as well as local habitats and species. Lab includes methods of interpretation and presentation of field project data. (Fall only, alternate years.) (AA: Area E5a, CSU: Area B2/Area B3, UC: Area 5B)
210 General Zoology (5) Three lecture and six lab hours plus one hour by arrangement per week. Prerequisites: MATH 120 or MATH 123 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) (CAN BIOL 4)

220 General Botany (5) Three lecture and six lab hours per week. Prerequisites: MATH 120 or 123 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) (CAN BIOL 6)

230 Introductory Cell Biology (4) Three lecture and three lab hours plus one hour by arrangement per week. Prerequisites: CHEM 220. Recommended Preparation: eligibility for ENGL 838, 848; BIOL 210 or 220; and concurrent enrollment in CHEM 231. 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) Three lecture and three lab hours per week. Prerequisites: 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 for students 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) (CAN BIOL 14)

250 Anatomy (4) Three lecture and three lab hours plus one hour by arrangement per week. Prerequisites: 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 for students of nursing, physiotherapy, physical education and related fields such as chiropractic. Elective for pre-dental, premedical, 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*) (CAN BIOL 10) $($ Completion of BIOL 250 and $260=$ CAN BIOL SEQ B)

260 Introductory Physiology (5) Three lecture and six lab hours plus one hour by arrangement per week. Prerequisites: 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*) (CAN BIOL 12) (Completion of BIOL 250 and $260=$ CAN BIOL SEQ B)
641 Cooperative Education (1-4) See first page of Description of Courses section. (AA, CSU)
666 Careers in Biotechnology and Biology (1-2) (Credit/No Credit or letter grade option.) One to two lecture hours per week. Recommended Preparation: a course in biology. Intended for general 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 (1) One lecture hour per week. Prerequisite: limited to students in the Honors Program who have completed or are concurrently enrolled in an associated non-honors 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*)
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ Selected Topics (1-3) See first page of Description of Courses section. (AA, CSU)

690 Special Projects (1-2) See first page of Description of Courses section. (AA, CSU)
879 Selected Topics (1-3) (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.

## Broadcast and Electronic Media

110 Media in Society (3) (Credit/No Credit or letter grade option) Three lecture hours per week. 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 (Replacing BCST 231) (3) (Credit/No Credit or letter grade option.) Two lecture and three lab hours plus two hours by arrangement per week. Recommended Preparation: ENGL 838 or ENGL 848 or equivalent; BCST 110 or equivalent; MULT 181, 191 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 equipment and lighting); also includes writing, producing and directing. (AA, CSU)

220 Broadcast Writing (Replacing BCST 194) (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: ENGL 838 or ENGL 848 or equivalent. 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 maxiimum of 6 units.) (AA, CSU)

## 230 On-Air Talent (Replacing BCST 120)

(3) (Credit/No Credit or letter grade option) Two lecture and three lab hours plus two hours by arrangement per week. 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 on-camera performance. Includes practice in marking copy, ad-lib, and microphone techniques. (To increase competency, may be taken two times for a maximum of 6 units.) (AA, CSU)

240 Directing Talent (1.5) (Credit/No Credit or letter grade option.) Two lecture and one lab hour plus two hours by arrangement per week for eight weeks. Recommended Preparation: ENGL 838 or ENGL 848 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. (To increase competency, may be taken two times for a maximum of 3 units.) (AA, CSU)
310 Studio Lighting Techniques (1.5)
(Credit/No Credit or letter grade option.) Two lecture hours and one lab hour plus two hours by arrangement per week for eight weeks. Recommended Preparation: ENGL 838 or ENGL 848 or equivalent; BCST 210 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. (To increase competency, may be taken two times for a maximum of 3 units.) (AA, CSU)

The Broadcast and Electronic Media curriculum has been completely updated. Listed on the left are the new course titles and numbers. For your convenience, the former names and numbers are on the right. Also note, there are three new courses.

| BCST | COURSE TITLE | FORMERLY <br> BCST | FORMER <br> COURSE TITLE |
| :--- | :--- | :---: | :--- |
| 110 | Media in Society | 110 | Electronic Media in Society |
| 210 | Television Studio Techniques | 231 | Television Studio Techniques |
| 220 | Broadcast Writing | 194 | Writing for Electronic Media |
| 230 | On-Air Talent | 120 | On-Air Talent for Electronic Media |
| 240 | Directing Talent | New |  |
| 310 | Studio Lighting Techniques | New |  |
| 312 | Field Lighting Techniques | New |  |
| 316 | Producing for Media | 237 | Producing for Media |
| 320 | Digital Television Field Production | 241 | Television Field Production |
| 410 | Advanced Production Techniques | 233 | Television Studio Production |
| 420 | Advanced Audio Operations | 132 | Radio Production |
| 450 | Internship in Broadcasting | 244 | Internship in Broadcasting |

## 312 Field Lighting Techniques (1.5)

(Credit/No Credit or letter grade option.) Two lecture and one lab hour plus two hours by arrangement per week for eight weeks. Recommended Preparation: ENGL 838 or ENGL 848 or equivalent; BCST 210 or equivalent. Video lighting for both entry level students and those with some experience in field lighting for video production. Course covers basic 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. (To increase competency, may be taken two times for a maximum of 3 units.) (AA, CSU)

## 316 Producing for Media (Replacing

 BCST 237) (3) (Credit/No Credit or letter grade option.) Two lecture hours and three lab hours plus two hours by arrangemen per week. Prerequisites: BCST 210 or equivalent, $B C S T$ 220 or equivalent. Recommended Preparation: ENGL 838 or ENGL 848 or equivalent. Provides hands-on experience to produce a television 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. (To increase competency, may be taken two times for a maximum of 3 units.) (AA, CSU)320 Digital Television Field (Replacing BCST 241) (3) Credit/No Credit or letter grade option.) Two lecture and three lab hours plus two hours by arrangement per week. 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. (To increase competency, may be taken two times for a maximum of 6 units.) (AA, CSU)

410 Advanced Production Techniques (Replacing BCST 233) (3) (Credit/No Credit or letter grade grading option.) Two lecture and three lab hours plus two hours by arrangement per week. Prerequisites: 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. (To increase competency, may be taken two times for a maximum of 6 units.) (AA, CSU)

420 Advanced Audio Operations (Replacing BCST 132) (3) (Credit/No Credit or letter grade option.) Two lecture and three lab hours plus two hours by arrangement per week. Prerequisite: MULT 316 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. (To increase competency, may be taken two times for a maximum of 6 units.) (AA, CSU)

450 Internship in Broadcasting (Replacing BCST 244) (3) (Credit/No Credit or letter grade option) Two lecture and three lab hours plus three hours by arrangement per week. Prerequisite: BCST 410 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. (To increase competency, may be taken three times for a maximum of 9 units.) (AA, CSU)
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Building Inspection Technology

## 700 Introduction to the Building Code

(3) Three lecture hours per week. 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)

710 Non-Structural Provisions of the Uniform Building Code (3) Three lecture hours per week. 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) Three lecture hours per week. Prerequisites: BLDG 700 or equivalent with a grade of $C$ or higher. Recommended Preparation: ELEC 110. Overview of the National Electrical Code. Covers the various aspects of electrical service as applied to building inspection, single-family dwellings and two-family dwellings. 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) Three lecture hours per week. Prerequisite: BLDG 720 or equivalent with a grade of $C$ or higher. Indepth study of the sections of the National Electrical Code dealing with multi-family and light commercial applications, with emphasis on grounding, load calculations, and special locations. (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) Three lecture hours per week. Prerequisite: BLDG 700 or equivalent with a grade of $C$ or higher. 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)

740 Mechanical Code (3) Three lecture hours per week. 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) Three lecture hours per week. Prerequisite: BLDG 700 or equivalent with a grade of $C$ or higher. 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 12 units.) (AA)

760 Energy Regulations (3) Three lecture hours per week. Prerequisite: BLDG 700 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 packages, 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) Three lecture hours per week. 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) Three lecture hours per week. Reading, understanding, and interpreting architectural plans for residential and commercial construction. (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 (1-3) (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.)

## Business

100 Contemporary American Business
(3) Three lecture hours per week. 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)
101 Human Relations I (3) Three lecture hours per week. 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, selfimage, communication, prejudice, conflict management, leadership, and resistance to change. (AA: Area E5b, CSU: Area E)

115 Business Mathematics (3) Three lecture hours per week. Prerequisite: score of 26 or higher on CSM Mathematics Placement Test I or other measures; or MATH 811 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: Area C1, CSU)
125 International Business (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. 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)

ENGL 848. Introduction to business computers; principles of computer operations 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) (CAN BUS 6)

315 Keyboarding I (3) Three lecture hours per week plus two lab hours by arrangement per week. Beginning course for students to learn to input and 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) Three lecture hours plus two lab hours by arrangement per week. Prerequisite: BUS. 315. 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) Three lecture hours plus two lab hours by arrangement for eight weeks. Prerequisite: 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. (To increase competency, may be taken twice for a maximum of 3 units.) (AA: Area E5d, CSU)

326 Electronic Filing and Records Management (1.5) Three lecture hours plus two lab hours by arrangement per week for eight weeks. 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. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)

352 Introduction to Insurance (1) Total of sixteen lecture hours. Credit/No Credit or letter grade option. 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) Credit/No Credit or letter grade option. Three lecture hours per week. Recommended Preparation: Eligibility for ENGL 838 or 848 and BUS 352 or equivalent. Fundamentals of property and liability insurance. Course covers the following three segments: (1) 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) Credit/No Credit or letter grade option. Three lecture hours per week. 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 or anyone interested in learning about the subject to handle his/her personal insurance needs. Topics include automobile 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) Credit/No Credit or letter grade option. Three lecture hours per week. 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 (1) (Credit/No Credit or letter grade option. Total of sixteen lecture hours. Recommended Preparation: Eligibility for 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)

401 Business Communications (3) Three lecture hours per week. 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)

641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

879 Selected Topics (1-3) (See first page of Description of Courses section.)
880 - $\mathbf{8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.)

## Business Microcomputer Applications

## Business Applications DOS Platform (BUSD)

A materials fee in the amount shown in the Schedule of Classes is payable upon registration for DOS Platform courses.
114 DOS Fundamentals I (1.5) Three lecture hours plus two lab hours by arrangement per week for eight weeks. Recommended Preparation: BUSW 105 or equivalent; eligibility for ENGL 848. Introduction to purpose and use of DOS (disk operating system). Includes DOS commands to manage files and disks; file management including creating, naming, copying, and deleting files; disk management including creating subdirectories; configuring the operating system; redirecting command input and output; use of DOS text editors; and basic batch file programming. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)

115 DOS Fundamentals II (1.5) Three lecture hours plus two lab hours by arrangement per week for eight weeks. Prerequisite: BUSD 114 or equivalent. Reviews DOS Fundamentals I techniques to control business application programs and to organize subdirectory structure for hard disk management. Examines disk editing techniques using debug and hex editors to correct operating system problems. In-depth look at DOS operators and interactors with files. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)

680 - $\mathbf{6 8 9}$ Selected Topics (1-3) See first page of Description of Courses section. (AA, CSU)
879 Selected Topics (1-3) (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.

## 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
(1.5) (Credit/No Credit grading.) Three lecture hours plus two lab hours by arrangement for eight weeks. Prerequisite: BUS. 315 or equivalent. Recommended Preparation: eligibility for ENGL 838 or 848 . Introduction to microcomputers. Covers equipment, operating systems, and Windows software applications including word processing, spreadsheet, and business presentations. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)
114 Windows Fundamentals I (1.5) Three lecture hours plus two lab hours by arrangement per week for eight weeks. Prerequisite: BUSW 105 or equivalent. Recommended Preparation: 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. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)
115 Windows Fundamentals II (3) Three lecture hours plus two lab hours by arrangement per week for eight weeks. Prerequisite: BUSW 114 or equivalent. Continuation
of BUSW 114. 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. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)

## 116 Command Line and Windows

 Operating System (3) Three lecture plus two hours by arrangement per week. Recommended Preparation: BUSW 114 or equivalent. Teaches how to install and customize Windows with features such as backup program, registry, startup options; how to install software application programs; configure devices, drivers, memory and set up fonts and printers. Introduction to installation, configuration, and support of Microsoft Windows in a networked environment; includes system setup and configurations of hardware, software; creation and management of user accounts; application support; security; maintenance and troubleshooting using Command Line. Prepares students for CompTIA A+. A $31 / 2$ inch DS/HD diskette is required at the first class meeting. (To increase competency, may be taken twice for a maximum of 6 units.) (AA, CSU)127 Windows 2000 Installation and Support (3) Six lecture hours plus two lab hours by arrangement per week for eight weeks. Prerequisite: CIS 152 or equivalent. Introduction to installation, configuration, and support of Microsoft Windows 2000 in a networked environment. Includes system setup and configurations of hardware and software; creation and management of user accounts; application support; security; maintenance and troubleshooting. Prepares students for Microsoft Windows 2000 Certification Exam. (May be taken two times for a maximum of 6 units.) (AA, CSU)

## 214 Word Processing I Using WORD for

 Windows (1.5) Three lecture hours plus two lab hours by arrangement per week for eight weeks. Prerequisite: BUS. 315 or equivalent. Recommended Preparation: eligibility for $E N G L 838$ or 848 . 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. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)215 Word Processing II Using WORD for Windows (1.5) Three lecture hours plus two lab hours by arrangement per week for eight weeks. Prerequisite: BUSW 214 or equivalent. Continuation of BUSW 214. Includes graphics, charts, columns, templates, macros, mail-merge, labels, sorting, forms, and software linking. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)
383 Business Presentations Using Power Point for Windows I (1.5) Three lecture hours plus two lab hours by arrangement per week for eight weeks. Prerequisite: BUSW 214 or equivalent. 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. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)
384 Business Prensentations II Using Power Point for Windows (1.5) Three lecture hours plus two lab hours by arrangement per week for 8 weeks. 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 Office, smart tags, packaging presentation for CDs. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)

## 415 Spreadsheet I Using Excel for Win-

 dows (1.5) Three lecture hours plus two lab hours by arrangement per week for eight weeks. Prerequisite: BUSW 105 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. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)416 Spreadsheet II Using Excel for Windows (1.5) Three lecture hours plus two lab hours by arrangement per week for eight weeks. 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) (Credit/No Credit or letter grade option.) Three lecture hours plus two hours by arrangement per week for eight weeks. Prerequisite: BUSW 105 or equivalent. Introduction to project management software for tracking tasks, costs and resources. Covers creating and analyzing project plans, schedules, and reports. Textbook includes 120-day trial version of Microsoft Project. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)

## 451 Microsoft Project Fundamentals II

(1.5) (Credit/No Credit or letter grade option) Three lecture hours plus two lab hours by arrangement per week for eight weeks. Continuation of BUSW 450. Covers baselines, updting and tracking, detailed customized reports, integration with other applications, multiple projects, and collaboration. Textbook includes trial version of Microsoft Project. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)

464 Database Management Fundamentals Using Access for Windows (3) Three lecture hours plus two lab hours by arrangement per week. Prerequisite: BUSW 114 or equivalent. Introduction to database design, use and applications for business to edit data, search for specific information, create forms, and print reports. (To increase competency, may be taken twice for a maximum of 6 units.) (AA, CSU)
530 Introduction to Internet (1.5) Three lecture hours plus two lab hours by arrangement for eight weeks. Prerequisite: BUSW 114 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. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)

## 534 HTML I (Hypertext Markup Lan-

guage) (1.5) Three lecture hours plus two lab hours by arrangement per week for eight weeks. 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. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)

## 535 HTML II (Advanced Hypertext

 Markup Language) (1.5) Three lecture hours plus two lab hours by arrangement per week for eight weeks. Prerequisite: BUSW 534 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. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)591 Integrated Software Suites (1.5) Three lecture hours plus two lab hours by arrangement for eight weeks. Prerequisites: BUSW 105 or equivalent and BUSW 114 or equivalent. Introduction to the concepts and uses of integrated software suites. Covers both individual and networked peer-to-peer utilization of suite software for information creation and management. Suite software includes word processing, spreadsheet, business presentation, personal information manager (document transfer/calendaring/ scheduling), and e-mail. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) See first page of Description of Courses section. (AA, CSU)
879 Selected Topics (1-3) (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.

## Career and Life Planning

104 Transfer Essentials and Planning (.5) (Credit/No Credit grading.) One lecture hour plus two hours by arrangement per week for eight weeks. Provides essential information about the 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 two times for a total of 1 unit.) (AA: Area E5d, CSU)

105 CRER College Planning (.5) (Credit/ No Credit grading.) One lecture hour plus two hours by arrangement per week for eight weeks. Course is highly recommended for all 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 two times for a total of 1 unit.) (AA: Area E5d, CSU, UC)

106 CRER Newcomer Orientation (.5) (Credit/No Credit grading.) One lecture hour plus two hours by arrangement per week for eight weeks. Course is designed for new and returning students who are recent immigrants, ESL students, or parents/guardians of high school ESL students Provides information about the CSU systems of higher education, functions of a community college, educational opportunities available at CSM, recent legislation about AB 540 for undocumented California high school graduates; how to use the community college to transfer to a university, financial aid program, college matriculation, and college success strategies. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (May be taken two times for a total of 1 unit.) (AA: Area E5d, CSU)

## 107 CRER Introduction to Choosing a

 College Major (.5) (Credit/No Credit grading.) One lecture hour plus two hours by arrangement per week for eight weeks. 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 amount as shown in the Schedule of Classes is payable upon registration. (May be taken two times for a total of 1 unit.) (AA: Area E5d, CSU)108 CRER Achieving an Associate Degree and/or Vocational Certificate (.5) (Credit/No Credit grading.) One lecture hour plus two hours by arrangement per week for eight weeks. 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 two times for a total of 1 unit.) (AA: Area E5d, CSU)
112 Career Advantage (.5-2) (Telecourse.) (Credit/No Credit 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 up to four times for a maximum of 2 units.) (AA: Area E5d, CSU)
120 College and Career Success (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. 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)

## 121 Planning for Student Success (1)

 (Credit/No Credit or letter grade option.) Two lecture hours plus one hour by arrangement per week for eight weeks. 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 (1) (Credit/No Credit or letter grade option.) Two lecture hours plus one hour by arrangement per week for eight weeks. Provides students with information
about what is expected of a college student. Students practice a variety of techniques to increase confidence and to develop collegelevel 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 (1) (Credit/No Credit or letter grade option.) Two lecture hours plus one hour by arrangement per week for eight weeks. 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)124 Study Skills for Success Part I (.5) (Credit/No Credit grading.) Two lecture hours and one hour by arrangement per week for four weeks. Provides student self-assessment, evaluation, and practice to develop skills necessary for college-level homework and completion of projects outside of class. Students develop individual study plans, practice basic skills leading to effective study habits and develop strategies to encourage success. Stresses self-management and the effective use of time. Case studies for critical thinking cover topics such as procrastination, motivation, and collaborative work. Students are actively engaged in each learning session. (May be taken four times for a maximum of 1 unit.) A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU)
125 Study Skills for Success Part II (.5) (Credit/No Credit grading) Two lecture hours plus one hour by arrangement per week for four weeks. Provides students with test taking strategies including self-analysis, a diagnostic inventory, test taking under time limits, and reducing test anxiety. Essay tests, objective test, true and false as well as math and science exams will be used as examples for developing test taking skills. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU)

126 Career Choices I: Career Assessment
(.5) (Credit/No Credit grading) (Open entry/open exit) One lecture hour plus one hour by arrangement per week for eight weeks. 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 two times for a maximum of 1 unit.) (AA: Area E5d, CSU)

127 Career Choices II: Job Search (.5) (Credit/No Credit grading) (Open entry/open exit) Two lecture hours plus one hour by arrangement per week for four weeks. Focuses on job search preparation. Topics include: the hidden job market, resume, networking, 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 two times for a maximum of 1 unit.) (AA: Area E5d, CSU)
138 Skill Development for Career Growth (.5-3) (Credit/No Credit or letter grade option.) One-half to three lecture hours per week. 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)
140 Peer Counseling (3) Three lecture hours per week. 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)

## 141 Peer Relations and Community

Service (1) (Credit/ No Credit grading.) One lecture hour per week. An orientation and training course to develop counseling skills, including principles of counseling and helping skills. Emphasizes the importance of group interaction, personal and interpersonal growth and understanding empathic communication skills. (May be taken four times for a maximum of 4 units.) (AA: Area E5d, CSU: Area E)

142 Advanced Peer Counseling (3) Three lecture hours per week. Prerequisite: CRER 140 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)

150 Leadership for Service (1) (Credit/No Credit or letter grade option.) One lecture hour plus one hour by arrangement per week. Survey of principles and practices of leadership for those interested in or actively engaged in leadership roles in student government, student clubs and organizations, college governance, civic groups and community service organizations. (May be taken four times for a maximum of 4 units.) (AA, CSU)
152 CRER Service Learning \& Leadership Practicum- CSM Connects (.5-2) (Credit/No Credit grading.) One lecture hour plus two hours by arrangement per week for eight weeks. Course offers the opportunity to engage in learning through meaningful service. Students volunteer time and talents to pre-approved sites in college community, or civic organizations or agencies. Through a service learning experience students focus on critical thinking, problem solving, values clarification, career exploration, social and personal development, and civic and community responsibility. Meet with the CSM Connects Coordinator for additional course information. (May be taken four times for a total of 8 units.) (AA: Area E5d, CSU)
402 Honors Seminar "A" (1) One lecture hour per week. Prerequisite: admission to Honors Program. Introduction to college. The process and tradition of academic scholarship. The techniques of learning, research, and student skills. (Fall only.) (AA: Area E5d, CSU)

404 Honors Seminar "B" (1) One lecture hour per week. Prerequisite: admission to Honors Program. Introduction to scholarship. An interdisciplinary course which introduces students to contemporary research and scholarship in various fields of study. Taught by college faculty from various
departments. Interconnectedness of scholarship emphasized. (Spring only.) (AA: Area E5d, CSU)

406 Athletic Guidance Seminar (2) (Credit/No Credit or letter grade option.) Two lecture hours per week. Designed to assist student athletes in identifying values, educational and career goals, and transfer and eligibility requirements. Offered primarily for students competing in intercollegiate athletics and should be taken prior to or during the first semester of competition. (AA: Area E5d, CSU)

680 - 689 Selected Topics (1-3) (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 (1-3) (See first page of Description of Courses section.)

## Chemistry

Unless otherwise indicated, a grade of $C$ or higher is required for all prerequisite courses.
100 Survey of Chemistry (3) Three lecture hours plus one hour by arrangement per week. Prerequisite: one semester of algebra or equivalent. (This course is designed for non-science majors and is not open to students who have had or are taking CHEM 210.) Study of matter; survey of the chemical concepts and phenomena commonly encountered. (AA: Area E5a, CSU: Area B1, UC: Area 5A*)
101 Survey of Chemistry Laboratory (1)
Three lab hours plus one hour by arrangement per week. Prerequisite: completion of or concurrent enrollment in Chemistry 100. Recommended Preparation: one semester of algebra or equivalent. An optional chemistry laboratory course to be taken concurrently with or following Chemistry 100. Designed for non-science majors with no previous experience in general college chemistry. Possible field trips. (AA: Area E5a, CSU: Area B1/Area B3, UC: Area 5A*)

192 Elementary Chemistry (4) Three lecture and three lab hours plus one hour by arrangement per week. Prerequisite: MATH 110 or one semester course of algebra. It is rec-
ommended that students enroll concurrently in MATH 115 or MATH 120 or 122. 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 210 or 224.) Extra supplies may be required. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA: Area C1/Area E5a, CSU, UC*)

210 General Chemistry I (5) Three lecture and six lab hours plus one hour by arrangement per week. Prerequisites: CHEM 192 with a grade of $C$ or better or equivalent; MATH 120 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 of Classes is payable upon registration. (Intended for students majoring in science fields and chemical engineering.) (AA: Area E5a, CSU: Area B1/Area B3, UC: Area 5A*) (CAN CHEM 2) (CHEM 210 and $220=$ CAN CHEM SEQ A)

220 General Chemistry II (5) Three lecture and six lab hours plus one hour by arrangement per week. Prerequisite: CHEM 210 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*) (CAN CHEM 4) (CHEM 210 and 220 = CAN CHEM SEQ A)
231 Organic Chemistry I (5) Three lecture hours, one recitation hour, and five lab hours plus one hour by arrangement per week. 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 onesemester survey. Extra supplies may be required. (AA: Area E5a, CSU: Area B1/Area B3, UC: Area 5A)

232 Organic Chemistry II (5) Three lecture hours, one recitation hour, and five lab hours plus one hour by arrangement per week. Prerequisite: CHEM 231. More rigorous treatment of mechanisms, reactions, and synthesis; structure determination using classical and spectroscopic methods. Laboratory work implements techniques and skills taught in CHEM 231, including identification of unknown compounds and mixtures. Extra supplies may be required. (Spring only.) (AA: Area E5a, CSU: Area B1/Area B3, UC: Area 5A)

## 250 Analytical Chemistry Quantitative

 Analysis (4) Two lecture and six lab hours plus one hour by arrangement per week. 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)410 Health Science Chemistry I (4) Three lecture and three lab hours plus one hour by arrangement per week. Recommended Preparation: MATH 110 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 210-220 and CHEM 410-420 will receive credit for CHEM 210-220 only. (AA: Area E5a, CSU: Area B1/Area B3) (CAN CHEM 6)

420 Health Science Chemistry II (4)
Three lecture and three lab hours plus one hour by arrangement per week. Prerequisite: CHEM 410. 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 210220 and CHEM 410-420 will receive credit for CHEM 210-220 only. (AA: Area E5a, CSU)
680 - 689 Selected Topics (1-3) See first page of Description of Courses section. (AA, CSU)
690 Special Projects (1-2) See first page of Description of Courses section. (AA, CSU)

879 Selected Topics (1-3) (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.

## 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.
111 Elementary Chinese I (3) (Credit/No Credit or letter grade option.) Three lecture hours and one lab hour by arrangement per week. 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) (Credit/No Credit or letter grade option.) Three lecture hours and one lab hour by arrangement per week. Prerequisite: CHIN 111 or equivalent with Credit or a grade of $C$ or higher. A continuation of CHIN 111 with further development of the skills of understanding, speaking, reading, and writing. (AA: Area E5c, CSU: Area C2, UC)
121 Advanced Elementary Chinese I (3) (Credit/No Credit or letter grade option.) Three lecture hours and one lab hour by arrangement per week. Prerequisite: CHIN 112 or equivalent with Credit or a grade of $C$ or bigher. 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) (Credit/No Credit or letter grade option.) Three lecture hours and one lab hour by arrangement per week. Prerequisite: CHIN 121 or equivalent with Credit or a grade of $C$ or higher. A continuation of Chinese 121 with further training in spoken and written Mandarin. (AA: Area E5c, CSU: Area C2, UC: Area 6)

131 Intermediate Chinese I (3) (Credit/ No Credit or letter grade option.) Three lecture hours and one lab hour by arrangement per week. Prerequisite: CHIN 122 or equivalent with Credit 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) (Credit/ No Credit or letter grade option.) Three lecture hours and one lab hour by arrangement per week. Prerequisite: CHIN 131 or equivalent with Credit 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 Online

