CSM's new Allied Health \& Wellness Building, to be completed in 2010, will house various health education programs (nursing, dental assisting, dental hygiene), cosmetology and a fitness center

# Catalog 2008-2009 collegeofsanmateo.edu 

## COLLEGE of SANMATEO

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

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## Calendar of Important Dates

## Summer Session 2008

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

August 9 Summer session eight-week classes close

## Fall Semester 2008

Matriculation Activities: See Schedule of Classes Placement Testing
College Orientation
Counseling
August 14 \& 15 Faculty Flex Days
August 18 Day and evening classes begin
August 29 Last day to add semester-length classes
August 29 Last day to drop semester-length classes with eligibility for partial credit/ refund
August 30 \& 31 Declared recess
September 1 Labor Day Holiday
September 12 Last day to drop semesterlength classes without appearing on student record
September 22 Last day to declare P/NP option for designated semester-long courses
October 1 Last day to file application for admission to the International Student (F-1 visa) Program for Spring 2009
October 3 Last day to apply for Fall AA/AS degree or certificate
November 10 Veterans' Day Holiday observed
November 17 Last day to withdraw from a semester-length class with assurance of a "W" grade
November 26 Declared recess for Evening classes
November 28-30
Thanksgiving recess
Registration for continuing students for Spring 2009
See Schedule of Classes for dates, times and places
December 12-18 Final examinations (day, evening and Saturday classes)
December 19-January 20
Inter-Semester recess

Spring Semester 2009
Matriculation Activities: See Schedule of Classes Placement Testing
College Orientation
Counseling
January 15 \& 16 Faculty Flex Days
January 17 \& 18 Declared recess
January 19 Martin Luther King Holiday
January 20 Day and evening classes begin
February 2 Last day to add semester-length classes
February 2 Last day to drop semester-length classes with eligibility for credit/refund
February 13 Lincoln Day Holiday
February 14 \& 15 Declared recess
February 16 President's Day Holiday
February 17 Last day to drop semesterlength classes without appearing on student record
February 24 Last day to declare P/NP option for designated courses
March 6 Last day to apply for Spring AA/AS degree or certificate
March 11 Faculty Flex Day (no classes)
April 6-12 Spring recess
April 15 Last day to file application for admission to the International Student (F-1 visa) Program for Fall 2009
April 30 Last day to withdraw from a semester-length class with assurance of a "W" grade
Registration for continuing students for Summer 2009 and Fall 2009 See Schedule of Classes for dates, times and places
May $23 \& 24$ Declared recess
May 25 Memorial Day Holiday
May 26-31 Final examinations (day and evening classes)
May 29 Commencement

## Summer 2009 (Tentative)

Matriculation Activities: See Schedule of Classes Placement Testing College Orientation Counseling
Registration See Schedule of Classes
June 22 Day \& evening classes begin
July 3 Independence Day Holiday (Observed)
July 10 Last day to apply for Summer AA/ AS degree or certificate
August 1 Summer six-week classes close
August 15 Summer eight-week classes close

## Administration

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

## Academic Divisions

Dean, Business/Technology
Kathleen Ross
Dean, Corporate and Continuing Education
Sandra L. Mellor
Dean, Language Arts
Sandra Stefani Comerford
Dean, Mathematics and Science
Charlene Frontiera
Dean, Physical Education/Athletics Andreas Wolf

Dean, Creative Arts/Social Science Kevin Henson
Dean, Coastside/Special Projects Martha Tilmann

## Director, Library Services

Lorrita Ford
Director, Nursing
Jane McAteer

## Student Services

Dean, 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 <br> <br> Mission Statement 

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

## SMCCCD Mission

In an atmosphere of collegiality and shared responsibility, and with the objective of sustaining open access for students and being responsive to community needs, the San Mateo County Community College District will fulfill the following mission with excellence:

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 records can be sent to colleges, universities, employers and other institutions upon a formal request of the student. Transcripts may be requested using the student WebSMART account. On WebSMART, under "Student Records," find "Request Official Transcript" link for this purpose. All courses completed or in progress at Cañada College, College of San Mateo, and/or Skyline College appear on the transcript. Transcripts from high school and other colleges are not forwarded from CSM to other institutions because our district colleges are authorized to send San Mateo County Community College transcripts only. Students may request official copies to be sent to them by noting "issue to student." Transcripts may also be requested directly from the Office of Admissions and Records, Building 1, Second Floor, and there is a downloadable form at: collegeofsanmateo.edu/forms. The form may be submitted in person, by mail, or faxed to the Office of Admissions and Records using fax number 574-6506. The first two official transcripts requested by a student are free; thereafter a charge of $\$ 5$ for each transcript is imposed. If a student wants a transcript processed immediately there is an additional "rush" service charge of $\$ 10$.
The transcript request must include the student's current name, a former name if used while attending College of San Mateo, the CSM student identification number or social security number, birth date, approximate dates of attendance, and the complete address to which the transcript is to be mailed. The student signature is required.
Students may access unofficial transcripts on their Student Web SMART account. This Web SMART transcript reflects courses taken during or after Summer 1981.

# 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 121 (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 "nonexempt" students and are expected to complete matriculation requirements.
Students who already hold an associate degree or higher, or those students who are matriculated students at another educational institution and taking courses at the College of San Mateo to meet the requirements of that institution, or students currently employed and taking only classes related to their jobs, are "exempt" students and are not required to participate in matriculation. Exempt students, however, may choose to participate in matriculation components.
The College provides matriculation services organized in several interrelated components:

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 or corequisite, filing a petition in the Assessment Center, Building 1, Room 130, on one or more of the following grounds:
a. The student has the knowledge or ability to succeed in the course despite not meeting the prerequisite.
b. The prerequisite or corequisite was established in violation of district policies or Title 5 regulations.
c. The prerequisite or corequisite is unlawfully discriminatory or applied in an unlawfully discriminatory manner.
d. The prerequisite or corequisite has not been made reasonably available and the student is subject to undue delay in goal attainment.
Students who wish to challenge prerequisites or corequisites must, within the established time frame, complete the Prerequisite Challenge Petition and attach required documentation. For semester length courses, petitions with documentation must be submitted to the Assessment Center, Bldg. 1, Rm. 130 at least five working days prior to the last day of the published late registration period. For courses that are not semester length, the petition with documentation must be submitted prior to the first day of the class. It is the responsibility of students to provide compelling evidence to support the challenge. Prerequisite Challenge Petitions are available on the college website at collegeofsanmateo.edu/forms.
12. 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.
13. 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:
14. Students with physical, visual, communication or learning disabilities are advised to contact: Disability Resource Center, Building 16, Room 150 or call 574-6438.
15. 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 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 al－ egada de los títulos susodichos－Title VI of the 1964 Civil Rights Act y Section 504， Rehabilitation Act of 1973 －debe dirigirse a la Oficina del Vice Canciller de Recursos Humanos y Relaciones del Personal al teléfono 358－6767．
Conforme a las leyes en los títulos citados anteriormente，se estudiará cada reclamación y a todas las personas a quienes concierna se les informará sobre las disposiciones de las leyes y los derechos legales pertinentes．Si por la manera prescrita resulta imposible ejecutar el proceso susodicho，o si no se cumple con los requisitos prescritos por las leyes，se iniciará la acción legal necesaria．Se compilará un registro de todas las reclamaciones basadas en los títulos mencionados y se comunicará al comité encargado del plan de Acción 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 ng 1964 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 kinikil－ ingang pagdinig ng anumang bagay na may kinalaman sa mga batas at patakaran．
Sinumang naghahangad ng impormasyon tungkol sa mga batas at patakarang ito o nagrereklamo ng paglabag sa Title VI ng 1964 Civil Rights Act at Sec．504ng Rehabilita－ tion Act of 1973 ay dapat kontakin ang Office of Vice Chancellor of Human Resourc－ es and Employee Relations．Telephone 358－6767．
Ang lahat ng reklamo ay susuriin ayon sa batas ng Title VI at Title IX，at ang mga taong kasangkot ay pagpapayuhan ng mga tadhana ng batas at ng kanilang mga legal na 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

聖馬习書院在取録新生，課程選修，學生服務，經濟援助及聥請職員方面的宗旨，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曾，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䮷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。除記録所有關歫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) email address; (3) participation in recognized activities and sports; (4) dates of enrollment; (5) degrees and awards received; (6) the most recent previous educational agency or institution attended; and (7) height and weight of members of athletic teams.
Appropriate college personnel as noted in No. 3 above have access to full address information.
The Federal Solomon Act requires colleges to release full directory information (including address) to U.S. Armed Forces.
A copy of the Family Educational Rights and Privacy Act (Sec. 438, P.L. 93-380) is available in the Office of Admissions \& Records, Administration Building, Room 210, during normal business hours.

## Sexual Assault Policy

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

## Sexual Harassment Policy

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

Students or staff seeking further information concerning this policy or claiming grievance because of alleged violations of this policy should contact the Vice-Chancellor of Human Resources and Employee Relations, 358-6767.

## Additional Redress

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

## Smoking Policy

It is the policy of San Mateo County Community College District to provide a safe learning and working environment for both students and employees. It is recognized that smoke from cigarettes, pipes and/or cigars is hazardous to health; therefore, it is the intent of the District to provide a smoke-free environment to the greatest extent possible. To achieve this goal, smoking will be limited to parking lots and designated outdoor areas only. Designated smoking areas are identified and clearly marked in various locations on campus.

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. To assist in the implementation of this policy, the District will provide education and training in the areas of smoking dangers and smoking cessation. Contact the CSM Health Center at 574-6396 for more information.
4. It is the responsibility of all students and employees to observe the policy and guidelines on smoking. Failure to comply with the policy on smoking will be treated in the same manner as other violations of District Rules and Regulations and may result in disciplinary action.
5. It is the responsibility of College and District Office managers to enforce the policy on smoking. Disputes over the
interpretation of the policy or complaints about individuals violating the policy should be brought to the attention of the person's supervisor, the Vice-President of Student Services at the College level, or the Vice-Chancellor of Human Resources and Employee Relations in the District Office. When the evidence is non-persuasive on either side, such disputes will be settled in favor of the nonsmoker(s) in recognition of the policy of the District to provide a smoke-free environment. Such disputes shall be settled at the lowest management level.
6. This policy does not supercede more restrictive policies which may be in force in compliance with State or Federal regulations.
7. Please refer to collegeofsanmateo.edu/ smokingpolicy to view a map of CSM's Designated Smoking Areas.

## Admission

## Eligibility Requirements

Graduation from high school or successful completion of the California High School Proficiency Examination or the General Education Development Examination (GED), is a prerequisite for admission for a person under 18 years of age. Any person who is 18 years of age or older and is able to benefit from the instruction offered is eligible to attend this public community college.
The policy of this district is that, unless specifically exempted by statute or regulation, every course, course section, or class, reported for state aid, wherever offered and maintained by the district, shall be fully open to enrollment and participation by any person who has been admitted to the college(s) and who meets such prerequisites as may be established pursuant to regulations contained in Article 2.5 (commencing with Section 55200) of Subchapter 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.
Prospective students should have college transcripts sent directly to College of San Mateo (Office of Admissions) by all institutions they have attended.

New students who plan to complete one or more of the educational goals listed below are expected to complete the matriculation process to enroll in classes: Step 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, Nursing, or Dental Hygiene program must file a separate application in addition to the application for admission to the College. To obtain the appropriate application form, call 574-6363 (Cosmetology), 574-6219 (Nursing), or 574-6401 (Dental Hygiene).

## 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/ College Connection Concurrent Enrollment Program

Students attending high school may register concurrently for CSM classes with the approval of the Dean of Enrollment Services. Interested students must submit a Concurrent Enrollment Application (http://smccd.edu/collegeconnection) with the required recommendation, together with their high school transcript.
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 11.5 units. 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.
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, California State University General Education (CSUGE) certification, or the Intersegmental General Education (IGETC) certification must make a formal request to have their transcripts evaluated by the College of San Mateo Admissions and Records evaluator. Students should make the request using the Transcript Evaluation Request form within the first semester in attendance at College of San Mateo. To initiate a transcript evaluation students must:
-be actively enrolled in a minimum of 3 units at College of San Mateo; and
-intend to complete at College of San Mateo a certificate program, associate degree program, and/or CSUGE certification or IGETC certification; and
-have official transcripts from other colleges and universities sent to the College of San Mateo Office of Admissions and Records; and submit a Transcript Evaluation Request form to the Office of Admissions and Records.

Previous coursework is reviewed, analyzed, and applied, as appropriate, to the stated educational goals. Official results of the evaluation are included in students' electronic files, and a copy is sent to students for their records. The results of the official evaluation should be used with a counselor for the purpose of academic planning. All coursework transferred into SMCCCD, except non-degree applicable and upper division courses, will be evaluated and become part of the overall GPA. Credit will not be allowed for units awarded at other colleges or universities in the following categories: credit by examination, military schooling credit, military service credit, Advanced Placement credit, College Level Examination Program (CLEP), or credit by other equivalency examinations. For more information about credit through examinations see Credit by Examinations in this catalog addendum.

## Former Students of College of San Mateo

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

## International Students

College of San Mateo is authorized under Federal law to enroll non-immigrant international students. College of San Mateo does not normally admit persons who enter the United States as visitors (B-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), 160 (computer based) or 56 (internet based) on TOEFL is required;
3. present evidence of sufficient funds to cover tuition fees and living expenses while attending College of San Mateo. The tuition fee for the 2008-2009 academic year is $\$ 200$ per unit of credit and a $\$ 20$ per unit enrollment fee; and
4. provide proof, before registration, of medical insurance coverage or enroll in a medical insurance plan provided for international
students by San Mateo County Community College District.
International students are required to complete 12 units of class work each semester to maintain their status. A tuition deposit of $\$ 500$ is required before issuance of the Form I-20 for visa purposes. Additional fees are payable at the time of registration.
Under certain circumstances of unforeseen financial hardship, continuing international students may petition to pay the tuition in three installments or petition for a waiver of the tuition fee. This does not apply to students enrolling for their first semester at College of San Mateo.

A special international student application is available from the International Student Center. Telephone: 574-6525. Fax: 574-6166. The international student application is also available online through the college web site at collegeofsanmateo.edu. For priority admission processing, applications for the Fall 2008 semester must be filed by April 15, 2008. Applications for the Spring 2009 semester must be filed by October 1, 2008. Applications for the Fall 2009 semester must be filed by April 15, 2009.

## 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 opportunity for academic success and career exploration, to students whose needs are not met in a traditional high school environment.
The program includes 60 high school juniors and seniors, all of whom were selected from among the district's seven schools. While these students are perceived as bright, creative and in some cases gifted, their grades and behavior may not yet reflect this potential.
As part of the Middle College program, these students take three SMUHSD-approved classes taught by SMUHSD instructors on the CSM campus; they round out their schedules with CSM courses. In many cases, students can earn both high school credits and college units. The Middle College program also includes comprehensive academic and career advising and access to all of CSM's support services. Cabrillo Unified School District students may be eligible and should contact their guidance counselor for information. For information, call the Middle College Office
(Bldg. 11, Room 136) at 574-6101 or email middlecollege@smuhsd.org 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 or Spain Semester in Fall 2008, a Semester in Florence in Spring 2009, and a summer 2009 program with location to be determined. 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
- Monitor Academic Standing


## Unit Load Limitations

A normal class load for a full-time student for fall and spring semesters is between $12-18$ units. For summer session a full time load is considered to be 6 units. Students are not permitted to take more than 19 units during the fall and spring semesters or more than 11 units during the summer session without approval from a College of San Mateo counselor. To request approval, students follow the directions on the Petition to Enroll in Beyond the Maximum Units available at collegeofsanmateo.edu/forms. A program of 12 units or more during fall and spring terms is considered a full-time load for athletic eligibility, financial aid, international students with 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.

## Wait Lists

Students wishing to add classes which have reached the enrollment limit may use WebSMART to add themselves to the waitlist. If seats become available in the class, the student will be notified by email and have 24 hours to enroll. If the student fails to enroll in the class within the 24 hours, $s /$ he will be placed at the bottom of the waitlist. Studnets who are on waitlist for classes that have established prerequisites are required to complete prerequisite requirements prior to enrolling. (Refer to the Class Schedule for more information.)