(3) (Credit/No Credit or letter grade option.) (Online Course) Prerequisite: CHIN 122 or equivalent with Credit 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 grammar while learning 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) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: CHIN 132 or equivalent with Credit 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 (1) (Credit/No Credit grading.) Two lecture hours plus one lab hour by arrangement per week for eight weeks. Corequisite: CHIN 111 or 112 . 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)

## 211 Colloquial Mandarin Chinese I,

 Elementary (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. A beginning conversational Mandarin Chinese course. Extensive oral training in Mandarin. Emphasizes practical vocabulary, pronunciation, and idiomatic usage, with sufficientgrammar 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) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: CHIN 211 or equivalent with Credit or a grade of $C$ or higher. Continuation of Chinese 211. Extensive oral training in Mandarin. Emphasizes further development of the 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. Course designed for students who wish to extend their basic skills of spoken Mandarin Chinese. (AA: Area E5c, CSU)
810 Basic Chinese Communication (.5)
(Credit/No Credit grading.) Two lecture hours per week for four weeks. Introduction to the basics of communicating in Mandarin Chinese and to the cultural expectations of Chinese speakers in business and tourism relationships. Designed to help those with little or no knowledge of Chinese culture communicate successfully via words and culturally appropriate actions. (AA)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (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 (1-3) (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.
110 Introduction to Computer and Information Science (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. 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)

## 111 Introduction to Internet Program-

 ming (3) (Credit/No Credit or letter grade option) Three lecture and one lab hour, plus one hour by arrangement per week. 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 2.0 topics, such as Ajax, blogs, mashups, podcasts, RSS feeds, Web services, and wikis will be covered. (AA, CSU)125 Visual Basic I (4) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week. Prerequisite: MATH 110 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; program testing; 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)

150 Networks and Data Communications
(3) (Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. Prerequisite: completion of or concurrent enrollment in CIS 110 or equivalent. Recommended Preparation: eligibility for ENGL 838/848, eligibility for READ 400. Introduction to networking and data communications. Covers Internet and intranets, LANs, WANs, common protocols, networking hardware and topologies, techniques in data communications, and trends in data communications. (AA, CSU)

151 Networks and Digital Communication (3) (Credit/No Credit or letter grade option) Three lecture and one lab hour plus one hour by arrangement per week. Prerequisites: completion of or concurrent enrollment in CIS 110 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)

## 152 Principles of Network Design and

 Management (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. Prerequisites: CIS 150 or equivalent. Recommended Preparation: eligibility for ENGL 848. Basic concepts of local and wide area network architecture, design, implementation, security, and management. Covers connectivity standards and protocols, bridging, switching, routing, micro-to-mainframe links, and network administration responsibilities. Provides case studies of TCP/IP, Novell NetWare, Microsoft, and UNIX networks. Prepares interested students for Novell, Net + and Microsoft certification exams. (AA, CSU)254 Introduction to Object-Oriented Program Design (4) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week. Prerequisite: MATH 110 or equivalent. Recommended Preparation: eligibility for ENGL 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 CS0 standards. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area E2b, CSU)

## 255 (CS1) Programming Methods: Java

 (4) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week. Prerequisite: MATH 120 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 CS1 standards. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area C1/Area E2b, CSU, UC)256 (CS2) Data Structures: Java (4) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week. Prerequisite: CIS 255 or equivalent. Recommended Preparation: eligibility for 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 stan-
dards. 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) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week. Prerequisite: MATH 120 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 CS1 standards. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area C1/Area E2b, CSU: Area B4, UC) (CAN CSCI 22)279 (CS2) Data Structures: C++ (4) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week. 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. Objectoriented approach to a variety of abstract data 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: Area C1, CSU, UC) (CAN CSCI 24)
312 UNIX Operating Systems I (1) (Credit/No Credit or letter grade option.) Total of sixteen lecture and sixteen lab hours. Prerequisites: CIS 110 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) (CAN CSCI 10)
313 UNIX Operating Systems II (1)
(Credit/No Credit or letter grade option.) Total of sixteen lecture and sixteen lab hours. Prerequisites: CIS 312 or equivalent. Recommended Preparation: eligibility for ENGL 848. Continuation of CIS 312, 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)

## 315 Survey of Contemporary Operating

 Systems (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. Prerequisite: CIS 110 or equivalent. Recommended Preparation: eligibility for ENGL 848. Comparative survey of current operating systems including the following concepts: memory management, processor management, device management, file management, network management, and concurrent processing. Covers MS DOS, Windows NT, and UNIX command sets, as well as Macintosh OS and VAX/VMS. Includes strengths and benefits of each operating system studied. (AA)
## 360 Introduction to Database Manage-

 ment, SQL and PL/SQL (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. Prerequisite: CIS 255 or CIS 278 or equivalent. Corequisite: CIS 361. Recommended Preparation: eligibility for ENGL 848. Database design, implementation, and management methods emphasizing the relational model; database administration issues; current issues and trends. Hands-on design and development of databases using Oracle. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)361 Open Computer Lab (1) (Credit/No Credit grading.) Three lab hours per week. Corequisite: CIS 360. Use of micro-computers to complete lab assignments for CIS 360. (AA, CSU)

## 362 Enterprise Database Management

(4) (Credit/No Credit or letter grade option.) Three lecture and three lab hours per week. 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)
377 Internet Programming: JavaScript/ HTML (2) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week for eight weeks. 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) (Credit/No Credit or letter grade option.) Three lecture hours and one lab hour plus one hour by arrangement per week. Prerequisite: CIS 125 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) (Credit/No Credit or letter grade option.) Three lecture hours and one lab hour plus one hour by arrangement per week. Prerequisite: CIS 254 or equivalent. 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)

381 Java Programming Language I (2) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week for eight weeks. Prerequisite: CIS 278 or equivalent. Recommended Preparation: eligibility for ENGL 838/848. Designed for experienced programmers who want to learn the Java language. The Java language is taught from the perspective of designing and implementing object-oriented, event-driven systems. Topics include object-oriented design with UML, Java fundamentals, applets and applications, packages, abstract data types (ADTs), and the Swing toolkit. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area C1, CSU, UC)

## 382 Java Programming Language II (2)

 (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week for eight weeks. Prerequisite: CIS 381 or CIS 255 or equivalent. Recommended Preparation: eligibility for ENGL 838/848. Continuation of CIS 381. Designed for programmers who are familiar with the syntax, control structures, and object-oriented paradigm of Java. Topics include exception handling, the Java collections framework, advanced graphical user interface elements, threads, and networking. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area C1, CSU, UC)
## 383-88 Advanced Java Programming

Topics (2) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week for eight weeks. Prerequisite: CIS 255 or CIS 382 or equivalent. Recommended Preparation: eligibility for ENGL 838/848. These courses are for the experienced Java programmer and address advanced features of the Java programming language, such as (but not limited to) Java Database Connectivity (JDBC), Java Server Pages (JSP) and Servlets Distributed Java Programming and JavaBean. Descriptions of the specific topics offered each semester will be printed in the Schedule of Classes. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area C1, CSU)
390 Internet Programming: Perl (2) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week for eight weeks. 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)

391 Visual Studio.NET I (2) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week for eight weeks. Prerequisite: CIS 256 or CIS 279 or equivalent. Recommended Preparation: eligibility for $E N G L$ 848. Designed for practicing programmers who want to learn the Visual Studio.NET environment. VS.NET is taught from the perspective of designing and implementing object-oriented, event-driven systems. Includes Visual Studio .NET architecture, .NET IDE, use of GUI controls, language fundamentals, and object-oriented programming. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area C1, CSU)

392 Visual Studio.NET II (2) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week for eight weeks. Prerequisite: CIS 391 or equivalent. Recommended Preparation: eligibility for ENGL 848. Continuation of CIS 391. Designed for programmers who are familiar with VS.NET architecture, the fundamentals of one of the VS.NET programming languages, and the objectoriented paradigm. Includes polymorphism, writing exception classes, delegates, collection classes, and multithreading. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area C1, CSU)

393-398 Visual Studio.NET: Advanced Topics (2) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus one hour by arrangement per week for eight weeks. Prerequisite: CIS 392 or equivalent. Recommended Preparation: eligibility for ENGL 848. These courses cover a number of advanced features of the Visual Studio .NET Framework, such as (but not limited to) ADO.NET (Database Connectivity), ASP. NET (Active Server Pages), XML, and Windows Forms. Descriptions of the specific topics offered each semester will be printed in the Schedule of Classes. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

479 Network Security Fundamentals (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: CIS 151 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)

485 Wireless Network Design and Implementation (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: CIS 151 or equivalent. Recommended preparation: eligibility for ENGL 838/848. Study of current wireless technologies. Includes fundamentals of wireless communication; radio frequency communication; infrared and Bluetooth wireless technologies; wireless LANs; IEEE 802.11 and Bluetooth standards; applications in business, education and social forums; security issues; and design and implementation of wireless networks. Projects will be based on local and wide area networks. (May be taken twice for a maximum of 6 units.) (AA, CSU)
488 Firewalls and Network Security (1.5) (Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week for eight weeks. 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) (Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. Prerequisite: CIS 151 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) (Credit/No Credit or letter grade option.) Three lecture hours and one lab hour plus one hour by arrangement per week. 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)

## 491 Computer Forensics: Search and

 Seizure (3) (Credit/No Credit or letter grade option.) Three lecture hours and one lab hour plus one hour by arrangement per week. 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 Computer Forensics: White-Collar Crime (3) (Credit/No Credit or letter grade option). Three lecture and one lab hour plus one hour by arrangement per week. 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 two time for a maximum of 6 units.) (AA, CSU)
495 Software Project Management (3) (Credit/No Credit or letter grade option) Three lecture hours and one hour by arrangement per week. Recommended Preparation: Eligibility for ENGL 848. Designed for software professionals. Course provides an introduction to the concepts and techniques utilized in the management of software system development. Includes team building, project planning, quality assurance measures, configuration management and risk assessment. Tool and metrics specific to software project estimation and tracking will be presented. Course satisfies PMP certification educational requirements. (May be taken two time for a maximum of 6 units.) (AA, CSU)
641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) )See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Consumer Arts and Science

310 Nutrition (3) Three lecture hours per week. 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 113 in meeting the Health Science requirement.)

641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

879 Selected Topics (1-3) (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.)

## Cooperative Work Experience Education

Cooperative Work Experience education is offered in two basic programs: (1) the parallel plan, in which the student works and attends college classes during the same semester; and (2) the alternate semester plan, wherein the student can alternate between semesters of work and study. Under the parallel plan, students can earn up to four units of Cooperative Work Experience Education credit per semester. Alternate semester students can earn up to eight units of work experience credit per semester of work. Students may choose between letter grading and Credit/No Credit grading. A letter grade is awarded unless a student has submitted a request for Credit/ No Credit grading to the Office of Admissions and Records by the deadline published in the class schedule.

640 Cooperative Work Experience Education/General Workplace Experience (.53) (Credit/No Credit or letter grade option.) Designed for the student who does not have a job that relates to a specific occupational goal or college major. Under the direction
of a coordinator, 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 semester, and the course may be taken for a total of six units of credit. Sev-enty-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. Enrollment in seven units (of which Cooperative Work Experience Education may be three of the seven) is mandatory. (AA: Area E5d, CSU)
641 Cooperative Work Experience Education (.5-4) (Credit/No Credit or letter grade option.) Work must be in a field related to a career goal or major. Under the direction of a coordinator, students focus on career goals and development. Students may be eligible for up to 4 units of credit per semester, and the course may be taken for a total of 16 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 credit. Enrollment in 7 units (of which Cooperative Work Experience Education may be four of the seven) is mandatory. (AA: Area E5d, CSU)

645 Cooperative Work Experience Education/Alternate Semester (.5-8) (Credit/No Credit or letter grade option.) Work may be in a field related to a career goal or major or may be general work experience. Students in the alternate semester program may earn up to 8 units of credit per semester. While enrolled in the alternate semester class, students are limited to taking only one other class. The program may be taken for a total of 16 units of credit. Seventy-five hours of work (approximately 5 hours per week) is equivalent to one unit of credit. The student must have new learning opportunities in order to repeat the course. (AA: Area E5d, CSU)
Real Estate Internship: See catalog Real Estate listings.

Honors Internship: Check with the Co-op Office or the Honors Program to see if you are eligible to earn transferable honors credit for your Co-op Internship.

## 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 17 years of age or older.
641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA)
712 Fundamentals of Cosmetology I (4.5-9) (AA)
722 Fundamentals of Cosmetology II
(4.5-9) Five lecture and fifteen lab hours per week. Prerequisites: admission to and registration in the Cosmetology program. Recommended Preparation: Eligibility for READ 400. All subjects covered in COSM 712 and 722 are required for licensing as a cosmetologist by the California Board 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 18 units.) (AA)

732 Advanced Cosmetology I (4.5-9) (AA)

742 Advanced Cosmetology II (4.5-9) Five lecture and fifteen lab hours per week. Prerequisites: minimum of 9 units with a grade of C or higher in COSM 712 and 722. Continuation of Cosmetology 712 and 722. Cosmetology 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 27 units.) (AA)

750 Brush-Up (4.5-9) Up to five lecture and fifteen lab hours per week by arrangement for a total of 400 hours per year. Prerequisite: Cosmetology license or COSM 732 and 742 with a grade of $C$ or higher. For supplemental training requirements or out-of-state requirements. Course requirements must be met satisfactorily prior to state examination. (May be taken for a maximum of 18 units of credit.) (AA)

752 Esthetics I (1-8) Five lecture and fifteen lab hours per week. Prerequisite: Admission to and registration in the Cosmetology Program; completion of 10 th grade or equivalent is required by the California Bureau of Cosmetology Program. Covers fundamentals of skin care, facial treatments, massage, hair removal and makeup application. A materials fee as shown in the Schedule of Classes is payable upon registration. (May be repeated for a maximum of 18 units.) (AA)

753 Esthetics II (1-8) Five lecture and fifteen lab hours per week. Prerequisite: COSM 752 or 300 hours of equivalent coursework. Advanced course that includes a continuation of skin care, facial treatments, massage, hair removal and makeup application, as well as all theoretical subjects of health and safety, skin diseases and disorders, chemistry, State rules and regulations, business and salon retailing. Students perform advanced services on each other and on clients. A materials fee as shown in the Schedule of Classes is payable upon registration. (May be repeated for a maximum of 18 units.) (AA)

760 Cosmetology Instruction Preparation (.5-20) Up to ten lecture and thirty lab hours per week by arrangement for a total of 600 hours. Prerequisites: satisfactory completion of an approved program of Cosmetology training with a minimum of 1600 hours or a California Cosmetologist license. Preparatory course of teaching techniques designed to qualify the student for the California Bureau of Cosmetology Instructor examination. Requires the student to complete a 600 -hour instructor training certificate program. (AA)
879 Selected Topics (1-3) (See first page of Description of Courses section.)
880 - 889 Selected Topics (1-3) (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 Cooperative Work Experience Education (1-4) (Credit/No Credit or letter grade option.) Open to dental assisting students only. Supervised work experience. A practical application of skills learned in the academic classroom as applied to the areas of specialization to be selected by the Dental Assisting coordinator. Sixty hours of volunteer work is equivalent to one unit of credit. Offered during spring semesters only. (AA, CSU)
716 Dental Office Procedures (2.5) Two lecture and two lab hours per week. 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. (AA)
721 Dental Materials I (3) Two lecture and three lab hours per week. 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) One lecture hour and three lab hours per week. 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)

731 Dental Science I (3) Three lecture hours per week. Basic introduction to the hard and soft tissues 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 Dental Science II (3) Three lecture hours per week. 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 (1) One lecture hour per week. 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) Two lecture hours and three lab hours per week. 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 office emergencies, and public health dentistry. (Fall only.) (AA)
742 Chairside Assisting II (3) Two lecture and three lab hours per week. 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) (Credit/No Credit grading.) Total of eight lecture and six lab hours. Prerequisites: concurrent enrollment in or completion of DENT 716, 721, 722, 731, 732, 735, 740, 742, 749, 751, 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)

749 Preclinical Dental Science Laboratory (.5) Seven lab hours per week for six weeks. Prerequisites: concurrent enrollment in or completion of DENT 716, 721, 731, 735, 740, 751, 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) Seven lab hours per week for twelve weeks. Prerequisite: completion of or concurrent enrollment in DENT 749. Introduction to and application of chairside skills; manipulation of dental materials and care of the dental patient. Held at local dental schools. (Fall only.) (AA)

763 Dental Radiology (2) One lecture hour and three lab hours per week. 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 (1-3) (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.)

## Developmental Skills

## 811 Specific Learning Skills Assessment

(.5) (Credit/No Credit grading.) (Open entry/open exit) Eight lecture hours by arrangement. 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.)
817 Assistive Computer Access (.5-3) (Credit/No Credit grading.) (Open entry/open exit) One and one-half to nine lab hours per week. Recommended Preparation: touch typing familiarity with 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 micro-
computers. 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 (1) (Credit/No Credit grading.) Two lecture hours per week for eight weeks.
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 (1-3) (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.

## Drafting Technology

(Also see Machine Tool Technology and Manufacturing and Industrial Technology.)
Extra supplies required in all Drafting Technology courses.

## 100 Introduction to Computer-Aided

 Drafting (2) One lecture hour and three lab hours plus one lab hour by arrangement per week. Prerequisite: one semester of college drafting with a grade of $C$ or higher or equivalent. Introduction to computer-aided drafting for students majoring in technical arts and graphics, architecture, engineering, and related majors. Basic operations of a personal computer and the application of CAD software. (AA, CSU, UC)120 Principles of Technical Drawing (3) Two lecture and four lab hours plus one lab hour by arrangement per week. Recommended Preparation: BUSW 105 or 114; 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)

121 Computer-Aided Drafting I (3) Two lecture and four lab hours plus one lab hour by arrangement per week. Prerequisite: one
semester of college drafting or equivalent. Recommended Preparation: BUSW 105 or 114. 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) Two lecture and four lab hours plus one lab hour by arrangement per week. Prerequisite: DRAF 100 or 121 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)
123 Computer-Aided Drafting III (3) Two lecture and four lab hours plus one lab hour by arrangement per week. 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)

124 Computer-Aided Drafting IV (3) Two lecture and four lab hours plus one lab hour by arrangement per week. 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)
130 Mechanical Design with ComputerAided Drafting (CAD) (3) Two lecture and four lab hours plus one lab hour by arrangement per week. Prerequisite: DRAF 120 and 121 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)

641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)

680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Economics

100 Principles of Macroeconomics (3) Three lecture hours per week. 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. 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) (CAN ECON 2)

102 Principles of Microeconomics (3) Three lecture hours per week. 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. 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) (CAN ECON 2)
123 Business-Economic Statistics (4) Four lecture hours per week. Prerequisite: MATH 120 or 123 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 $O R$ 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 correlation analysis, and non-parametric methods.

Introduction to using a computer. (AA: Area C1/Area E2b, CSU: Area B4, UC: Area $2 A^{*}$ )

680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Electronics Technology

Extra supplies/lab fee may be required in all Electronics Technology courses.

## 110 Introduction to Fundamentals of

 Electronics (3) Two lecture and three lab hours per week plus two lab hours per week by arrangement. 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)
## 131 Copper-Based Network Cabling

 Fundamentals (4.5) Three and one-half lecture and four lab hours plus two lab hours by arrangement per week. Recommended Preparation: completion of or concurrent enrollment in CIS 110 and ELEC 110 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) One lecture hour and three lab hours plus two lab hours by arrangement per week. Prerequisite: ELEC 131 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 installa-
tion 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)
201 D.C. Electronics (3) Two lecture and three lab hours plus two lab hours by arrangement per week. Prerequisite: Eligible for or successful completion of MATH 110 or 111 or equivalent; concurrent enrollment in or completion of ELEC 231 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) Two lecture and three lab hours plus two lab hours by arrangement per week. Prerequisite: ELEC 201 or equivalent with a grade of $C$ or higher. Study of alternating current and its effect on resistors, inductors, and capacitors. The nature of $A C, A C$ 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)

Two and one-half lecture and one and one-half lab hours plus one lab hour by arrangement per week. Prerequisite: CIS 110; ELEC 110 or their equivalent, all with a grade of $C$ or higher. Corequisite: completion of or concurrent enrollment in BUSW 114 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)

## 216 PC Troubleshooting and System

 Maintenance (3) Two and one-half lecture and one and one-half lab hours plus one lab hour by arrangement per week. Prerequisite: BUSW 114 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)231 Basic Applied Electronic Mathematics (2) Two lecture hours plus two hours by arrangement per week. Prerequisite: Eligible for or successful completion of MATH 110 or 111 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: Area C1, CSU)

232 Advanced Electronics Mathematics (1) One lecture hour plus two hours by arrangement per week. 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: Area C1, CSU)
262 Digital Electronics (4) Three lecture and four lab hours plus two hours by arrangement per week. Prerequisite: ELEC 201 or the equivalent with a grade of $C$ or higher. Covers the analysis and troubleshooting of combinational and sequential logic 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) Three lecture and four lab hours per week plus one lab hour per week by arrangement. 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) One lecture hour and three lab hours plus one hour by arrangement per week. Recommended Preparation: ELEC 110 or 201 or their equivalent with a grade of $C$ or higher. Introduces high reliability soldering and rework techniques including point-to-point, through-hole, and surface mount technologies. Stresses identification of workmanship standards and self- or peer-evaluation against said standards. Includes preparation and care of soldering equipment. (AA, CSU)
## 290 Introduction to Communications

Systems (3) Two lecture and three lab hours plus two hours by arrangement per week. 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)
310 Introduction to Microprocessors (3) Two lecture and three lab hours per week plus one lab hour per week by arrangement. 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) Three lecture and four lab hours per week plus one lab hour per week by arrangement. Prerequisite: ELEC 275 or equivalent with a grade of $C$ or higher; completion of or concurrent enrollment in ELEC 232 or equivalent. 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) One lecture hour and three lab hours plus one hour by arrangement per week. Prerequisite: BUSW 530; ELEC 110 or 202; ELEC 282 or their equivalent with a grade of $C$ or higher. 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) Two lecture and three lab hours per week plus one lab hour per week by arrangement. Prerequisite: ELEC 310 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) Three lecture and three lab hours per week plus one lab hour per week by arrangement. Prerequisites: 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) Three lecture and four lab hours per week plus one lab hour per week by arrangement. 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)

421 Fundamentals of Electric Motor Control (4) Three lecture and three lab hours plus one hour by arrangement per week. Prerequisite: ELEC 262 and 275 or equivalent with a grade of $C$ or higher or equivalent experience.
Theory, construction, and operation of frac-tional- and 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 Programmable Logic Controllers (4) Three lecture and three lab hours plus one hour by arrangement per week. Prerequisite: ELEC 421 or equivalent with a grade of $C$ or higher or equivalent experience. 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) Three lecture and three lab hours plus two hours by arrangement per week. 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)441 Sensors and Data Transmission Systems (4) Three lecture and three lab hours plus one hour by arrangement per week. 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) Three lecture and three lab hours plus one hour by arrangement per week. 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) Three lecture and three lab hours plus two hours by arrangement per week. 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)

641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Engineering

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.
100 Introduction to Engineering (3) (Replacing ENGR 140) Two lecture and three lab hours per week plus one hour by arrangment per week. Prerequisites: Math 130 or equivalent; eligibility for ENGL 838/848. Introduction to the engineering profession, courses of study and resources for engineering 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) Three lecture and four lab hours per week. Prerequisite: MATH 130. Recommended Preparation: DRAF 120 or equivalent. 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*) (CAN ENGR 2)

215 Computational Methods for Engineers and Scientists (3) Two lecture hours and three lab hours per week plus one hour by arrangement per week. Prerequisite: completion of or concurrent enrollment in MATH 241 or 251. Recommended Preparation: experience with a Windows-based computer environment. Introduces and develops computer programming principles and problem solving skills within the environment of the scientific computer application MATLAB. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU, UC*)

230 Engineering Statics (3) Three lecture hours plus one hour by arrangement per week. Prerequisites: PHYS 250; MATH 252. Corequisite: concurrent enrollment in 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*) (CAN ENGR 8)

240 Engineering Dynamics (3) Three lecture hours per week. Prerequisite: ENGR 230; MATH 253 Focuses on the motion of particles, system of particles and rigid bodies. Applies engineering principles to describe the effects of forces acting on a body and system of bodies. (AA, CSU, UC*)

260 Circuits and Devices (4) Three lecture and three lab hours per week. Prerequisites: PHYS 260. Concurrent enrollment in MATH 275 is recommended. Introduction to circuits. Natural and forced response, network theorems; characteristics and circuit models of electronic devices including transistor and diodes. Laboratory assignments include both hardware techniques and computer- aided analysis. (Spring only.) (AA, CSU, UC*) (CAN ENGR 6)
270 Materials Science (3) Two lecture and three lab hours plus one hour by arrangement per week. Prerequisites: MATH 251; 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 atomicand micro-structure and the mechanical and electrical properties of metals, concrete, polymers, ceramics, and semiconducting materials. (AA, CSU, UC*) (CAN ENGR 4)
641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (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 (1-3) (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 credit in college English will not be required to take the test. They must, however, take the Reading Test if they have not completed English 100 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 100 and other English courses.

## The English Program

The English program consists of transfer and nontransfer 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 | Nontransfer Courses |
| :--- | :--- |
| English 100 | 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
English 110, 120,
135, or 140
Nontransfer Courses
English 875
Speech 855

ESL 400
Speech 100, 111, 112,
120, 140, 150, 170
Note that English 100 with a grade of C or higher is the prerequisite for English 110, 120,135 , and 140 and for all transfer-level literature courses.

For those students who do not place into ENGL 100 on the placement tests, the following course options satisfy the prerequisite for ENGL 100 (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; other English/Literature nontransfer courses are those numbered 800 or above.

The following English courses are credit-bearing but not degree-applicable, which means that the units count for the purpose of financial aid but not toward the AA/AS degree: 828, 830, 850, 875.
100 Composition and Reading (3) Three lecture hours plus one hour by arrangement per week. 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 8,000 words; writing emphasizes expository forms. (AA: Area C2/Area E2a, CSU: Area A2, UC: Area 1A) (CAN ENGL 2) (ENGL 100 and 110 or ENGL 100 and $165=$ CAN ENGL SEQ A)
101 English Practicum (1) (Credit/No Credit grading.) Two lecture hours per week. Corequisite: concurrent enrollment in ENGL 100. Combined with English 100, English 101 provides extensive practice in critical reading strategies, sentence structure and grammar as well as essay and paragraph organization and development. (AA, CSU)

110 Composition, Literature, and Critical Thinking (3) Three lecture hours plus one hour by arrangement per week. Prerequisite: ENGL 100 with a grade of C or higher. Introduction to the major imaginative genres of poetry, drama, and fiction. Students write 8,000 to 10,000 words in expository essays and other kinds of assignments employing methods of literary analysis and demonstrating skill in critical thinking. (AA: Area E2a/Area E5c, CSU: Area A3, UC: Area 1B) (CAN ENGL 4) (ENGL 100 and $110=$ CAN ENGL SEQ A)

## 135 Composition, Fiction and Critical

Thinking (3) Three lecture hours plus one hour by arrangement per week. Prerequisite: ENGL 100 with a grade of $C$ or higher. Designed to introduce students to the study of the short story novel. Students will write eight to ten thousand words in expository essays and other kinds of assignments employing methods of literary analysis and dem-
onstrating skill in critical thinking. (AA: Area E2a, CSU: Area A3/Area C2, UC: Area 1B)

161 Creative Writing I (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Prerequisite: ENGL 100 with a grade of $C$ or higher. The craft of writing short fiction and poetry. Students write a minimum of two short stories and complete a poetry project. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area E2a, CSU: Area C2, UC) (CAN ENGL 6)
162 Creative Writing II (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Prerequisite: ENGL 161 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. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area E2a, CSU: Area C2, UC)

163 Creative Writing III (3) (Credit/No Credit or letter grade option) Three lecture hours per week. 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. A materials fee in the amount 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 E2a, CSU: Area C2, UC)
165 Advanced Composition (3) Three lecture hours plus one hour by arrangement per week. Prerequisite: ENGL 100 with a grade of $C$ or higher. Advanced techniques of essay and report writing with particular emphasis 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 8,000 words of graded prose. (Fulfills critical thinking requirement for transfer students.) (AA: Area E2a, CSU: Area A3/Area C2, UC: Area 1B) (CAN ENGL 4) (ENGL 100 and $165=$ CAN ENGL SEQ A)
641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

828 Basic Composition and Reading (5) Five lecture hours plus one hour by arrangement per week. 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) Five lecture hours plus one hour by arrangement per week. 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 Credit 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 100. (AA: Area C2/Area E2a)

## 848 Introduction to Composition and

 Reading (4) Four lecture hours plus one lab hour by arrangement per week. 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 Credit or a grade of C or higher (or eligibility for READ 836 or 400 -level reading course). Practice in composition and reading to develop and refine specific composition skills. Includes instruction in reading comprehension and vocabulary development, elements of the essay, and composing techniques necessary for college writing (writing from source ma-terials, analytical reading, and English usage and mechanics). Designed mainly to prepare students to meet competency standards required for entrance into English 100. (AA: Area C2/Area E2a)
850 Writing Workshop (.5-3) (Credit/No Credit grading.) (Open entry/open exit) One and one-half to nine lab hours per week. 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. (To increase competency, may be taken four times for a maximum of 12 units.) (Units do not apply toward AA/AS degree.)

## 865 Projects in Workplace Writing (1)

(Credit/No Credit grading.) Four lecture hours for four weeks. 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 degree applicable; not transferable.)
875 English Grammar (3) Three lecture hours per week. 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 (1-3) (See first page of Description of Courses section.)
880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## Literature

101 Twentieth-Century Literature (3)
Three lecture hours plus one hour by arrangement per week. Prerequisite: ENGL 100 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) Three lecture hours per week. Prerequisite: ENGL 100 or equivalent. Study of the significant writings of the Old and New Testaments and of the Apocrypha. (AA: Area E2a/Area E5c, CSU: Area C2, UC: Area 3B)

111 The Short Story (2) Two lecture hours per week. Prerequisite: ENGL 100 or equivalent. Study of short stories. Class discussion and occasional writing, both analytical and creative. (AA: Area E2a/Area E5c, CSU: Area C2, UC)
113 The Novel (3) Three lecture hours per week. Prerequisite: ENGL 100 or equivalent. Study of novels of the late 19th and 20th Centuries and of various aspects of literary criticism. Reading, discussion, and writing of critical papers. (AA: Area E2a/Area E5c, CSU: Area C2, UC: Area 3B)

151 Shakespeare (3) Three lecture hours per week. Prerequisite: ENGL 100 or equivalent. Study of representative plays and poems. Reading, discussion, writing of critical papers, tests. (AA: Area E2a/Area E5c, CSU: Area C2, UC: Area 3B)

201 American Literature I (3) Three lecture hours per week. Prerequisite: ENGL 100 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 E2a/Area E5c, CSU: Area C2, UC: Area 3B) (CAN ENGL 14) (LIT. 201 and 202 = CAN ENGL SEQ C)

202 American Literature II (3) Three lecture hours per week. Prerequisite: ENGL 100 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 E2a/Area E5c, CSU: Area C2, UC: Area 3B) (CAN ENGL 16) (LIT. 201 and 202 = CAN ENGL SEQ C)

220 Introduction to World Literature (3) Three lecture hour plus one hour by arrangement per week. Prerequisite: English 100 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)

231 Survey of English Literature I (3) Three lecture hours plus one hour by arrangement per week. Prerequisite: ENGL 100 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 E2a/Area E5c, CSU: Area C2, UC: Area 3B) (CAN ENGL 8) (LIT. 231 and 232 = CAN ENGL SEQ B)

232 Survey of English Literature II (3) Three lecture hours plus one hour by arrangement per week. Prerequisite: ENGL 100 or equivalent with a grade of $C$ or higher. Study of the typical works of major English writers of the 19th and 20th Centuries. Lectures, discussions, recorded readings, and writing of critical papers. (AA: Area E2a/Area E5c, CSU: Area C2, UC: Area 3B) (CAN ENGL 10) (LIT. 231 and 232 = CAN ENGL SEQ B)

256-9 Individual Authors (3) Three lecture hours per week. Prerequisite: ENGL 100 or equivalent with a grade of $C$ or higher. Intensive study of the works of a single author or two or more related authors. Content of course will vary according to selected author(s). Descriptions of the specific author(s) taught each semester will be listed in the Schedule of Classes. Lectures, discussion, related readings, and writing of critical papers. (May be taken four times for a maximum of 12 units.) (AA: Area E5c, CSU)
260 African-American Literature (3)
Three lecture hours per week. Prerequisite: ENGL 100 or equivalent with a grade of C or higher. Survey of African-American
literature. Acquaints students with literary and aesthetic qualities of African-American literature as well as personal and cultural concerns prevalent in the body of work, such as slavery, emancipation, race relations, civil rights, heritage, and identity. Material presented from a variety of genres. Lectures, discussions, analysis and writing of critical papers. (AA: Area E2a/Area E5c, CSU: Area C2)

261-3 Topics in Literature (3) Three lecture hours per week. Prerequisite: ENGL 100 or equivalent with a grade of $C$ or higher. Study of selected topics in literature, focusing on representative literary texts. Content of course varies according to selected topic. Descriptions of the specific topics taught each semester will be listed in the Schedule of Classes. Lectures, discussion, related readings, and writing of critical papers. (May be taken four times for a maximum of 12 units.) (AA: Area E2a/Area E5c,)

265 Asian-American Literature (3) Three lecture hours per week. Prerequisite: ENGL 100 or equivalent with a grade of $C$ or higher. Survey of Asian-American writing of the 20th Century to acquaint students with the distinct literary and aesthetic qualities and the personal and cultural concerns, such as relocation and dislocation, of writers deriving from two cultures. Authors may include Chinese-, Japanese-, Filipino-, Korean-,
Vietnamese-, and Indian-Americans. Materials will be presented in a variety of genres. Lectures, readings, discussions, and critical essays. (AA: Area E2a/Area E5c, CSU: Area C2, UC: Area 3B)

271 Irish Literature: Mythology (1) Two lecture hours per week for eight weeks. Prerequisite: $E N G L 100$ or equivalent with a grade of $C$ or higher. Study of selected texts relating to Ireland's mythology and the role it has played in the reconstruction of the presentday Irish national identity. Lectures, discussions, readings, and writing projects. (AA: Area E2a/Area E5c, CSU: Area C2)
272 Irish Literature: Novel and Short Story (1.0) Two lecture hours per week for eight weeks. Prerequisite: ENGL 100 or equivalent with a grade of C or higher. Study of selected classic and modern novels and short stories written by Irish authors, relating to Irish times and interests. Lectures, discussions, readings, and writing projects. (AA: Area E2a/Area E5c, CSU: Area C2)
273 Irish Literature: Resistance Literature (1.0) Two lecture hours per week for eight weeks. Prerequisite: ENGL 100 or equivalent
with a grade of C or higher. Study of selected texts relating to Ireland's continued struggle for national independence from medieval times through the present. Lectures, discussions, readings, and writing projects. (AA: Area E2a/Area E5c, CSU: Area C2)

276 Irish Authors (1) Two lecture hours per week for eight weeks. Prerequisite: $E N G L$ 100 or equivalent with a grade of $C$ or higher. Study of texts related to one Irish author and the role this author has played in the construction of the present-day Irish national identity. Readings, lectures, discussions, and writing projects. (May be taken three times for a maximum of 3 units.)(AA: Area E2a/Area E5c, CSU)

277 Film and Literature (3) Three lecture hours and one lab hour per week. Prerequisite: ENGL 100 or equivalent with a grade of $C$ or higher. Comparative study of film and literature, emphasizing similarities and differences between the two artistic modes. Focus on film adaptations of novels, authors and directors, genres, international works, period pieces, etc. Topic varies with each semester offering. Lecture, screenings, discussion, quizzes, and critical papers. (May be taken three times for a maximum of 9 units.) (AA: Area E2a/Area E5c, CSU: Area C1, UC: Area 3A)

278 Introduction to Literary Criticism and Theory (3) Three lecture hours per week. Prerequisite: ENGL 100 or equivalent with a grade of $C$ or higher. Introduction to critical thought in relation to literature, focusing on major developments in the 20th century. This beginning course introduces student to influential critical approaches, seminal texts, and prominent figures of 20th century literary criticism. Reading, lecture, discussion, and writing of critical essays. (AA: Area E2a/Area E5c, CSU: Area C2)
430 Mythology and Folklore (3) Three lecture hours per week. Prerequisite: ENGL 100 or equivalent. Survey of major deities and heroes, recurring mythological themes, and relationships between people and deities, especially the Greek and Roman cultures. (AA: Area E2a/Area E5c, CSU: Area C2, UC: Area 3B)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

804 Twentieth-Century Literature (3) (Credit/No Credit grading.) Three lecture hours plus one hour by arrangement per week. 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, readings, and optional writing of critical papers. (AA)
809 Bible as Literature (3) (Credit/No Credit grading.) Three lecture hours per week. Study of selected texts from the Old and New Testaments and from the Apocrypha. Lectures, discussions, related readings, quizzes, and optional special project. (AA)

## 820 Introduction to World Literature

(3) (Credit/No Credit grading.) Three lecture hours plus one hour by arrangement per week. 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.
823 American Literature I (3) (Credit/ No Credit grading.) Three lecture hours per week. 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) (Credit/No Credit grading.) Three lecture hours per week. Study of American literature since Mark Twain. Lectures, readings, discussions, and writing of optional critical essays. (AA)
830 Mythology and Folklore (3) (Credit/ No Credit grading.) Three lecture hours plus one hour by arrangement per week. Survey of major deities and heroes, recurring mythological themes, and relationships between people and deities, especially in Greek and Roman cultures. Readings, discussions, and writing of optional critical essays. (AA)

835 Shakespeare (3) (Credit/No Credit grading.) Three lecture hours plus one hour by arrangement per week. 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) (Credit/No Credit grading.) Three lecture hours plus one hour by arrangement per week. 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) (Credit/No Credit grading.) Three lecture hours plus one hour by arrangement per week. Study of the typical works of major English writers of the 19th and 20th Centuries. Lectures, discussions, recorded readings. (AA)
856-9 Individual Authors (3) (Credit/No Credit grading.) Three lecture hours per week. Intensive study of the works of a single author or two or more related authors. Content of course will vary according to selected author(s). Descriptions of the specific author(s) taught each semester will be listed in the Schedule of Classes. Lectures, discussion, related readings, and writing of optional critical papers. (May be taken four times for a maximum of 12 units.) (AA)
860 African-American Literature (3) (Credit/No Credit grading.) Three lecture hours per week. Survey of African-American literature. Acquaints students with literary and aesthetic qualities of AfricanAmerican literature as well as personal and cultural concerns prevalent in the body of work, such as slavery, emancipation, race relations, civil rights, heritage, and identity. Material presented from a variety of genres. Lectures, discussions, analysis and writing of optional critical papers. (AA)
861-3 Topics in Literature (3) (Credit/No Credit grading.) Three lecture hours per week. Study of selected topics in literature, focusing on representative literary texts. Content of course varies according to selected topic. Descriptions of the specific topics taught each semester will be listed in the Schedule of Classes. Lectures, discussion, related readings, and writing of optional critical papers. (May be taken four times for a maximum of 12 units.) (AA)
865 Asian-American Literature (3) (Credit/No Credit grading.) Three lecture hours per week. Survey of Asian-American writing of the 20th Century to acquaint students with the distinct literary and aesthetic qualities and the personal and cultural concerns, such as relocation and dislocation, of writers deriving from two cultures. Authors may include Chinese-, Japanese-, Filipino-, Korean-, Vietnamese-, and Indian-Ameri-
cans. Materials will be presented in a variety of genres. Lectures, readings, discussions, and writing of optional critical essays. (AA)
871 Irish Literature: Mythology (1) (Credit/No Credit grading.) Two lecture hours per week for eight weeks. Study of selected texts relating to Ireland's mythology and the role it has played in the reconstruction of the present-day Irish national identity. Lectures, discussions, readings, and optional writing projects. (AA)

## 872 Irish Literature: Novel and Short

 Story (1) (Credit/No Credit grading.) Two lecture hours per week for eight weeks. Study of selected classic and modern novels and short stories written by Irish authors, relating to Irish times and interests. Lectures, discussions, readings, and optional writing projects. (AA)
## 873 Irish Literature: Resistance Litera-

 ture (1) (Credit/No Credit grading.) Two lecture hours per week for eight weeks. Study of selected texts relating to Ireland's continued struggle for national independence from medieval times through the present. Lectures, discussions, readings, and optional writing projects. (AA)876 Irish Authors (1) (Credit/No Credit grading.) Two lecture hours per week for eight weeks. Study of texts related to one Irish author and the role this author has played in the construction of the present-day Irish national identity. Readings, lectures, discussions, and writing projects. (May be taken three times for a maximum of 3 units.) (AA)
877 Film and Literature (3) (Credit/No Credit grading.) Three lecture hours and one lab hour per week. Comparative study of film and literature, emphasizing similarities and differences between the two artistic modes. Focus on film adaptations of novels, authors and directors, genres, international works, period pieces, etc. Topic varies with each semester offering. Lecture, screenings, discussions, quizzes, and short writing assignments. (May be taken four times for a maximum of 12 units.) (AA)

## 878 Introduction to Literary Criticism

 and Theory (3) (Credit/No Credit grading.) Three lecture hours per week. Introduction to critical thought in relation to literature, focusing on major developments in the 20th century. This beginning course introduces student to influential critical approaches, seminal texts, and prominent figures of 20th century literary criticism. Reading, lecture, discussion, and writing of optional critical essays. (AA)879 Selected Topics (1-3) (See first page of Description of Courses section.)
880 - 889 Selected Topics (1-3) (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) Five lecture hours plus one hour by arrangement per week. 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 120. 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 competency standards required for the AA/AS degree and for entrance into English 100 or $100 / 101$ or 838 or 848.) (AA: Area C2/Area E2a, CSU, UC)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

825 Writing for Non-Native Speakers I
(5) (Credit/No Credit grading.) Five lecture hours per week. 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 begin-ning-level grammar structures in exercises and writing assignments. (Units do not apply toward AA/AS degree.)
826 Writing for Non-Native Speakers II (5) (Credit/No Credit grading.) Five lecture hours per week. Recommended Preparation: Credit in ESL 825 (or 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. 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), models, expletives, contractions, special verbs, count/noncount nouns, plurals (regular/irregular), articles, pronouns, prepositions, adjectives, adverbs, correct word order, punctuation, and spelling. (Units do not apply toward AA/AS degree.)

827 Writing for Non-Native Speakers III (5) (Credit/No Credit or letter grade option.) Five lecture hours per week. Recommended Preparation: Credit 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) Five lecture hours per week. 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 Speakers I (3) (Credit/No Credit grading.) Three lecture hours plus one lab hour by arrangement per week. 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 for Non-Native Speakers II (3) (Credit/No Credit grading.) Three lecture hours plus one lab hour by arrangement per week. Recommended Preparation: ESL 845 with Credit (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 for Non-Native Speakers III (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Recommended Preparation: ESL 846 with Credit (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) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: Recommended Preparation: ESL 847 with Credit 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. (To increase competency, may be taken twice for a maximum of 6 units.) (Units do not apply toward AA/AS degree.)

849 Conversation Workshop (.5) (Credit/ No Credit grading.) (Open entry/Open Exit.) Twenty-four hours by arrangement per semester. For native speakers of languages other than English who want to improve their conversation skills. Includes individual appoinments 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.) (To increase competency, may be taken four times for a maximum of 2 units.) (Not Degree Applicable; Not Transferable.)

850 Writing Workshop (.5-3) (Credit/No Credit grading.) (Open Entry/Open Exit.) One and one-half to nine lab hours per week. 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.) (To increase competency, may be taken four times for a maximum of 12 units.) (Not Degree Applicable; Not Transferable.)

## 855 Reading for Non-Native Speakers I

(3) (Credit/No Credit grading.) Three lecture hours plus one lab hour by arrangement per week. 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. (To increase competency, 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) (Credit/No Credit grading.) Three lecture hours plus one lab hour by arrangement per week. Recommended Preparation: Credit in ESL 855 (or appropriate skill level indicated by the reading placement tests and other measures). It is recommended that students enroll concurrently in ESL 825 or higher course, ESL 845 or higher course, and READ 807. Designed to improve vocabulary, build general background knowledge, and strengthen literal and inferential reading skills. (To increase competency, may be taken twice for a maximum of 6 units.) (Units do not apply toward AA/AS degree.)
857 Reading for Non-Native Speakers III (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Recommended Preparation: Credit 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 825 or higher course and ESL 845 or higher course. Designed to emphasize higher-level vocabulary, focus on critical reading, increase basic reading speed, and introduce fiction. (To increase competency, may be taken twice for a maximum of 6 units.) (Units do not apply toward AA/AS degree.)

866 ESL Summer Writing Workshop I
(3.5) (Credit/No Credit or letter grade option.) Eight lecture hours per week for seven weeks. Recommended Preparation: ESL 825, 826, or 827 (or appropriate skill level indicated by placement tests and other measures). A maintenance and/or advancement course designed specifically for new and continuing ESL students. Practice in grammatical structures appropriate to these levels and academic writing from a connected series of simple sentences on topics of daily life to expository paragraphs based on class reading material. (To increase competency, may be taken three times for a maximum of 10.5 units.) (Units do not apply toward AA/AS degree.)

## 867 ESL Summer Writing Workshop II

(3.5) (Credit/No Credit or letter grade option.) Eight lecture hours per week for seven weeks. Recommended Preparation: ESL 828 or 400 (or appropriate skill level indicated by placement tests and other measures). A maintenance and/or advancement course designed specifically for new and continuing ESL students. Practice in academic writing from short informal pieces to formal expository essays based on the analysis of complex texts. (To increase competency, may be taken twice for a maximum of 7 units.) (Units do not apply toward AA/AS degree.)
879 Selected Topics (1-3) (See first page of Description of Courses section.)

880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## 891 Accent Reduction for Non-Native

 Speakers (3) (Credit/No Credit grading.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: SPCH 842 or ESL 846 or equivalent with Credit 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 Improve-

 ment for Non-Native Speakers (.5-3) (Credit/No Credit grading.) (Open entry/open exit.) One and one-half to nine lab hours per week. 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 1-3.Students may enroll in this self-paced course any time through the 13 th 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 (.5-1.5) (Credit/No Credit grading.) (Open entry/open exit.) One and onehalf to five lab hours per week. 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 1.5 units.) (Units do not apply toward AA/AS degree.)
## 897 Vocabulary for Non-Native Speak-

 ers of English II (.5-1.5) (Credit/No Credit grading.) (Open entry/open exit.) One and one-half to five lab hours per week. A selfpaced, 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 1.5 units.) (Units do not apply toward AA/AS degree.)
## 898 Comprehensive Grammar Review

 for Non-Native Speakers (3.0) (Credit/No Credit or letter grade option) Three lecture hours per week. 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 new and continuing ESL students. Review of grammatical 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 short compositions. Review of strategies for finding and correcting these errors in students' own writing. (Units do not apply toward AA/AS degree.)
## Ethnic Studies

101 Introduction to Ethnic Studies I (3)
Three lecture hours per week. 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 E1b/Area E5b, CSU: Area D/Area F3, UC: Area 4/Area 7C)
102 Introduction to Ethnic Studies II (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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 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 E1b/Area E5b, CSU: Area D/Area F3, UC: Area 4/Area 7C)

## 150 Social Dynamics of People of Color

(3) Three lecture hours per week. 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)

151 Patterns of Prejudice and Racism I (3) Three lecture hours per week. 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) Three lecture hours per week. 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. 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)

## 160 Psychology of People of Color (3)

(Credit/No Credit or letter grade option.) Three lecture hours per week. 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 theories that provide viable alternative methods of analyzing the ideational and behavioral mechanisms operative among Third World persons. Explores methods of treatment of the major mental illnesses affecting each culture. (AA: Area E5b, CSU: Area D/Area E, UC: Area 4)

## 161 Issues Facing People of Color in

 Contemporary American Society (2) (Credit/No Credit or letter grade option.) Four lecture hours per week for eight weeks. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollmentin READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Covers some major social issues confronting people of color in the United States. Recognizes differences and examines similarities among people of color. Introduces issues such as health, education, conflict, the family, prejudice, and criminal justice. (AA: Area E5b, CSU, UC)
261 African-American Culture I (3) Three lecture hours per week. 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. 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) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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. Also analyzes Hip Hop 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) Three lecture hours per week. 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 AfricanAmericans 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 C1, UC: Area 3A)
290 Law and the African-American Community (3) Three lecture hours per week. 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.
Nature and extent of crime among AfricanAmericans in the U.S. Seeks to understand crime, suggest methods of control, and predict criminality within the African-American community. Covers crimes against persons and property, conviction rates among African-Americans, and application of penal codes. (AA: Area E5b, CSU: Area D, UC: Area 4)

## 300 Introduction to La Raza Studies

(3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ concurrent enrollment in READ 400, 405, or 415 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)

## 351 The Primal Mind and Cultural Diver-

 sity (3) Three lecture hours per week. 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. 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) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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)

425 The History of Asian People in the United States (3) Three lecture hours per week. 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. Asian-American history from 1840 to the present, with special attention to the contemporary issues and problems prevalent in Asian-American communities. (AA: Area E5b, CSU: Area D, UC: Area 4)

430 Asian-American Communities in the United States (3) Three lecture hours per week. 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 communities in the United States. Includes community structure and social institutions; comparison of Asian-American community with other minorities and with the majority society. (AA: Area E5b, CSU: Area D, UC: Area 4)
440 Cultural Experience of Asian-American Writers (3) Three lecture hours per week. 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) Three lecture hours per week. 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. 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 C1, UC: Area 3A)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

879 Selected Topics (1-3) (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.)

## Film

100 Introduction to Film (3) (Credit/No Credit or letter grade option.) Three lecture hours and one lab hour per week. 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 C1, UC: Area 3A)
101-106 Film Studies Focus (1) (Credit/ No Credit grading.) Total of sixteen lecture hours per one-unit module. Recommended Preparation: ENGL 848. Introduction to specific film history topics, such as directors, genres, periods, and cultural issues. Offered in self-contained, one-unit modules. Descriptions of the specific modules offered each semester will be printed in the Schedule of Classes. Lectures, screenings, discussions, quizzes, and writing of critical papers. (Each one-unit module may be taken twice for a total of 2 units.) (AA: Area E5c, CSU)
110 American Cinema (3) (Telecourse) Recommended Preparation: ENGL 848.
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: C1)

## 120 History of Film I (3) (Credit/No

 Credit or letter grade option.) Three lecture hours and one lab hour per week. 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 C1, UC: Area 3A)121 History of Film II (3) (Credit/No Credit or letter grade option.) Three lecture hours and one lab hour per week. 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 C1, UC: Area 3A)

153 Screenwriting (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 100. 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. (To increase competency, may be taken twice for a maximum of 6 units.) (AA, CSU: Area C2)
155 Narrative Digital Filmmaking (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: MULT 181 or equivalent. Introduces students to the narrative possibilities of digital film production. Students will gain a critical appreciation of the history and theory of narrative digital filmmaking, and will engage in various exercises and projects designed to develop skills of character exposition and storytelling. (May be taken two times for a maximum of 6 units.) (AA, CSU)

## 160 Documentary Digital Filmmaking

(3) (Credit/No Credit or letter grade option.) Three lecture hours per week Recommended Preparation: MULT 181 or equivalent. Introduction to the history and practice of documentary filmmaking in the digital age. Provides an historical overview of traditional and digital documentary film and then concentrates on student productions. Through lectures, screenings, and hands-on exercises, students develop a critical appreciation of the documentary form and gain skills in digital documentary practice. (May be taken twice for a maximum of 6 units.) (AA, CSU: Area C1, UC: Area 3A)
200 Advanced Film Study (3) (Credit/No Credit or letter grade option.) Three lecture hours and one lab hour per week. Prerequisite: FILM 100, 110, 120, or 121 or equivalent. Further study of the art and history of film. May emphasize one or more of the following topics: 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 C1, UC: Area 3A)

277 Film and Literature (3) Three lecture hours and one lab hour per week. Prerequisite: FILM 100, 110, 120, or 121 or equivalent with Credit or a grade of $C$ or higher. Comparative study of film and literature, emphasizing similarities and differences between the two artistic modes. Focus on film adaptations of novels, authors and directors, genres, international works, period pieces, etc. Topic varies with each semester offering. Lectures, screenings, discussions, quizzes, and writing of critical papers. (May be taken three times for a maximum of 9 units.) (AA, CSU: Area C1, UC: Area 3A)

680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
800 Advanced Film Study (3) (Credit/No Credit grading.) Three lecture hours per week and one lab hour per week. Further study of the art and history of film. Course topic varies from semester to semester and may emphasize one or more of the following: genres, directors, stars, gender, race, national cinemas, or new technologies. Lectures, screenings, readings, discussions and writing of optional critical essays. (May be taken four times for a maximum of 12 units.) (AA)

877 Film and Literature (3) (Credit/No Credit grading.) Three lecture hours and one lab hour per week. Comparative study of film and literature, emphasizing similarities and differences between the two artistic modes. Focus on film adaptations of novels, authors and directors, genres, international works, period pieces, etc. Topic varies with each semester offering. Lectures, screenings, discussions, quizzes, and short written assignments. (May be taken four times for a maximum of 12 units.)
879 Selected Topics (1-3) (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.)