## Dropping Classes

Classes may be dropped without the instructor's approval. Withdrawal from a class or classes must be initiated by the student by the appropriate deadline date by using WebSMART during published service hours, in person at the Office of Admissions and Records, by mail, or by fax at 574-6506 (including the student's signature). Withdrawal requests must be postmarked or faxed by the appropriate deadline date as published in the Schedule of Classes.
When utilizing WebSMART to drop a class, it is important to print a copy of the transaction as a receipt.
A student who stops attending a class may not be dropped from the roll by the instructor, and therefore may receive a penalty grade of F or NP. It is the student's responsibility to withdraw officially following prescribed timelines and procedures. A student who does not withdraw in accordance with established procedures will receive a grade of F .
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.
Only the following courses are approved for AUDIT at College of San Mateo.
Art 206 - Figure Drawing and Portraiture
Art 207 - Life Drawing
Art 224 - Oil Painting II

Art 232 - Watercolor II
Art 406 - Sculpture II
Art 412 - Ceramics II
Music 452 - Repertory Jazz Band
PE INDV 120 - Badminton
PE INDV 160 - Golf
PE INDV 254 - Intermediate/Advanced Tennis

## Prerequisites, Corequisites, and Recommended Preparation

The Board of Trustees of the San Mateo County Community College District allows colleges to establish prerequisites, corequisites, and recommended preparation for courses and educational programs. Prerequisites and corequisites must be determined to be necessary and appropriate and must be established in accordance with Title 5 regulations in the California Administrative Code. They are designated in course descriptions in the college catalog and appear in the class schedules.
A Prerequisite is a condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or program. As an example, students must successfully complete elementary algebra (Math 110), prior to enrolling in intermediate algebra (Math 120). So, Math 110 is a prerequisite for Math 120. A prerequisite course must be completed successfully to enroll in the course which follows. Successful completion is defined as earning a grade of " C " or better. Placement test results can also be used to meet prerequisite skill levels.
A Corequisite is a course that a student is required to take simultaneously in order to enroll in another course. Corequisites are designated in course descriptions in the catalog.
Recommended Preparation for a course or program is a condition that a student is advised, but not required, to meet before enrollment. Recommended preparation is designated in course descriptions in the catalog. A number of courses list English 848 and Reading 400 as recommended preparation which alerts students to the writing and reading skills that are important to student success in a class.

## Computerized Prerequisite Checking

The San Mateo County Community College District enforces all prerequisite and corequisite requirements. Mathematics and English classes have computerized prerequisite checking in place. Beginning in Spring 2008 courses
with approved prerequisites and corequisites are subject to computerized prerequisite checking. When attempting to register for a course that has a prerequisite, the computer registration system searches the San Mateo County Community College District student data base for one of two things: 1) the successfully completed prerequisite course(s) or 2) placement test results from testing completed within the last two years that identify the appropriate skill level prerequisite requirements. If neither prerequisite identifier is in place, registration for the class is not completed. If a student is currently enrolled in the prerequisite course(s), the system allows registration into the next level course. However, if the in progress prerequisite course is not successfully completed, the student will be withdrawn from the course.

## How Can Students Meet <br> Prerequisite Requirements?

There are four ways students can meet prerequisite requirements:

1. complete the prerequisite course(s) within the San Mateo County Community College system, with a grade of "CR/P or C" or higher; or
2. complete placement tests in the San Mateo County Community College District within the last two years with results that indicate the prerequisite skill level; or
3. *complete the prerequisite course at another accredited college/university in the United States;
4. *meet prerequisites through the College Board Advanced Placement Exam results (AP Tests).
*For 3 and 4, students must use the Prerequisite Equivalency Petition to secure approval. Prerequisite Equivalency Petitions are available on the college website www.collegeofsanmateo.edu ; under QUICK LINKS scroll down to the FORMS page. If a student has not completed a course or test to meet prerequisite requirements but has other experience that meets the prerequisite skill level then the prerequisite challenge process is the means to determine course eligibility.

## How Can Prerequisites and Corequisites Be Challenged?

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

- The student has the knowledge or ability to succeed in the course despite not meeting the prerequisite.
- The prerequisite or corequisite was established in violation of district policies or Title 5 regulations.
- The prerequisite or corequisite is unlawfully discriminatory or applied in an unlawfully discriminatory manner.
- The prerequisite or corequisite has not been made reasonably available and the student is subject to undue delay in goal attainment.
Students who wish to challenge prerequisites or corequisites must, within the established time frame, complete the Prerequisite Challenge Petition and attach documentation. For semester length courses, petitions with documentation must be submitted at least five working days prior to the last day of the published late registration period. For courses that are not semester length, the petition with documentation must be submitted prior to the first day of the class. It is the responsibility of the student to provide compelling evidence to support the challenge. Prerequisite Challenge Petitions are available on the college website www.collegeofsanmateo.edu/forms.


## Fees

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

## Enrollment Fee

A State-mandated enrollment fee of $\$ 20$ per unit is payable at the time of registration.
The Board of Governors of the California Community Colleges has established a grant program to help low income students pay the enrollment fee. Information on eligibility requirements and application deadlines, as well as application forms, are available in the Financial Aid Office.
In addition to other costs, students classified as non-residents of the state of California must pay a tuition fee. See details under NonResident Tuition Fee.

## Health Services Fee

All students, except concurrently enrolled high school students enrolled in less than 12 units or those registering only for telecourses, offcampus classes or weekend classes, are required to pay a $\$ 16$ health services fee each fall and spring semester at the time of registration for day or evening classes. For the summer session 2008 the health services fee is $\$ 13$. 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 $\$ 40$ each for the fall and spring semesters or $\$ 70$ for a two term (fall/spring) permit, and $\$ 20$ for the summer session. Parking permits for low income students are $\$ 20$ per semester. Low income students are those who demonstrate financial need under federal standards or state BOG income standards or those who receive assistance through CalWORKs, SSI or general assistance. One-day parking permits (\$2) for all student lots are available from machines in Lots 1, 2, 10 and 14.
Permits may be purchased online using WebSMART. Up to a certain date, published in the class schedule, parking permits will be mailed to students as part of the Registration Statement. After this date, students must obtain their permits in the Security Office or Business Office. Parking is on a first-come, first-served basis. A permit is not a guarantee of a parking space. The College and San Mateo County Community College District accept no liability for vandalism, theft or accidents. Use of parking facilities is at the user's risk.

Parking and traffic regulations are enforced by the Campus Security Office staff, and violators are cited to the civil administrative procedures on campus as set forth in the California Vehicle Code. Students who violate traffic regulations are subject to disciplinary action as outlined in the student conduct code. The College reserves the right to change parking regulations for special events.

## Special Parking for

## Students with Disabilities

Blue handicapped parking spaces have been provided in Lots 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 cosmetology salon, CSM Bookstore (non-book items), and all athletic events. Funds collected from the student body fee help support numerous programs and services on campus including scholarships, emergency student loans, child care, athletics, guest speakers and concerts.

## Non-Resident Tuition Fee

No tuition is charged to legal residents of California. In 2008-2009, students who have not been residents of California (as defined in the Education Code) for one year or longer prior to the beginning of a term are required to pay a non-resident tuition fee of $\$ 191$ per unit ( $\$ 200$ per unit for foreign students) at the time of registration in addition to the $\$ 20$ per unit enrollment fee. Residency status is determined by the Office of Admissions and Records.
In general, an unmarried minor (a person under 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. The San Mateo County Community College District offers a textbook rental program to assist students with textbook costs. Special equipment is needed for certain programs such as Electronics, Drafting, Nursing, Cosmetology, Engineering, Art and Architecture, involving an additional initial outlay ranging from $\$ 100$ to $\$ 600$. Please refer to course descriptions for special costs.

## Credit and <br> Refund Policy

## Enrollment Fee

Nonresident Tuition Fee
Health Services Fee
Parking Fee

## 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 at 574-6141.

## 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 |  |  |
| *P | Pass (at least satisfactory; |  |
|  | units awarded not counted in GPA) |  |
| *NP | No Pass (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 Pass or No Pass are given. The units earned with a grade of Pass count as units completed. No Pass means the student is not charged with units attempted and is not credited with units completed.
The determination of the student's grade by the instructor shall be final in the absence of mistake, fraud, bad faith, or incompetency. Procedures for the correction of grades given in error shall include expunging the incorrect grade from the record.

## I - Incomplete

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

## MW - Military Withdrawal

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

## RD - Report Delayed

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

## W - Withdrawal

See Index: "Withdrawal from Classes"

## Pass/No Pass Option

Updated Title 5 regulations eliminate the Credit/No Credit (CR/NC) option and replace it with Pass/No Pass (P/NP). The new designators, $\mathrm{P} / \mathrm{NP}$, are weighed in the same manner as the former CR/NC designators.

Students electing to use the PASS/NO PASS option for a course should use the student Web SMART account to make this designation. After students have registered for a class, on Web SMART find "grade mode." "Grade mode" allows students to select either a letter grade or pass/no pass grading option if the option exists. (Not all courses offer the P/ NP option.)
Students may also submit the appropriate form to the Office of Admissions and Records within the first $30 \%$ of the term. Changes will not be permitted after this time.
Each division of the College may designate courses in which a student may elect to receive a letter grade or be graded on a Pass/ No Pass basis.

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

Four-year colleges and universities vary widely in the number of units of Pass/No Pass courses they accept. Students should consult the catalog of the college to which they may transfer for its regulations in this regard.

## Final Examinations

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

## Grade Reports

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

## Change of Grade

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

## Honors

## Dean's List Recognition

Students who qualify for Dean's List status at the end of the fall and spring semesters and summer session will be notified by letter. The student will be honored by the college (College of San Mateo, Cañada, or Skyline College) from which the majority of the units in any given semester are earned. Full-time students must complete twelve (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 degreeapplicable coursework completed at other accredited institutions.
3.30-3.49 Graduation with Honors
3.50-4.00 Graduation with High Honors

Students are required to submit all official college transcripts to Admissions for GPA calculation and determination of honors at graduation.
In every case, the student's cumulative GPA in degree-applicable courses taken only at College of San Mateo, Cañada College and Skyline College must equal or exceed the minimum required GPA for the honors category for which the student is being considered.

## Honor Societies

## Alpha Gamma Sigma

College of San Mateo is affiliated with the California Community College Honor Scholarship Society, Alpha Gamma Sigma. The local chapter is the Eta Chapter. Alpha Gamma Sigma maintains academic standards for induction, continued membership and permanent membership. Membership during a semester in AGS is based upon the student's GPA as of the previous semester at CSM or elsewhere. New members must have completed a minimum of 12 graded college units and achieve a semester GPA of 3.30 or higher to be invited to join the local chapter. Continuing members must maintain a cumulative GPA of 3.0 or higher. There is no unit requirement for continuing membership. There are two avenues to permanent membership: 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 Community College District. Authority for the public educational system in California rests
with the state. The state legislature has full authority, subject only to the limits placed upon it by the Constitution of the United States and the State of California, and fulfills its duty as follows:

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 activities of the College to the point where such
functions or activities can no longer effectively continue. Examples of such functions or activities are classroom activities, athletic events, administrative activities, approved assemblies, meetings and programs, and construction work. Examples of disruptive activities are blocking access to college facilities, disrupting classroom activities to the point where the instructor, in his/her opinion, is no longer able to continue the class, heckling an assembly speaker so that the speaker cannot continue talking, and unauthorized use of sound equipment.
4. In the event of disruptive behavior, the President of the College or his/her representative will make every effort to restore order within the context of the College of San Mateo community itself. Should disruptive activity continue, the administration may suspend those individuals continuing to engage in disruptive behavior. The administration of the College may take whatever steps are necessary to restore order, including requests for aid from appropriate law enforcement agencies.
5. Violent behavior will be defined as any action that results in physical harm to persons or property or an overt and public threat of harm.
6. In case of violence, the President or his/her delegated representative, may request immediate and appropriate action by law enforcement authorities.
7. In the case of extreme violation of the rule(s), a student may face expulsion by action of the Board of Trustees on recommendation of the College President and the Chancellor-Superintendent. Procedures in this instance are provided for in the District Rules and Regulations, as adopted by the Board of Trustees.

## Disciplinary Actions

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

## I. General Disciplinary Actions

A. Decisions regarding the following types of disciplinary action are the responsibility of the Vice President, Student Services. Unless the immediate application of disciplinary action is essential, such action will not be taken until the student has had an opportunity to utilize the established appeal procedures found in Rules and Regulations, Section 7.73.

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. Restitution may take the form of appropriate service to repair or other wise compensate for damages.
B. Disciplinary action shall not of itself jeopardize a student's grades nor will the record of such action be maintained in the student's academic files.
C. A student subject to disciplinary action has a right to appeal the decision in accordance with Rules and Regulations, Section 7.73.

## II. Suspension and Expulsion

A. Suspension is the termination of student status for a definite period of time. A suspended student may not be present on campus and is denied College privileges including class attendance and all other student body or College granted privileges.

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 conditions of the suspension shall be sent to the student's address of record. The student's professors/instructors and
counselor shall be informed, in writing, of the suspension.
D. At the end of the term of suspension, the student must obtain an authorization form from the Vice President, Student Services before returning to classes.
E. A student under suspension at any District College may not enroll in any other District College during the period of suspension.
F. The chief executive officer of the College shall report all suspensions of students to the Chancellor-Superintendent.
G. If the suspended student is a minor, the parent or guardian shall be notified in writing by the chief executive officer of the College or his/her designee.
H. Expulsion of a student is the indefinite termination of student status and all attending rights and privileges. Expulsion of a student is accomplished by action of the Board of Trustees on recommendation of the college President and the 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
5. 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.
6. 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. | 108 | First level for decision or action | 108 | Second level for appeal of decision or action |
| :---: | :---: | :---: | :---: | :---: |
| Academic Matters. | $1{ }^{\text {¢ }}$ | Instructor. | $1{ }^{4}$ | Division Dean |
|  |  | Division Dean. | 1 | Vice President, Instruction |
| Academic Probation or Dismissal. | 4 | College Policy | $4{ }^{4}$ | Dean, Counseling, Advising |
| Admissions. | [198) | Dean, Enrollment Services. | 19 | Vice President, Student Services |
| Attendance. | [0\% | Instructor. | 18 | Division Dean |
| Discipline.. | $1{ }^{\text {¢ }}$ | Vice President, Student Services | 18 | President |
|  |  | Disciplinary Advisory Committee |  |  |
| Discrimination Matters. | (1) | Vice Chancellor, Human Resources and. Employee Relations |  | Chancellor |
| Fee Payments or Refunds and Non-Resident Tuition. | $1{ }^{8}$ | Dean, Enrollment Services. | 19 | Vice President, Student Services |
| Financial Aid. | 10 | Director of Financial Aid. | 18 | Dean, Enrollment Services |
| Matriculation | $1{ }^{\text {deg }}$ | Matriculation Policy | 4 | Vice President, Student Services |
| Residency Determination............................ | 10 | Dean, Enrollment Services...................... | 19 | Vice President, Student Services |
| Security and Parking. | $1{ }^{\text {c }}$ | Supervisor of College Security................... | 18 | Dean, Administrative Services |
| Registration | $1{ }^{\text {ce }}$ | Dean, Enrollment Services. | $4{ }^{\circ}$ | Vice President, Student Services |
| Sexual Harassment. | $1{ }^{\text {c }}$ | Vice Chancellor, Human Resources. $\qquad$ \& Employee Relations | 18 | Chancellor |
| Student Records. | [198) | Dean, Enrollment Services. | 1 | Vice President, Student Services |
| Time, Place and Manner | $1{ }^{\text {c }}$ | College Policy.. | $1{ }^{\text {P }}$ | Vice President, Student Services |
| Waiver of Academic Requirements. | 10 | College Policy. | $1{ }^{\text {® }}$ | Academic Review Committee |
| Withdrawal (Late). | [198 | College Policy...................................... | [9\% | Dean, Enrollment Services |
| Matters Not Listed. | $1{ }^{\circ}$ | College Policy or Appropriate Staff.............. | 19 | 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.