## Fire Technology

641 Cooperative Education (1-4) (See first page of Description of Courses section.) (CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
705 Fire Hydraulics (3) Three lecture hours per week. 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)
714 Wildland Fire Control (3) Three lecture hours per week. 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) Three lecture hours per week. 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) Three lecture hours per week. Provides fundamental information regarding the history and philosophy of fire protection; organization and operation of a fire prevention bureau; use of fire 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) Three lecture hours per week. 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) Three lecture hours per week. 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) Three lecture hours per week. 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, preplanning 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) Three lecture hours per week. 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)783 Firefighter I Academy (9) Eight lecture and nine lab hours per week. Prerequisite: six units of Fire Technology coursework (excluding EMT) with a grade of C or higher. Designed for pre-service instruction in basic fire fighting knowledge and skills. Lecture and manipulative instruction in all areas of responsibility for a fire fighter. (Certificate of completion will be issued by the Fire Technology Department.) (AA)

## 787 Emergency Medical Technician 1

 Basic: Recent Advances (.5-1.5) (Credit/ No Credit grading.) (Open entry/open exit) Eight to twenty-four lecture hours per semester. Prerequisite: possession of a valid EMT-1 Certificate. Refresher course in preparation for EMT-1 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)
(Credit/No Credit grading.) Total of one hundred sixty lecture and four hundred forty-four lab hours. Prerequisite: sponsorship by a fire service agency as a professional firefighter. Inservice 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) Eleven lecture and six lab hours per week for four weeks. 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)
795 Emergency Medical Technician Basic (7) Six lecture and four lab hours per week. 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. Non-refundable testing/materials fee required. (May be taken twice for a maximum of 14 units.) (AA)

800 Fire Service Entrance Test Preparation (3) Three lecture hours per week. 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)
880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## Fire TechnologyPublic 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 fouryear institution are strongly advised to study a foreign language at CSM. See information on Foreign Language Certificates of Completion 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 110 (often offered as 111 and 112), 120 (often offered as 121 and 122), 130 (often offered as 131 and 132), and 140. 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 112 class. If you have completed one year, consider 120. 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 $801,802,803$, etc. The first class is for those with little or no knowledge of the language.

## French

## 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, French courses must be taken for letter grade.

## 110 Elementary French (5) (Credit/No

 Credit or letter grade option.) Five lecture hours plus two lab hours by arrangement per week. Recommended Preparation: eligibility for 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 other activities. Work done by arrangement includes audio, video/DVD, and computerized resources to improve proficiency. (AA: Area E5c, CSU: Are C2, UC)111 Elementary French I (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. 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, and computerized resources to improve proficiency. (Covers approximately the first half of the semester's work in French 110.) (AA: Area E5c, CSU: Are C2, UC*)
112 Elementary French II (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: FREN 111 or equivalent with Credit 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 111 and 112 are equivalent to French 110.) (AA: Area E5c, CSU: Are C2, UC*)
115 Beginning French I (3) (Telecourse) (Credit/No Credit or letter grade option.) 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 111 but without the oral component. (AA: Area E5c, CSU: Are C2)
116 Beginning French II (3) (Telecourse) (Credit/No Credit or letter grade option.) Prerequisite: FREN 115 or equivalent with Credit 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 112 but without the oral component. (AA: Area E5c, CSU: Are C2)

117 Advanced Beginning French I (3) (Telecourse) (Credit/No Credit or letter grade option.) Prerequisite: FREN 116 or equivalent with Credit or a grade of C or higher. 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 121 but without the oral component. (AA: Area E5c, CSU: Are C2, UC)

118 Advanced Beginning French II (3) (Telecourse) (Credit/No Credit or letter grade option.) Prerequisite: FREN 117 or equivalent with Credit 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 122 but without the oral component. (AA: Area E5c, CSU)
120 Advanced Elementary French (5) (Credit/No Credit or letter grade option.) Five lecture hours plus two lab hours by arrangement per week. Prerequisite: FREN 110 or 112 or equivalent with Credit 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: Are C2, UC: Area $6^{*}$ )
121 Advanced Elementary French I (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: FREN 110 or 112 or equivalent with Credit 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: Are C2, UC*)

122 Advanced Elementary French II (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: FREN 121 or equivalent with Credit 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 121 and 122 are equivalent to French 120.) (AA: Area E5c, CSU: Are C2, UC: Area $6^{*}$ )
130 Intermediate French (5) (Credit/No Credit or letter grade option.) Five lecture hours plus one lab hour by arrangement per week. Prerequisite: FREN 120 or 122 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: Are C2, UC: Area 3B/Area 6)
131 Intermediate French I (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one-half lab hour by arrangement per week. Prerequisite: FREN 120 or 122 or equivalent with a grade of $C$ or higher. Covers approximately the first half of the semester's work in French 130. (AA: Area E5c, CSU: Are C2, UC: Area 3B/Area $6^{*}$ )
132 Intermediate French II (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one-half lab hour by arrangement per week. Prerequisite: FREN 131 or equivalent with a grade of C or higher. Covers approximately the second half of the semester's work in French 130. (French 131 and French 132 are equivalent to French 130.) (AA: Area E5c, CSU: Are C2, UC: Area 3B/Area 6*)
140 Advanced Intermediate French (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Prerequisite: FREN 130 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 gram-
mar and vocabulary. Conducted largely in French. (AA: Area E5c, CSU: Are C2, UC: Area 3B/Area 6)
203 French Literature in Translation (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Reading and discussion of French and French-language literature chosen from such forms as novels, short stories, memoirs, plays, and other writings, presented in the context of French and Francophone history and culture, with emphasis on recent works. Readings will change from one semester to the next. (May be taken twice for a total of 6 units.) (AA: Area E5c, CSU: Are C2, UC: Area 3B*)
680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
801 Conversational French I, Elementary (2) (Credit/No Credit grading.) Three lecture hours per week. 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.)
802 Conversational French II, Advanced Elementary (2) (Credit/No Credit grading.) Three lecture hours per week. Prerequisite: FREN 801 or equivalent with Credit. A practical course in French language and Francophone cultures approached through the spoken language, on a more advanced level than French 801. 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.)
803 Conversational French III, Intermediate (2) (Credit/No Credit grading.) Three lecture hours per week. Prerequisite: FREN 802 or equivalent with Credit. 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.)

804 Conversational French IV, Advanced Intermediate (2) (Credit/No Credit grading.) Three lecture hours per week. Prerequisite: FREN 803 or equivalent with Credit. 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.)
810 Basic French Communication (.5) (Credit/No Credit grading.) Two lecture hours per week for four weeks. Introduction to the basics of communicating in French and to the cultural expectations of French speakers in business and tourism relationships. Designed to help those with little or no knowledge of French culture communicate successfully via words and culturally appropriate actions.
880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## Geography

100 Physical Geography (3) (Credit/No Credit or letter grade option.) Three lecture hours per week plus field trips. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Basic characteristics of physical features of the Earth and their interrelationships. The basic characteristics of maps, the Earth's grid, seasons, time zones, weather and climate, vegetation biomes, ocean currents, and landforms. The interrelationship of these basic features are analyzed in a global framework with an emphasis on human ecology. (Satisfies the General Education requirement for Physical Science.) (AA: Area E5a, CSU: Area B1, UC: Area 5A) (CAN GEOG 2)
110 Cultural Geography (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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. Aerial distribution of the most important parts of human culture. Emphasizes the way people make a living resulting from their interaction with their environment in various parts of the world. (Satisfies Social Science requirement.) (AA: Area E5b, CSU: Area D, UC: Area 4) (CAN GEOG 4)

## 150 World Regional Geography (3)

(Credit/No Credit or letter grade option.) Three lecture hours per week. 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 geographic regions of the world, including physical and cultural features of each region. Emphasizes global influences and population growth. Covers location of important geographic features, such as major cities, mountain ranges, climatic regions, and internal political divisions within each world region. (AA: Area E5b, CSU: Area D, UC: Area 4)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## Geology

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.
100 Survey of Geology (3) Three lecture hours plus one hour by arrangement per week. Not open to students who have taken or are taking GEOL 210. Earthquakes, volcanoes, drifting continents, and plate tectonics; earth materials and processes that shape the land. One or more field trips may be required. (AA: Area E5a, CSU: Area B1, UC: Area 5A*)
101 Geology Laboratory (1) Three lab hours plus one hour by arrangement per week. Prerequisite: completion of or concurrent enrollment in GEOL 100. Optional introductory geology laboratory course designed to be taken concurrently with or following GEOL 100. 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 B1/Area B3, UC: Area 5A*)
118 Natural Disasters (3) Three lecture hours plus one hour by arrangement per week. Study of the natural processes that have disastrous effects on human populations. Topics include earthquakes, volcanic eruptions, tsunamis, floods, hurricanes, torna-
does, landslides, and fires. Explores the basic physical causes of these events, discusses the consequences, and critically reviews prediction/prevention methods. One Saturday field trip may be required. (AA: Area E5a, CSU, UC: Area 5A)

125 History of Life (4) Three lecture and three lab hours plus one hour by arrangement per week. Study of the history of life on Earth from its origins 3.8 billion year ago to the present day. Examines the rock and fossil records that provide clues to the evolution, behavior, and extinction of past life forms and the changes in land distribution, climate, and environment through time. Includes two half-day field trips. (AA: Area E5a, CSU: Area B1, UC: Area 5A)
210 General Geology (4) Three lecture and three lab hours plus one hour by arrangement per week. The work of wind, water, gravity, and glaciers; earthquakes, the earth's interior, drifting continents, and 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 B1, UC: Area 5A*) (CAN GEOL 2)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## German

## 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, German courses must be taken for letter grade.
110 Elementary German (5) (Credit/No Credit or letter grade option.) Five lecture hours plus two lab hours by arrangement per week. Recommended Preparation: eligibility for ENGL 848 or a higher English course. Introduction to the German language and culture with emphasis on practical vocabulary, basic sentence structures, and clear pronun-
ciation. 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)
111 Elementary German I (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Covers approximately the first half of the semester's work in German 110. Recommended for those students without any background in foreign language study. (AA: Area E5c, CSU: Area C2, UC*)
112 Elementary German II (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: GERM 111 or equivalent with Credit 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, smallgroup and paired activities, and other exercises. Covers approximately the second half of the semester's work in German 110. (German 111 and 112 are equivalent to German 110.) (AA: Area E5c, CSU: Area C2, UC*)

120 Advanced Elementary German (5) (Credit/No Credit or letter grade option.) Five lecture hours plus two lab hours by arrangement per week. Prerequisite: GERM 110 or 112 or equivalent with Credit or a grade of C or higher. Continuation of work begun in German 110 with further practice in listening, speaking, reading, and writing. (AA: Area E5c, CSU: Area C2, UC: Area 6)

## 121 Advanced Elementary German I (3)

(Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: GERM 110 or 112 or equivalent with Credit 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 120. (AA: Area E5c, CSU: Area C2, UC*)

## 122 Advanced Elementary German II

(3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: GERM 121 or equivalent with Credit or a grade of C or bigher. 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 120. (German 121 and 122 are equivalent to German 120.) (AA: Area E5c, CSU: Area C2, UC: Area $6^{*}$ )

130 Intermediate German (5) (Credit/No Credit or letter grade option.) Five lecture hours plus one lab hour by arrangement per week. Prerequisite: GERM 120 or 122 or equivalent with Credit 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)

131 Intermediate German I (3) (Credit/ No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: GERM 120 or 122 or equivalent with Credit or a grade of $C$ or higher. Covers the first part of German 130, the level following German 120 or 122. Study of the German language and culture of Ger-man-speaking 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) (Credit/ No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: GERM 131 or equivalent with Credit or a grade of C or higher. Covers approximately the second half of the semester's work in German 130. (German 131 and 132 are equivalent to German 130.) (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 6*)

140 Advanced Intermediate German (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Prerequisite: GERM 130 or 132 or equivalent with Credit 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 (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
801 Conversational German I, Elementary (2) (Credit/No Credit grading.) Three lecture hours per week. 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) (Credit/No Credit grading.) Three lecture hours per week. Prerequisite: GERM 801 or equivalent with Credit. Further work in conversation following the model of German 801. (This course will not fulfill the language requirement at California State Universities or at the University of California.) (AA)803 Conversational German III, Intermediate (2) (Credit/No Credit grading.) Three lecture hours per week. Prerequisite: GERM 802 or equivalent with Credit. 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) (Credit/No Credit grading.) Three lecture hours per week. Prerequisite: GERM 803 or equivalent with Credit. 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)

810 Basic German Communication (.5) (Credit/No Credit grading.) Two lecture hours per week for four weeks. Introduction to the basics of communicating in German and to the cultural expectations of German speakers in business and tourism relationships. Designed to help those with little or no knowledge of German culture communicate successfully via words and culturally appropriate actions. (AA)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.)

## Graphics

115 Designing with Type I: Essentials of Typographic Expression (3) (Credit/No Credit or letter grade option.) Three lecture and one lab hour plus two hours by arrangement per week. Prerequisite: Any ONE of the following: GRA 100, 105, 107, 150, 170 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)
116 Designing with Type II: Delivering the Message Effectively (3) (Credit/No Credit or letter grade option.) Three lecture and one lab hour plus two hours by arrangement per week. Prerequisite: GRA 105, 107, 115, 170 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) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus two hours by arrangement per week. Prerequisite: Any ONE of the following: GRA 100, 150 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)
140 Adobe Acrobat (1.5) (Credit/No Credit or letter grade option.) Three lecture and one lab hour plus two hours by arrangement per week for eight weeks. Prerequisite: MULT 113 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)
150 Adobe Illustrator for Print and Web Design I (3) (Credit/No Credit or letter grade option.) Three lecture and one lab hour plus two hours by arrangement per week. Prerequisite: MULT 113 or equivalent Macintosh andlor 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, 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.

| New GRA | New Course Title | New <br> Units | Old <br> 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 | 3.0 | $\begin{aligned} & 130 \\ & 131 \end{aligned}$ | 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 <br> Adobe Illustrator II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 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 | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 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 |

161 Adobe Photoshop for Print and Web Design II (3) (Credit/No Credit or letter grade option.) Three lecture and one lab hour plus two hours by arrangement per week. Prerequisite: GRA 160 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)

170 Adobe InDesign (3) (Credit/No Credit or letter grade option.) Three lecture and one lab hour plus two hours by arrangement per week. Prerequisite: MULT 113 or equivalent Macintosh andlor 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) Two lecture and two lab hours plus two hours by arrangement per week. Prerequisite: GRA 108 and 131 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) (Credit/No Credit or letter grade option.) Three lecture and three lab hours plus two hours by arrangement per week. 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) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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) (Credit/No Credit or letter grade option.) Two lecture and four lab hours plus two hours by arrangement per week. Prerequisite: GRA 150, 160, 170 or equivalent. Creating print-ready 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 (1) One lecture and one lab hour plus two hours by arrangement per week. 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)

641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)

680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Health Science

Two units of Health Science required for A.A./A.S. Degree. Health Science 100 or two units of Health Science 101-125 will satisfy the A.A./A.S. Degree requirement.
100 General Health Science (2) Two lecture hours per week. 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*)
101 Heredity and Birth Defects (1) Two lecture hours per week for eight weeks. Study of the principles of human genetics, cell division, and prenatal development. Emphasizes the causes, prevention, and treatment of the most common hereditary and envi-ronment-induced birth defects. (AA: Area E3, CSU: Area E)

102 Human Reproduction (1) Two lecture hours per week for eight weeks.
Emphasizes the biological aspects of human reproduction and birth control. Also covers new fertilization techniques, population dynamics, predetermination of sex, and related topics. (AA: Area E3, CSU: Area E)
103 Drugs: Use and Abuse (1) Two lecture hours per week for eight weeks. Study of the general categories of drugs; discussion of beneficial and harmful effects that selected drugs have upon the individual and society. (AA: Area E3, CSU: Area E)

105 Communicable Disease (1) Two lecture hours per week for eight weeks. Study of the immune system and other defenses against infectious organisms. Emphasizes prevention and treatment of our most serious communicable disorders, with special consideration of AIDS and other sexually transmitted diseases. (AA: Area E3, CSU: Area E)

106 Emotional Health (1) Two lecture hours per week for eight weeks. Study of human needs and personality development. Includes discussions of emotional disorders and their causes but emphasizes positive approaches to developing and maintaining emotional stability. (AA: Area E3, CSU: Area E)

109 Environmental Health (1) Two lecture hours per week for eight weeks. Principles of ecology and critical appraisal of people's effect on the environment. Discussion of many types of environmental hazards and pollutants, emphasizing their effect on human health. (AA: Area E3, CSU: Area E)

111 Heart Disease and Cancer (1) Two lecture hours per week for eight weeks. Study of the two leading causes of death in the U.S. today, emphasizing prevention. Also covers causes, symptoms and warning signs, detection, and treatment. (AA: Area E3, CSU: Area E)

112 Current Health Issues (1) Two lecture hours per week for eight weeks. 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 (1)
Two lecture hours per week for eight weeks. 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. 113.) (AA: Area E3, CSU: Area E)

114 Fitness (1) Two lecture hours per week for eight weeks. 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. 114.) (AA: Area E3, CSU: Area E)

119 Exercise and the Aging Process (3)
Three lecture hours per week. Integrates exercise physiology and the effects of true aging 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. 119.) (AA, CSU)

125 Principles of Exercise Physiology (3) Three lecture hours per week. 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. 125.) (AA, CSU)

641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.)

## History

(Also see Humanities)
100 History of Western Civilization I (3) Three lecture hours per week. 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 E1a/Area E5b, CSU: Area D, UC: Area 3B) (CAN HIST 2) (HIST 100 and $101=$ CAN HIST SEQ A)

101 History of Western Civilization II (3)
Three lecture hours per week. 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 E1a/Area E5b, CSU: Area D, UC: Area 3B) (CAN HIST 4) (HIST 100 and $101=$ CAN HIST SEQ A)
102 History of American Civilization (3) Three lecture hours per week. 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 19th 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 E1a/Area E5b, CSU: Area D/Area F1, UC: Area 3B/Area 7A*)
104 World Civilizations I (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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 origins, development, and interactions of world civilizations to the early modern era. Comparative analysis of cultural, economic, geographic, political, religious, and social forces of world civilizations. Includes topics related to Asia/Pacific Islands, Americas, Africa, Europe, and Middle East. Engages students in the basic elements of historical thinking and analysis. (AA: Area E5b, CSU: Area C2/Area D, UC: Area 3B/Area 4)

106 World Civilization II (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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. Interactions of world civilizations from the early modern era to the present. Comparative analysis of cultural, economic, geographic, political, reigious, and social forces of world civilizations. Includes topics related to Asia/Pacific Islands, the Americas, Africa, Europe, and the Middle East. Engages students in the basic elements of historical thinking and analysis. (AA: Area E5b, CSU: Area C2/Area D, UC: Area 3B/Area 4)
110 History of England (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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. Surveys the more important political , constitutional, economic, social, and cultural phases of the history of the English people. (AA: Area E5b, CSU: Area D, UC: Area 4)

201 United States History I (3) Three lecture hours per week. 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 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 E1a/Area E5b, CSU: Area D/Area F1, UC: Area 4/Area 7A*) (CAN HIST 8) (HIST 201 and 202 = CAN HIST SEQ B)
202 United States History II (3) Three lecture hours per week. 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. Continues the work of History 201; explores the Reconstruction period,
industrial expansion, social, Constitutional, and economic development, and the foreign policies of the U.S. to the present. (AA: Area E1a/Area E5b, CSU: Area D/Area F1, UC: Area 4/Area 7A*) (CAN HIST 10) (HIST 201 and 202 = CAN HIST SEQ B)

242 The African-American in U.S. History (3) Three lecture hours per week. Recommended Preparation: HIST 201 and eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Social, economic, and political facts as they relate to the African-American. Analyzes race relations, with special emphasis on the history of the African-American. (AA: Area E1a/Area E5b, CSU: Area D/Area F1, UC: Area 4/Area 7A)
260 Women in American History (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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 E1a/Area E5b, CSU: Area D/Area F1, UC: Area 4/Area 7A)
270 Civil War and Reconstruction (3) Three lecture hours per week. Recommended Preparation: HIST 201 or 202 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. Survey and analysis of the political, social, and economic problems of the North and South during the antebellum, Civil War, and Reconstruction eras. (AA: Area E1a/Area E5b, CSU: Area D, UC: Area 4)
310 California History (3) Three lecture hours per week. 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 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 E1a/Area E5b, CSU: Area D/Area F3, UC: Area 4/Area 7C)
315 History of San Mateo County (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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; mis-sion-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 E1a/Area E5b, CSU: Area D)

## 350 History of the American West (3)

Three lecture hours per week. 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, community-building, Indian problems, and the character and image of the West and Westerners. (AA: Area E1a/Area E5b, CSU: Area D, UC: Area 4)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Horticulture

311 Plant Materials I: Trees (3) (Credit/ No Credit or letter grade option.) Two lecture and three lab hours plus one hour by arrangement per week. 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) (Credit/No Credit or letter grade option.) Two lecture and three lab hours plus one hour by arrangement per week. 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) (Credit/ No Credit or letter grade option.) Two lecture and three lab hours per week (day class) or three lecture and two hours by arrangement per week (evening class). Culture and maintenance of turf areas, ground covers, annuals, perennials, shrubs and trees. Landscape water management. Operation of landscape maintenance equipment. (AA, CSU)

320 Introductory Plant Science. (3) (Credit/No Credit or letter grade option.) Two lecture and three lab hours per week. Introduction to scientific principles of higher plant structure, function, and reproduction to serve as a basis for further practical work in the field of horticulture. (AA, CSU)

325 Interior Plantscape (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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 offices, hotels, and shopping centers. (AA, CSU)

326 Growing Orchids (1) (Credit/No Credit or letter grade option.) Three lecture hours per week for six weeks. 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 and floral design industries. Field trips to outstanding orchid growers' greenhouses. (AA, CSU)
327 Nursery Management (3) (Credit/No Credit or letter grade option.) Two lecture and three lab hours per week. 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) (Credit/No Credit or letter grade option.) Two lecture and three lab hours plus one hour by arrangement per week (day class) or three lecture and two hours by arrangement per week (evening class). 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) (Credit/ No Credit or letter grade option.) Two lecture and three lab hours per week (day class) or three lecture and two hours by arrangement per week (evening class). 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) (Credit/No Credit or letter grade option.) Two lecture and three lab hours plus three hours by arrangement per week. 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) (Credit/No Credit or letter grade option.) One lecture and two lab hours plus one hour by arrangement per week. 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)
401 Floral Arranging II (1.5) (Credit/No Credit or letter grade option.) One lecture and two lab hours plus one hour by arrangement per week. Prerequisite: HORT 400 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) (Credit/No Credit or letter grade option.) One lecture and two lab hours per week for eight weeks. 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 1 units.) (AA, CSU)
405 Flowers to Wear and Carry II (.5) (Credit/No Credit or letter grade option.) One lecture and two lab hours per week for eight weeks. 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. Emphasizes the study of the history, uses, and construction methods of the hand-held nosegay and Hawaiian lei. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 1 unit.) (AA, CSU)

415 Retail Floristry Management (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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 (1.5)
(Credit/No Credit or letter grade option.) One lecture hour and two lab hours per week. Prerequisite: HORT 401 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 (1.5)

(Credit/No Credit or letter grade option.) One lecture and two lab hours per week. Prerequisite: HORT 401 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)
421 Contemporary Ikebana (1.5) (Credit/No Credit or letter grade option.) One lecture and two lab hours per week. Study of Japanese flower arranging, its history, philosophy, method and practice. Covers three schools of Ikebana (Ikenobo, Ohara, and Sogetsu) and includes work toward a certificate from the Sogetsu School. 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 (0.5) (Credit/No Credit or letter grade option.) Two lecture and four lab hours per week for four weeks. 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 (1)
(Credit/No Credit or letter grade option.) Two lecture hours per week for eight weeks. 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 (1.5)
(Credit/No Credit or letter grade option.) One lecture and two lab hours per week. 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 (1.5) (Credit/No Credit or letter grade option.) One lecture and two lab hours plus one hour by arrangement per week. Prerequisite: HORT 400 Study of the commercial methods of flower arranging used to develop original 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)
(Credit/No Credit or letter grade option.) One lecture and two lab hours plus one hour by arrangement per week for eight weeks. Visual merchandising and display for retail florists. In-depth study of the purpose of display and rules of effective visual 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 1 unit.) (AA, CSU)
429 Corporate Accounts and Tropical Designs (.5) (Credit/No Credit or letter grade option.) One lecture and two lab hours plus one hour by arrangement per week for eight weeks. Recommended Preparation: HORT 401 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 amount shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 1 unit.) (AA, CSU)
641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

705 Soils and Plant Growing (3) (Credit/ No Credit or letter grade option.) Three lecture hours per week. Fundamental principles of soils, soil management, fertility, and plant nutrition. Soil types, origins, characteristics, and biological relationships. Commercial and natural fertilizers; soil conditioners; growing media; crop rotation; and watering. (AA, CSU)
706 Plant Propagation (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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) (Cred$i t /$ No Credit or letter grade option.) Three lecture hours per week. Introduction to principles of residential landscaping, emphasizing fundamental design and construction. (AA, CSU)
711 Landscape Trees (3) (Credit/No Credit or letter grade option.) Three lecture hours plus two hours by arrangement per week. 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) (Credit/No Credit or letter grade option.) Three lecture hours plus two hours by arrangement per week. Study of shrubs, ground covers, and vines commonly used in California. (AA, CSU)
742 Greenhouse Management (3) (Credit/ No Credit or letter grade option.) Three lecture hours per week. Propagation and culture of roses, carnations, chrysanthemums, orchids, potted plants, and other greenhouse crops. Pest and disease control. (AA, CSU)
777 Pest Control I (2) (Credit/No Credit or letter grade option.) Two lecture hours and one lab hour per week. History and development of ornamental plant pesticides and biological controls. Emphasizes integrated pest management, especially San Francisco Bay Area pests and their control. Demonstrates testing and application equipment. Includes insect and related pests, their anatomy, growth, life cycles and classification. Preparation for State Applicator's License. (AA, CSU)

778 Pest Control II (2) (Credit/No Credit or letter grade option.) Two lecture hours and one lab hour per week. Study of the biological (bacterial, fungal and viral) and abiotic (temperature, light, soil, water and air) causes of plant diseases. Study of the common weeds and vertebrate pests in ornamental gardens. Reviews controls, with an emphasis on Integrated Pest Management, including cultural, biological, and chemical. (AA, CSU)

803 Plant Disease (1) (Credit/No Credit or letter grade option.) Three lecture hours per week for six weeks. Common diseases and abiotic ailments of ornamental plants grown in California. Includes the nature of the disease process; life cycle of pathogens; and integrated pest management of plant diseases, including biological, cultural and, when appropriate, chemical controls. (Units do not apply toward AA/AS degree.)
879 Selected Topics (1-3) (See first page of Description of Courses section.)