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

College of San Mateo will determine the amount of federal financial aid that a student has earned in accordance with federal law. Students who receive federal financial aid and do not attend any classes will be required to repay all of the funds they received. Students who withdraw from all classes prior to completing
more than $60 \%$ of the semester will have their financial eligibility recalculated based on the percentage of the semester completed and will be required to repay any unearned financial aid they received.
At College of San Mateo a student's withdrawal date is:

1) the date the student officially notified the Admissions Office of his or her intent to withdraw, or
2) the midpoint of the semester for $a$ student who leaves without notifying the college, or
3) the student's last date of attendance at a documented academically-related activity.

| Type of aid | Amount | Eligibility | Application | Priority Deadline |
| :---: | :---: | :---: | :---: | :---: |
| Federal Pell Grant Program | \$100 to \$4310 | Need based - U.S. citizen or eligible non-citizen | Free Application for Federal Student Aid (FAFSA) supplemental documents | 60 days before end of academic term |
| Board of Governors Waiver (BOGW) <br> (State Grant to cover enrollment fee) | Covers enrollment fees. <br> Also waives health fee. | California resident - medium income or recipient of CalWORKS, SSI, GA | Free Application for Federal Student Aid (FAFSA) or BOGG Application CalWORKS/SSI/GA | None |
| Federal Supplemental Educational Opportunity Grant (FSEOG) | \$100 to \$800 | Need Based - U.S. citizen or eligible non-citizen | Free Application for Federal Student Aid (FAFSA) and supplemental documents | March 2 |
| Extended Opportunity Program Services Grant (EOPS) (State Grant) | Up to \$175 | Need based - Meet EOPS eligibility criteria | Free Application for Federal Student Aid (FAFSA) and supplemental documents | Priority date for Fall/ Spring |
| Cal Grant A (State Grant) | $\begin{aligned} & \$ 2334 \text { to } \$ 8322 \\ & \text { (upon transfer) } \end{aligned}$ | California resident need based - subjective criteria and GPA considered Attending California School | Free Application for Federal Student Aid (FAFSA) | March 2 |
| Cal Grant B (State Grant) | Up to \$1551 | California resident - financial need, low income, less than 16 units college work Attending California School | Free Application for Federal Student Aid (FAFSA) | March 2 |
| Cal Grant C (State Grant) Must be enrolled in vocational program | Up to \$576 | California resident need based - subjective criteria and GPA considered Attending California School | Free Application for Federal Student Aid (FAFSA) | March 2 |
| Federal College Work-Study Program | Varies | Need based - U.S. citizen or eligible non-citizen | Free Application for Federal Student Aid (FAFSA) and supplemental documents | March 2 |
| Federal Stafford Loan (Government subsidized and unsubsidized loans made by commercial lenders.) Current loan interest rate not to exceed 8.25\% | Undergraduates up to $\$ 3500$ per year. Maximum: $\$ 4500$ total | Need based - U.S. citizen or eligible non-citizen | Free Application for Federal Student Aid (FAFSA) Stafford Application, and supplemental documents | 60 days before end of academic term to receive aid for the current term |
| Federal Plus Loans to undergraduate students, plus loans for parents of dependent undergraduate students. Current interest rate not to exceed $9 \%$ | Parents: <br> up to $\$ 4000$ per academic year on behalf of the student | Parents must meet credit check. Loan amount may not exceed student's cost of attendance less financial aid award for loan periodU.S. citizen or eligible noncitizen | Free Application for Federal Student Aid (FAFSA) plus application and supplemental documents Loans made by commercial lenders (banks) | 60 days before end of academic term to receive aid for the current term |
| Staff and Federal Unsubsidized Loans for students who are independent undergraduates and to undergraduate students whose parents are unable to obtain a Federal Plus Loan. Interest rate not to exceed 8.25\% | Students: <br> up to $\$ 4000$ per academic year | Student must first apply for the Stafford Student Loan. Loan amount may not exceed student's cost of attendance less financial aid award for loan period - U.S. citizen or eligible non-citizen | FAFSA, supplemental documents, and Supplemental Loans application <br> Loans made by Commercial lenders (banks) | 60 days before end of academic term to receive aid for the current term |

## Associated Students

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

President
Vice President (Senate Chairperson)
Secretary
Finance Director
Senators (one for every five hundred students enrolled)
CSM Student Trustee Nominee to the Board of Trustees
In addition, students are selected by the Student Senate to serve on the following College and District Advisory Committees:

College Council (4)
College Auxiliary Services Advisory Committee (CASAC) (4)
College Diversity in Action Group (DIAG) (2+)
College Enrollment Management Committee (2)
College Faculty Academic Senate (2)
College Library and Media Center Committee (2)
College Safety Committee (2)
Committee on Instruction (2)
Disciplinary Advisory Committee (2)
District Auxiliary Services Advisory Committee (DASAC) (3)
District Shared Governance Council (DSGA) (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. Meeting times for Associated Student groups are available through the Student Activities Office in Building 13.

## Student Senate

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

## Inter-Club Council

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

## Academic Affairs \& Enhancement Committee

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

## Student Lounge/Game Room Advisory Committee

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

## Finance and <br> Administration Committee

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

## Legislative Affairs and Governmental Relations Committee

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

## Programs and Services Committee

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

## Public Relations Committee

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

## Volunteer Community Service Committee

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

## Associated Student Body Card

All students who have completed registration and paid the $\$ 8$ student body fee are entitled to a photo I.D. student body card. After classes have begun, you may obtain your Student Body Card at the Student Activities Office. This photo identification card entitles you to special discounts from $10 \%$ to $40 \%$ off at local businesses, movie theaters, shops and restaurants. On-campus discounts are available at the cosmetology salon and all athletic events. The funds collected from the student body fee help support numerous programs and services on campus including: scholarships, emergency student loans, child care, athletics, guest speakers and concerts. If you would like more information about the student body card benefits, or would like the student body fee reimbursed, please contact the Student Activities Office at 574-6141, 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 13; Telephone: 574-6141) for more information. In order to establish a new organization, there must be a minimum of six interested students, an approved faculty/staff advisor and a constitution meeting college requirements.
The following are current or recently active clubs and organizations. The advisor of each club is also listed as a resource person to contact for more specific information. (This list is subject to change.)

## Academic and Career Oriented

Business Students Association (BSA) Promotes interest in business through speakers and social activities. Advisors: Rosemary Nurre, 574-6493.
Cosmetology Club Provides social activities for cosmetology students and their families. Advisor: Andria 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.

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.

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

## Ethnic/Cultural

Filipino-American Multicultural Exchange (FAME) Creates a sense of family while fostering the development of future leaders through the promotion of the Filipino culture. Advisor: Chris Rico, 574-6189.
Fiesta Spanish Club For those that want to learn and improve upon a knowledge of the Spanish language. Advisor: Richard Castillo, 574-6316.
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.
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.

Polynesian Club Encourages an appreciation for Polynesian culture and provides support for Polynesian students. Advisor: Deborah Laulusa, 574-6405.
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: TBA, 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.
Catholic Club on Campus (Triple C) Fosters a sense of belonging on campus where students can discover and share the richness and meaning of life. Advisor: Angela SkinnerOrr, 574-6457.
Cheerleaders Spirit Squad Promotes spirit campuswide through cheerleading and spirit leading. Advisor: Andreas Wolf, 574-6461.
CSM Toastmasters Provides a supportive environment for students to study and practice the art of public speaking. Advisor: Rudy Ramirez, 574-6372.

Performance Dance Ensemble Anyone who is interested in dance and performing can come and learn about the action behind the scenes of a dance show. 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.
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

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

EOPS Club Provides opportunities and activities for EOPS students, including field trips, study sessions and barbecues. Advisor: Ruth Turner, 574-6154 and Warren Shelby, 574-6154.
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.

## Student Activities Office

The Student Activities Office is a drop-in information office located in Building 13 where students are welcome to ask questions regarding any aspect of the College.
Special services provided for students by the Student Activities Office include:

## Student Activities Event Planning

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

## Housing Assistance

Dormitories and other types of collegesponsored housing are not offered by College of San Mateo. However, the Student Activities Office maintains up-to-date listings of housing available in the community. The majority
of listings are rooms in private homes, but apartments and houses are also available.

## Student Government and Club Information

Information concerning any aspect of student government, student activities or clubs may be obtained in the Student Activities Office. This office also provides these groups with duplicating and publicity services.

## Student Center Facilities Use

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

## Referral Services

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

## Transportation Information

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

## Campus Posting

All signs, flyers, or similar materials must follow campus regulations regarding time, place and manner of distribution. Copies of these regulations are available in the Student Activities Office, Building 13.

## Vending Refunds

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

## Campus Publications

The following publications are issued by College of San Mateo:
Campus Activities Announcements/Calendar - A publication prepared and distributed by the Student Activities Office periodically announcing activities, new events and items of interest to the faculty and students of the College. Submit items for publication to the Student Activities Office, Building 13.
Class Schedule - A listing and description of courses offered each term (Fall Semester, Spring Semester, Summer Intersession). The publication also includes information on admissions and registration, fees, student services and other related matters.

## 'Monday Morning Blues' or 'The Verb'

 - Occasional publications of the Associated Students Senate to inform students of various campus issues and programs and to provide an open forum between students and student leaders.Planning to Transfer to a University A publication prepared and distributed by the Transfer Center each semester which provides a schedule of transfer related workshops and academic planning sessions with university representatives.
The San Matean - A student newspaper published every other week, serving a twofold purpose of providing news coverage of activities on campus and of giving experience to journalism students.

## Student-Sponsored Events

## Time, Place and Manner

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

## A. Distribution of Materials:

The college regulations governing the distribution of printed and manufactured materials is designed to permit maximum freedom of expression and to prevent attempts to coerce or intimidate students into buying or receiving printed materials. Distribution of any material on campus is subject to the approval of the Vice President, Student Services or his/her designee.

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 authorized by the Vice President, Student Services or his/her designee.
5. Tables may be set up in authorized areas of the college by campus organizations and by individuals. Requests must be submitted to the Student Activities Office for approval. Tables will be checked out on an availability basis. Institutional and campus organizations will receive priority use of the tables.
6. Tables must be checked out and returned to the Student Activities Office.
7. Tables must be staffed at all times and a placard identifying the organization must be displayed. Individuals staffing tables must remain behind the tables at all time.
8. Distribution of all materials is to be coordinated with the Coordinator of Student Activities. An information copy of any material to be distributed must bear the name of the sponsor.
9. The collection of signatures for petitions is subject to the same regulations as those which govern the distribution of materials. Such matters as coordination with the Coordinator of Student Activities, identification of the sponsor, and the restrictions as to the areas of circulation, govern the collection of signatures for petitions as well as distribution of materials.

## B. Posting of Materials:

1. All materials to be posted must be dated and stamped by a member of the Student Activities Office staff. Materials will only be stamped if they are presented by a college department or program, a nonprofit organization, or a governmental agency. All other materials must indicate their posting date in the upper righthand corner. Any items not stamped or dated are subject to removal by college staff.
2. College of San Mateo has designated certain areas of the campus and certain bulletin boards as limited public forums.

Persons or organizations seeking to distribute materials on campus shall provide a copy of the material to the Coordinator of Student Activities, or his/her designee. The Coordinator of Student Activities will promptly review the proposed distribution and approve it unless the material is libelous, invades the privacy of others, is obscene or pornographic, is pervasively indecent and vulgar, will cause a material and substantial disruption of the proper and orderly operation of the college or college activities, or advertises a product or services not permitted for use under the law. In the event that materials are not approved for distribution, the decision may be appealed to the Vice President, Student Services, whose decision shall be final.
If the material is approved, the individual or organization will be allowed to distribute or post such material at approved locations and times as set forth in these regulations. The approved locations are available from the Coordinator of Student Activities.
3. Materials shall not be distributed in a manner which disrupts any college activity or blocks or impedes the safe flow of traffic within corridors and entrance ways at the college. Persons who distribute such materials shall be responsible for cleaning up such materials thrown on the floor, in college buildings, or on the grounds outside the college.
4. Available space for posting materials is limited at the college. In order to provide the maximum opportunity for a variety of individuals and organizations to post materials for review by students, the college will remove outdated materials on a regular basis. Posted materials may be removed by college personnel at any time if posted in restricted locations and after 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.
5. The number and size of posters or leaflets that any one organization or person may post is subject to limitation by the Coordinator of Student Activities and shall be limited only if the materials are so large or numerous as to infringe on the rights of others to use designated areas.
6. In the event that material is distributed from a table, the table may only be set up in approved locations. The table must be staffed at all times and the table must be removed at the end of each day of distribution of materials. Individuals staffing the tables must stay behind the table.
7. Placement of materials on parked vehicles causes a severe litter problem and is expressly prohibited. (City ordinance code section: 10.40 .030 )
8. Approved materials may be posted in designated areas of the college authorized by the Vice President, Student Services or his/her designee and on open bulletin boards located throughout the campus. Classroom bulletin boards are intended for instructional usage but may be utilized on a space available basis, subject to Divisional needs and policies. Any materials posted in unauthorized locations, or without being stamped and dated by the Student Activities Office are subject to removal.
9. Materials may not be posted on doors, painted surfaces, or exterior building walls. All other surfaces (e.g., 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.
10. Permission may be granted to post materials, on a space available basis, to educational institutions or public service agencies.
11. Exceptions to any of the preceding requirements must be approved in advance by the Coordinator of Student Activities.

## C. 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: Due to campus construction, please see the Office of Student Activities for more information.

## Student Organizations

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

## Permanent Student Organizations

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

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 through the Student Activities Office and publications of general circulation on campus.
4. Deposits all organizational funds in a college account as required by the California Education Code and established college procedures.
B. Privileges: The privileges of recognized student organizations include:
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.

## 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 and must follow the procedural requirements outlined above.

## Campus Facility Use

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

## A.Procedure for the presentation of programs:

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 and if the event is approved, the Coordinator of Student Activities will begin the necessary paperwork to reserve the facility and place the event on the Campus Events Calendar. If approval is denied, the Coordinator of Student Activities' decisions in
this regard are subject to appeal and review by the Vice President, Student Services.
b. Program plans must demonstrate that the program will not present or create an undue health or safety risk to students, staff, or the public. The Vice President, Student Services may deny or cancel programs which cannot meet this requirement.
c. Programs must be presented in appropriate authorized areas.
d. Programs will end by 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 prior to the date of the event.

## B. 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. When necessary, the Coordinator of Student Activities will make the initial determination of the availability of a facility in consultation with the Facilities Reservation Office.:
Facilities available for use are:
All Classrooms
Choral Room (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. Once the program plans have been reviewed and the availability of the facility has been established, the facility reservation will be confirmed with the college Facilities Utilization Clerk through the use of a facilities contract form.
4. Programs must be produced in such a manner so as not to constitute interference with the instructional program. Only at times when classes are not in session may sound amplification equipment be used out of doors. Exceptions to this policy may be granted by the Vice President, Student Services or his/her designee under any of the following specific instructions:
a. The program includes a prominent speaker or presentation of campuswide interest.
b. The program is a response to an imminent or continuing national or local crisis.
c. The program is of campus-wide interest and significance.
Before a request for an exception may be submitted to the Vice President, Student Services, the sponsor of the program must make every effort to schedule the program into authorized facilities during hours when classes are not in session. Sponsors must also verify that it is impossible to do so.

## Off-Campus Organizations

Off-campus organizations may request use of college facilities for short-term activities and events. All organizations are required to fill out the necessary paperwork to be on campus.
Short term activities include, but are not limited to, the distribution of materials, making products and/or services available to campus students and staff, and for recruiting volunteers and/or paid employees. Those interested in using campus facilities for short term activities should contact the Student Activities Office at (650) 574-6141.
Events include, but are not limited to, all-day workshops, conferences, and social activities not directly targeted at campus students and staff. Such requests are subject to District policies with respect to use of facilities. Those interested in using campus facilities for events should contact the Facilities Reservation Office at (650) 574-6220.

## Bookstore

The CSM Bookstore is located in Building 34, and is open Monday through Thursday from 7:45 a.m. to $7: 15$ p.m. and Friday from 7:45 a.m. to 3 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 two 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/Kiosko

The "Kiosko" snack bar is located near Building 13 and is open Monday through Thursday from 7:30 a.m. to 7 p.m.; and Friday from 7:30 a.m. to 2 p.m. when classes are in session. Catering is available for special occasions and meetings by contacting the manager (574-6582).

## Food Service/Drip Coffee

A fresh coffee, juice and snack food service is offered by Drip Coffee on the east side of Building 17. Hours are Monday through Thursday from 7:30 a.m. to 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, Football, Women's Softball, Men's and Women's Swimming, Men's and Women's Track and Field, and Women's Water Polo. CSM is a member of the Northern California Football Association.
In order to be eligible a student must adhere to the California State Athletic Constitution and Coast Conference eligibility rules and regulations.
The following is a summary of eligibility regulations:

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 student-athlete who has not competed at a post-secondary institution in the past five years.
6. In meeting the unit requirements, courses in which grades of $\mathrm{D}, \mathrm{F}$, or NP were received may be repeated. Under special circumstances, courses that have been completed with a grade of C or better may be repeated; however, the units will not be counted.
Student athletes who plan to transfer prior to receiving an AA degree should meet with their athletic 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: 574-6462.
College of San Mateo observes all recruiting regulations of the Commission on Athletics, the governing body of California Community College intercollegiate athletics. In accordance with these regulations, athletic recruitment of any individual residing outside the College's recruiting boundaries is prohibited. Likewise, any student of another California community college, regardless of residence, shall not be athletically recruited. The College of San Mateo recruiting area is composed of the County of San Mateo and the neighboring community college districts that share a common boundary. Student athletes who reside outside the recruiting boundaries of College of San Mateo must make "first contact" with the College. Please call the CSM athletic department at 574-6461 for more information.


## Telephone Directory

Area Code for College of San Mateo is 650 General Campus Information 574-6161

| A |  |
| :--- | ---: |
| Accounting | $574-6494$ |
| Adapted P.E. | $378-7219$ |
| Administration of Justice | $574-6343$ |
| Admissions and Records | $574-6165$ |
| Dean | $574-6590$ |
| Assistant Registrar | $574-6576$ |
| AA/AS/Certificate Information | $358-6857$ |
| Admissions Information | $574-6165$ |
| Grades/Attendance | $358-6855$ |
| Registration Information | $574-6165$ |
| Transcripts (Outgoing) | $358-6851$ |
| 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: | $574-6185$ |
| President | or $574-6141$ |
|  | $574-6185$ |
| Vice President | or $574-6141$ |
|  | $574-6185$ |
| Senate Vice Chairperson | or $574-6141$ |
| Secretary | $574-6185$ |
| Finance Director | or $574-6141$ |
|  | $574-6185$ |
|  | or $574-6141$ |

Committees \& Programs:

| Academic Affairs | $574-6185$ |
| :--- | ---: |
| Inter Club Council | or $574-6141$ |
|  | or $574-6185$ |
|  | or 5141 |

Legislative \&
Governmental Relations 574-6185
or 574-6141
Monday Morning Blues
Program \& Services
Public Relations
574-6185
or 574-6141
574-6185
or 574-6141
574-6185
or 574-6141

Associated Student
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 | $574-6412$ |


| $\mathbf{C}$ |  |
| :--- | :--- |
| Career Services | $574-6116$ |


| 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 | $574-6165$ |


| $\mathbf{F}$ |  |
| :--- | ---: |
| Facilities Scheduling/Rental | $574-6220$ |
| Film | $574-6314$ |
| Financial Aid | $574-6146$ |
| Fire Technology | $574-6347$ |
| Floristry Lab | $574-6170$ |
|  | or 574-6217 |
| Food Service/Kiosko | $574-6582$ |
| Food Service/Drip Coffee | $378-7343$ |
| Foreign Language | $574-6314$ |


| $\mathbf{G}$ |  |
| :--- | :--- |
| Geography | $574-6496$ |
| Geology | $574-6268$ |
| Graphics | $574-6278$ |
| $\mathbf{H}$ |  |
| 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 | $574-6496$ |
|  |  |
|  | $574-6161$ |
| ID Cards | $574-6161$ |
| Information (Operator) | DIAL "0" |
| On Campus | $574-6404$ |
| Instruction Office | $574-6543$ |
| Instructional Media Services | $574-6525$ |
| International Student Center | $574-6619$ |
| Internship Opportunities |  |
| J |  |
| Job Listing (Student Employment) | $574-6495$ |
| Job Information (District) | $574-6111$ |
| Journalism | $574-6330$ |

## K

KCSM TV/KCSM FM 574-6586

| $\mathbf{P}$ |  |
| :--- | ---: |
| Paleontology | $574-6268$ |
| Parking (see Security) | $574-6415$ |
| Physical Education/ |  |
| Athletics Division | $574-6461$ |
| $\quad$ Athletic Trainer | $574-6451$ |
| Baseball | $358-6875$ |
| Basketball (women's) | $358-6830$ |
| Cross Country | $574-6448$ |
| $\quad$ Football | $358-6771$ |
| Softball | $574-6464$ |
| Swimming Pool (out of service untilfall |  |
| 2010 due to construction) |  |
| $\quad$ Swimming Team | $574-6449$ |
| Team House | $574-6467$ |
| Track \& Field | $574-6448$ |
| Water Polo (women's) | $574-6449$ |
| Philosophy | $574-6496$ |
| Photography Lab (Creative Arts) | $574-6292$ |
| Physical Science | $574-6268$ |
| Physics | $574-6268$ |
| Planetarium | $574-6256$ |
| Political Science | $574-6496$ |
| President's Office | $574-6222$ |
| Psychology | $574-6496$ |
| Psychological Services | $574-6396$ |
| Appointments |  |
| Public Relations | $574-6231$ |
| \& Marketing Department |  |

## R

| Receptionist/General Line | $574-6161$ |
| :--- | ---: |
| Reading Center | $574-6437$ |
| Real Estate | $574-6494$ |
| Recreation/Game Room | $574-6187$ |
|  | or $574-6141$ |
| Registrar's Office | $574-6165$ |
| S |  |
| San Matean Newspaper | $574-6330$ |
| Scholarships | $574-6434$ |
| Sculpture | $574-6290$ |
| Security Office | $574-6415$ |
| Social Science Division | $574-6496$ |
| Sociology | $574-6496$ |
| Student Activities | $574-6141$ |
| Student Lounge | $574-6141$ |
|  | or $574-6187$ |
| Study Abroad Program | $574-6595$ |
| T |  |
| Technology Division | $574-6228$ |
| Telecourses/Distance Learning | $524-6933$ |
| Testing - Assessment Center | $574-6175$ |
|  | or $574-6262$ |
| Theatre | $574-6191$ |
| Tours - campus | $574-6349$ |
| Transfer Services | $358-6839$ |
| Transition to College | $574-6193$ |

v
Vice President, Instruction 574-6404
Vice President, Student Services 574-6118
W
Welding Technology
574-6122
Writing Center
574-6436

## Academic Policies

## Academic Standards Policy

The Academic Standards Policy of College of San Mateo and the San Mateo County Community College District is based on a cumulative grade point average of $\mathrm{C}(2.0)$, 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 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 three conditions:

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

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

3. The substandard course work to be alleviated must have been taken at $\mathrm{Ca}-$ ñada College, College of San Mateo, or Skyline College. However, the course work on which the application for academic renewal is based may be completed at any college or university accredited by the Western Association of Schools and Colleges or equivalent agency.
To request Academic Renewal, a student must file a formal petition with the Office of Admissions and Records. It is available to download from collegeofsanmateo.edu. Find QUICK LINKS and scroll down to FORMS to locate the Academic Renewal Petition. When academic course work is alleviated from the computation of the grade point average, the student's permanent record shall be properly annotated in a manner to ensure that all entries are legible, providing a true and complete academic history.

## Attendance Regulations

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

## Open Enrollment

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

## Enrollment Limitations: Multiple and Overlapping Enrollments

- A college district may not allow a student to enroll in two or more sections of the same credit course during the same term.
- A college district may not allow a student to enroll in two course that overlap unless the following requirements are met.

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

## Enrollment Limitations: <br> Limit of Withdrawals

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


## Sequential Courses

A student may not enroll in or receive credit for a course that is lower in a sequence of courses after successful completion of a course that is higher or more advanced. As an example, after successful completion of Spanish 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

## Advanced Placement Test (AP)

College of San Mateo awards credit based on the results of the Advanced Placement tests from the College Board's Entrance Examinations. The student is responsible for sending official AP results to College of San Mateo and formally requesting from the Office of Admissions and Records, a review of the results related to the student's associate degree general education requirements, California State University General Education certification, and Intersegmental General Education Curriculum (IGETC) certification. For university transfers, AP credit is applied according to the policy of the transfer institution. Students should be aware that college courses taken after the AP test may duplicate the content of the AP course and test and, in these cases, College of San Mateo and the transfer institution may not award credit for both the course and the AP test. In some cases, AP test results may be considered to advance a student in a course sequence such as mathematics or foreign languages and may be considered to meet course prerequisite requirements. It is essential for students majoring in Science, Math, Engineering, or Foreign Languages to meet with a counselor before enrollment to determine how the use of AP credit will affect placement in a course sequence at College of San Mateo and affect transfer plans. Advanced placement tests are not applicable for meeting unit load requirements for enrollment status, or for such programs as financial aid, athletic eligibility, veterans' benefits, or for graduation residency requirements.

## College Level Examination Program (CLEP)

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

## International Baccalaureate <br> Examination (IB)

College of San Mateo awards credit to associate degree general education requirements based on the results of the tests from the College Board's Entrance Examinations. The student is responsible for sending official IB test results to College of San Mateo and formally requesting from the Office of Admissions and Records a review of the results related to the student's associate degree general education requirements. Should students transfer to a university, IB credit is granted according to the policy of the transfer institution.

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

A currently enrolled student in good standing may be permitted to obtain credit for courses if he/she is especially qualified through previous training or instruction and can demonstrate such qualifications by successfully completing an examination approved by the faculty and dean of the appropriate division and the Office of Instruction. Credit will not be allowed for a course for which credit has previously been granted or for which credit has been earned in a more advanced course in the same sequence. Credit by Examination may not be used in order to improve a grade already received for a course. The department head or division dean will determine if the student possesses special competency and will authorize the administration of examinations. A student may earn up to 12 units through credit by examination to be applied to a vocational certificate or the associate degree. All grades issued upon completion of credit by examination will be used for the calculation of the student's grade point average. A student may challenge a course for credit by examination only one time.
CBE credit is limited to those courses recommended by the academic divisions and approved by the Office of Instruction. A current list of eligible CBE courses is published below.
Business Division:
Accounting 103
Dental Assisting 721, 722, 731, 742
Creative Arts Division:
Art 101, 102, 103, 201, 223, 231, 241, 301, 351, 354
Horticulture/Environmental 311, 312, 315, 320, 327, 330, 342
Horticulture/Ornamental 705, 706, 711, 712, 742
Math/Science Division:
All Nursing courses

Language Arts Division:
No classes
Physical Education Division: No classes

Social Science Division: Social Science 111

Technology Division:
Administration of Justice 100, 104
Credit earned through credit by examination may not be used for meeting unit load requirements for enrollment status, or for programs such as financial aid, athletic eligibility, veterans' benefits, or for graduation residency requirements.

## Academic Review Committee

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

## Course Repetition

## Certain Courses Are Approved for Repetition

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

## Course Repetition for the Purpose of

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

## Extenuating Circumstances

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

## Course Repetition for the Student Who Has Received a Grade of A, B, C or CR/P

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

## Mandated Training

## Requirements and Course Repetition

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

## 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 must document the details of the alleged incident.
4. The instructor should report the violation to the Vice President, Student Services for disciplinary action.

## Student Responsibilities

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

## Sanctions

Among academic sanctions an instructor may choose to utilize are the following:

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.
The instructor shall report the violation to the Vice President, Student Services, whose office maintains such information. The instructor should include the following: 1) name and identification number of the student, 2) the specific nature of the violation, 3) the date of its occurrence, 4) how the violation was determined, and 5) any additional comments that the instructor wishes to include.

The Vice President will determine the Collegelevel discipline that is appropriate based on the magnitude and severity of other documented reports related to the same student. Note that disciplinary actions are not part of the academic record, and disciplinary actions are not recorded on student transcripts. All disciplinary information is maintained only in the Office of the Vice President, Student Services, and is confidential in nature.
Nothing in these guidelines shall be construed to restrict a student's right to appeal through the appropriate process described in the "Student Grievances and Appeals" section of the college catalogue.


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

The following table shows how College Board Advanced Placement Test (AP) tests are applied to: 1- the California State University General Education/Breadth Pattern (CSU GE) and 2 - 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 Placement Test* | 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 C1 <br> none <br> none | One course in Area 3A <br> none <br> none | *UC 8 quarter units <br> *UC 8 quarter units <br> *UC 8 quarter units |
| Biology | 3 semester units B2 | One course in Area 5B | *UC 8 quarter units |
| Chemistry | 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 | *UC 2 quarter units <br> *UC 4 quarter units (4 qt. unit max for both tests) |
| Economics <br> Macroeconomics <br> Microeconomics | 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 | 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 | *UC 4 quarter units |
| History European United States World | 3 semester units in D <br> 3 semester units in D <br> *new test in review | One course in Area 3B or 4 One course in Area 3B or 4 *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 | 6 semester units in C2 <br> 6 semester units in C2 | Each course meets foreign language proficiency One course in 3B <br> One course in 3B | *UC 8 quarter units <br> *UC 8 quarter units |
| German Language | 6 semester units in C2 | One course in 3B and meets foreign language proficiency | * UC 8 quarter units |


| Advanced <br> Placement Test* | CSU** General Ed Certification 9/25/97 | IGETC+ IGETC Application | General UC Policy for AP |
| :---: | :---: | :---: | :---: |
| Government \& Politics <br> Comparative <br> United States | 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 | 3 semester units C2 <br> 3 semester units C2 | Each course meets foreign language proficiency 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 | 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 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 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 D | One course in Area 4 | * UC 4 quarter units |
| Spanish <br> Language <br> Literature | 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 | 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. The chart above outlines general education application for Advanced Placement credit. Applying Advanced Placement credit to meet specific majors is more complicated. 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, 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)

If you are planning to use the IB Exams to apply to CSM graduation requirements, CSU general education pattern, or IGETC general education pattern, 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.

Information about the IB Examination is available here: www.ibo.org

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

The CSM Library owns 71,000 volumes of print books and receives more than 250 print journals, magazines and newspapers. Current issues of journals, newspapers and magazines are on display near the Circulation Desk. Past issues of periodicals can be checked out from the Circulation Desk.
Additionally, hundreds of journals, newspapers, magazines and special subject databases are available online through the Library's webpage. Ebooks and most of the library's online databases can be accessed from home 24 hours a day. Videos of CSM telecourses are available for limited home check out and 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 82 years of the college's history.
Since 1987 the CSMLibrary 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

KCSM TV and FM are Bay Area public broadcasting stations licensed to the college district and operated by College of San Mateo. CSM has the only professional TV and FM stations with educational licenses in Northern California. KCSM TV broadcasts on PBS Channel 43 and cable Channel 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
Basic Skills Support
Krystal Romero
Career Counseling/Student Employment
Eileen O'Brien
College/Career Planning
Jeanne Stalker
Child Development Center, Coordinator
Louise Piper
Cooperative Work Experience Education Steve Cooney
Counseling Services
Gary Booker
Disabled Students Programs and Services
Danita Scott-Taylor
Financial Aid Director
Claudia Menjivar
Health Services
Sharon Bartels
High School Relations
Steve Morehouse
International Student Advisor
Martin Bednarek
Internship Program
Eileen O'Brien
Learning Disabilities Specialist
TBA
Multicultural Center
Danita Scott-Taylor
Extended Opportunity Programs
and Services (EOPS)
Danita Scott-Taylor
Psychological Services
Makiko Ueda
Scholarships
Nancy Pendergast
Student Activities Coordinator
Aaron Schaefer
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
Kitty Brown
Arnett Caviel
Dean Chowenhill
Jacqueline Gamelin
Modesta Garcia
Carolyn Ogletree
Aisha Upshaw
Mary Valenti
Administration of Justice Program
Jacqueline Gamelin
Business and Accounting Majors
Jacqueline Gamelin
Bilingual Counselors (Spanish)
Sylvia Aguirre-Alberto
Modesta Garcia
Career Counselor
Eileen O'Brien
CalWORKS Program
Aisha Upshaw
CARE Program
Ruth Turner
Dental Hygiene Program
Modesta Garcia
Disabled Student Services/
Transition to College
Kevin Sinarle
EOPS Counselors
Sylvia Aguirre-Alberto
Arnett Caviel
Ruth Turner
Aisha Upshaw
Multicultural Center Counselors
Sylvia Aguirre-Alberto
Nursing Program
Kitty Brown
Mary Valenti
Technology Areas (CAD, Building Inspection)
Dean Chowenhill
Veterans' Program
Dean Chowenhill

Faculty Advisors
Faculty Advisors at College of San Mateo provide advising assistance that is major specific. Each faculty advisor specializes in the area(s) identified below. Faculty advisors 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.

## Advisors by Instructional Division:

Business and Technology Division
Rick Ambrose
Stacey Grasso

## Language Arts Division

Linda Scholer
Coastside/Half Moon Bay Location
David Danielson
Mathematics and Science Division
Laura Demsetz
Advisors by Majors or Programs:
Accounting and Business Majors
Rick Ambrose
Architecture, Engineering, Computer
Science, Math, Science Majors
Laura Demsetz

## Athletics

Bret Pollack
Computer Science and Technology
Area Majors
Stacey Grasso

## Cosmetology Program

Andria Nalls
ESL Program
Linda Scholer
(See a College Counselor ifyou are lookingfor a major that does not appear in the categories listed above.)