880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## Humanities

(Also see History and Philosophy)
101 Introduction to Humanities: Greece through Reformation (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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)

102 Introduction to Humanities: Reformation to Present (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or bigher $O R$ 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)

111 Religion, Literature, and Philosophy in Ancient Greece (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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)

## 112 Art and Architecture - Late Roman

 Empire to Renaissance (3) Three lecture hours per week. 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 development of art and architecture from the early centuries to the end of the Middle Ages. The rise of Christianity, church vs. state, Medievalism, the Renaissance, and Counter-Reformation. (AA: Area E5c, CSU: Area C2, UC: Area 3B)114 Film and Literature as Communication in the Modern Era (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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. 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 C1/Area C2, UC: Area 3B)

125 Technology/Contemporary Society/ Human Values (3) Three lecture hours per week. 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. 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)
127 Science and Art I: Prehistory to Renaissance (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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. Changing ideas of nature and the cosmos, from prehistory to the age of Newton. Development of scientific concepts of nature and their effect on man's perceptions of the world, as reflected in changing styles of art, music, literature, and philosophy. Social and cultural values that influenced and were influenced by scientific and artistic events of the time. (Completion of HUM. 127 and 128 satisfies three units of Physical Science and three units of Humanities credit for the AA/AS degree. Either course taken alone satisfies three units of Humanities credit only.) (AA: Area E5a/Area E5c, CSU: Area B1/Area C1/Area C2, UC: Area 3B)

128 Science and Art II: Renaissance to 20th Century (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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. Changing ideas of nature and the cosmos, from the Scientific Revolution to the 20th Century. Development of scientific concepts of nature and their effect on man's perceptions of the world, as reflected in changing styles of art, music, literature, and philosophy. Social and cultural values that influenced and were influenced by scientific and artistic events of the time. (Completion of HUM. 127 and 128 satisfies three units of Physical Science and three units of Humanities credit for the AA/AS degree. Either course taken alone satisfies three units of Humanities credit only.) (AA: Area E5a/Area E5c, CSU:
Area B1/Area C1/Area C2, UC: Area 3B)

131 Cultural Achievements of AfricanAmericans (3) Three lecture hours per week. 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) Three lecture hours per week. 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)

## 136 Creative Women in Modern Times

(3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Explores the works and projects created by women in the Western world from the Renaissance to the present, including the achievements of women in statecraft, philosophy, the visual arts, music, photography, and filmmaking, especially in the 19th and 20th Centuries. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

140 Cultural Heritage of San Francisco and Its Environs (3) Three lecture hours per week. 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 20th Century. (AA: Area E5c, CSU: Area C2)

675 Honors Colloquium in Western Civilization I (1) One lecture hour per week. 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 (1) One lecture hour per week. 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)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
879 Selected Topics (1-3) (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.)

## Human Services

100 Introduction to Human Services
(3) Three lecture hours per week. 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 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 Human Services workers. (AA: Area E5b/Area E5d, CSU)

110 Introduction to Counseling and Interviewing (3) Three lecture hours per week. 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 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 Management (3) Three lecture hours per week. 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 course to familiarize students with the basic concepts and skills of case management. 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)

## 120 Public Assistance and Benefits

Programs (1) Eight lecture hours per week for two weeks. 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. Overview and examination of benefits awarded under state and federal assistance programs. Analyzes and evaluates TANF (Temporary Aid to Need Families), SSI and SSDI (Social Security Insurance), 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, determination, and duration. (AA: Area E5b)

130 Employment Support Strategies (1-3) One to three lecture hours per week. 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. 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, strength identification, motivation, removing barriers to employment, community training and employment resources, job search and match, job coaching, and support planning. Maybe taken up to four times for no more than 6 units. (AA: Area E5b, CSU)
131 Job Development (3) Three lecture hours per week. 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 values, theory, skills, and practices used by job developers to facilitate successful job placement for persons in need of employment. Covers the values and principles of job development, marketing, developing partnerships with employers, presentation skills, career counseling, vocational assessment, job match, job placement, and job retention. Designed for paraprofessionals currently working in Hu man Service agencies and students preparing for careers in Human Services. (AA: Area E5b, CSU)

150 Rehabilitation and Recovery (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or bigher 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)

151 Current Trends and Issues in Psychosocial Rehabilitation (1-3) One to three lecture hours per week. 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 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 student preparing for careers in Human Services. May be taken up to four times for no more than 6 units. (AA: Area E5b, CSU)

## 262 Empowerment Skills for Family

 Workers (3) Three lecture hours per week. 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) Three lecture hours per week. 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 skills-based course designed to prepare human services students and workers to provide support services 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)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (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 (1-3) (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.
110 Elementary Italian (5) (Credit/No Credit or letter grade option.) Five lecture hours plus two lab hours by arrangement per week. Introduction to the language for beginners: basic grammar and vocabulary, conversation, reading, and writing. Presents cultural material in short readings. (AA: Area E5c, CSU: Area C2, CSU)
111 Elementary Italian I (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. 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, CSU*)

112 Elementary Italian II (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: ITAL 111 or equivalent with Credit or a grade of $C$ or higher. Continuation of ITAL 111. 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, CSU*)

115 Beginning Italian I (3) (Telecourse.) (Credit/No Credit or letter grade option.) Basic Italian vocabulary and language structures studied through text, audiocassettes, and broadcast videotapes. Equivalent to Italian 111 but without the oral component. (AA: Area E5c, CSU)
116 Beginning Italian II (3) (Telecourse) (Credit/No Credit or letter grade option.) Prerequisite: ITAL 115 or equivalent with Credit 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 112 but without the oral component. (AA: Area E5c, CSU)
117 Advanced Beginning Italian I (3) (Telecourse) (Credit/No Credit or letter grade option.) Prerequisite: ITAL 116 or equivalent with Credit 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 121 but without the oral component. (AA: Area E5c, CSU)
118 Advanced Beginning Italian II (3) (Telecourse) (Credit/No Credit or letter grade option.) Prerequisite: ITAL 117 or equivalent with Credit 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 122 but without the oral component. AA: Area E5c, CSU)

120 Advanced Elementary Italian (5) (Credit/No Credit or letter grade option.) Five lecture hours per week. Prerequisite: ITAL 110 or 112 or equivalent with Credit or a grade of $C$ or higher. Continuation of work begun in Italian 110. Emphasizes reading, writing, speaking, and introduction to Italian culture. (AA: Area E5c, CSU, UC: Area 6*)

121 Advanced Elementary Italian I (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: ITAL 112 or equivalent with Credit 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) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: ITAL 121 or equivalent with Credit 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 (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
879 Selected Topics (1-3) (See first page of Description of Courses section.)

801 Conversational Italian I, Elementary
(2) (Credit/No Credit grading.) Three lecture hours per week. 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) (Credit/No Credit grading.) Three lecture hours per week. Prerequisite: ITAL 801 or equivalent with Credit. Further work in conversation following the model of Italian 801. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)

810 Basic Italian Communication (.5) (Credit/No Credit grading.) Two lecture hours per week for four weeks. Introduction to the basics of communicating in Italian and to the cultural expectations of Italian speakers in business and tourism relationships. Designed to help those with little or no knowledge of Italian culture communicate successfully via words and culturally appropriate actions. (AA)
879 Selected Topics (1-3) (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.)

## 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 foreign language are required to use the language laboratory as prescribed by each department.

Note: To be transferable to UC, Japanese courses must be taken for letter grade.
110 Elementary Japanese (5) (Credit/No Credit or letter grade option.) Five lecture hours plus two lab hours by arrangement per week. A beginning course in Japanese emphasizing oral expression, reading, and written forms. (AA: Area E5c, CSU: Area C2, UC)

111 Elementary Japanese I (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Covers approximately the first half of the semester's work in Japanese 110. (AA: Area E5c, CSU: Area C2, UC*)
112 Elementary Japanese II (3) (Credit/ No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: JAPN 111 or equivalent with Credit or a grade of $C$ or higher. Covers approximately the second half of the semester's work in Japanese 110. (Japanese 111 and 112 are equivalent to Japanese 110.) (AA: Area E5c, CSU: Area C2, UC*)
120 Advanced Elementary Japanese (5) (Credit/No Credit or letter grade option.) Five lecture hours plus two lab hours by arrangement per week. Prerequisite: JAPN 110 or 112 or equivalent with Credit 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) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: JAPN 110 or 112 or equivalent with Credit or a grade of C or higher. Covers approximately half of the semester's work in Japanese 120. (AA: Area E5c, CSU: Area C2, UC*)

## 122 Advanced Elementary Japanese II

(3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: JAPN 121 or equivalent with Credit or a grade of $C$ or higher. Covers approximately the second half of the semester's work in Japanese 120. (Japanese 121 and 122 are equivalent to Japanese 120.) (AA: Area E5c, CSU: Area C2, UC: Area $6^{*}$ )
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

879 Selected Topics (1-3) (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.)

## Journalism

110 Mass Media in Society (3) Three lecture hours per week. Prerequisite: eligibility for ENGL 100. 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) (CAN JOUR 4)

120 Newswriting (4) Three lecture and three lab hours per week. 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) (CAN JOUR 2)

300 Newspaper Production (3) One lecture hour and six hours by arrangement per week. 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 (1) One lecture and two hours by arrangement per week. 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 four units.) (AA)
641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Library Studies

100 Introduction to Library Research (1) One lecture hour per week. A self-paced introduction to library resources and information. Provides practical, hands-on introduction to library organization, access tools (online catalog and indexes), reference materials and electronic resources. Includes development of basic research skills. (AA, CSU, UC)

101 Information Research Skills (1) (Credit/No Credit or letter grade option.) (Open Entry/Open Exit) Three lab hours per week. Use of information resources and information technologies emphasizing the principles of information competency. Covers how to use information resources available in libraries and on the Internet to carry out research projects; teaches students how to successfully identify, choose, analyze and synthesize data to meet various information needs. (AA: Area E5d, CSU)

105 Online Research Skills (3) (Credit/No Credit or letter grade option.) Three hours by arrangement per week. Introduction to 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, CSU)
107 Online Research Basics (1) (Credit/No Credit) One lecture hour per week. Basic skills in using the Internet as a medium for information, research, and communication. Hands-on training will be emphasized. Introduction to larger issues such as governance, ethics, freedom of expression, copyright and plagiarism. (AA: Area E5d, CSU)
110 Information Resources and Libraries (3) (Open entry/open exit.) (Credit/ No Credit or lettter grade option.) Three lecture hours plus two hours by arrangement per week. 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 two times for a maximum of 6 units.) (AA: Area E5d, CSU, UC)
665 Special Topics: Library and Information Studies (.5-2) (Credit/No Credit grading.) (Open Entry/Open Exit) One lecture hour plus four hours by arrangement per week to equate to .5-2.0 units.) 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 total of 2 units) (AA, CSU)

680-689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

879 Selected Topics (1-3) (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.)

## Life Sciences

(See Biology)

## Literature

(See English and Literature)

## Machine Tool Technology

200 Introduction to Machine Tool Tech-
nology (2) One lecture hour and three lab hours per week. 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)

641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

701 Applied CNC Mathematics (3) Three lecture hours per week plus one lab hour per week by arrangement. Prerequisite: basic machine tool training or equivalent industrial experience. Recommended Preparation: three units of MATH 811 or equivalent skill level. Mathematics focusing on skills needed for programming CNC machine tools. Includes algebra, geometry, trigonometry and some analytic geometry. Emphasizes using math to solve the practical problems faced in the work world of a computer numerical control programmer/machinist. (AA, CSU)
702 Introduction to Numerical-Control Programming (3) Six lecture hours per week for eight weeks plus one lab hour per week by arrangement. Prerequisite: MTT 701. Designed for experienced machinists or advanced technical students. Continuation of MTT 701. Basic concepts in programming machine tools. Covers cutter path (points of transition), motion commands, set ups, miscellaneous functions, canned cycles, program input, sub routines, program editing and debugging. (AA, CSU)

750 Machine Tool Theory and Practice I (3) Two lecture and four lab hours plus three lab hours per week by arrangement. Recommended Preparation: MTT 701. Instruction in basic machine tool procedures. Designed for engineering and drafting students and machinist trainers. Instruction in the use,
operation, set up of conventional machine tools. Topics covered include lathes, mills, grinders, tool geometry, physics of metal removal, measurement, and job planning. (AA: Area E5d, CSU)

## 755 Machine Tool Theory and Practice

II (2) One lecture hour and three lab hours plus one lab hour by arrangement per week. Prerequisite: MTT 750. Intermediate studies in machine tool. Allows skill development in individual areas of interest: tool and cutter grinding, E.D.M., tool design, numericalcontrol programming, thread cutting, and others. (Lab supplies required.) (AA, CSU)

## 760 Machine Tool Theory and Practice

III (2) One lecture hour and three lab hours plus one lab hour by arrangement per week. Prerequisite: MTT 755. Advanced studies in machine tool. Allows skill development in individual areas of interest: tool and cutter grinding, E.D.M., tool design, numericalcontrol programming, thread cutting, and others. (Lab supplies required.) (AA, CSU)
879 Selected Topics (1-3) (See first page of Description of Courses section.)

880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## Management

100 Introduction to Business Management (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. Study of the principal functions of contemporary management, including planning, organizing, staffing, controlling, and decision-making. (AA: Area E5d, CSU)
105 Financial Management (3) Three lecture hours per week. Prerequisite: ACTG 121 or equivalent. Survey of the concepts of financial management. (AA, CSU)
110 Report Writing (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. Principles of effective communication in a variety of business and industrial applications; emphasizes clarity, accuracy, and logic in the presentation of written, oral, and statistical materials. (AA, CSU)

120 Management Communications (3)
Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. Communication processes, both oral and written. Lectures, discussion, case studies, and oral presentations on such topics as the relationship between communication and organiza-
tional climate, perception and motivation, and the causes and patterns of miscommunication. (AA, CSU)

## 215 Management of Human Resources

(3) Three lecture hours per week. 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) Three lecture hours per week. Recommended Preparation: eligibility for 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) Three lecture hours per week. 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) Three lecture hours per week. 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)
641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
879 Selected Topics (1-3) (See first page of Description of Courses section.)
880 - $\mathbf{8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.)

# Manufacturing and Industrial Technology 

100 Science for Technology (3) Three lecture hours per week. Recommended Preparation: one semester of high school algebra. Study of applied physics phenomena as related to simple devices, including forces, stress, motion acceleration, velocity, friction, energy, and basic thermodynamics. (AA: Area E5a, CSU)

## 120 Industrial Materials and Processes

(3) Three lecture hours per week. 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)
130 Beginning Blacksmithing and Industrial Forging (2) (Credit/No Credit or letter grade option.) One lecture and three lab hours plus one hour by arrangement per week. 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)

641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

879 Selected Topics (1-3) (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.)

## Mathematics

(Also see Business 115, 810)
The normal sequences of mathematics are:

| The Algebra Sequence <br> MATH 811 and/or MATH 802 V/ $\frac{(\text { MATH 110) }) \text { or (MATH } 111+\text { MATH 112) }}{V}$ $($ MATH 120) or (MATH $122+$ MATH 123) Transfer Math |
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## *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. Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses. Prerequisites may be met
by showing proof of satisfactory completion of an equivalent course at a post-secondary institution. Questions on equivalency of courses, transfer credit, etc. should be referred to the Division Dean, Building 11, Room 136.

Extra supplies may be required in all Mathematics classes except MATH 811 and 812.
110 Elementary Algebra (5) Day: five lecture hours per week; evening: six lecture hours per week; plus one hour by arrangement per week. Prerequisite: three units of credit in MATH 811 OR appropriate score on the College Placement Test and other measures as appropriate. 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. (AA: C1)

## 111 Elementary Algebra I (FIRST HALF)

(3) Three lecture hours plus one hour by arrangement per week. Prerequisite: three units of credit in MATH 811 OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: concurrent enrollment in READ 830. Covers the first half of MATH 110. 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. (AA: C1)

112 Elementary Algebra II (SECOND HALF) (3) Three lecture hours plus one hour by arrangement per week. Prerequisite: Satisfactory completion of MATH 111. Recommended Preparation: completion of READ 825 with a grade of $C$ or higher and concurrent enrollment in READ 830. Second half of a study of elementary algebra including introductions to: exponents, polynomial operations, factoring, rational expressions and equations, roots, radicals and radical equations and quadratic equations. (AA: C1)
115 Geometry (5) Day: five lecture hours per week; evening: six lecture hours per week; plus one hour by arrangement per week. Prerequisite: MATH 110 or 112 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)

120 Intermediate Algebra (5) Day: five lecture hours per week; evening: six lecture hours per week; plus one hour by arrangement per week. Prerequisite: Satisfactory completion of MATH 110 or 112 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)
Note: MATH 122 and MATH 123 together are the equivalent of MATH 120.
122 Intermediate Algebra I (FIRST
HALF) (3) Three lecture hours plus one hour by arrangement per week. Prerequisite: Satisfactory completion of MATH 110 or 112 OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: MATH 115 and READ 830. First half of 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 and rational equations, equations in two variables, graphs, systems of equations. (AA)

## 123 Intermediate Algebra II (SECOND

 HALF) (3) Three lecture hours plus one hour by arrangement per week. Prerequisite: MATH 122 OR other measures as appropriate. Recommended Preparation: MATH 115 and READ 830. Covers the Second half of a comprehensive review of elementary algebra with certain topics studied in greater depth. Quadratic and radical equations, complex numbers, exponential and logarithmic functions, sequences and series. (AA)125 Elementary Finite Mathematics (3) Three lecture hours plus one hour by arrangement per week. Prerequisite: MATH 120 or 123 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 E2b, CSU: Area B4, UC: Area 2A) (CAN MATH 12)

130 Analytic Trigonometry (3) Three lecture hours plus one hour by arrangement per week. Prerequisites: MATH 115 and MATH 120 or 123 OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: 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 E2b, CSU: Area B4) (CAN MATH 8)

145 Liberal Arts Mathematics (3) Three lecture hours plus one hour by arrangement per week. Prerequisite: MATH 120 or 123 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)

## 200 Elementary Probability and Statistics

(4) Day: four lecture hours per week; evening: five lecture hours per week; plus one hour by arrangement per week. Prerequisite: MATH 120 or 123 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, regression and correlation, contingency tables, and nonparametric methods. (AA: Area E2b, CSU: Area B4, UC: Area 2A*) (CAN STAT 2)
222 Precalculus (5) Day: five lecture hours per week; evening: six lecture hours per week; plus one hour by arrangement per week. Prerequisite: MATH 130 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 E2b, CSU: Area B4, UC: Area 2A*) (CAN MATH 16)

## 231 Symbolic Logic and Mathematical

 Proof (1) (Credit/No Credit or letter grade option.) Two lecture hours plus one hour by arrangement per week for eight weeks. Prerequisite: MATH 222 OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: Completion of READ 400 or 405. Strongly recommended for students enrolled in or planning to take MATH 251 and math courses with numbers higher than 251. Propositions, arguments and validity, truth-functional equivalence, axiomatic systems, quantifiers, direct and indirect proof, and proof strategy. (AA, CSU)Note: The prerequisites for MATH 242 are both MATH 130 and MATH 241. Students planning to take both MATH 241 and 242 should take MATH 130 prior to entering MATH 241.
241 Applied Calculus I (5) Day: five lecture hours per week; evening: six lecture hours per week; plus one hour by arrangement per week. Prerequisites: MATH 120 or 123 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 251 sequence for mathematics, physics or engineering majors.) (AA: Area E2b, CSU: Area B4, UC: Area 2A*) (CAN MATH 30) (MATH 241 and $242=$ CAN MATH SEQ D)

242 Applied Calculus II (3) Three lecture hours plus one hour by arrangement per week. Prerequisites: MATH 130 and 241 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 2A*) (MATH 241 and 242 = CAN MATH SEQ D)
251 Calculus with Analytic Geometry I
(5) Day: five lecture hours per week; evening: six lecture hours per week; plus one hour by arrangement per week. Prerequisites: MATH 222 OR appropriate score on the College Placement Test and other 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 2A*) (MATH 251, 252, and 253 = CAN MATH SEQ C)

252 Calculus with Analytic Geometry II (5) Day: five lecture hours per week; evening: six lecture hours per week; plus one hour by arrangement per week. Prerequisite: MATH 251. 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 2A*) (MATH 251,252 , and $253=$ CAN MATH SEQ C)

253 Calculus with Analytic Geometry III
(5) Day: five lecture hours per week; evening: six lecture hours per week; plus one hour by arrangement per week. 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 2A*) (MATH 251, 252, and 253 = CAN MATH SEQ C)

268 Discrete Mathematics (4) Day: four lecture hours per week; evening: five lecture hours per week; plus one hour by arrangement per week. Prerequisite: MATH 251 OR other measures as appropriate. Recommended Preparation: READ 400 or 405 . Covers topics in discrete mathematics with particular emphasis on applications to computer science. Includes 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) Three lecture hours plus one hour by arrangement per week. Prerequisite: MATH 252 or equivalent. Recommended Preparation: concurrent enrollment in MATH 231 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) (CAN MATH 26)

275 Ordinary Differential Equations (3) Three lecture hours plus one hour by arrangement per week. 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) (CAN MATH 24)

680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

802 Preparation for Algebra (3) (Credit/ No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. Prerequisite: satisfactory completion of Math 811 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.)
811 Arithmetic Review (3) (Credit/No Credit grading.) Three lecture hours plus one hour by arrangement per week. 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 (1)

(Credit/No Credit grading.) (Open entry/open exit) Three hours per week of individualized instruction. Prerequisite: MATH 110 or 111/112. A review of elementary algebra. (Units do not apply toward AA/AS degree.)
879 Selected Topics (1-3) (See first page of Description of Courses section.)

880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## Meteorology

100 Elementary Meteorology (3) Three lecture hours plus one hour by arrangement per week. 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 B1, UC: Area 5A)

101 Meteorology Laboratory (1) Three lab hours plus one hour by arrangement per week. Prerequisite: concurrent enrollment in or completion of METE 100 with a grade of $C$ or higher. Optional introductory meteorology laboratory course designed to be taken concurrently with or following Meteorology 100. 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 (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
879 Selected Topics (1-3) (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.)

## 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 (1-3) (See first page of Description of Courses section.) (AA, CSU)
879 Selected Topics (1-3) (See first page of Description of Courses section.)

## Multimedia

101 WebReady (1) (Credit/No Credit grading) (Open Entry/Open Exit) Total of sixteen 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 105 \& 107) (Credit/No Credit or letter grade option.) Three lecture hours per week. Prerequisite: 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 111\& 112) (Credit/No Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement per week. 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 Dreamweaver (3) (Replacing MULT $170 \& 171)$ (Credit/No Credit or letter grade option.) Two lecture and one lab hours plus one hour by arrangement per week. Prerequisite: MULT 177 or equivalent and eligibility for ENGL 838 or 848 or equivalent. Recommended Preparation: MULT 113 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 rollovers; 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 Graphics for Multimedia (Photo-

shop) (3) (Replacing MULT $175 \& 176$ ) (Credit/No Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement per week. Prerequisite: GRA 120, MULT 102 or equivalent; eligibility for ENGL 838 or 848 or equivalent. Recommended Preparation: MULT 113 or equivalent. Introduction to professional graphics applications Photoshop and Image Ready. 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 $180 \& 181)($ Credit/No Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement per week. Prerequisite: MULT 102 or equivalent; eligibility for ENGL 838 or 848 or equivalent. Recommended Preparation: MULT 113 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 $182 \& 183)($ Credit/No Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement per week. Prerequisite: MULT 184 or equivalent; eligibility for $E N G$ 838 or 848 or equivalent. Recommended Preparation: MULT 113 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 190 \& 191) (Credit/No Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement. Prerequisite: eligibility for ENGL 838 or 848 or equivalent; MULT 102 or equivalent. Recommended Preparation: MULT 113 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 251 \& 252) (Credit No/Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement per week. Prerequisite: MULT 177 or equivalent; eligibility for ENG 838 or 848 or equivalent. Recommended Preparation: MULT 113 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 information user interface. Design interactive productions for critique in class. May be taken twice for a maximum of 6 units.) (AA, CSU)

274 Flash (3) (Replacing MULT 270 \& 271) (Credit No/Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement per week. Prerequisite: MULT 177 or equivalent; eligibility for ENG 838 or 848 or equivalent. Recommended Preparation: MULT 113 or equivalent. Introduces Flash, which is used to create vector animations. 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) (Credit/No Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement per week. Prerequisite: MULT 274 or equivalent; eligibility for ELGL 838 or ELGL 848 or equivalent. Recommended Preparation: MULT 113 or equivalent. 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)

## 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 <br> Units | Old MULT | Former Course Title | Old <br> 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 | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 177 | Graphics for Multimedia (Photoshop) | 3.0 | $\begin{aligned} & 175 \\ & 176 \end{aligned}$ | Photoshop \& Illustrator I Photoshop \& Illustrator II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 184 | Digital Video | 3.0 | $\begin{aligned} & 180 \\ & 181 \end{aligned}$ | Digital Video I Digital Video II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 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 | $\begin{aligned} & 190 \\ & 191 \end{aligned}$ | 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 | $\begin{aligned} & 270 \\ & 271 \end{aligned}$ | Flash I <br> Flash II | $\begin{aligned} & 1.5 \\ & 1.5 \\ & \hline \end{aligned}$ |
| 279 | Flash Actionscript | 3.0 | $\begin{aligned} & 272 \\ & 273 \end{aligned}$ | Flash III Flash IV | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 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 <br> DVD Studio Pro II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 297 | Pro Tools LE | 3.0 | $\begin{array}{r} 295 \\ 296 \\ \hline \end{array}$ | Pro Tools LE I Pro Tools LE II | $\begin{aligned} & 1.5 \\ & 1.5 \\ & \hline \end{aligned}$ |
| 317 | Digital Studio Recording | 3.0 | $\begin{array}{r} 315 \\ 316 \\ \hline \end{array}$ | Digital Studio Recording I Digital Studio Recording II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 387 | Digital Video Workflow | 3.0 | $\begin{array}{r} 385 \\ 386 \\ \hline \end{array}$ | Digital Video Workflow I Digital Video Workflow II | $\begin{aligned} & 1.5 \\ & 1.5 \\ & \hline \end{aligned}$ |
| 392 | MM Internship | 3.0 | $\begin{aligned} & 390 \\ & 391 \end{aligned}$ | Multimedia Internship I Multimedia Internship II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |

282 After Effects (3) (Replacing MULT 280 \& 281) (Credit No/Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement per week. Prerequisite: MULT 184 or equivalent; eligibility for ENGL 838 or ENGL 848 or equivalent. Recommended Preparation: MULT 113 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 \& 291) Credit/No Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement per week. Prerequisite: MULT 177, 187 or equivalent; eligibility for ENGL 838 or 848 or equivalent. Recommended Preparation: MULT 113 or equivalent. Covers the basic DVD principles working with Apple's DVD Studio Pro to learn DVD production, authoring, menus, subtitling, slideshows, 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) (Credit/No Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement per week. Prerequisite: MULT 192 or equivalent; eligibility for ENGL 838 or 848 or equivalent. Recommended Preparation: MULT 113 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 315 \& 316) (Credit/No Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement per week. Prerequisite: MULT 297 or equivalent; eligibility for ENGL 838 or 848 or equivalent. Recommended Preparation: MULT 113
or equivalent. Students will plan and record a digital audio production. Projects may include music production, voiceover, 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) (Credit/No Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement per week. Prerequisite: MULT 187 or equivalent; eligibility for ENGL 838 or 848 or equivalent. Recommended Preparation: MULT 113 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) (Repacing MULT $390 \& 391$ ) CreditNo Credit or letter grade option.) Two lecture and one lab hour plus one hour by arrangement per week. Prerequisite: MULT 253 or equivalent; eligibility for ENGL 838 or 848 or equivalent. One of the following: MULT 172 or 187 or 274 or equivalent. Recommended Preparation: MULT 113 or equivalent. 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)