## Assessment Center Services

## Placement Testing

The Assessment Center, located in Building 1, Room 130, conducts the college placement testing program which includes English, Reading, ESL, and Mathematics testing components. There is no charge for placement testing. Computerized testing is offered year round by appointment to students who have completed a College of San Mateo Admissions Application, have a CSM student identification number, present an approved photo identification (e.g., driver's license, passport, credit card with photo), and plan to attend College of San Mateo. Placement test results are posted on students' Web SMART accounts under Student Records/Placement Test Results.
Placement tests are required for all students who plan to enroll at College of San Mateo to complete a vocational certificate, an associate degree, transfer to a university, or for students who are undecided but considering one of the aforementioned goals. Also, placement tests are required to enroll in English, ESL, reading, and mathematics, and other courses that have math or English prerequisites.
Placement tests are designed to measure current academic readiness in English, reading, and mathematics. Students are advised to work with counselors to discuss test results, educational goals, and other relevant information so that counselors can assist students to develop student educational plans.

## Using Placement Test Results to Meet Course Prerequisites

Placement test results, for the purpose of course placement and prerequisite skill level, are valid for two years only.

## Using Placement Test Results to Meet Associate Degree Competency Requirements in English and/or Mathematics

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

## Placement Test Retest

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

## Special Accommodations for Placement Tests

The Assessment Center is able to provide extended test time to students who request it, and is wheelchair accessible. Students requiring placement tests in alternate formats, must contact the Disability Resource Center (Bldg 16, Room 150) at 574-6438 or 574-6433.

## Placement Test Waivers

Placement tests may be waived for students who have successfully completed English and/or mathematics coursework at another accredited college or university in the United States. For more information view the Prerequisite Equivalency Petition at collegeofsanmateo.edu/forms or go to the Assessment Center, Building 1, Room 130.

## Ability to Benefit Test

The Ability to Benefit Test is required for those students who do not possess a high school diploma, GED Certificate or High School Proficiency Certificate and want to apply for federal financial aid. The Ability to Benefit test is administered by the Assessment Center, located in Building 1, Room 130. There is no charge for testing. The ATB test is offered year-round by appointment to students who have completed a College of San Mateo Admissions Application and an application for Financial Aid. Photo identification is required prior to taking the test. The College of San Mateo uses ASSET Test for Writing Skills Test , Reading Skills Test and Numerical Skills Test. In addition, the College of San Mateo uses CELSA for English Language Skills Test. The Ability to Benefit Test is a pass or fail instrument. Once the student passes the test, the Assessment Center provides the Financial Aid Office test results and the application for financial aid can then be processed. Students who fail the test may retake the test after 30 days.

## Career and Self Assessment

Career assessment, including occupational interest, personality, values, and skills assessments, are available to assist students with decisions regarding college majors and career choices. Combinations of test scores and interest patterns create profiles unique to each person. Students who are undecided about a major, as well as those who wish to verify established goals, may find these services very valuable. Career and Self Assessment measures are available through Career and Life Planning Courses (CRER). Consider enrollment in CRER 120 for a full assessment profile, or CRER 123 or CRER 126 for "short course" assessment experiences. There is a charge for some measures.

## 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).

## College/Career Planning

Located in Building 1, Room 115 and Room 213 , services are 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. 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. Up-to-date listing of recommended websites for job search and job/college related information and reference books such as the Occupational Outlook Handbook which gives detailed descriptions of over 12,000 occupations, are available.
It is important for students who are undecided about their majors and/or career goals to use services, and also enroll in one or more of the many career and life planning courses (CRER) available each semester.

## Child Development Center

The Mary Meta Lazarus Child Development Center, located at the east end of the science building overlooking the Bay, provides a comprehensive child development program as a service to assist students who have young children ages $21 / 2$ through 5 . The Center is open from 7:30 a.m. to 5 p.m. daily. Currently, tuition fees for children $21 / 2$ 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 Counseling Services, Building 1, Room 207, 574-6400. The counseling staff make appointments for students and facilitate drop-in counseling services.
Personal counseling is available to all registered students through the Office of Psychological Services. Staff trained in personal counseling help students develop their full potential and obtain maximum benefit from their college experience. When appropriate, students may be referred to other offices for specialized assistance. Appointments for special services may be made in person, by telephone, through a counselor/advisor, or through the Student Health Center, Building 1, Room 226 (5746396).

## 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 $4: 30 \mathrm{p} . \mathrm{m}$ 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 a.m. to 7 p.m., Monday through Thursday and 9 a.m. to 2 p.m. 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 of San Mateo college units and who have maintained a cumulative G.P.A. of 2.75 or above are encouraged to apply. Both students returning to and transferring from CSM are eligible. These scholarships are awarded to students in a wide variety of majors. Scholarships are awarded on the basis of academic achievement and are, for the most part, not need-based. In addition, a number of local and national organizations offer scholarships to CSM students. Eligibility requirements vary widely and require applications. CSM Scholarship applications are available the beginning of November and due by the end of January. For specific dates and additional information contact the Scholarship Office, Building 1, Room 271 (574-6434), collegeofsanmateo.edu/scholarships.

## Student Employment Services

Located in Bldg. 1, Room 213, Student Employment assists students and alumni in obtaining job information. Part-time work and professional job listings are available for review and follow up. 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 574-6116 for more information.
Students are encouraged to consider enrollment in CRER 126 - Career Assessment, and/ or CRER 127 - Job Search Strategies. Each course is a short 8 -hour course and designed to assist students with interest and skill assessment, career research and exploration, and current and effective job search skills and strategies. Check the Class Schedule for course offerings or go to Bldg. 1, Room 115, for more information.

## Transfer Services

Located within the Transfer, College/Career Planning, and Student Success Center in Bldg. 1, Room 115, 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

- ACCUPLACER - Reading comprehension and sentence structure (Computerized Placement Tests) (The College Board)
- Compass Mathematics Test - Internet Version (ACT)
- *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)
- *Compass ESL Test
*ESL Placement Testing is undergoing revision at the time of the publication of this catalog. For more information about ESL Placement Testing contact the Assessment Center, Bldg 1, Room 130.
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: <br> 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 Critical Reading | 580 |
| *SAT Writing Subject Test | 660 |
| ACT English Usage Test | 23 |
| CSU English Placement Test | 150 |
| AP English Language and |  |
| Composition Test 3, 4, or 5 <br> AP English Literature and  <br> Composition Test 3, 4, or 5 <br> * Test taken prior to the use of the new SAT  <br> Reasoning Test. $l$ |  |

## College of San Mateo Course Placement Guides

## English Course Placement Guide

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

| If you have a | and a Sentence | Take the following |
| :---: | :---: | :---: |
| Reading score of: | Skills score of: | English and Reading course(s): |
| 0 to 8 (0 to 27). | All scores.. | Take READ 812 first |
| 9 to 14 (28 to 41) | All scores | Take READ 825 first; the following semester take ENGL 828 |
| 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 8 | Take ENGL 838 |
| 15 to 20 (42 to 62) | 22 to 35 (86 to | 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 7 | Take ENGL 838 |
| 21 to 26 (63 to 87) | 19 to 35 (73 to 1 | 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 1 | 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 Services (Building 1, Room 207) 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 848 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.
*Attention: ESL Placement Testing is undergoing revision at the time of the publication of this catalog. For more information about ESL Placement Testing contact the Assessment Center, Bldg. 1, Room 130.

## 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
 Non-native speakers: READ 825 (READ 809 optional)*
16 to 22 .
READ 830 Non-native speakers: READ 830 (READ 809 optional)*


*It is highly recommended that students enroll in Reading course(s) marked as optional.

## Mathematics Course Placement Guide Computerized and Manual MDTP

| 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 |


| COMPASS Mathematics Test (ACT) - Internet Version |  |  |
| :---: | :---: | :---: |
| If your took SMCCCD Assessment: | and Scored: | You can take the following Math course(s): |
| Pre-Algebra. | 1 to 40 | .MATH 811 |
| Pre-Algebra | 41 to 100 | .MATH 802 or MATH 811 |
| Algebra. | . 1 to 25 | .MATH 111 |
| Algebra. | 26 to 45. | .MATH 110 or 111 |
| Algebra. | 46 to 100 | .MATH 120 or 122 |
| College Algebra | . 1 to 45 | .MATH 120 or 122 |
| College Algebra | 46 to 100 | .MATH 125, 130, 145, 200, or 241 |
|  | $\text { . . } 1 \text { to } 45 \text {. }$ | .MATH 125, 130, 145, 200, 222, 231, or 241 (and after completion of MATH 241 is eligible for MATH 242 without taking MATH 130) |
| Trig | 46 to 100 | .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: <br> The Mathematics test requirement will be waived for students with a minimum score on one of the following tests: <br> Test <br> Minimum Score <br> AP Calculus AB <br> AP Calculus BC <br> 3,4 , or 5

See pages 36 and 37 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 to develop an educational plan which will assure a smooth transition to the transfer institution of their choice. While completing transfer requirements, students may also want to earn units toward an Associate in Arts or Associate in Science degree at CSM. With careful planning, both objectives can be reached by taking essentially the same set of transferable courses.

## Transfer of Credit

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

## CSM Transfer Services collegeofsanmateo.edu/transfer

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

Once students choose a major and the university to which they plan to transfer, they should 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 1, Room 115. Call 358-6839 for hours of operation.

## Requirements for 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 a UC and CSU.

## Certification of General Education

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

## Transfer Admission Procedures

Students should take the following steps in applying for admission as a transfer student to a four-year college or university:

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

## California Independent Colleges and Universities

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

When choosing from among the privately supported colleges and universities in California, you may wish to review the type of certification a particular institution has received. Note: In selecting a California independent college or university, students are advised to give first priority to those institutions which are fully accredited by the Western Association of Schools and Colleges. If you would like more information about the certification process as specified in California's Education Code, please contact the California Postsecondary Education Commission at (916) 445-1000.

## 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 CSU

The following courses are designated by CSM as appropriate for baccalaureate credit and are accepted by all California State Universities as applicable toward a baccalaureate degree:
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, $105,106,108,120,145,153,165,185,641$, 680-689, 690
American Sign Language 111, 112, 121, 122, 680-689, 690
Anthropology 110, 180, 350, 370, 680-689, 690
Architecture 100, 120, 140, 155, 165, 210, 220, 230, 240, 641, 666, 680-689, 690
Art 100, 101, 102, 103, 104, 124, 201, 202, 206, 207, 214, 223, 224, 225, 226, 231, 232, 236, 301, 315, 350, 351, 352, 353, 354, 355, $360,365,366,374,381,405,406,411,412$, 641, 665, 680-689, 690
Astronomy 100, 101, 103, 115, 125, 680-689, 690
Biology 100, 102, 110, 123, 130, 140, 145, 184, 195, 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, 150, 180,
201, 295, 315, 316, 317, 326, 352, 353, 354, 355, 356, 401, 641, 680-689, 690
Business Microcomputer Operations 502, 504, 680-689
Business Applications-Windows 105, 114, $115,204,205,214,215,313,323,383,384$, $415,416,450,451,464,475,477,530,534$, 535, 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 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, 151, 254, 255, 256, 278, 279, 312, $313,362,377,379,380,381,382,383-8$, 390, 488, 489, 490, 491, 492, 495, 641, 680-689, 690
Consumer Arts and Science 310, 641, 680-689, 690
Cooperative Education 640, 641, 647

Dance 117, 121, 131, 132, 141, 143, 153 , 167, 400
Drafting Technology 120, 121, 122, 123,
124, 130, 140, 641, 680-689, 690
Economics 100, 102, 123, 680-689, 690
Electronics 110, 131, 133, 144, 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, 261, $262,265,288,300,350,351,360,440,585$, 680-689, 690
Film 100, 110, 120, 121, 153, 200, 215, 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, $120,121,122,130,131,132,140,680-689$, 690
Geography 100, 110, 150, 680-689, 690 Geology 100, 101, 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, 235, 242, 255, 260, 680-689, 690
Health Science $100,101,112,113,114,119$, 125, 641, 680-689, 690
History 100, 101, 102, 201, 202, 260, 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, 150, 151, 262, 264, 680-689, 690
Humanities 101, 102, 111, 114, 125, 131, 133, 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, 105, 110, 665, 680-689
Literature 101, 105, 113, 151, 201, 202, 220, 231, 232, 263, 277, 430, 680-689, 690
Machine Tool Technology 200, 641, 680-689, 690, 701, 702, 750, 755, 760
Management 100, 215, 220, 235, 265, 641, 680-689, 690
Manufacturing and Industrial Technology
$100,120,130,641,680-689,690$

Mathematics $125,130,145,147,200,222$,
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, 680-689, 690
Music 100, 101, 102, 103, 104, 131, 132, 133, 134, 202, 240, 250, 275, 290, 291, 292, 293, 301, 302, 303, 304, 371, 372, 373, 374, $401,402,403,404,430,451,452,465,470$, 641, 680-689, 690
Nursing 211, 212, 221, 222, 231, 232, 241,
242, 261, 262, 264, 265, 610, 615, 620, 630, 641, 666, 680-689, 690
Oceanography 100, 101, 680-689, 690
Paleontology 110, 111, 680-689, 690
Philosophy 100, 103, 244, 246, 300, 680689, 690
Physical Education All classes in the following series: 100-199, 200-299, 300-399, 400-499, 600-699
Physical Science 676, 680-689, 690
Physics 100, 101, 210, 211, 220, 221, 250, 260, 270, 680-689, 690
Political Science 100, 110, 120, 130, 150, 200, 210, 212, 215, 250, 260, 310, 680-689, 690
Psychology 100, 105, 108, 110, 121, 200, 201, 220, 225, 300, 410, 675, 680-689, 690
Reading 400, 405, 412, 415, 454, 455, 680-689
Real Estate 100, 105, 110, 121, 131, 141, 200, 215, 220, 641, 680-689
Social Science 111, 220, 221, 301, 302, 303, $304,307,308,310,313,314,315,316,318$, 319, 321, 680-689, 690
Sociology 100, 105, 110, 141, 200, 340, 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, 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

## 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 A: Communication Skills and Critical Thinking |  |  | 9 units required |
| :---: | :---: | :---: | :---: |
| One course required from | ection. Grades of "C" or bette | d in Area A coursewo |  |
| A1 Oral Communication | A2 Written Communication | A3 Critical Thinking |  |
| SPCH 100, 120, 140, 150 | ENGL 100 | ENGL 110, 13 |  |

Area B: Natural Science and Mathematics
9 units required
One course from Physical Science, Life Science, \& Math Concepts. Must include one lab course identified by *.

```
B1 Physical Science
ASTR 100, 101*(1), 103*(1), 115, 125 CHEM 210*,
220*, 231, 232, 250*,410* GEOG 100 GEOL 100,
101*(1),210* METE 100, 101*(1) OCEN 100, 101*(1)
PALN }110\mathrm{ PHYS 100, 101*(1), 210*, 250*
*B3 Lab Courses identified with an "*"
Area C: Arts, Literature, Philosophy & Languages
```


## C1 Arts

ARCH 100 ART $100,101,102,103,104,124,207,350,351$
ETHN 288, 585 FILM $100,110,120,121,200,215,277$
HUM 114 LIT 277 MUS 100, 202, 240, 250, 275
C2 Humanities
ANTH 180 ASL 121, 122 CHIN 111, 112, 121, 122, 131, 132
ENGL 135, 161, 162, 163 ETHN 265, 350, 351, 440 FILM 153
FREN $110,111,112,115,116,117,120,121,122,130,131,132,140$
GERM $110,111,112,120,121,122,130,131,132,140$
9 units required
Chose at least one course from the Arts and at least one course from the Humanities. Courses must be from at least two disciplines.

C2 Humanities - continued<br>HUM 101, 102, 111, 114, 125, 131, 133, 140, 676<br>ITAL $110,111,112,121,122$ JAPN $110,111,112$,<br>120, 121, 122 LIT 101, 105, 113, 151, 201, 202, 220, 231, 232, 275, 430 PHIL 100, 244, 300 SPAN $110,111,112,120,121,122,130,131$, 132, 140, 161, 162, 251 SPCH 111, 112

Area D: Social, Political, \& Economic Institutions
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, 261, 262, 300, 360, 440, GEOG 110, 150
HIST 100, 101, 102, 201, 202, 260, 310, 315, 350 HUM 125 JOUR 110 PLSC 100, 110, 130, 150, 200, 210, 212, 215, 250, 260, 310 PSYC 100, 105, 108, 110, 200, 201, 220, 225, 300, 410, 675 SOCI 100, 105, 110, 141, 200, 340 SPCH 120

Group 1 US HISTORY
HIST 102, 201, 202, 260

Area E: Lifelong Understanding \& Self Development
Group 2 US CONSTITUTION
*PLSC 200 (meets both Group 2 \& Group 3)
PLSC 210, 212, 215, 250

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

3 units required
BUS 101 CA\&S 310 CRER 120, 121, 123, 138, 140, 141, 402, 404 ETHN 151, 152 HSCI 100, 101, 112, 113,114 PSYC 100, 108, 110, 300 SOCI 110,340

6/23/08

## 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 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 of California Campuses

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

Accounting 121*, 131*, 161

* Note: Credit limited to 4 units

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

* Note: Corresponds to two years of high school study.
Anthropology 110, 180, 370
Architecture 100*, 120*, 140*, 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, 124, 201, 202, 206,
207, 214, 223, 224, 231, 232, 301, 315, 351, 352, 353, 365, 381, 405, 406, 411, 412
Astronomy 100, 101, 103, 115, 125
Biology 100\#, 102, 110, 130*, 140, 145+, 184, 195, 210, 220+, 230, 240, 250*, 260*
\# Note: No credit for BIOL 100 if taken after BIOL 110.
* Note: BIOL 130, 250 and 260 combined the maximum UC credit is two courses.
+ Note: No credit for BIOL 145 if taken after BIOL 220.

Business 100, 201
Career and Life Planning 105, 120
Chemistry 192*, 210, 220, 231, 232, 250

* Note: Credit limited to either CHEM 100/101 or CHEM 192. No credit if taken after CHEM 210. CHEM 100, 101 and 192 combined the maximum UC credit is 4 units.

Chinese $111^{*}$ and $112^{*}, 121+, 122+, 131^{\wedge}$, 132^, 140

* Note: 111 and 112 combined are equivalent to semester 1.
+ Note: 121 and 122 combined are equivalent to semester 2 or 122 corresponds to two years of high school study.
^ Note: 131 and 132 combined are equivalent to semester 3.
Computer and Information Science 110, 111, 125, 255, 256, 278, 279, 381/382


## Consumer Arts and Science 310

Dance 121, 131, 132, 141, 143, 151, 161, 195
Drafting 121*

* Note: Credit limited to either 100 or 121.

Economics 100, 102, 123*

* Note: ECON 123, MATH 200, and/or PSYC 121 combined the maximum credit is one course.

Engineering 100, 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, 261, 262, 265, 288, 300, 350, 351, 360, 440, 585

* Note: Credit limited to either ETHN 151 or SOCI 141.

Film 100, 120, 121, 200, 277 (same as LIT 277)

French $110^{*}, 111^{*}$ and $112^{*}, 120,121+$, $122+, 130^{\wedge}, 131^{\wedge}, 132^{\wedge}, 140$

* Note: 111 and 112 combined are equivalent to 110 .
+ Note: 121 and 122 combined are equivalent to 120,120 or 122 correspond to two years of high school study.
$\wedge$ Note: 131 and 132 combined are equivalent to 130 .
Geography 100, 110, 150
Geology $100^{*}, 101^{*}, 210^{*}$
* Note: Combined credit for GEOL 100, 101 and 210 limited to 4 units.

German 110*, $111^{*}$ and $112^{*}, 120+, 121+$, $122+, 130^{\wedge}, 131^{\wedge}, 132^{\wedge}, 140$

* Note: 111 and 112 combined are equivalent to 110 .
+ Note: 121 and 122 combined are equivalent to 120,120 or 122 correspond to two years of high school study.
${ }^{\wedge}$ Note: 131 and 132 combined are equivalent to 130 .

Health Science 100
History 100, 101, 102*, 201*, 202*, 260,
310, 350

* Note: No credit for HIST 102 if taken after HIST 201/202 taken.
Horticulture 311, 312
Humanities 101, 102, 111, 114, 125, 131, 133
Italian $110^{*}, 111^{*}$ and $112^{*}, 120+, 121+$, 122+
* Note: 111 and 112 combined are equivalent to 110 .
+ Note: 121 and 122 combined are equivalent to 120,120 or 122 correspond to two years of high school study.
Japanese $110^{*}, 111^{*}$ and $112^{*}$ and $120+$, 121+, 122+
* Note: 111 and 112 combined are equivalent to 110 .
+ Note: 121 and 122 combined are equivalent to 120,120 or 122 correspond to two years of high school study.
Journalism 110
Library Studies 100, 110
Literature 101, 105, 113, 151, 201, 202, 220, 231, 232, 251, 277, 430
Mathematics 125, 145, 200*, 222, 241+,
$242+, 251+, 252+, 253+, 268,270,275$
* Note: MATH 200, ECON 123 or PSYC 121 combined maximum credit one course.
+ Note: MATH 241 and 242 and 251, 252, 253 combined maximum credit one series.
Meteorology 100, 101
Music $100^{*}, 101,102,103,104,131,132$, 133, 134, 202, 240, 250, 275, 301, 302, 303, 304, 371, 372, 373, 374, 401, 402, 403, 404, 430, 451, 452, 470
* Note: No credit for MUS. 100 if taken after MUS. 101 or 131.
Oceanography 100, 101
Paleontology 110
Philosophy 100, 103, 244, 300
Physical Education All classes in the following series: 100-199*, 200-299*, 300-399*
* Note: Credit limited to 4 units.

Physics $100^{*}, 101^{*}, 210+, 211,220+, 221$,
$250+, 260+, 270+$

* Note: No credit for 100/101 if taken after PHYS 210 or 250.
+ Note: 210, 220 and 250, 260, 270 combined maximum credit one series.

Political Science 100, 110, 130, 150, 200*, 210*, 212*, 215, 250, 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.
Social Science 111
Sociology 100, 105, 110+, 141*, 200, 340
* Note: Credit limited to either ETHN 151 or SOCI 141.
+ Note: Credit limited to either SOCI 110 or PSYC 110.
Spanish $110^{*}, 111^{*}$ and $112^{*}$ and $120+$, $121+, 122+, 130^{\wedge}, 131^{\wedge}, 132^{\wedge}, 140,161$, 162, 251
* Note: 111 and 112 combined are equivalent to 110 .
+ Note: 121 and 122 combined are equivalent to 120,120 or 122 correspond to two years of high school study.
${ }^{\wedge}$ Note: 131 and 132 combined are equivalent to 130 .
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 1, Room 115; 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.


CSU GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION \& AMERICAN IDEALS (CSU REQUIREMENT ONLY) Not part of IGETC; may be completed prior to transfer. One course from each group except PLSC 200 meets two groups.
Group 1 US HISTORY Group 2 US CONSTITUTION Group 3 CA STATE \& LOCAL GOV
HIST 102, 201, 202, $260 \quad$ *PLSC 200 (meets both Group 2 \& Group 3)
*PLSC 200 (meets both Group 2 \& Group 3) PLSC 210, 212, 215, 250

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 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 $\qquad$ BIOL 110
CAN BIOL 4 $\qquad$ BIOL 210
CAN BIOL 6 $\qquad$ BIOL 220
CAN BIOL 12 $\qquad$ BIOL 260
CAN BIOL 14 $\qquad$ BIOL 240
CAN BIOL SEQ A
BIOL 110+210+220
CAN BIOL SEQ B
BIOL 250+260
CAN BUS 2 $\qquad$ ACTG 121
CAN BUS 4 $\qquad$ ACTG 131
CAN BUS 6 $\qquad$ BUS 295

CAN BUS 8 $\qquad$ 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 $\qquad$ CIS 110
CAN ECON 2 $\qquad$ ECON 100
CAN ECON 4 $\qquad$ ECON 102
CAN ENGL 2 $\qquad$ ENGL 100
CAN ENGL 4 $\qquad$ ENGL 110; or ENGL 165
CAN ENGL 6 $\qquad$ ENGL 161
CAN ENGL 8 $\qquad$ LIT 231
CAN ENGL 10 $\qquad$ LIT 232
CAN ENGL 14 LIT 201

CAN ENGL 16 $\qquad$ LIT 202

CAN ENGL SEQ A $\qquad$ ENGL 100+110; or ENGL 100+165

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 |
| :---: | :---: |
| CAN ENGR 2............... | . ENGR 210 |
| CAN ENGR 4............... | . ENGR 270 |
| CAN ENGR 6............... | . ENGR 260 |
| CAN ENGR 8............... | . ENGR 230 |
| CAN FCS 2 ................ | CA\&S 310 |
| CAN FREN 10........... | . FREN 140 |
| CAN GEOG 2........... | . GEOG 100 |
| CAN GEOG 4........... | . GEOG 110 |
| CAN GEOL 2............... | . GEOL 210 |
| CAN GOVT 2 .............. | . PLSC 210 |
| CAN HIST 2............. | HIST 100 |
| CAN HIST 4.............. | . HIST 101 |
| CAN HIST 8.............. | HIST 201 |
| CAN HIST 10............. | HIST 202 |
| CAN HIST SEQ A.......... | . HIST 100+101 |
| CAN HIST SEQ B.......... | . HIST 201+202 |
| CAN ITAL 2 ................. | ITAL 110 OR ITAL 111+112 |
| CAN JAPN 2 ................ | JAPN 110 OR JAPN 111+112 |
| CAN JAPN 4................ | JAPN 120 OR JAPN 121+122 |
| CAN JAPN SEQ A ......... | . JAPN 110+120 OR JAPN $111+112+121+122$ |
| CAN JOUR 2 ............... | . JOUR 120 |
| CAN JOUR $4 . . . . . . . . . . . . .$. | . JOUR 110 |

## College of San Mateo CAN number

## College of San Mateo course

CAN MATH 8 .................. MATH 130
CAN MATH 12 ................ MATH 125
CAN MATH 16 ............... MATH 222
CAN MATH 18................ MATH 251
CAN MATH 20 ................ MATH 252
CAN MATH 22 ................ MATH 253
CAN MATH 24................ MATH 275
CAN MATH 26 ................ MATH 270
CAN MATH 30 ............... MATH 241
CAN MATH 32 ................ MATH 242
CAN MATH SEQ C .......... MATH 251+252+253
CAN MATH SEQ D ......... MATH 241+242
CAN MUS 8 .................... MUS 202
CAN PHIL 2..................... PHIL 100
CAN PHIL 4 .................... PHIL 246
CAN PHIL 6..................... SOSC 111
CAN PHYS 2 ................... PHYS 210
CAN PHYS 4 .................. PHYS 220
CAN PHYS 8 ................... PHYS 250
CAN PHYS 12 ................. PHYS 260
CAN PHYS 14 ................. PHYS 270
CAN PHYS SEQ A ........... PHYS 210+220
CAN PHYS SEQ B............ PHYS 250+260+270
CAN PSY 2 $\qquad$ PSYC 100

CAN PSY 6 $\qquad$ PSYC 121

CAN SOC 2 SOCI 100

CAN SOC 4..................... SOCI 105
CAN SPAN 10 $\qquad$ SPAN 140

CAN SPCH 4 $\qquad$ SPCH 100

CAN SPCH 8 $\qquad$ SPCH 120

CAN STAT 2 $\qquad$ MATH 200

## TRANSFER TO <br> PRIVATE COLLEGES AND UNIVERSITIES

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

The following institutions have identified specific
CSM courses thatstudents should take inpreparation
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: Contact Cogswell Polytechnical College

## 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: Contact Menlo College
Mills College
Homepage: www.mills.edu
CSM Information: Contact Mills College

## National University

Homepage: www.nu.edu
CSM Information: www.nu.edu/Admissions/ Undergraduate/TransferInformation.cfm

## Notre Dame de Namur University

Homepage: www.ndnu.edu
CSM Information: Contact Notre Dame de Namur University

## Saint Mary's College of California

Homepage: www.stmarys-ca.edu
CSM Information: Contact Saint Mary's College of California

## Santa Clara University

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

University of San Francisco
Homepage: www.usfca.edu
CSM Information: www.usfca.edu/acadserv/ admission/transfer/articulation.html

University of Southern California
Homepage: www.usc.edu
CSM Information: 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.claremontmckenna.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 University
Homepage: www.simpsonuniversity.edu
Stanford University
Homepage: www.stanford.edu
Thomas Aquinas College
Homepage: www.thomasaquinas.edu
University of Judaism
Homepage: www.uj.edu
University of La Verne
Homepage: www.ulv.edu
University of Phoenix/Northern California
Homepage: www.phoenix.edu/northcal
University of Redlands
Homepage: www.redlands.edu
University of San Diego
Homepage: www.sandiego.edu
Vanguard University of Southern California
Homepage: www.vanguard.edu
Westmont College
Homepage: www.westmont.edu
William Jessup University
Homepage: www.jessup.edu
Whittier College
Homepage: www.whittier.edu
Woodbury University
Homepage: www.woodbury.edu


## University of California

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 Bellflower 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) 3433-3000
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
91330-8227
(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

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

The awarding of an Associate Degree is intended to represent more than an accumulation of units. It is to symbolize a successful attempt on the part of the college to lead students through patterns of learning experiences designed to develop certain capabilities and insights. Among these are the ability to think and to communicate clearly and effectively both orally and in writing; to use mathematics; to understand the modes of inquiry of the major disciplines; to be aware of other cultures and times; to achieve insights gained through experience in thinking about ethical problems; and to develop the capacity for self-understanding. In addition to these accomplishments, the student shall possess sufficient depth in some field of knowledge to contribute to lifetime interest.
Graduation from College of San Mateo with the Associate in Arts or Science degree is based upon the completion of 60 units of lower-division college-level work, including the requirements A through E listed on pages 64 and 65. A student pursuing an Associate Degree must declare a major field of study. The major is comprised of specific courses within a discipline or related discipline as specified by the appropriate division and recorded in the college catalog. A list of College of San Mateo degree programs, with courses and units required for each major, can be found in the catalog on pages 68 through 131. 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 maximum of 12 units from courses in which the student has elected a Pass/No Pass option may be applied toward an Associate degree. An application for the degree must be filed in the Office of Admissions and Records during the last semester of attendance (refer to calendar for the college year for deadline).

## Philosophy of General Education

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

## Student Catalog Rights

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

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

## Additional Associate Degrees and Certificates

A student may earn multiple Associate Degrees and Certificates from College of San Mateo. Each additional degree and Certificate of Achievement will be posted to the student's academic record and the student will receive diplomas for each degree and Certificate of Achievement earned. For additional degrees and certificates any course used to meet the prescribed graduation requirements may count toward more than one degree and certificate. Courses used for one major may be used to meet requirements for additional majors. Courses used to meet the competency requirements and general education requirements for the first degree may be used to fulfill these requirements for additional degrees, provided the student has maintained "continuous enrollment" (see Graduation Requirements and Student 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 listing on page 66) for students planning to prepare for gainful employment. All occupational programs are carefully developed by advisory committees composed of college staff and selected representatives from the business and industrial community.
These programs are designed to develop personal and technical competencies necessary for successful employment and job advancement.

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

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

## Certificate Programs

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

## Certificates of Achievement

The higher of the two levels of certificates, Certificates of Achievement, are awarded upon successful completion of 18 units or more in designated courses. These certificates appear on transcripts.

## Certificates of Specialization

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

## Program Planning and 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

A minimum of 12 units must be completed at College of San Mateo. Also note information under MAJOR.

## B-SCHOLARSHIP

A minimum grade point average of 2.0 is required in all degree applicable coursework. All coursework transferred into SMCCCD (San Mateo County Community College District), except non-degree applicable and upper division courses, will be evaluated to meet graduation requirements and will become part of the overall GPA. The GPA from courses taken in SMCCCD and those courses from outside SMCCCD will be used in the calculation for graduation. Honors and Phi Theta Kappa are calculated and recorded at each college.