## 395 Multimedia Portfolio Design (1.5)

(Credit/No Credit or letter grade option.) Three lecture hours plus three hours by arrangement per week for eight weeks. Recommended Preparation: MULT 391. An advanced course that exposes students to various ways of creating a web design portfolio or digital video demo reel. Students design several versions of their portfolio or demo reel and choose the one that best displays their work. (May be taken twice for a maximum of 3 units.) (AA, CSU)

397 (formerly MULT 115) Multimedia Careers (1.5) (Credit/No Credit or letter grade option.) Three lecture hours per week for eight weeks. Introduction to the multimedia profession. Includes job hunting, skill set assessment, full-time and contract work environments, freelancing, startup ventures, and career management. (AA, CSU)
680 - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Selected Topics (1-2) (See first page of Description of Courses section.) (AA, CSU)
879 Selected Topics (1-3) (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.) (AA, CSU)

## Music

100 Fundamentals of Music (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. Designed for students who wish to learn how to read music and perform it at sight. Recommended for students 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 C1, UC: Area 3A)

101 Musicianship I (3) Three lecture hours per week. Prerequisite: MUS. 100 or equivalent. Corequisite: concurrent enrollment in MUS. 131 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) Three lecture hours per week. Prerequisite: MUS. 101 or equivalent. Corequisite: concurrent enrollment in MUS. 132. Recommended Preparation: eligibility for ENGL 848. Continuation and advanced study of topics introduced in Music 101. (Nine units of Musicianship are recommended for students majoring in Music.) (AA, CSU, UC)

103 Musicianship III (3) Three lecture hours per week. Prerequisite: MUS. 102 or equivalent. Corequisite: concurrent enrollment in MUS. 133. Continuation of Music 101102. (AA, CSU, UC)

104 Musicianship IV (3) Three lecture hours per week. Prerequisite: MUS. 103. Corequisite: concurrent enrollment in MUS. 134. Continuation of Music 103. (AA, CSU, UC)

131 Harmony I (3) Three lecture hours per week. Prerequisite: MUS. 100 or equivalent. Corequisite: concurrent enrollment in MUS. 101. Recommended Preparation: eligibility for ENGL 848. Principles of scale, mode, and interval construction; triads in first, second, and third inversions; melodic and harmonic rhythm; root progressions and voice leading; seventh chords and secondary dominants; introduction to common harmonic practice through exercises, analysis, and creative work. (AA, CSU, UC)

132 Harmony II (3) Three lecture hours per week. Prerequisite: MUS. 131. Corequisite: concurrent enrollment in MUS. 102. Continuation and advanced study of topics introduced in MUS. 131. (AA, CSU, UC)

133 Harmony III (3) Three lecture hours per week. Prerequisite: MUS. 132. Corequisite: concurrent enrollment in MUS. 103. Continuation of the study of tonal and formal procedures; contextual investigations of diminished seventh, Neapolitan sixth, and augmented sixth chords; tonicization, modulation, and sequence; introduction to Impressionism and to 20th Century melody, harmony, and form. (AA, CSU, UC)

134 Harmony IV (3) Three lecture hours per week. Prerequisite: MUS. 133. Corequisite: concurrent enrollment in MUS. 104. Continuation and advanced study of topics introduced in Music 133. (AA, CSU, UC)

170 Improvisation (3) Three lecture hours per week. Prerequisite: MUS. 131 or equivalent. Study of improvisatory styles and techniques and the historical perspective of the practices; rhythmic, harmonic, and melodic foundations; and improvisatory ensemble. (To increase competency, may be repeated for a maximum of 12 units of credit, after which students may petition to audit. See Index: "Audit Policy.") (AA: Area E5c, CSU, UC*)

202 Music Listening and Enjoyment (3) Three lecture hours per week plus selected listening. No musical experience required. Recommended Preparation: eligibility for ENGL 848. Survey of the music of Western civilization. Enhances enjoyment and appreciation of the world's great music and develops an understanding of today's concert music in a historical context. Attendance at one ore more offcampus concerts may be required. (AA: Area E5c, CSU: Area C1, UC: Area 3A)

240 Music of the Americas (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. Survey of the musical styles of various American cultures, including Native American forms and expressions. Examines the contributions of African, Latin, and European influences to the musical heritage of the United States and explores jazz, folk, popular and classical traditions. (AA: Area E5c, CSU: Area C1, UC: Area 3A)

250 World Music (3) Three lecture hours per week. 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 C1, UC: Area 3A)

275 History of Jazz (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848. Study of jazz since 1900, 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 C1, UC: Area 3A)

290 Electronic Music I (3) Two lecture and three lab hours per week. Introductory course in the use and implementation of MIDI (Musical Instrument Digital Interface) musical instruments, including interfacing with computers and MIDI software. Ability to read music is desirable but not essential. (AA, CSU)

291 Electronic Music II (2) (Credit/No Credit or letter grade option) Two lecture and two lab hours per week. 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. (To increase competency, may be taken twice for a total of 4 units.) (AA, CSU)
292 Sound Creation: Sampling and Synthesis (3) (Credit/No Credit or letter grade option.) Two lecture and three lab hours per week. 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. (AA, CSU)

293 Audio for Visual Media (2.5) (Credit/ No Credit or letter grade option.) Two lecture and two lab hours per week. Prerequisite: MUS. 291 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 for visuals using MIDI instruments, computer-based sequencing, and multi-track tape recording techniques. (AA, CSU)
301 Piano I (1) Three lab hours plus two individual practice hours per week. 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 (1) Three lab hours plus two individual practice hours per week. Prerequisite: MUS. 301 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) Three lab hours plus two individual practice hours per week. 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 (1) Three lab hours plus two individual practice hours per week. Prerequisite: MUS. 303 or equivalent. Continuation of study 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, after which students may petition to audit. See Index: "Audit Policy.") (AA, CSU, UC*)
320 Study of Brass Instruments (1) Three lab hours plus two individual practice hours per week. Techniques of playing the instrument of the student's choice, with individual and class instruction. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU, UC*)

371 Guitar I (1) Three lab hours plus two individual practice hours per week. 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 (1) Three lab hours plus two individual practice hours per week. Prerequisite: MUS. 371. Continuation of Music 371 with emphasis on solo performances. Students must supply their own instruments. (AA, CSU, UC*)
373 Guitar III (1) Three lab hours plus two individual practice hours per week. Prerequisite: MUS. 372. Continuation of MUS. 372 with emphasis on solo performances. Students must supply their own instruments. (AA, CSU, UC*)
374 Guitar IV (1) Three lab hours plus two individual practice hours per week. Prerequisite: MUS. 373. Continuation of Music 373 with emphasis on solo performances. Students must supply their own instruments. (To increase competency, 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*)
401 Voice I (1) Three lab hours plus two practice room hours per week. Elementary vocal problems analyzed and corrected through exercises and songs. (AA, CSU, UC*)
402 Voice II (1) Three lab hours plus two practice room hours per week. Prerequisite: MUS. 401 or equivalent. Intermediate songs and recital performance as ability merits. (AA, CSU, UC*)

403 Voice III (1) Three lab hours plus two practice room hours per week. Prerequisite: MUS. 402 or equivalent. Advanced songs and recital performance as ability merits. (AA, CSU, UC*)
404 Voice IV (1) Three lab hours plus two practice room hours per week. Prerequisite: MUS. 403 or equivalent. Advanced songs and recital performance as ability merits. (To increase competency, 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 (1) Three lecturecritique hours per week. 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. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU, UC*)

451 Jazz Workshop (1) (Credit/No Credit or letter grade option.) Three lecturecritique hours per week. Workshop in jazz interpretation and styles. Ensemble experience from "blues" to present-day jazz. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU, UC*)
452 Repertory Jazz Band (1) Three lec-ture-critique hours per week. 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. (To increase competency, 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*)
453 Jazz Band (2) Five lecture-critique hours per week. Prerequisites: MUS. 101 and 320 or equivalent. All phases of jazz performance, starting with beginner ensemble experience. Performance required. (To increase competency, may be taken four times for a maximum of 8 units, after which students may petition to audit. See Index: "Audit Policy.") (AA, CSU, UC*)
465 Music for Minors Training (3) Credit/ No Credit grading. Five lecture hours per week for less than eleven 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 elemen-tary-age children. (AA, CSU)
470 CSM Singers (1) Three lecturecritique hours plus two hours by arrangement per week. Prerequisites: MUS. 402 or equivalent; demonstration of proficiency. Study and performance of choral literature for accompanied and unaccompanied choir. Performance may be required. (To increase competency, 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*)
490 Masterworks Chorale (1) (Credit/No Credit grading.) Three lecture-critique hours per week plus two hours by arrangement. Prerequisite: MUS. 470 or equivalent; demonstration of proficiency. Study and performance of representative choral literature appropriate for a large chorus. Introduces different works each semester, providing a succession of new curriculum. (To increase competency, 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*)

665 Special Topics in Music Performance (.5-1) (Credit/No Credit grading.) Three lecture hours per week plus up to six lab hours by arrangement. Prerequisite: demonstration of proficiency. Advanced study in specialized areas of the performing arts. Designed for vocalists, pianists, and instrumentalists, this course provides for extended in-depth 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)
800 Computer-Assisted Instruction in Music (.5) Total of twenty-four lab hours per semester. Designed primarily for students enrolled in MUS. 100, 101, 102, 103, 104, $131,132,133$, or 134 to improve their skills in music theory and musicianship through Computer-Assisted Instruction in Music (CAIM). No previous computer experience required; instructor is available for assistance/consultation. (To increase competency, may be taken four times for a maximum of 2 units.) (AA)
641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
879 Selected Topics (1-3) (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.)

## 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 the sequence. Upon graduation, 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 211, 212,221 , 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.

211 Introduction to Nursing (4.5) Four lecture and fifteen lab hours plus two hours by arrangement per week for eight to nine 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 off-campus health care facilities. (Fall only.) (AA: Area E3, CSU)

## 212 Concepts of Homeostasis in Nursing

(4.5) Four lecture and fifteen hours plus two hours by arrangement per week for eight to nine weeks. Prerequisite: NURS 211. 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) (Credit/No Credit grading.) One and one-half lab hours per week. Prerequisite: admission to the A.S. Degree Nursing Program. Corequisite: concurrent enrollment in NURS 211 and 212. Provides for nursing skill development and competency testing for skills identified for concurrent nursing courses. Extra supplies may be required. (Fall only.) (AA)

221 Pediatric Nursing (4.5) Five lecture and twelve lab hours plus two hours by arrangement per week for eight to nine weeks. Prerequisites: NURS 212.. Corequisite: concurrent enrollment in NURS 225. Developmental levels and common health needs and problems from infancy to young adult. Supervised learning experiences corresponding with classroom instruction in off-campus health care facilities. (Spring only.) (AA: Area E3, CSU)

222 Maternity Nursing (4.5) Five lecture and twelve lab hours per week plus two hours by arrangement for eight to nine weeks. Prerequisites: NURS 212. Corequisite: concurrent enrollment 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 E3, CSU)

225 Nursing Skills Lab II (.5) (Credit/No Credit grading.) One and one-half lab hours per week. Prerequisite: NURS 212 or equivalent with a grade of $C$ or higher. Corequisite: concurrent enrollment in NURS 221 and 222. Provides for nursing skill development and competency testing for skills identified for concurrent nursing courses. Extra supplies may be required. (Spring only.) (AA)

231 Psychiatric Nursing (5) Five lecture and fifteen lab hours plus two hours by arrangement per week for eight to nine weeks. Prerequisite: NURS 222 or equivalent. 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 off-campus health care facilities. (Fall only.) (AA, CSU)

232 Medical/Surgical Nursing (5) Five lecture and fifteen lab hours plus two hours by arrangement per week for eight to nine 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) (Credit/No Credit grading.) One and one-half lab hours per week. Prerequisite: NURS 222 or equivalent. Corequisite: concurrent enrollment in NURS 231 and 232. Provides for nursing skill development and competency evaluation of the skills identified for concurrent nursing courses. Extra supplies may be required. (Fall only.) (AA)
241 Advanced Medical/Surgical Nursing (5) Five lecture and fifteen lab hours plus two hours by arrangement per week for eight to nine 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 classroom instruction in off-campus health care facilities. (Spring only.) (AA, CSU)

## 242 Leadership/Management in Nursing

(5) Five lecture and fifteen lab hours plus two hours by arrangement per week for eight to nine weeks. Prerequisite: NURS 241. Corequisite: concurrent enrollment in NURS 245. Transition to the graduate role. Student initiate the nursing process with emphasis on the determination of priorities, on decisionmaking responsibilities, and on personal accountability. Supervised learning experiences corresponding with classroom instruction in off-campus health care facilities. (Spring only.) (AA, CSU)

245 Nursing Skills Lab IV (.5) (Credit/No Credit grading.) One and one-half lab hours per week. Prerequisite: NURS 232 or equivalent. Corequisite: concurrent enrollment in NURS 241 and 242. Provides for nursing skill development and competency testing for skills identified for concurrent nursing courses. Extra supplies may be required. (Spring only.) (AA)
264 Perioperative Nursing (8) (Formerly NURS 261) Seven lecture hours per week and thirty-two lab practice hours per semester. Prerequisite: current $R N$ license or acceptance into the course by the Nursing Department. Recommended Preparation: one year of recent clinical experience in nursing. Course provides entry-level knowledge required to work as a novice practitioner in perioperative nursing. Focuses on the theoretical framework of perioperative nursing and is intended to be taken in conjunction with NURS 265. Extra supplies may be needed. (Spring only) (AA, CSU)

265 Perioperative Nursing Preceptorship (10) (Formerly NURS 262) Thirty-two lab hours per week for seventeen weeks. Prerequisite: Current RN license or acceptance into the course by the Nursing Department. Recommended: One year of recent clinical experience in nursing. Covers entry level knowledge and skills required to work as a entry- level practitioner in perioperative nursing. Focuses on learning in the perioperative clinical setting. Students apply learned concepts in an operating room under the supervision of assigned preceptors. The course is intended to be taken with NURS 264. Extra supplies may be required. (Spring only) (AA, CSU)

## 610 Basic Medication Dosage Calcula-

 tions for Nurses (1) (Credit/No Credit grading.) Total of sixteen lecture hours. Prerequisite: MATH 110 or 112 or equivalent with a grade of C of higher OR equivalent skill level (as measured by a satisfactory score on Math Placement test Two). Designed to meet the needs of current and potential practitioners of nursing. Covers the safe and accurate administration of medications, an important and primary responsibility of the nurse. Includes a step-by-step approach to medication dosage calculations by various routes of administration. Assists students in applying basic mathematical concepts to real world clinical situations. Emphasizes dosage accuracy in clinical scenarios that require critical thinking skills. (May be taken four times for a maximum of 4 units) (AA, CSU)
## 620 Bridge Course for Advanced Entry

 Students (1.5) (Credit/No Credit grading) Twenty-four lecture hours per semester. Bridge course 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, help 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)641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)

666 Careers in Nursing (1) (Credit/No Credit grading.) One lecture hour per week. Designed for potential nursing majors and non-nursing majors. Provides an overview of nursing roles, educational requirements, responsibilities, job opportunities, and settings for nursing practice. (AA: Area E5d, CSU)

680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
800 Success Strategies for an RN Program
(1) (Credit/No Credit grading.) Total of sixteen lecture hours. Recommended Preparation: BIOL 250; Math 110; eligibility for ENGL 100. Provides interested students with 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.
845 Review: Registered Nurse Exam (.5) (Credit/No Credit grading.) One-half hour lecture and one and one-half hours lab per week for eight weeks. Prerequisite: concurrent enrollment 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 (1-3) (See first page of Description of Courses section.)

880 - 889 Selected Topics (1-3) (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.

100 Oceanography (3) Three lecture hours plus one hour by arrangement per week 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 seafloor spreading. (AA: Area E5a, CSU: Area B1/Area B2, UC: Area 5A)
101 Oceanography Laboratory/Field Study (1) Three lab hours plus one hour by arrangement per week. Prerequisite: concurrent enrollment in or completion of OCEN 100. 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 5A)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Office Administration <br> (See Business)

## Paleontology

(Also see Geology 125)

110 General Paleontology (3) Three lecture/recitation hours plus one hour by arrangement per week. 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 B1/Area B2, UC: Area 5A/Area 5B)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Philosophy

(Also see Humanities)
100 Introduction to Philosophy (3) Three lecture hours per week. 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) (CAN PHIL 2)

103 Critical Thinking (3) Three lecture hours per week. Recommended Preparation: ENGL 100 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 to develop critical thinking. Pres-
ents 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, UC)

160 History of Western Philosophy: Ancient to Medieval (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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 of ancient philosophy, the early Greek philosophers through the medieval period. Special emphasis on the Pre-Socratics, Plato, Aristotle, Augustine, and Aquinas. Topics include philosophy and religion, myth, science, and society. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

## 175 History of Western Philosophy:

 16th-18th Century (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Covers the history of Western Philosophy from Descartes and the rise of the scientific revolution through Kant. Includes Erasmus, Bacon, Pascal, Hobbes, Spinoza, Locke, Leibniz, Berkeley, Hume, and Rousseau. (AA: Area E5c, CSU: Area C2, UC: Area 3B)200 Introduction to Logic (3) Three lecture hours per week. Recommended Preparation: ENGL 800 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. Introduces students to elementary formal logic. Emphasizes translation of English statements and arguments into formal language and the procedures for proving arguments valid. Covers all of sentential logic and monadic predicate logic. (AA: Area E2b, CSU, UC)

244 Contemporary Social and Moral Issues (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 100 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)
246 Ethics in America (3) (Telecourse) (Credit/No Credit or letter grade option.) 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. Examines contemporary ethical conflicts in journalism, government, medicine, law, business, and the criminal justice system. Provides a grounding in the language, concepts, and traditions of ethics. (AA, CSU) (CAN PHIL 4)

## 300 Introduction to World Religions

 (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 100 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)320 Asian Philosophy (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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 ideas and issues that traditionally concern philosophic minds. Emphasizes doing philosophy as a means of understanding it. Critical evaluation of such philosophical topics as values and ethics, logic, political ideologies, human existence, science and religion, cosmology, and knowledge. (AA: Area E5c, CSU: Area C2, UC: Area 3B)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

879 Selected Topics (1-3) (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.)

## Photography

## 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 1 unit per three class hours per semester.
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

879 Selected Topics (1-3) (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.)

## Adapted (ADAP)

100 Adapted Aquatics (.5-1) (Credit/No Credit grading.) One and one-half to three lab hours plus one lab hour by arrangement per week. 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: limit 4 units*)

110 Adapted General Conditioning (.5-1) (Credit/No Credit grading.) One and one-half to three lab hours plus one lab hour by arrangement per week. 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: limit 4 units*)

## 140 Adapted Circuit Weight Training

(.5-1) (Credit/No Credit grading.) One and one-half to three lab hours plus one lab hour by arrangement per week. Offered primarily for students with physical limitations. Disability verification recommended. Instruction in the use of fitness equipment; individualized training to develop muscular endurance using specific exercises in circuit training. (May be repeated according to results of individual testing.) (AA: Area E4, CSU, UC: limit 4 units*)

155 Adapted Back Care (.5-1.0) (Credit/ No Credit grading.) Two to four lab hours plus one lab hour by arrangement per week. Recommended Preparation: recent physical examination and disability verification. Designed for students who would like to improve their back health. Lecture topics include: structure of the healthy spine, common deviations and back injuries, and proper body mechanics. Students participate in flexibility training and a progressive exercise program to build musculature and correct posture and learn how to perform daily living activities while maintaining back health. (AA: Area E4, CSU)

165 Adapted Lifelong Fitness (.5-1) (Credit/No Credit grading.) Two to four lab hours plus one lab hour by arrangement per week. 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: limit 4 units*)

175 Adapted Evaluation (.5) (Credit/No Credit grading) (Open entry/open exit) Two hours by arrangement per week for six or eight weeks ) Course designed to assess the physical ability of students. Based on the results of the assessment, an appropriate exercise program will be determined for the student. (To increase competency and continued evaluation of improvement, may be taken four times for a maximum of 2 units.)

## Aquatics (AQUA)

109 Intermediate Swimming and Beginning Water Polo (1) Three lab hours per week. 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. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)

127 Swim for Conditioning (.5-1) One and one-half to three lab hours plus one lab hour by arrangement per week. Prerequisite: ability to swim. Endurance swimming for all swimmers at all levels of fitness. Interval training using all strokes. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)
133 Individual Swim Conditioning (. 5 or 1.) (Credit/No Credit or letter grade option.) Two to three lab hours plus one hour by arrangement per week. 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 vari-
ous drills and exercises to demonstrate the value of swim fundamentals and training, making swimming easier by becoming more efficient.(To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU)

135 Aqua Exercise (. 5 or 1) (Credit/No Credit or letter grade option.) Two to three lab hours plus one hour by arrangement per week. 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. (To increase competency, may be taken four times for a maximum of 4 units). (AA, CSU)

## Dance (DANC)

121 Contemporary Modern Dance (1)
Three lab hours plus one lab hour by arrangement per week. Fundamentals of contemporary dance technique, body alignment, and basic movements. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)

131 Jazz Dance I (1) Three lab hours plus one lab hour by arrangement per week. Beginning techniques in jazz-stage, jazz movements, fast jazz, jazz rock, jazz blues, and various other jazz combinations. (AA: Area E4, CSU, UC: limit 4 units*)
132 Jazz Dance II (1) Three Lab hours plus one lab hour by arrangement per week. Prerequisite: DANC 131 or equivalent. Continuation of Dance 131 with more complex routines and refining of basic skills. (To increase competency, may be taken three times.)
(AA: Area E4, CSU, UC: limit 4 units*)
141 Beginning Ballet I (1) Three Lab hours plus one lab hour by arrangement per week. Beginning study of ballet techniques and style, including barre, center floor, and dance variations. Explores modern ballet works. (AA: Area E4, CSU, UC: limit 4 units*)
143 Intermediate Ballet II (1) Three lab hours plus one lab hour by arrangement per week. Prerequisite: DANC 141. Continuation of Dance 141, concentrating on barre, center floor, and dance variations. Explores classic ballet works. (To increase competency, may be taken three times.) (AA: Area E4, CSU, UC: limit 4 units*)

## 151 Beginning Social Dance (.5-1)

 (Credit/No Credit or letter grade option.) Two to three lab hours plus one hour by arrangement per week. 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. (To increase competency, may be taken twice for a maximum of 2 units.) (AA, CSU)161 Tango Argentino (.5 or 1) (Credit/No Credit or letter grade option.) Two to three lab hours plus one hour by arangement per week. 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. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU)
195 Dancing Without Limits (. 5 or 1) (Credit/No Credit) Two to three lab hours plus one hour by arrangement per week. 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. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU)

## Fitness (FITN)

116 Body Conditioning (.5-1) One and one-half to three lab hours plus one lab hour by arrangement per week. Individual flexibility, agility, strength, aerobic fitness, and relaxation. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)
127 Aerobic Dance (.5-1) One and one-half to three hours plus one lab hour by arrangement per week. Recommended Preparation: recent physical examination. Dance and exercise to music to increase cardiovascular
efficiency, flexibility, and coordination; strengthen heart muscle; lower resting hear rate; and tone the body. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)
135 Aerobic Exercise (1) Three lab hours per week. Prerequisite: None This course is based on the television production series Body Electric and is designed to improve fitness. This progressive aerobic and conditioning program is designed to build musculature and correct posture while teaching techniques to manage daily living activities. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC: limit 4 units*)
136 Low Impact Aerobics (1) Three lab hours per week. This course is based on the Sit and Be Fit television series, which is designed for students desiring an exercise program at an easier pace. It concentrates on developing and strengthening muscle groups as well as overall stretching. (May be taken four times for a maximum of 4 units.) (AA: Area E4, CSU, UC: limit 4 units*)

195 Fitness Lab (.5-1.5) (Credit/No Credit or letter grade option.) (Open entry/open exit) Two to four and one half lab hours plus one hour by arrangement per week for six or eight weeks. 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. (To increase competency, may be taken four times for a maximum of 6 units. (AA, CSU)
205 Weight Conditioning (1-1.5) Two to three lab hours plus one lab hour by arrangement per week. Recommended Preparation: recent physical examination. Individualized weight conditioning for all levels of ability using specialized machines and free weights. Instruction on safety, form, technique, and muscle development. Participation will increase muscle strength, tone, and endurance. Body composition assessment and fitness-related research support achievement of fitness goals. Most sections team taught. Coeducation class format. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)

215 Weight Conditioning for Varsity Track (.5-1) (Open entry/open exit.) One and onehalf to three lab hours plus one lab hour by arrangement per week. 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. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)
220 Weight Conditioning for Varsity Football (.5-2) (Open entry/open exit.) One and one-half to six lab hours per week. Recommended only for Varsity Football candidates. Designed to teach students to use overload weight training to build bulk and strength. Students work on major muscle groups, emphasizing leg and upper-body development. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)
225 Athletic Conditioning (.5-2) (Open entry/open exit.) Six lab hours plus one hour by arrangement per week. Prepares student athlete for varsity-level competition through general and sport specific strength and conditioning exercise. Student athletes engage in general and sport specific strength development, stretching, aerobic conditioning, sport specific movement and speed development. (To increase competency, may be taken four times for a maximum of 8 unts.) (AA: Area E4, CSU, UC: limit 4 units*)

235 Cross Training Boot Camp (. 5 or 1) (Credit/No Credit or letter grade option.) Two to three lab hours plus one hour by arrangement per week. 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.(To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU)
301 Spinning* (. 5 or 1) (Credit/No Credit or letter grade option.) Two or three lab hours plus one hour by arrangement per week. 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. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU)

334 Yoga (. 5 or 1) (Credit/No Credit or letter grade option.) Two or three lab hours plus one hour by arrangement per week. 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. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU)

## Individual Sports (INDV)

120 Badminton (.5-1) One and one-half to three lab hours plus one lab hour by arrangement per week. Skill techniques, proper footwork, rules of play, strategies, and doubles and singles play for various skill levels of ability. Tournaments in singles and doubles. (To increase competency, may be taken four times, after which students may petition to audit. See Index: "Audit Policy.") (AA: Area E4, CSU, UC: limit 4 units*)
160 Golf (.5-1) One and one-half to three lab hours plus one lab hour by arrangement per week. 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. (To increase competency, may be taken four times, after which students may petition to audit. See Index: "Audit Policy.") (AA: Area E4, CSU, UC: limit 4 units*)
251 Beginning Tennis (.5-1) One and one-half to three lab hours plus one lab hour by arrangement per week. 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: limit 4 units*)

252 Beginning/Intermediate Tennis (.5-1) One and one-half to three lab hours plus one lab hour by arrangement per week. Emphasizes service, forehand, and backhand strokes. Includes rules of play, net play, and doubles and singles strategy. (AA: Area E4, CSU, UC: limit 4 units*)

## 254 Intermediate/Advanced Tennis

(.5-1) One and one-half to three lab hours plus one lab hour by arrangement per week. Recommended Preparation: successful completion of college level beginning tennis course. Techniques and skills of basic tennis strokes used in playing doubles and singles. Philoso-
phy and strategy of playing doubles and singles. (To increase competency, may be taken twice, after which students may petition to audit. See Index: "Audit Policy.") (AA: Area E4, CSU, UC: limit 4 units*)

## Team Sports (TEAM)

105 Advanced Baseball (.5-4) (Open entry/open exit.) One and one-half to twelve lab hours plus one lab hour by arrangement per week. 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. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)

110 Basketball (.5-1) One and one-half to three lab hours plus one lab hour by arrangement per week. 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. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)
118 Advanced Basketball: Women (.5-3) (Open entry/open exit.) Three to nine lab hours plus one lab hour by arrangement per week. Recommended Preparation: interscholastic basketball or equivalent. A class for women wishing to compete on Women's Varsity Basketball Team. Advanced skills of basketball play; development of team play. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)

## 119 Tournament Basketball for Women

(.5-1) (Credit/No Credit or letter grade option.) Four to six lab hours plus one hour by arrangement per week for six or eight weeks. 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, CSU)

## 135 Advanced Football and Conditioning

 (.5-2.5) (Open entry/open exit.) One and one-half to seven and one-half lab hours per week. 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. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)148 Indoor Soccer (.5 or 1) (Credit/No Credit or letter grade option.) Two or three lab hours plus one hour by arrangement per week. 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. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU)
150 Softball (.5-1) One and one-half to three lab hours plus one lab hour by arrangement per week. Basic skills, strategy, and practice in softball. Includes batting, catching, throwing, rules of play, and team strategy through round-robin competition. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)
158 Advanced Softball: Women (.5-2) (Open entry/open exit.) One and one-half to six lab hours plus one lab hour by arrangement per week. Recommended Preparation: interscholastic softball or equivalent. 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. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)

165 Advanced Track and Field: Men and Women (.5-2) (Open entry/open exit.) One and one-half to six hours plus one lab hour by arrangement per week. 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. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)
171 Beginning Volleyball (.5-1) One and one-half to three lab hours plus one lab hour by arrangement per week. 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: limit 4 units*)

173 Intermediate Volleyball (.5-1) One and one-half to three lab hours plus one lab hour by arrangement per week. Prerequisite: TEAM 171 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: limit 4 units*)

175 Advanced Volleyball (.5-1) One and one-half to three lab hours plus one lab hour by arrangement per week. Prerequisite: TEAM 173, high school team participation, or demonstration of competency. Volleyball play for advanced students of superior ability. Continuation of fundamental skills. Emphasizes team play, advanced strategy, court coverage, and rules. Round-robin and tournament play. (To increase competency, may be taken two times.) (AA: Area E4, CSU, UC: limit 4 units*)

179 Tournament Volleyball (.5-1) One and one-half to three lab hours per week. Prerequisite: beginning course in volleyball or equivalent. For advanced beginners and intermediate level volleyball players. Emphasizes the team aspects of sports. Includes participation in organized intra-class tournaments preceded by stretching and appropriate warm-up activities. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)

## 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. Stu-dent-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.