## C-COMPETENCY REQUIREMENTS

## 1: Math/Quantitative Reasoning

This competency requirement may be satisfied with any of the following:
a. Appropriate scores on the CSM Placement Test: Placement Test results that indicate MATH 120 or 122 or higher.
b. ACT Math: standard score of 15 or above on math
c. SAT I Math: quantitative score of 400 or above (test taken prior to May 1995) or score of 440 or above (test taken during or after May 1995)
d. Completion with a grade of C or higher of MATH 110 or both MATH 111 and 112
e. Completion of a course higher than MATH 110 at CSM or any other college or university (for courses outside of the San Mateo County Community College District the student must secure a verification through the Official Transcript Evaluation)
f. Completion of any course with a MATH 110 prerequisite, or
g. Completion of any one of the following courses with a grade of C or higher:
ACTG 121; BUS 115; CIS 255, 278, 279, 290, 381/382, 383-388; CHEM 192; ECON 123; ELEC 231 \& 232; PLUM 702, 742; PSYC 121; R.E. 131

2: English
This competency requirement may be satisfied with the following:
a. Completion of ENGL $\mathbf{1 0 0}$ with a grade of C or higher, or by satisfying both $b$ and $c$ below
b. Completion of ENGL 838, 848 or ESL 400 in (the case of non-native speakers), and
c. Placement in READ 400 or 405 based upon the Reading Placement Test or completion of READ 400 or 405 with a grade of C or higher

## D—MAJOR

Major requirements are a minimum of 18 units, 12 of which must be taken in residence at College of San Mateo, from the list of courses required for the major in the catalog. Some majors require more than 18 units. A grade 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 met by completing one of the three options below:
Option 1: by completing PLSC 200
Option 2: completing one of the options in group 1 and one course in group 2 as noted below:


Group 2: California State and Local Government (California Institutions)
One course from the following selections:
PLSC 310; HIST 315, 310; SOCI 200;
ETHN 101, 102

Option 3: complete the U.S. History \& American Ideals, U.S. Constitution, California State and Local Government requirement as approved by CSU to meet the CSU graduation requirement at a California Community College or a California State University campus.
NOTE: Courses used to satisfy the American and CA History and Government requirements through Option 1, 2, or 3, may not be used to satisfy the E5b Social Science general education requirements.
2: Language and Rationality (6-9 units)
a. English Composition: 3 units - select one of the following courses:

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

## E-GENERAL EDUCATION (CONTINUED)

c. Communication and Analytical Thinking: $\mathbf{3}$ units - select one of the following courses:
(Courses marked with an asterisk (*) can also be used to meet $2 b$ which allows you to complete 2a, 2b, and $2 c$ with 6 units of coursework)
BUS 295, 401; CIS 110, 125, 254, 255, 278, 292; ECON 123; ENGL 100*, 110*, 135*, 165*; ESL 400*; LIT 101*, 105*, 113*, 151*, 201*; LIT 202*, 220*, 231*, 232*, 275*, 277*, 430*; MATH 125, 130, 200, 222, 241, 251; PHIL 103, 200; SOSC 111; SPCH 100*, 120*, 140*

## 3: Health Science ( 2 units)

Two units of Health Science are required (HSCI 100 [2 units]; or two units from HSCI 119 or 125; or two classes selected from HSCl 101, 112, 113, 114). One unit of CA\&S 310 may be used in lieu of HSCI 113. The requirements may be waived for veterans of the U.S. Armed Forces with one or more years of active service and for nursing students who complete NURS 211, 212, 221, and 222, or equivalent, with a grade of C or higher.

## 4: Physical Education (1-4 units)

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

## 5: Additional General Education Requirements (12 units)

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

ASTR 100, 101, 103, 115, 125; BIOL 100, 102, 110, 130, 140, 145, 184, 195, 210, 220, 230, 240, 250, 260, 666, 675; CA\&S 310, CHEM 192, 210, 220, 231, 232, 410, 420; ELEC 110; GEOG 100; GEOL 100, 101, 210; HORT 311, 312, 350; HUM 127-128 (When both HUM 127 and 128 are taken, 3 units will meet the Natural Science requirement and 3 units are allowed toward the Humanities requirement.); MANU 100; METE 100, 101; OCEN 100, 101; PALN 111; PHYS 100, 101, 210, 220, 250, 260, 270; PSCI 676.
Majors fulfilling Area E5A: Chemistry, Dental Assisting, Geological Sciences, Horticulture, Life Sciences, Physical Science, Physics
b. Social Science: at least 3 units

ANTH 110, 180, 350, 370; BCST 110; BUS 100, 101, 102, 125; ECON 100, 102; ETHN 101, 102, 150, 151, 152, 261, 262, 265, 300, 360, 440; GEOG 110, 150; HIST 100, 101, 102, 201, 202, 260, 310, 315, 350; HMSV 100, 115, 120, 130, 150, 151;
PLSC $100,110,120,130,150,200,210,212,215,250,260,310$; PSYC 100, 105, 108, 110, 200, 201, 220, 225, 300, 410, 675;
SOSC 220, 221, 310, 313; SOCI 100, 105, 110, 141, 200, 340.
Majors fulfilling Area E5B: Ethnic Studies, Social Science
c. Humanities: at least 3 units

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

ADMJ 100; ARCH 666; BIOL 666; BCST 110; BLDG 700; BUS 201, 315, 316, 317; 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; DENH 200; DRAF 120; ELEL 701; ENGR 100; FIRE 715; GRA 150, 160; HORT 400; HMSV 100; JOUR 110; LIBR 100, 105, 107, 110; MANU 130; MGMT 100; MULT 102; NURS 666; PLUM 701 or 741; R.E. 100; SOSC 301; SPFI 701; SPCH 100, 120, 140, 150; WELD 300, 350.
Majors fulfilling Area E5d : Acctg,, Admin. of Justice, Alcohol/Other Drug Studies, Archit., Broadcast \& Electronic Media, Bldg Inspection, Bus. Info. Processing, CIS, Cosmetology, Drafting., Electrical, Electronics, Engineering, Filmmaking, Fire Sprinkler, Fire Tech., Graphics, Horticulture, Human Ser., Journalism, Life Sci, Biotech., Mgmt, Math, Multimedia, Nursing, Plumbing/Pipe Fitting, Real Estate, Refrig./Air Cond. Mech., Welding Tech.

## F-ELECTIVES

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

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



* Pending approval from the State Chancellor's Office. $\quad$ ** Pending completion of the approval process.

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

## CSM Transfer Opportunities: Subject Areas and Majors

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

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

## Communication

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

## Environmental Studies \& Agriculture

Animal Science
Botany \& Plant Sciences
Earth \& Environmental Sciences
Environmental Sciences
Fisheries
Forestry
Horticulture
Resource Management
Soil \& Water Science
Wildlife \& Conservation Biology
Ethnic \& Area Studies
African American Studies
American Studies
Asian American Studies
Asian Studies
Celtic Studies
Chicano Studies
Chinese Studies
Global Cultures
Japanese Studies
Jewish Studies
Latin American Studies
Middle Eastern Studies
Native American Studies
Russian Studies
World Cultures
Health Professions,
Education \& Counseling
Alcohol \& Drug Studies
Child Development
Counseling
Dental Hygiene
Education
Gerontology
Nursing
Nutritional Sciences
Rehabilitation Counseling
Special Education
Speech Pathology
Teaching ESL
Humanities, Art \& Foreign Languages
Art
Art History
Arts Management
Classical Civilizations
Comparative Literature
Dance
Design/Media Arts
Dramatic Art
English
Ethnomusicology
Film \& Digital Media
Humanities
Linguistics
Medieval Studies
Music
Music History
Philosophy
Photography
Religious Studies
Renaissance Studies

Rhetoric
Sculpture
Studio Art
Chinese
French
German
Italian
Japanese
Spanish
Mathematics \& Physical Sciences
Astrophysics
Chemistry
Earth \& Planetary Science
Earth Systems Science
Fiber \& Polymer Science
Financial Mathematics \& Statistics
Geology/Geological Sciences
Geophysics
Mathematics
Paleobiology
Pharmacological Chemistry
Physics
Statistics
Pre-Professional
Pre-Chiropractic
Pre-Dentistry
Pre-Law
Pre-Medicine
Pre-Optometry
Pre-Pharmacy
Pre-Physical Therapy
Pre-Veterinary

## Social Sciences

Administration of Justice/Criminology
Anthropology
Archeology
Cognitive Science
Economics
Geography
History
Human Development
Human Sexuality
Law \& Society
Liberal Studies
Multicultural Studies
Peace \& Conflict Studies
Political Science
Psychology
Public Policy
Social Welfare
Sociology/Social Science
Women's Studies

## ACCOUNTING

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

University Transfer Program
60-70 transferable units
California State University
University of California
Independent Colleges and Universities
For students who wish to transfer as a Business Administration major, refer to Business Administration on page 78.

## AA Associate in Arts Degree

Accounting . . . . . . . . . . . . . . . . . . . . . . . . . 60 units

## CA Certificate of Achievement

Accounting
22 units

## CS Certificates of Specialization

| 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. | 15.5-16.5 units |
| Enrolled Agent Exam Preparation | 14.5-15.5 units |

## Recommended high school preparation

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

## University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for Business and Accounting for the California State University and the University of California systems. For independent or out-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 point average of 2.0 is required for the major courses. Complete 16 units listed below

> ACTG 100 Accounting Procedures. 3 units
> ACTG 103 Ten Key Skills . . . . . . . . . . . . . . . . . . . . . . . . 5 unit
> ACTG 121 Financial Accounting . . . . . . . . . . . . . . . . 4 units
> ACTG 131 Managerial Accounting. . . . . . . . . . . . . . . 4 units
> ACTG 144 QuickBooks Set up and Services. . . . . . . . 1.5 units
> ACTG 145 QuickBooks Payroll and Merchandising . . 1.5 units
> BUSW 415 Spreadsheet I. . . . . . . . . . . . . . . . . . . . . . 1.5 units

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

| ACTG 161 | Intermediate Accounting I. . . . . . . . . . . 4 units |
| :---: | :---: |
| ACTG 162 | Intermediate Accounting II . . . . . . . . . . . 4 units |
| ACTG 163 | 3 Auditing . . . . . . . . . . . . . . . . . . . . . . . . 3 units |
| ACTG 164 | 4 Governmental and Nonprofit Accounting. 3 units |
| ACTG 165 | Cost Accounting . . . . . . . . . . . . . . . . . . 3 units |
| ACTG 171 | Individual Income Taxes . . . . . . . . . . . . . 3 units |
| ACTG 172 | Business Income Taxes . . . . . . . . . . . . . . 3 units |
| ACTG 173 | Trust, Estate, Gift Taxes . . . . . . . . . . . . . . 1.5 units |
| BUS 100 | Contemporary American Business . . . . . . . . 3 units |
| BUS 201 | Business Law I. . . . . . . . . . . . . . . . . . . . . 3 units |
| BUS 295 | Computer Systems in Business. . . . . . . . . . . 4 units |

## CA Accounting

## Minimum 22 semester units

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

## CS Accounting Assistant

8.5 semester units

A grade of " C " or higher is required for each course applied to the certificate.
ACTG 100 Accounting Procedures. . . . . . . . . . . . . . . . . . . . . . . . . . . units
ACTG 103 Ten Key Skill. . . . . . . . . . . . . 1.5 units
ACTG 144 QuickBooks: Set Up and Service . . . . . 1.5 units
ACTG 145 QuickBooks: Payroll and Merchandising. . 1.5 units
BUSW 415 Spreadsheet I. . . . . . . . . . . . . . . . . . . . . 5 unit

ACTG 103 Ten Key Skill . . . . . . . . . . . . . . . . . . . . . . . . . 5 unit
ACTG 144 QuickBooks: Set Up and Service . . . . . . 1.5 units
ACTG 145 QuickBooks: Payroll and Merchandising. . 1.5 units
BUSW 415 Spreadsheet I. . . . . . . . . . . . . . . . . . . . . 1.5 units
CRER 127 Career Choices: Job Search. . . . . . . . . . . . . . 5 unit

## CS CPA Exam Preparation: Financial Accounting and Auditing

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

## ACTG 161 Intermediate Accounting I . . . . . . . . . . . . 4 units <br> ACTG 162 Intermediate Accounting II . . . . . . . . . . . . . 4 units <br> ACTG 163 Auditing . . . . . . . . . . . . . . . . . . . . . . . . . 3 units <br> ACTG 164 Governmental and Nonprofit Accounting. 3 units <br> CS CPA Exam Preparation: Business Environment and Regulation

## 13.5 semester units

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

```
ACTG 165 Cost Accounting . . . . . . . . . . . . . . . . . . . }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
```


## CS Tax Preparer I

8.5 semester units

A grade of " C " or higher is required for each course applied to the certificate.
ACTG 100 Accounting Procedures. . . . . . . . . . . . . . . . . . . . . . . . . 5 units
ACTG 103 Ten Key Skills . . . . . . . . . . . . . . . 3 units
ACTG 171 Individual Income Taxes . . . . . . . . . . . . 1.5 units
BUSW 415 Spreadsheet I . . . . . . . . . . . . . . . . 5 unit

## CS Tax Preparer II

## 15.5-16.5 semester units

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

```
ACTG }103\mathrm{ Ten Key Skills
    . }5\mathrm{ unit
ACTG }121\mathrm{ Financial Accounting . . . . . . . . . . . . . . . . }4\mathrm{ units
ACTG 144 QuickBooks: Set-up and Service Business . . OR
ACTG 145 QuickBooks: Payroll & Merchandising
        Business
        1.5 units
ACTG 171 Individual Income Taxes . . . . . . . . . . . . . . . }3\mathrm{ units
ACTG 172 Business Income Taxes . . . . . . . . . . . . . . . }3\mathrm{ units
ACTG 173 Trust, Estate, Gift Taxes . . . . . . . . . . . . . . . 1.5 units
BUSW 415 Spreadsheet I........................... . . . 1.5 units
CRER 127 Career Choices: Job Search . . . . . . . . . . . . . }5\mathrm{ unit
```


## CS Enrolled Agent Exam Preparation

14.5-15.5 semester units

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

## AS Associate in Science Degree <br> Administration of Justice Option 1 .60 units

## CA Certificate of Achievement

Administration of Justice Option 1 . . . . . . . . 27 units
Regular Basic Course Standard Format . . . . . 22 units

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

## University Transfer Program

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

## AS

## Major in Administration of Justice 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.
ADMJ 100 Introduction to Criminal Justice . . . . . . . . 3 units
ADMJ 102 Principles and Procedures of the Justice System 3 units
ADMJ 104 Introduction to Criminal Law .......... 3 units
ADMJ 106 Legal Aspects of Evidence. . . . . . . . . . . . . 3 units
ADMJ 108 Community Relations/Multi-Cultural Policy Issues

3 units
ADMJ 710 Police Report Writing . . . . . . . . . . . . . . . . 3 units
Plus 9 units selected from one of the six groups listed below.
All 9 units must be within the same group.
Group 1: ADMJ 120, 153, 185, SOSC 301, 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, ANTH 105, 110, 120, GEOG 110
Group 5: SPCH 120, 140, 150
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 Regular Basic Course Standard Format 22 semester units

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

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

These courses comply with training regulations set forth by POST. Upon successful completion of each of the following courses, the student will receive a certificate of completion.
PC 832 Training Courses
ADMJ 771 PC 832: Arrest and Control Training . . . . . 3 units 5 units
ADMJ 775 PC 832: Firearms Training. . . . . . . . . . 5 und
Regular Basic Course Modular Format
ADMJ 778 Regular Basic Course Level III. . . . . . . . . . 10 units
ADMJ 779 Regular Basic Course Level II . . . . . . . . 15.5 units