100 Varsity Baseball (.5-2) (Open entry/open exit.) Fifteen lab hours per week by arrangement. 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: limit 4 units*)
105 Varsity Baseball Conditioning (.51) (Credit/No Credit or letter grade option.) (Open entry/open exity) ) Two or three lab hours plus one hour by arrangement per week. 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 studentathletes competing in baseball. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU)
120 Varsity Cross Country: Men (.5-2) (Open entry/open exit.) Fifteen lab hours per week by arrangement. 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: limit 4 units*)

130 Varsity Football (.5-2) (Open entry/open exit.) Fifteen lab hours per week by arrangement. Recommended Preparation: interscholastic participation or equivalent. Intercollegiate varsity football competition in the Golden Gate Conference. Student athletes must be 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: limit 4 units*)

133 Offensive Varsity Football Lab (.5-3) (Credit/No Credit or later grade option.) Two to nine lab hours plus one hour by arrangment per week. Maintenance weight training program for in-season competition. Emphasis will be on free weights, flexibility exercises, and anaerobic training. Instrucxtion on form, technique, and muscle development. Participation will increase muscle sixe, strength, and endurance. (To increase competency, may be taken four times for a maximum of 12 units. (AA, CSU)

## 134 Defensive Varsity Football Lab (.5-

 3) (Credit/No Credit or letter grade option.) Open entry/open exit) Two to nine lab hours plus one hour by arrangement per week. 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, strenght, and endurance. (To increase competency, may be taken four times for a maximum of 12 units. (AA, CSU)160 Varsity Swim (.5-2.) (Credit/No Credit or letter grade option.)(Open entry/open exit) Fifteen lab hours per week. 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.(To increase competency, may be taken four times for a maximum of 8 units. (AA, CSU)

185 Varsity Track and Field: Men and Women (.5-2) (Open entry/open exit.) Fifteen lab hours per week by arrangement. Recommended Preparation: interscholastic participation in track and field or cross country or equivalent. Varsity Track and Field competition for men and women in the Coast Conference. (AA: Area E4, CSU, UC: limit 4 units*)

300 Varsity Basketball: Women (.5-2) (Open entry/open exit.) Fifteen lab hours per week minimum. Recommended Preparation: interscholastic participation in basketball or equivalent. Intercollegiate competition in the Coast Conference and California Championships. (AA: Area E4, CSU, UC: limit 4 units*)

310 Varsity Cross Country: Women (.5-2)
(Open entry/open exit.) Fifteen lab hours per week by arrangement. 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: limit 4 units*)

## 320 Varsity Softball: Women (.5-2)

(Open entry/open exit.) Fifteen lab hours per week minimum. Recommended Preparation: interscholastic participation in softball and completion of Team 158, Advanced Softball for Women. Intercollegiate women's varsity softball competition in the Coast Conference and State championships. (AA: Area E4, CSU, UC: limit 4 units*)
330 Varsity Tennis: Women (.5-2)
(Open entry/open exit.) Fifteen lab hours per week minimum. 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: limit 4 units*)
400 Women's Varsity Polo (.5-2) (Credit/No Credit or letter grade option.) (Open/entry/ open exit) Fifteen lab hours per week. 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. (To increase competency, may be taken four times for a maximum of 8 units.) (AA, CSU)

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 12 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.)

101 Theory of Baseball (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. Concepts of modern baseball are explored including: stategy, 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)

102 Theory of Offensive Football (3)
(Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. 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, developemental drills, strength and conditioning programs are covered. This is NOT an activity class. (AA, CSU)

## 103 Theory of Defensive Football (3)

(Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. 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)
104 Theory of Special Teams (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. 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, developemental drills, strength and conditioning programs are covered. This is NOT an activity class. (AA, CSU)

113 Selected Topics in Nutrition (1) Two lecture hours per week for eight weeks. 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. This is NOT an activity class. (May not be taken for credit following HSCI 113.) (AA, CSU)

114 Fitness (1) Two lecture hours per week for eight weeks. 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. This is NOT an activity class. (May not be taken for credit following HSCI 114.) (AA, CSU, UC)

119 Exercise and the Aging Process (3) Three lecture hours per week. Integrates exercise physiology and the effects of true aging versus secondary aging. Studies the way in which physical activity can prevent or treat disabling conditions typically associated with the aging process. Designed for students considering the health care professions. This is NOT an activity course. (May not be taken for credit following HSCI 119.) (AA, CSU)

120 First Aid/CPR (1) (Credit/No Credit or letter grade option) Two lecture hour per week for eight weeks. 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)
125 Principles of Exercise Physiology (3)
Three lecture hours per week. 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. This is NOT an activity class. (May not be taken for credit following HSCI 125.) (AA, CSU)

135 Introduction to College and Intercollegiate Athletics (2) (Credit/No Credit or letter grade option.) Two lecture hours plus one hour by arrangement per week. 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)

641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

810 Adapted P.E. Assistant Lab (1-3)
(Open entry/open exit.) Three to nine lab hours per week. Designed to provide hands-on experience for pre-therapy students. Includes practical experience working with disabled students in the Adapted Physical Education Program. (AA)
879 Selected Topics (1-3) (See first page of Description of Courses section.)
880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## Physical Science

## (Also see Humanities 127 and 128)

100 Introduction to the Physical Sciences (3) Three lecture hours per week. Open to all students except those who are currently enrolled in or have completed a college course in physics, astronomy, or chemistry. Survey of topics in physics, astronomy and chemistry. Emphasizes interdisciplinary aspects of science. (Intended for non-science majors.) (AA: Area E5a, CSU: Area B1, UC: Area 5A*)

675 Honors Colloquium in Physical Science (1) One lecture hour per week. Prerequisite: limited to students in the Honors Program who have completed or are concurrently enrolled in an associated non-honors course in physical science. Readings, discussion, and lectures covering selected advanced topics in physical science to be determined by the Physical Science Department and the Honors Program. (AA: Area E5a, CSU: Area B1)

## 676 Physical Reality and Measurement

 - Honors Colloquium (1) Two lecture hours per week for eight weeks. 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 (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

879 Selected Topics (1-3) (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.)

## Physics

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.

100 Descriptive Introduction to Physics (3) Three lecture hours plus one hour by arrangement per week. 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 B1, UC: Area 5A*)
101 Conceptual Physics Lab (1) Three lab hours per week. Prerequisite: Math 110 or equivalent. Corequisite: concurrent enrollment or passing grade in Phys 100 or equivalent. Students become familiar in this laboratory course with the basic laws of physics by semi-quantitative experiments. (AA, CSU)
150 Preparation for Physics (4) (Credit/ No Credit grading.) Three lecture and three lab hours plus one hour by arrangement per week. Prerequisite: completion of or concurrent enrollment in MATH 130 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 210 or 250 . (AA)

The Physics 210-220 sequence is designed for students 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 210-211-220-221.

210 General Physics I (4) Three lecture and three lab hours plus one hour by arrangement per week. Prerequisite: MATH 130; PHYS 150 or equivalent. Mechanics, heat, and sound. (AA: Area E5a, CSU: Area B1/ Area B3, UC: Area 5A*) (PHYS 210 and 220 = CAN PHYS SEQ A)

211 General Physics I - Calculus Supplement (1) One lecture hour per week. Prerequisites: 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) Three lecture and three lab hours plus one hour by arrangement per week. Prerequisite: PHYS 210. Magnetism, electricity, light, and modern physics. (AA: Area E5a, CSU, UC: Area 5A*) (PHYS 210 and $220=$ CAN PHYS SEQ A)
221 General Physics II - Calculus Supplement (1) One lecture hour per week. Prerequisites: MATH 242 or 252; PHYS 211; 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 threesemester 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 210-211-220-221 sequence.

250 Physics with Calculus I (4) Three lecture, one recitation hour, and three lab hours plus two hours by arrangement per week. 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 B1/Area B3, UC: Area 5A*) (PHYS 250, 260 and $270=$ CAN PHYS SEQ B)
260 Physics with Calculus II (4) Three lecture and three lab hours plus two hours by arrangement per week. Prerequisites: PHYS 250; MATH 242 or completion of or concurrent enrollment in MATH 253. Electricity and magnetism. Extra supplies required. (AA: Area E5a, CSU, UC) (PHYS 250, 260 and $270=$ CAN PHYS SEQ B)

270 Physics with Calculus III (4) Three lecture and three lab hours plus two hours by arrangement per week. Prerequisites: PHYS 250; MATH 242 or completion of or concurrent enrollment in MATH 253. Heat, light, and modern physics. Extra supplies required. (AA: Area E5a, CSU, UC) (PHYS 250, 260 and $270=$ CAN PHYS SEQ B)
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Political Science

100 Introduction to Political Science (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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)

## 110 Contemporary Foreign Governments

(3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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 $O R$ 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) Three lecture hours per week. 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)

130 International Relations (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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 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 21st Century challenges presented by globalization and terrorism. (AA: Area E5b, CSU: Area D, UC: Area 4)
150 Introduction to Political Thought (3) Three lecture hours per week. 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 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 Govern-

ments (5) Five lecture hours per week. 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 E1/Area E5b, CSU: Area D/Area F2, UC: Area 4/Area 7B/Area 7C*)

210 American Politics (3) Three lecture hours per week. 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 E1a/Area E5b, CSU: Area D/Area F2/Area F3, UC: Area 4/Area 7B*) (CAN GOVT 2)

## 212 Introduction to American Politics

 and Society (3) Three lecture hours per week. 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 E1a/Area E5b, CSU: Area D/Area F2, UC: Area 4/Area 7B)
## 215 Contemporary Issues in American

Politics (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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. Explores, within the constitutional framework, current issues of importance to wellinformed 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. (Satisfies the American Institutions requirement.) (AA: Area E1a/Area E5b, CSU: Area D/Area F2, UC: Area 4/Area 7B)

220 The American Presidency (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion
of READ 400 or 405 with a grade of C or bigher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Comparative critical analysis of the executive branch of American government from Franklin Roosevelt's administration to the present. Scrutinizes variations in policy-making, political activity, administrative leadership, and Executive-Legislative branch relationships. (Satisfies the American Institutions requirement.) (AA: Area E1a/ Area E5b, CSU: Area D, UC: Area 4)

250 Civil Liberties and Civil Rights (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ concurrent enrollment in READ 400, 405, or 415 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 E1a/Area E5b, CSU: Area D/Area F2, UC: Area 4/Area 7B)

255 Women, Politics and Power (3) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or bigher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. The changing roles of women in the political process. Emphasizes the methodology, rationale, and effect of women's participation on several levels of political activity. (Satisfies the American Institutions requirement.) (AA: Area E1a/Area E5b, CSU: Area D/Area F2, UC: Area 4/Area 7B)

## 260 Contemporary Ethnic Politics (3)

Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Survey and analysis of goals, methods and achievements of African, Asian and Latino Americans in their pursuit of political equality from the 1960 s to the
present. (Satisfies the American Institutions requirement.) (AA: Area E1a/Area E5b, CSU: Area D, UC: Area 4)

## 310 California State and Local Govern-

 ment (2) (Credit/No Credit or letter grade option.) Two lecture hours per week. 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 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 E1b/Area E5b, CSU: Area D/Area F3, UC: Area 7C)680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Psychology

(Also see Sociology)
100 General Psychology (3) Three lecture hours per week. 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) (CAN PSY 2)

105 Experimental Psychology (3) (Credit/ No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. Prerequisite: PSYC 100 with a grade of $C$ or higher. Recommended Preparation: PSYC 121. 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)

108 Psychology in Practice (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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 100. Intended for students who want a general picture of human psychology. (May not be taken for credit following PSYC 100.) (AA: Area E5b, CSU: Area D/Area E)

110 Courtship, Marriage, and the Family (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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 110.) (AA: Area E5b, CSU: Area D/ Area E, UC: Area 4)
121 Basic Statistical Concepts (3) Three lecture hours per week. Prerequisite: MATH 120 or 123 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 100 or SOCI 100; 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 C1, CSU: Area B4, UC: Area 2A*)
200 Developmental Psychology (3) Three lecture hours per week. Prerequisite: PSYC 100 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 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 life-span. 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) Three lecture hours per week. Prerequisite: PSYC 100. 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 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) Three lecture hours per week. Prerequisite: PSYC 100. 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. 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) Three lecture hours per week. Recommended Preparation: PSYC 100; 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) Three lecture hours per week. Prerequisite: PSYC 100. 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 for credit following SOCI 300.) (AA: Area E5b, CSU: Area D/Area E, UC: Area $4^{*}$ )
330 Sports Psychology (3) Three lecture hours per week. 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. Analysis of psychological and sociological elements of participation in sports. Examination of mental factors that help produce optimum performance. The personal and collective meaning of sports in our society. (AA: Area E5b, CSU: Area D/Area E)

410 Abnormal Psychology (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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

(1) One lecture hour per week. 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)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Reading

400 Academic Textbook Reading (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. Prerequisite: READ 830 with a grade of $C$ or bigher (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. (This course partially satisfies the English competency requirement for the AA/AS degree.) (AA: Area C2, CSU)

405 College Analytical Reading (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. 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. (This course partially satisfies the English competency requirement for the AA/AS degree.) (AA: Area C2, CSU)

## 412 College-Level Individualized Reading

 Improvement (.5-3) (Credit/No Credit grading) (Open entry/open exit) One and one half to nine hours by arrangement per week. Recommended Preparation: eligibility for READ 400 or 405 or ENGL 100. Practice methods of increasing comprehension, vocabulary, critical reading, study-reading strategies, and/or speed using college-level readingmaterials. May include internet, computerassisted, 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 twelth week of the semester. (May be taken four times for a maximum of 12 units.) (AA, CSU)
415 Reading Across the Disciplines: Individualized Preparation (.5-1.5) (Credit/No Credit grading.) Open entry/open exit.One and one-half to five lab hours by arrangement per week. 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 transfer-level 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 reading appointment required. May include textbook comprehension, principles of learning and retention, notetaking, annotating, discipline-based vocabulary, paraphrasing, reading graphics, test taking, and research techniques. Registration is open through the 12th week of the semester. (May be taken four times for a maximum of 6 units.) (AA, CSU)

454 College-Level Vocabulary Improvement I (.5-1.5) (Credit/No Credit grading) (Open entry/open exit) One and one half to five hours by arrangement per week. Recommended Preparation: eligibility for READ 400 or 405 or ENGL 100. A self-paced, individualized course designed to improve col-lege-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 1.5 units.) (AA, CSU)

## 455 College-Level Vocabulary Improve-

 ment II (.5-1.5) (Credit/No Credit) One and one half to five hours by arrangement per week. Recommended Preparation: eligibilty for READ 400 or 405 or ENGL 100. Continuation of READ 454. A self-paced, individualized course designed to improve college-level vocabulary skills through a words-in-contextapproach. Students will use textbooks and computer programs to study up to 300 words. (May be taken three times for a maximum of 1.5 units.) (AA, CSU)

680 - 689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

807 Basic Phonic Skills for Non-Native Speakers (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. 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. (To increase competency, may be taken twice for a maximum of 6 units.) (Units do not apply toward AA/AS degree.)

808 Basic Phonic Skills (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. 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. (To increase competency, 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) Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Recommended Preparation: READ 807 or 808 with Credit 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. (To increase competency, may be taken twice for a maximum of 6 units.) (Units do not apply toward AA/AS degree.)
## 812 Individualized Reading Improve-

 ment (.5-3) (Credit/No Credit grading.) (Open entry/open exit.) One and one-half to nine lab hours by arrangement per week. Practice methods of increasing comprehension, vocabulary, critical reading, study-reading strategies, and/or speed using a variety of 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. (To increase competency, may be taken up to four times for a maximum of 12 units.) (Units do not apply toward AA/AS degree.)
814 Basic Spelling Mastery (.5-1) (Credit/ No Credit grading.) (Open entry/open exit.) One and one half to three hours by arrangement per week. 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 1 unit.) (Units do not apply toward AA/AS degree.)
815 Advanced Spelling Mastery (.5-1) (Credit/No Credit grading.) (Open entry/open exit.) One and one half to three hours by arrangement per week. 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) (Credit/No Credit or letter grade option) Three lecture hours plus one hour by arrangement per week. 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)

 (Credit/No Credit or letter grade option.) Three lecture hours plus one hour by arrangement per week. Recommended Preparation: READ 825 with a grade of C (or higher or appropriate skill level indicated by the Reading placement tests and other measures). Analysis of expository writing, including extended textbook passages, work documents, and fictional writing, essential to proficient reading in college courses and job-related reading. Emphasis on applying reading strategies to comprehend and retain textbook information and perform better on academic andcareer-related tests. 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 excerpt, and book-length works. Intensive work with vocabulary and word origins. Qualifies as preparation for READ 400 and READ 405. (May be taken twice for a maximum of 6 units.) (AA)

## 852 Vocabulary Improvement I (.5-5)

(Credit/No Credit grading.) (Open entry/open exit.) One and one-half to five lab hours per week. A self-paced, 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 (.5-1.5)
(Credit/No Credit grading.) (Open entry/open exit.) One and one-half to five lab hours per week. A self-paced, individualized course designed to improve their 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.)
879 Selected Topics (1-3) (See first page of Description of Courses section.)

880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## Real Estate

For licensed real estate agents, R.E. 100 and 105 may be waived as prerequisites for all real estate courses.

100 Real Estate Principles (3) Three lecture hours per week. 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) Three lecture hours per week. Real estate markets, financing investment purchases, value of money and a welldiversified investment strategy, 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)110 Real Estate Practice (3) Three lecture hours per week. 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)

## 121 Legal Aspects of Real Estate I (3)

Three lecture hours per week. 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 Estate Law. (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)
122 Legal Aspects of Real Estate II (3) Three lecture hours per week. Prerequisite: R.E. 121 or equivalent. Contracts, security transactions, and current developments in law. Course materials include selections of California appellate court decisions. For the serious student who will devote the required time of approximately six hours of study each week. (May be taken twice for a maximum of 6 units.) (Meets the State requirements for the broker's license.) (AA)

131 Real Estate Finance I (3) Three lecture hours per week. Practices, customs, and laws relating to mortgage lending 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: Area C1, CSU)
132 Real Estate Finance II (3) Three lecture hours per week. Prerequisite: R.E. 131 or equivalent. Financing of commercial, industrial, and special-purpose properties. Financing mathematics, financial analysis, construction financing, and feasibility studies, creative financing, and government participation through social action programs. (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)

141 Real Estate Appraisal: Basic (3) Three lecture hours per week. 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)
142 Real Estate Appraisal: Intermediate
(3) Three lecture hours per week. Prerequisite: R.E. 141 or equivalent. More complex aspects of appraisal process, including standards and ethics and narrative report writing. (Meets the State requirements for Appraisal Licensure.) (May be taken twice for a maximum of 6 units.) (AA, CSU)

143 Real Estate Appraisal: Advanced (3) Three lecture hours per week. Prerequisite: R.E. 142 or equivalent. Advanced real estate appraisal of multi-family dwellings, apartment houses, commercial, and special purpose property. (Meets the State requirements for the broker's license.) (AA, CSU)

145 Real Estate Appraisal: Rural (3) Three lecture hours per week. Prerequisites: R.E. 141 or equivalent. Advanced real estate appraisal of rural properties, covering row crop, orchard, and livestock properties. (Meets the State requirements for the broker's license.) (May be taken twice for a maximum of 6 units.) (AA, CSU)
200 Real Estate Economics (3) Three lecture hours per week. 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)
205 Real Estate Mathematics (3) Three lecture hours per week. Review of the fundamentals of mathematics as they apply to real estate practice, with problems in amortization, appraising, broker's trust fund accounts, interest, and capitalization techniques. (AA)
210 Real Estate Exchanges and Taxation
(3) Three lecture hours per week. Prerequisites:
R.E. 110, 121, 131, and 141 or equivalent.

Advanced course for real estate brokers and investors with experience in residential and commercial transactions. Primary emphasis on developing and analyzing exchange
transactions, practical and technical aspects of completion, the correlation of exchanges, and tax matters. (Meets the State requirements for the broker's license.) (May be taken twice for a maximum of 6 units.) (AA, CSU)

215 Commercial and Investment Property (3) Three lecture hours per week. 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 Real Estate Property Management

(3) Three lecture hours per week. 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)

225 Real Estate Office Administration
Three lecture hours per week. Introduction to management: research, personnel, and market management decisions; transition from sales associate to manager; personnel training, counseling, and compensation; trends in the industry and their implications for management. (Meets the State requirements for the salesperson's and broker's licenses.) (May be taken twice for a maximum of 6 units.) (AA)
230 Real Estate Internship (4) Two lecture hours and ten laboratory hours per week. Supervised work experience and seminar. Practical application of classroom skills. Intended to assist the student enrolled in the Cooperative Education program. (As of Spring 1987, will be accepted by the State Department of Real Estate as a qualification for salesperson's license and as a substitution for R.E. 110.) (May be taken twice for a maximum of 8 units.) (AA)

235 Real Estate Sales Techniques (3) Three lecture hours per week. Specialized techniques required to promote an effective sales record. Coordinates the theoretical background required for State examinations into the area of property merchandising. (May be taken twice for a maximum of 6 units.) (AA)

301 Escrow Procedures: Basic (3) Three lecture hours per week. 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)
303 Escrow Practices: Intermediate (3) Three lecture hours per week. Prerequisites: R.E. 301 or equivalent. Course covers unusual types of escrow and evaluating possible solutions. (Meets the State requirements for the salesperson's and broker's licenses.) (May be taken twice for a maximum of 6 units.) (AA)

## 305 Escrow Problems: Advanced (3)

 Three lecture hours per week. Prerequisite: R.E. 303 or equivalent. Further study of unusual and difficult types of escrows. Presents case problems, conflicts and disputes in escrow for discussion. (Meets the State requirements for the salesperson's and broker's licenses.) (AA)311 Title Examination Procedures I (3) Three lecture hours per week. Preliminary study of documents comprising a chain of title and evaluation of the validity of chain of title documents. Field trips required. (May be taken twice for a maximum of 6 units.) (AA)

313 Title Examination Procedures II (3) Three lecture hours per week. Prerequisite: R.E. 311. Designed to supplement R.E. 311. Practical and advanced comprehensive study of title examining problems. Field trips required. (May be taken twice for a maximum of 6 units.) (AA)
641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)
801 Real Estate License Exam Preparation (1.5) Three lecture hours per week for eight weeks. 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 (1-3) (See first page of Description of Courses section.)
880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## Social Science

111 Critical Thinking and Writing (3)
Three lecture hours per week. Prerequisite: ENGL 100. Recommended Preparation: Completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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 1B) (CAN PHIL 6)

220 British Life and Culture (3) (Credit/ No Credit or letter grade option.) One and one-half lecture hours and five lab hours per week. 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 British society and 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)

221 French Life and Culture (3) (Credit/ No Credit or letter grade option.) One and one-half lecture hours and five lab hours per week. 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 at several cultural and political centers. Required for enrollees in the Paris Semester. (AA: Area E5b, CSU)

## 301 Introduction to Alcohol and Other

 Drug Studies (3) Three lecture hours per week. 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) Three lecture hours per week. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 or 415 with a grade of $C$ or higher $O R$ concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests 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)

## 303 Alcohol and Other Drug Abuse

 Prevention and Education (3) Three lecture hours per week. Recommended Preparation: SOSC 301 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. History, theories, models, and approaches to prevention. Review of research on epidemiology, environmental factors and prevention strategies; effective prevention programs. (AA, CSU)
## 304 Intervention, Treatment and Recovery

(3) Three lecture hours per week. Recommended Preparation: SOSC 301 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. 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) Three lecture hours per week. 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) Three lecture hours per week. Recommended Preparation: eligibility for English 800 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 various beginning AOD (alcohol and other drug) counseling techniques, as well as interviewing and referral skills. Using the experiential format, participants learn and practice skills in attentive listening, recognizing and responding to different levels of client communication. The theory and practice of group leadership in group counseling process and group interaction will be studied as a means to change behavior. (AA, CSU)309 Peer Education and Prevention Strategies (3) Three lecture hours per week. 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. Discussion and development of proactive peer strategies for substance abuse prevention on college campuses. Includes issues such as the physical and social effects of alcohol and other drug use, as well as eating problems, sexually transmitted diseases, and acquaintance rape. (AA, CSU)

310 Special Population Groups in Alcohol and Other Drug Studies (3) Three lecture hours per week. 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 special population groups 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)

313 Alcohol and Other Drug Treatment for Incarcerated Populations (3) Three lecture hours per week. Prerequisite: SOSC 301, 302, 304. 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. Covers philosophy, approaches, goals, objectives, language, policies, and procedures of the Criminal Justice System and the Alcohol and Other Drug Treatment Systems to insure that drug-involved offenders receive appropriate treatment and supervision. (AA: Area E5b, CSU)

314 Individual AOD (Alcohol and Other Drug) Counseling Process (3) Three lecture hours per week. 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 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) Three lecture hours per week plus completion of at least 100 hours of documented work in an agency or organization in the alcoholldrug abuse field ( 255 hours if CAADAC certification is sought). Prerequisite: SOSC 301 and 302. 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. Supervised practicum/internship. The first semester of a two-semester sequence placing students in alcohol/drug abuse agencies or organizations. Participants must already be knowledgeable about chemical dependency. (AA, CSU)

316 Field Studies and Seminar II (3) Three lecture hours per week plus completion of at least 100 hours of documented work in an agency or organization in the alcoholldrug abuse field (255 hours if CAADAC certification is sought). Prerequisite: SOSC 315. 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. Supervised practicum/internship. The second semester of a two-semester sequence placing students in alcohol/drug abuse agencies or organizations. Participants must already be knowledgeable about chemical dependency. (AA, CSU)

## 318 Domestic Violence and AOD Issues

(3) Three lecture hours per week. 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. 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) Three lecture hours per week. 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)

321 Adolescent Alcohol and Other Drug Prevention, Treatment and Recovery (3) 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)

680-689 Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (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 (1-3) (See first page of Description of Courses section.)

## Sociology

100 Introduction to Sociology (3) (Cred$i t /$ No Credit or letter grade option.) Three lecture hours per week. 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) (CAN SOC 2)

105 Social Problems (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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) (CAN SOC 4)

## 110 Courtship, Marriage and the Family

 (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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 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, psychological, and sociological aspects of sex; class and religious factors; divorce; and remarriage. (May not be taken for credit following PSYC 110.) (AA: Area E5b, CSU: Area D/Area E, UC: Area 4)141 Race and Ethnic Relations (3)
Three lecture hours per week. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher $O R$ 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) Three lecture hours per week. 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 E1b/Area E5b, CSU: Area D/Area F3, UC: Area 4/Area 7C)
300 Social Psychology (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Recommended Preparation: SOCI 100 or PSYC 100. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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 processes of perception, identity, roles, and attitudes. (May not be taken for credit following PSYC 300.) (AA: Area E5b, CSU: Area D/Area E, UC: Area 4)

340 Human Sexuality (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. 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)

391 Parent-Child Relations (3) (Telecourse.) (Credit/No Credit or letter grade option.) Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Analysis of problems faced by new and prospective parents. Study of parent-child interaction and perception of attitudes, roles, and identity. Explores alternative solutions and coping strategies to assist parents in the process of guiding their children's growth and development. Partial focus on Black and Latino families. (AA: Area E5b, CSU: Area D/Area E)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)
690 Special Projects (1-2) (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 (1-3) (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.
110 Elementary Spanish (5) (Credit/No Credit or letter grade option.) Five lecture hours plus two lab hours by arrangement per week. 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)

111 Elementary Spanish I (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. 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 110. (AA: Area E5c, CSU: Area C2, UC*)

112 Elementary Spanish II (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: SPAN 111 or equivalent with Credit 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 112 is the second half of SPAN 111. (AA: Area E5c, CSU: Area C2, UC*)
115 Beginning Spanish I (3) (Telecourse) (Credit/No Credit 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 111 but without the oral component. (AA: Area E5c, CSU)

116 Beginning Spanish II (3)
(Telecourse) (Credit/No Credit or letter grade option.) Prerequisite: SPAN 115. 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 112 but without the oral component. (AA: Area E5c, CSU)
117 Advanced Beginning Spanish I (3) (Telecourse) (Credit/No Credit or letter grade option.) Prerequisite: SPAN 116 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 121 but without the oral component. (AA: Area E5c, CSU)

118 Advanced Beginning Spanish II (3) (Telecourse) (Credit/No Credit or letter grade option.) Prerequisite: SPAN 117 or equivalent. Second half of a second-semester course that completes the introduction of Spanish vocabulary and language structures traditionally taught in a first-year 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) (Credit/No Credit or letter grade option.) Five lecture hours plus two lab hours by arrangement per week. Prerequisite: SPAN 110 or 112 or equivalent with Credit or a grade of C or higher. Continuation of Spanish 110.
Includes short readings that serve as a basis for classroom conversation. (AA: Area E5c, CSU: Area C2, CSU: Area 6)

121 Advanced Elementary Spanish I (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: SPAN 110 or 112 or equivalent with Credit 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 120. (AA: Area E5c, CSU: Area C2, CSU*)

## 122 Advanced Elementary Spanish II

(3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: SPAN 121 or equivalent with Credit 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 120. (Spanish 121 and 122 are equivalent to Spanish 120.) (AA: Area E5c, CSU: Area C2, CSU: Area $6^{*}$ )
130 Intermediate Spanish (5) (Credit/No Credit or letter grade option.) Five lecture hours plus one lab hour by arrangement per week. Prerequisite: SPAN 120 or 122 or equivalent with Credit or a grade of $C$ or higher. Practice of conversation and composition; review of grammar; in-class and collateral reading of Spanish and SpanishAmerican literature. Equivalent to Spanish 131 and 132. (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area 6)

131 Intermediate Spanish I (3) (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: SPAN 120 or 122 or equivalent with Credit or a grade of $C$ or higher. Practice of conversation and composition; review of grammar; in-class and collateral readings of Spanish and SpanishAmerican literature. Covers approximately the first half of the semester's work in Spanish 130. (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area $6^{*}$ )
132 Intermediate Spanish II (3) (Credit/ No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: SPAN 131 or equivalent with Credit 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 130. (Spanish 131 and 132 are equivalent to Spanish 130.) (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area $6^{*}$ )

140 Advanced Intermediate Spanish (3)
(Credit/No Credit or letter grade option.) Three lecture hours per week. Prerequisite: SPAN 130 or 132 or equivalent with Credit 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 SpanishAmerican literature. (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area 6)

161 Reading in Spanish Literature I (3) (Credit/No Credit or letter grade option.) Three lecture hours per week. Prerequisite: SPAN 140 or equivalent with Credit or a grade of $C$ or higher. Oral and written composition; in-class reading and discussion of Spanish, Spanish-American, 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 (Credit/No Credit or letter grade option.) Three lecture hours per week. Prerequisite: SPAN 161 or equivalent with Credit or a grade of $C$ or higher. Further oral and written composition; in-class reading of Spanish and Spanish American literature; extensive collateral reading of Spanish and SpanishAmerican literature, and review of grammar. (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area 6)

## 251 Hispanoamerica Contemporanea

(3) (Credit/No Credit or letter grade option.)

Three lecture hours per week. Prerequisites: SPAN 140 with Credit 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 (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

801 Conversational Spanish I, Elementary
(2) (Credit/No Credit grading.) Three lecture hours per week. 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) (Credit/No Credit grading.) Three lecture hours per week. Prerequisite: SPAN 801 or equivalent with Credit. Further work in conversation following the model of Spanish 801. (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) (Credit/No Credit grading.) Three lecture hours per week. Prerequisite: SPAN 802 or equivalent with Credit. 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) (Credit/No Credit grading.) Three lecture hours per week. Prerequisite: SPAN 803 or equivalent with Credit. 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)805 Conversational Spanish V, Advanced
(2) (Credit/No Credit grading.) Three lecture hours per week. Prerequisite: SPAN 804 or equivalent with Credit. Provides an allSpanish environment for advanced topical conversation focusing on current themes and graded readings, as well as programmed growth of topical vocabulary and increasingly complex language structures for adultlevel aural and oral communication skills. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)

806 Conversational Spanish VI, Upper Advanced (2) (Credit/No Credit grading.) Three lecture hours per week. Prerequisite: SPAN 805 or equivalent with Credit. This course provides an all-Spanish environment for upper-advanced topical conversation as well as growth of topical vocabulary and increasingly complex language structures for adult-level aural/oral communication skills. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)
810 Basic Spanish Communication (.5) (Credit/No Credit grading.) Two lecture hours per week for four weeks. Introduction to the basics of communicating in Spanish and to the cultural expectations of Spanish speakers in business and tourism relationships. Designed to help those with little or no knowledge of Spanish culture communicate successfully via words and culturally appropriate actions. (AA)

879 Selected Topics (1-3) (See first page of Description of Courses section.)
880 - 889 Selected Topics (1-3) (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 100 or Speech 120. Speech 855 is credit-bearing but not degree-applicable, which means that the units count for the purposes of financial aid but not toward the AA/AS degree.
100 Public Speaking (3) Three lecture hours plus one lab hour by arrangement per week. Recommended Preparation: eligibility for ENGL 100. 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 E2a/Area E5d, CSU: Area A1, UC: Area 1C) (CAN SPCH 4)

111 Oral Interpretation I (3) Three lecture hours plus one lab hour by arrangement per week. Recommended Preparation: eligibility for ENGL 100. 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 E2a/Area E5c, CSU: Area C2, UC)

112 Oral Interpretation II (3) Three lecture hours plus one lab hour by arrangement per week. Prerequisite: SPCH 111 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 E2a/Area E5c, CSU: Area C2, UC)

120 Interpersonal Communication (3) Three lecture hours plus one hour by arrangement per week. Recommended Preparation: eligibility for ENGL 848. 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 E2a/Area E5d, CSU: Area A1/Area D/Area E, UC: Area 1C) (CAN SPCH 4)

140 Small Group Communication (3) Three lecture hours plus one hour by arrangement per week. Recommended Preparation: eligibility for ENGL 100. 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 E2a/Area E5d, CSU: Area A1, UC: Area 1C) (CAN SPCH 4)
150 Intercultural Communication (3) Three lecture hours plus one hour by arrangement per week. Recommended Preparation: eligibility for ENGL 100. 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 E2a/Area E5d, CSU: Area A1, UC: Area 1C)

170 Organizational Communication (3) Three lecture hours plus one hour by arrangement per week. Recommended Preparation: eligibility for ENGL 100. Organizational communication theory and improvement of communication skills in organizations. Emphasizes decision-making; achievement of goals; conflict management; negotiation; cross-cultural examination of organizational structure, climate, and work-related values; and diversity management in organizations. (AA: Area E2a, CSU: Area D)
180 Family Communication (3) (Telecourse) Recommended Preparation: SPCH 120 and eligibility for ENGL 100. Through the televised segments, this course explores family interaction patterns through discussion, exercises, video guests, and in-studio guests. Examines the ways in which family members communicate, make decisions, settle conflict, and learn to relate to one another. (AA: Area E2a, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

855 Speech for Non-Native Speakers (Credit/No Credit or letter grade option.) Three lecture hours plus one lab hour by arrangement per week. Recommended Preparation: ESL 847 with Credit 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 E2a)

860 Communication in the Workplace (1) (Credit/No Credit grading.) Four lecture hours per week for four weeks. 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)
861 Speech Communication (1) (Credit/ No Credit grading.) Four lecture hours plus one hour by arrangement per week for four weeks. 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 (1-3) (See first page of Description of Courses section.)

880 - 889 Selected Topics (1-3) (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.
110 Elementary Welding Theory I (4)
Four lecture hours per week. Corequisite: concurrent enrollment in WELD 111. 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)
111 Elementary Welding Practice I (3) Nine lab hours plus one lab hour by arrangement per week. Corequisite: concurrent enrollment in WELD 110. Practical experience in gas and conventional arc welding of ferrous metals, brazing, and soldering. (AA, CSU)

120 Elementary Welding Theory II (4) Four lecture hours per week. Prerequisites: WELD 110/111. Corequisite: concurrent enrollment in WELD 121. 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)

121 Elementary Welding Practice II (3) Nine lab hours plus one lab hour by arrangement per week. Corequisite:
concurrent enrollment in WELD 120.
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) Four
lecture hours per week. Prerequisites: WELD
120/121. Recommended Preparation: DRAF 120; MTT 200; MANU 100 or PHYS 100.
Corequisite: concurrent enrollment in WELD 211. 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)

211 Advanced Welding Practice I (5) Fifteen lab hours per week plus one lab hour by arrangement per week. Corequisite: concurrent enrollment in WELD 210. 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) Four lecture hours per week. Prerequisite: WELD 210/211. Corequisite: concurrent enrollment in WELD 221. 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 D1.1 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) Fifteen lab hours per week plus one lab hour by arrangement per week. 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 of Non-Destructive Testing (2) Two lecture hours per week. 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) One lecture hour and three lab hours plus one lab hour by arrangement per week. 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) Two lecture and four lab hours plus one hour by arrangement per week. 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)
641 Cooperative Education (1-4) (See first page of Description of Courses section.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

690 Special Projects (1-2) (See first page of Description of Courses section.) (AA, CSU)

700 TIG Welding Technology (4) Two lecture and six lab hours plus one lab hour by arrangement per week. 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 (1-3) (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.)

## Faculty

(Date of original appointment follows name.)
Aguirre-Alberto, Sylvia (1989)
Counselor
A.A., College of San Mateo
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B.S., M.B.A., San Jose State University

Kirk, John R. (1970)
Professor, Economics
B.A., University of California, Berkeley
M.A., San Jose State University

Kitamura, Jonathan R. (2006)
Assistant Professor, English
B.A., University of California, Santa Barbara
M.A., San Francisco State University

Komas, Robert (1991)
Professor, Mathematics
B.A., University of California, San Diego
M.A., San Jose State University

Kramm, George (1994)
Professor, Speech Communication
B.A., M.A., San Diego State University

Laderman, David (1995)
Professor, Film
B.A., California State University, Northridge
M.A., Emory University
M.A., San Francisco State University

Lawrence, Yin Mei (2006)
Associate Professor, Chemistry
B.S., University of Manchester, England

Ph.D., University of Nottingham, England
Leddy, Matthew (1991)
Professor, Horticulture
A.A., Skyline College
B.A., University of California, Santa Cruz
M.A., San Francisco State University

Lehmann, J. Jay (1989)
Professor, Mathematics
B.S., University of Illinois
M.S., Claremont Graduate School

Li, Yaping (1995)
Professor, Speech Communication
B.A., Shandong University,

People's Republic of China
M.A., Ph.D., Indiana University

Lisses, Jennifer A. (2006)
Associate Professor, Spanish
A.A., Cerritos College
B.A., M.A., Long Beach State University

Locke, David (2001)
Associate Professor, Physics
B.S., University of Missouri, Columbia
M.A., University of California, Berkeley

Lohmann, Richard (1997)
Professor, Photography
B.A., M.A., San Francisco State University

MacDonald, James R. (1984)
Professor, Electronics
B.S., University of California, Davis

Mach, Jean (1989)
Professor, English
B.A., University of Washington
M.A.T., College of Notre Dame
M.A., University of California, Berkeley

Mangan, Joe C. (1999)
Professor, P.E./Cross Country;
Head Track and Field Coach
A.A., DeAnza College
B.S., M.S., Indiana University

Marron, Jamie (1991)
Professor, Reading
B.A., M.A., University of Illinois
M.A., University of California, Berkeley
M.F.A., Mills College

Ed.D., University of Southern California
Martin, Theresa (1995)
Professor, Biology
B.A., University of California, Santa Barbara
M.S., University of California, Davis
M.A., University of California, Berkeley

Mathur, Minu (2000)
Professor, Sociology
B.A., Delhi University
M.S., Ph.D., Oklahoma State University

Maule, Bruce (1990)
Professor, Accounting
B.S.C., Santa Clara University
M.B.A., San Jose State University

McAteer, Jane (1987)
Director, Nursing
B.S.N., Georgetown University
M.N., University of California, Los Angeles

McConnell-Tuite, Milla L. (1987)
Professor, English
B.A., M.A., San Francisco State University

McGinnis, Thurman (1995)
Professor, Administration of Justice
A.A., College of San Mateo
B.A., M.A. Hayward State University

McGlasson, Pamela N. (1991)
Professor, Business
B.S., Georgia College
M.Ed., Savannah State University

Mellor, Sandra L. (1974)
Dean, Corporate and Continuing Education B.A., M.A., San Jose State University

Morehouse, Steven N. (1977)
Counselor, High School Relations
A.A., College of San Mateo
B.A., San Francisco State University
M.S., California State University, Hayward

Morris, Teresa M. (2006)
Librarian
B.A., University of California, Berkeley
M.S., University of North Carolina, Chapel Hill

Motoyama, Catherine T. (1991)
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

Musgrave, Diane W. (1970)
Professor, English, German
A.B., A.M., Stanford University
M.A., San Francisco State University

Nakata, Rory (1990)
Professor, Art
B.A., San Francisco State University
M.A., Sacramento State University

Nishanian, Harutiun (2006)
Assistant 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)
Career Counselor
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)
Head Football Coach
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
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Petit, Susan Y. (1968)
Professor, English; French
B.A., Knox College
M.A., Purdue University
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Petromilli, James (1973)
Director, Center for Teaching and Learning
A.A., College of San Mateo
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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
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Pittman, Judith (2001)
Associate 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

Ramsey, Carolyn O. (1974)
Professor, Career and Life Planning; Counselor B.A., M.S., San Francisco State University

## Ratto, Robert (2001)

Associate Professor, Cosmetology
A.A., San Joaquin Delta College
B.A., San Francisco State University

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)
Assistant 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

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

Scholer, Linda K. (1984)
Professor, English
B.A., North Central College
M.Ed., University of Illinois

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
B.A., Fresno State University
M.S., San Francisco State University

Smith, Brandon (2005)
Assistant 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)
Associate 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 (2001)
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 (1991)
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, Technology
B.F.A., M.S., Michigan State University

Tollefson, Patricia A. (1984)
Professor, English
B.A., M.A., San Francisco State University
M.A., University of California, Davis
M.A., John F. Kennedy 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
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/Transfer Center
B.S., Central State University
M.Ed., University of Cincinnati

Valenti, Mary (1996)
Counselor
B.S., Notre Dame de Namur University M.A., San Jose State University

Villareal, Henry (2001)
Dean, Enrollment Services
B.S., M.S., University of Wisconsin

Ed.D., Arizona State University
Vorobey, Lilya (2000)
Assistant 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
Edgar H. Andrews (1987)
History; Humanities
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
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 (2001)
English
Robert Bennett (1994)
Counselor
Barbara Jean Berensmeier (1990)
Physical Education
Daniel A. Berry (1991)
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
Michael Brusin (1995)
History; Economics
Elizabeth Burdash (1995)
Psychology
Elaine M. Burns (2007)
Counselor
Virginia Burton (1981)
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
Michael Chriss (1993)
Astronomy; Humanities
Peter Chroman (1996)
Anthropology; Sociology

Rosalee Clarke (1996)
Mathematics
J. Kyle Clinkscales (1981)

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
Michael L. DeGregorio (2001)
Chemistry; Physics
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

Richard C. Donner (1998)
Physical Education
John B. Dooley (1979)
Librarian
Roland H. Fark (2000)
Biology
Emile L. Faure (2004)
Mathematics
Dr. John C. Fiedler (2001) English

Dr. Anita Fisher (2001)
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)
Horticulture
Georgia Grant (2007)
Computer \& Information Science
Dr. Patricia Griffin (2006)
Vice President, Student Services
Anne M. Grubbs (1974)
Chairperson, Health Occupations
Division

Dr. H. Sanford Gum (1984)
Drafting
Peter K. Gunderson (2003)
Geography
Martha Gutierrez (2007)
Counselor
Joe C. Hagerty (1983)
Director, Health \& ServiceCareers
Division
Jennie Halualani (1995)
Health Services
John Hancock (1995)
Music
Jane E. Hanigan (1984)
English; Re-Entry Program
Dr. William Harriman (1983)
English
Edward M. Harris (1985)
Mathematics
Richard V. Harris (1992)
Physical Education
Kenneth W. Harrison (1999)
Music
Carol Rhodabarger Heitz (1985)
Career and Personal
Development; Counselor
Mary M. Herman (1989)
Speech Pathologist
Robin Heyeck (2000)
English
Woodson F. Hocker (1972)
Spanish
John H. Hogan (2007)
Physical Education
Paul C. Holmes (1987)
English
Roy H. Holmgren (1989)
Mathematics
Dr. Cecilia A. Hopkins (1986)
Director, Business Division
Dee L. Howard (2002)
Counselor

Robert S. Howe (1990)
Career and Life Planning
Joeann J. Ingraham (1986)
Physical Education
James E. Innis (2000)
Health Science
William A. Janssen (1999)
Business
Joseph R. Johnson (2002)
Welding
Dr. John E. Karl, Jr. (1993)
Anatomy; Physiology
Dr. Walter M. Kaufmann (1990)
Sociology; Psychology
Robert Kellejian (1992)
Electronics
Dr. Shirley J. Kelly (2006)
President
Kenneth D. Kennedy (2004)
Political Science
Dr. Noel W. Keys (1995)
Psychological Services
Michael B. Kimball (2004)
English
Theodore W. Kirsch (2002)
Electronics
Robert C. Kowerski (2007)
Chemistry
Edward A. Kusich (1977)
Engineering; Mathematics
Eva M. Landmann (1987)
Nursing
Walter J. Leach, Jr. (1985)
Psychology; Sociology
Frank B. Leroi (2003)
Economics
Dr. Doris H. Linder (1989) History

Lorne MacDonald (1999)
Electronics; Engineering

George A. Mangan (2001)
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
Ruth McCracken (2003)
Nursing
Mary J. McCue (1999)
English
Dr. Joseph M. McDonough (1995)
Psychology
Virginia A. McMillin (1984)
Nursing
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
Robert C. Newell (1992)
Electronics
John L. Noce (1992)
Physical Education
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
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)
Political Science
Robert D. Pounds (2002)
Physical Education
Dolores I. Price (1985)
Physical Education
Joe A. Price (1994)
Art
Dr. Philip G. Prindle (1992)
Speech
Jean Pumphrey (1993)
English
Theodore L. Rankin (1987)
Administration of Justice
Vincent P. Rascon (1988)
Art

Dr. Edward H. Rategan (1989)
Computer \& Information Science
Elizabeth K. Rempel (1977)
Art
James Roach (2003)
Psychology
JoAnn C. Rock (2000)
Cooperative Education
Richard W. Rohrbacher (1987)
Speech; English; Broadcasting Arts
Samuel S. Rolph (1979)
Play Production
Jacquelyn Rose (1993)
Coordinator of Services for the Physically Disabled

William B. Rundberg (2000)
Mathematics; Earth Systems
Robert D. Rush (1995)
Physical Education
Dr. Rosa I. Sausjord (1983) Spanish

Edward G. Schoenstein (1996)
Technical Art \& Graphics
Edwin A. Schwartz (1993)
Psychology

Dr. Robert L. Shapiro (1983)
Electronics Technology
John B. Searle (2005)
Chemistry; Biology
Caroline R. Silva (1996)
Physical Education; Counselor
Dr. Balbir Singh (2005)
Mathematics
Robert W. Smith (1997)
Mathematics; Humanities
Grace Sonner (2005)
Vice President, Instruction
Dennis Stack (1999)
Drafting
Richard G. Statler (2005)
Physical Education; Health Science
Nancy J. Stock (2002)
Cosmetology
Angela R. Stocker (2003)
Physical Education; Social Science
Lawrence T. Stringari (2006)
Human Services; Psychological Services

Leah Tarleton (1994)
Health Services

Jack Thur (1996)
Physical Education
Lora B. Todesco (2000)
Business
Allen Tracy (1982)
Chemistry
Ronald R. Trouse (1993)
English
John Turner (1985)
English
Dr. James Upton (2001)
Mathematics; Humanities; Philosophy

Duane A. Wakeham (1986)
Art
Herbert R. Warne (1983)
Director of Admissions \&
Records
Barlow Weaver (1987)
Librarian
Dr. Alan L. Weintraub (1999)
Geography
Dr. David West (1999) Sociology

Agnes Williams (1996)
Cosmetology

John C. Williams (1992)
Biology
Richard A. Williamson (1991)
English; Film
Stuart Williamson (2000) Biology

Arlene Wiltberger (2006)
Psychological Services
Dr. Irving M. Witt (1993)
Sociology
Betty J. Wittwer (1990)
Business
Bernard F. Woods (1979)
Business Administration
Dr. Frank H. Young (1996)
Mathematics
Yoneo Yoshimura (1998)
Counselor
William H. Zempel (1990) Meteorology; Physics

Paul C. Zimmerman (2002)
Architecture
Christe P. Zones (1992) Geology

## Parking by Permit Only During Class Hours

ONE-DAY PERMITS: $\$ 1$ per day - Permit machine locations indicated by X (Lots 1, 2, 10 and 14)
VISITOR PARKING: Lot 3 Permit machine location indicated by $\mathbf{V}$
STUDENT PARKING: Lots $1,2,3 \mathrm{~B}, 9,10,14,15,15 \mathrm{~A}, 16,18,21,22$
STAFF PARKING: Lots 2A, 2A Extension, 3A, 3C*, 4*, 5, 6, 7*, 8*, 11, 12A*, 13, 17, 19, 20*, 20A, 20M (*Indicates lots available for student parking, after 5 pm only.)
DISABLED PARKING: By special permit only (contact Disability Resource Center, Bldg. 16, Room 150, 574-6438)
MOTORCYCLE PARKING: Lots 3, 11
PLEASE NOTE SPECIAL RESTRICTIONS ON PARKING LOT SIGNS. PLEASE ALSO NOTE PARKING LOTS THAT ARE OUT OF SERVICE DUE TO CONSTRUCTION.

## Building:

1. Administration
2. Music
3. Theatre, Broadcasting Arts
4. Art

4A. Ceramics/Sculpture
5. Student Center

Bookstore
Cafeteria
Café International
Counseling \& Transfer Center

- Academic Counseling Services
- Transfer Services

Student Activities
6. Swinerton
7. Maintenance
8. Gymnasium
9. Library, KCSM-TV/FM
10. Life Science
11. Science Classrooms/Middle College
12. Physical Science
13. To Be Determined
14. South Hall
15. Faculty Offices
16. Central Hall, DSPS
17. Faculty Offices
18. North Hall
19. Technology

- Architecture
- Building Inspection
- CIS Lab
- Drafting
- Electronics
- Engineering

20. EOPS, Multicultural Center, Horticulture

20A. Horticulture Greenhouses
21. Cosmetology
22. Dental Assisting
23. Nursing Lab
24. Locker Rooms
25. Machine Tool Tech., Manufacturing Tech.
26. Technology Classrooms
27. Graphics, Multimedia, Welding
28. Test Cell
29. NPA Lab, CIS Lab
30. Team House
31. Ticket Booth
33. Lazarus Child Development Center
34. ITS/Media Services
35. Moore Regional Public Safety Center
36. Science Building/Planetarium
A. District Administrative Offices - 3401 CSM Drive
B. College Vista - District Faculty/Staff Housing

T1. Temporary Building 1 - Career Development Center

- Career Services
- Cooperative Work Experience
- CSM Connects
- Student Employment


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