## ALCOHOL AND OTHER DRUG STUDIES

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

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

## AA Associate in Arts Degree

Alcohol and Other Drug Studies
60 units

## CA Certificate of Achievement

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

## University Transfer Program

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

## AA Major in Alcohol and Other Drug Studies

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

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

A grade 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\mathrm{ units
PSYC 410 Abnormal Psychology . . . . . . . . . . . . . . . }3\mathrm{ units
SOCI 100 Introduction to Sociology. . . . . . . . . . . . . }3\mathrm{ units
```

Plus 3 units selected from the following courses:
SOSC 303 Alcohol \& Other Drug Abuse Prevention
and Education. . . . . . . . . . . . . . . . . . . . 3 units
SOSC 310 Special Population Groups in Alcohol and Other Drug Studies. . . . . . . . . . . . . . . 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

## CS Certificate of Specialization

American Sign Language. . . . . . . . . . . . . . . . 12 units

## University Transfer Program

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

## CS American Sign Language

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

ASL 111 Elementary American Sign Language I . . . . . 3 units
ASL 112 Elementary American Sign Language II. . . . . 3 units
ASL 121 Advanced Elementary American Sign Language I . . . . . . . . . . . . . . . . . . . . . . 3 units
ASL 122 Advanced Elementary American Sign Language II. . . . . . . . . . . . . . . . . . . . . . 3 units

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

## ANTHROPOLOGY

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

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

## University Transfer Program

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

## ARCHITECTURE

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

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

## AS Associate in Science Degree

Architecture 60 units

## Recommended high school preparation:

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

## University Transfer Program

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

## AS Major in Architecture

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

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

A grade 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 140 Architecture and Design Drawing $2 \ldots$. . . 2 units
ARCH 155 Architecture, Technology, and Building 1: Construction Materials and Methods . . . . 2 units
ARCH 165 Architecture, Technology, and Building 2: Construction Processes and Systems. . . . . 2 units
ARCH 210 Design I: Intro to Architecture, Environmental Design and the Design Process
........ 4 units
ARCH 220 Design II: Architecture: Design, Form \& the Built Environment . . . . . . . . . 4 units
ARCH 230 Design III: Visioning and Building Architecture . . . . . . . . . . . . . . . . 4 units
ARCH 240 Design IV: Visioning Place and Community . . . . . . . . . . . . . . . . . . . 4 units

## ART

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

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

## AA Associate in Arts Degree

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

## 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 Adobe Illustrator for Print \& Web Design I . 3 units
GRA 160 Adobe Photoshop for Print \& Web Design I 3 units

## AA Major in Fine Arts Option 1: Drawing

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

## Major requirements: $\mathbf{3 3}$ 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 223 Oil Painting I. . . . . . . . . . . . . . . . . . . . . . . . 3 units
ART 301 Design. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
Plus, repeat the following courses:
ART 206 Figure Drawing and Portraiture . . . . . . . . . . 3 units
ART 207 Life Drawing . . . . . . . . . . . . . . . . . . . . . . . . 3 units

## AA Major in Fine Arts Option 2: General Studio Art

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 World to Medieval Times OR |
| :---: | :---: |
| ART 102 | Art \& Architecture of Renaissance and Baroque Europe $\qquad$ 3 units |
| ART 103 | Art of Europe and America from the Rococo to the Present OR |
| ART 104 | Art of the 20th Century . . . . . . . . . . . . . . 3 units |
| ART 201 | Drawing and Composition I. . . . . . . . . . . . 3 units |
| ART 202 | Drawing and Composition II . . . . . . . . . . 3 units |
| ART 206 | Figure Drawing and Portraiture . . . . . . . . . 3 units |
| ART 207 | Life Drawing . . . . . . . . . . . . . . . . . . . . . . 3 units |
| ART 214 | Color. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units |
| ART 223 | Oil Painting I . . . . . . . . . . . . . . . . . . . . . . 3 units |
| ART 301 | Design. . . . . . . . . . . . . . . . . . . . . . . . . . 3 units |
| ART 405 | Sculpture I. . . . . . . . . . . . . . . . . . . . . . . 3 units |

## AA Major in Fine Arts Option 3: Painting

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

## Major requirements: $\mathbf{3 3}$ 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 223 Oil Painting I . . . . . . . . . . . . . . . . . . . . . . . . 3 units
ART 224 Oil Painting II . . . . . . . . . . . . . . . . . . . . . . . 6 units
ART 301 Design. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units

## AA Major in Fine Arts Option 4: Printmaking

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

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

A grade 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

## 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.

$$
\begin{aligned}
& \text { ART } 350 \text { Visual Perception } \\
& 3 \text { units } \\
& \text { ART } 351 \text { Beginning Black and White Photography. . . } 3 \text { units } \\
& \text { ART } 352 \text { Intermediate Black and White Photography. } 3 \text { units } \\
& \text { ART } 354 \text { Color Photography I. . . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { ART } 360 \text { Experimental Photography. . . . . . . . . . . . . . } 3 \text { units } \\
& \text { ART } 381 \text { Beginning Digital Photography . . . . . . . . . . } 3 \text { units } \\
& \text { ART } 353 \text { Advanced Black and White Photography OR } \\
& \text { ART } 355 \text { Color Photography II . . . . . . . . . . . . . . . . . } 3 \text { units }
\end{aligned}
$$

## Art History University Transfer Program

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

## BROADCAST AND ELECTRONIC MEDIA

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

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

## AA Associate in Arts Degree <br> Broadcast and Electronic Media <br> Option 1: Television Production . . . . . . . . . . . 60 units <br> Option 2: Broadcast Audio . . . . . . . . . . . . . . . 60 units <br> Option 3: Television Producing . . . . . . . . . . . . 60 units

## CA Certificate of Achievement

## Broadcast and Electronic Media

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

## CS Certificates of Specialization

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: $\mathbf{3 3}$ semester units
A grade point average of 2.0 is required for the major courses.
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
Strongly Recommended: BCST 450 (replaces 244)

## CA Broadcast and Electronic Media Option 1: Television Production 33 semester units

Complete 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: 32.5 semester units

A grade point average of 2.0 is required for the major courses.
BCST 110 Media in Society
3 units
BCST 210 Television Studio Techniques (replaces 231) 3 units
BCST 420 Advanced Audio Operations (replaces 132) 3 units
MULT 184 Digital Video (replaces 180/181). . . . . . . . 3 units
MULT 192 Digital Audio (replaces 190/191) . . . . . . . 3 units
MULT 292 DVD Studio Pro (replaces 290/291) . . . . . 3 units
MULT 297 Pro Tools LEI (replaces 295/296) . . . . . . . 3 units
MULT 317 Digital Recording Studio (replaces 315/316) 3 units
MULT 387 Digital Video Workflow (replaces 385/386) 3 units
MUS 292 Sound Creation: Sampling and Synthesis . . 3 units
MUS 293 Audio for Visual Media.
2.5 units

Strongly Recommended: BCST 450 (replaces 244)

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

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

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

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

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

A grade point average of 2.0 is required for the major courses. BCST 110 Media in Society $\qquad$ 3 units BCST 210 Television Studio Techniques (replaces 231) 3 units
BCST 220 Broadcast Writing (replaces 194) . . . . . . . 3 units
BCST 316 Producing for Media (replaces 237) . . . . . . 3 units
BCST 320 Digital Television Field
Production (replaces 241) . . . . . . . . . . . . . 3 units
MGMT 265 Project Management. . . . . . . . . . . . . . . . 3 units
MULT 184 Digital Video (replaces 180/181). . . . . . . . 3 units
MULT 192 Digital Audio (replaces 190/191) . . . . . . . 3 units
MULT 292 DVD Studio Pro (replaces 290/291) . . . . . 3 units
MULT 387 Digital Video Workflow (replaces 385/386) . 3 units Strongly Recommended: BCST 450 (replaces 244)

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

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

## CS Lighting <br> 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

## CS On-Air

16 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 unit
SPCH 100 Public Speaking . . . . . . . . . . . . . . . . . . . . 3 units
SPCH 111 Oral Interpretation I . . . . . . . . . . . . . . . . . 3 units

## CS 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 60 units

## CA Certificate of Achievement

Building Inspection
33-34 units

## AS Major in Building Inspection

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

## Major requirements: 33-34 semester units

A grade point average of 2.0 is required for the major courses.
BLDG 700 Introduction to Building Code . . . . . . . . . 3 units
BLDG 710 Non-Structural Provisions of the Uniform Building Code . . . . . . . . . . . 3 units
BLDG 720 Electrical Inspection I . . . . . . . . . . . . . . . . 3 units
BLDG 725 Electrical Inspection II . . . . . . . . . . . . . . . 3 units
BLDG 730 Plumbing Inspection. . . . . . . . . . . . . . . . . 3 units
BLDG 735 ADA Building Requirements . . . . . . . . . . . . 3 units
BLDG 740 Mechanical Code . . . . . . . . . . . . . . . . . . 3 units
BLDG 750 Structural Provisions of Uniform Building Code. 3 units
BLDG 760 Energy Regulations . . . . . . . . . . . . . . . . . 3 units
BLDG 775 Introduction to Residential Dwelling Inspection Technology . . . . . . . . 3 units

Plus,
ENGL 848 or higher . . . . . . . . . . . . . . . . . . . . . . . . . . . 4 units
Suggested electives:
BLDG 790; COOP 641; MGMT 235, 265; PHYS 100

## CA Building Inspection

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

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

Refer also to ACCOUNTING Major on page 68.

## AA Associate in Arts Degree

Business Administration,
Option 1 (Non-transfer program) . . . . . . . . . . 60 units
Business Administration,
Option 2 (Transfer program) . . . . . . . . . . . . . 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, Option 1 (Non-transfer)

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

Plus, select 3 units from a BUSW series

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

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

## Major requirements: 19-25 semester units

A grade point average of 2.0 is required for the major courses.
ACTG 121 Financial Accounting . . . . . . . . . . . . . . . . 4 units
ECON 100 Principles of Macroeconomics . . . . . . . . . 3 units
ECON 102 Principles of Microeconomics . . . . . . . . 3 units
ECON 123 Business Economic Statistics ........... . OR
MATH 200 Statistics................................ . . . 4 units
Plus, select 6-10 units from the following courses:
ACTG 131 Managerial Accounting. . . . . . . . . . . . . . . 4 units
BUS 100 Contemporary American Business . . . . . . . . 3 units
BUS 201 Business Law I. . . . . . . . . . . . . . . . . . 4 units
BUS 295 Computer Systems in Business. . . . . . . . . . 3 units
MATH 125 Elementary Finite Math . . . . . . . . . . . . 5 units
MATH 241 Applied Calculus 1. . . . . . . . . . . . 5 units
MATH 251 Calculus with Analytic Geometry I. . . .

## 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: Insurance - Property and Casualty . 60 units
Business: Merchandising - Management. . . . 60 units
Business Information Processing
Option 1: Microcomputer/Office Assistant . . 60 units
Option 2: Microcomputer/Database and Spreadsheet Functions

60 units

## CA Certificate of Achievement

Business: Insurance - Property and Casualty . 32 units
Business: Merchandising - General . . . . . . . . 21 units
Business: Merchandising - Management . . . . 21-23 units
Business Information Processing
Option 1: Microcomputer/Office Assistant . . 23-24.5 units
Option 2: Microcomputer/Database and Spreadsheet Functions. . . . . . . . . . 24 units

## CS Certificates of Specialization

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

## Recommended high school preparation:

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

## AA Major in Business: 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 . . . . . . . . . . . . . . . 4-5 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
COOP 641 Cooperative Work Experience 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 unitsComplete 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.

## CS Insurance: Property and Casualty 12 semester units

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

## CA Business: Merchandising - General 21 semester units

A grade of "C" or higher is required for each course.
BUS 100 Contemporary American Business . . . . . . . . 3 units
BUS 101 Human Relations I. . . . . . . . . . . . . . . . . . . . 3 units
BUS 115 Business Mathematics . . . . . . . . . . . . . . . . . 3 units
BUS 180 Marketing . . . . . . . . . . . . . . . . . . . . . . . . . 3 units COOP 641 Cooperative Work Experience Education . . 6 units

Plus, select 3 units from any of the Business Management courses.

## AA Major in Business Merchandising - Management

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

Major requirements: 21-23 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
COOP 641 Cooperative Work Experience Education . . 6 units
ACTG 100 Accounting Procedures. . . . . . . . 3 units . OR
ACTG 121 Financial Accounting . . . . . . . . . . . . . . . . 4-5 units

## CA Business: <br> Merchandising - Management <br> 21-23 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 Business Information Processing: Option 1 Microcomputer/ Office Assistant

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

Major requirements: 23-24.5 semester units
A grade 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 . . . . . . . . . . . . . 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 Business Information Processing: Option 1 Microcomputer/Office Assistant 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 Information Processing: Option 2 Microcomputer/Data Base and Spreadsheet Functions

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

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

A grade 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
BUSW 105 Introduction to Microcomputers . . . . . . . 1.5 units
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . 1.5 units
BUSW 214 Word Processing Using WORD for Windows
1.5 units

BUSW 415 Spreadsheet I Using Excel for Windows . . 1.5 units
BUSW 416 Spreadsheet II Using Excel for Windows . 1.5 units
BUSW 464 Database Management Fundamentals Using Access for Windows 3 units
BUSW 530 Introduction to the Internet . . . . . . . . . . . 1.5 units

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

## 24 semester units

Complete major requirements listed under Associate in Arts Major in Business: Business Information Processing Option 2 Microcomputer/Data Base and Spreadsheet Functions A grade of " C " or higher is required for each course.
CS Office Assistant I
8.5-10 semester units
A grade of " C " or higher is required for each course.
BUS 317 Micro/Keyboarding: Skillbuilding

$\qquad$BUS 316 Keyboarding II.OR
BUSW 114 Windows Fundamentals I. ..... 1.5 units
BUSW 214 Word Processing Using WORD for WindowsBUSW 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
CS Office Assistant II
11.5 semester units
A grade of " C " or higher is required for each course.
BUS 317 Micro/Keyboarding: Skill building
BUSW 114 Windows Fundamentals I.BUSW 214 Word Processing I UsingWORD 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

## AS Associate in Science Degree

Chemistry
.60 units

## Recommended high school preparation:

Coursework in Chemistry, Biology, Physics, Mathematics

## University Transfer Program

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

## AS Major in Chemistry

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

Major requirements: 24-25 semester units
A grade of " C " or higher is required for all courses in the major.
CHEM 210 General Chemistry I. . . . . . . . . . . . . . . . . 5 units
CHEM 220 General Chemistry II . . . . . . . . . . . . . . . . 5 units
CHEM 231 Organic Chemistry I. . . . . . . . . . . . . . . . . . 5 units
CHEM 232 Organic Chemistry II . . . . . . . . . . . . . . . . 5 units
PHYS 210/211 General Physics I/
Calculus Supplement . . . . . . 5 units. . OR
PHYS 250 Physics with Calculus
4 units

## CHINESE

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

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

## CS Certificates of Specialization <br> Chinese.

## University Transfer Program

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

## CS Chinese

## 12 semester units

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

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

## CA Certificate of Achievement

Computer and Network Forensics . . . . . . . . 31.5 units
Computer Science Applications
and Development . . . . . . . . . . . . . . 30 units
Computer Support Specialist
Option 1 Network Support . . . . . . . . . . . . 27.5-28.5 units
Computer Support Specialist
Option 2 PC Hardware and System Support . . 31 units
CS Certificates of Specialization
C++ Programming. . . . . . . . . . . . . . . . . . 8 units 7.5 units
CIS Network Security Specialist. . . . . . . . . . 13.5 units
Computer Forensics . . . . . . . . . . . . . . . . . 14 units
Internet 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 I. . . . . . 5 units
MATH 252 Calculus with Analytic Geometry II . . . . . 5 units
ENGL 100 Composition and Reading. . . . . . . . . . . . . 3 units
Plus, select 4 or more units from CIS courses numbered 110 or higher

Plus, select 6 or more units from MATH 253, 268, 270, 275; PHYS 250.

## AS Major in Computer and Network Forensics

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

## 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 31.5 semester units

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

## 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 unitsPlus, select 8 units from the following courses:
CIS 278 (CS2) Programming Methods: C++. . . . . . . . 4 units(if not used above)CIS 255 (CS1) Programming Methods: Java . . . . . . . . 4 units(if not used above)CIS 256 (CS2) Data Structures: Java . . . . . . . . . . . . . . 4 units(if not used above)CIS 279 (CS2) Data Structures: C++ . . . . . . . . . . . . . 4 units(if not used above)
CIS 312 UNIX Operating Systems I ..... 1 unit
CIS 313 UNIX Operating Systems II ..... 1 unit
CIS 362 Enterprise Database Management ..... 4 units
CIS 381-388 Java Programming 2 units each
CIS 391-398 Visual Studio.NET ..... 2 units eachPlus, select 4 units from the following courses
CIS 377 Internet Programming: JavaScript/HTML ..... 2 units
CIS 379 Internet Programming: XML ..... 3 units
CIS 380 Internet Programming: PHP. ..... 3 units
CIS 390 Internet Programming: Perl ..... 2 unitsor other Internet programming 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: 27.5-28.5 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 125 Visual Basic I ................................ . OR
CIS 254 Introduction to Object-Oriented Program Design . . . . . . . . . 4 units
ELEC 110 Introduction to Fundamentals of Electronics. . . . . . . . . . . . 3 units
ELEC 215 Introduction to PC Hardware . . . . . . . . . . . . 3 units
Plus, 3.5 units from the following courses:
CIS 312 UNIX Operating Systems I . . . . . . . . . . . . . 1 unit
CIS 313 UNIX Operating Systems II . . . . . . . . . . . . . . 1 unit
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . . 1.5 units
Plus, select 9 units from the following courses:
CIS 479 Network Security Fundamentals . . . . . . . . . . 3 units
CIS 489 Computer Forensics . . . . . . . . . . . . . . . . . . . 3 units
CIS 490 Computer Forensics:
Network Analysis and Defense . . . . . . . . . . . 3 units
CIS 491 Computer Forensics: Search and Seizure. . . . 3 units

## CA Computer Support Specialist Option I Network Support 27.5-28.5 semester units

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

## 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 Communications. . . . . 3 units
CIS 125 Visual Basic I . . . . . . . . . . . . . . . . . . . . . . . . OR
CIS 254 Introduction to Object-Oriented
ELEC 110 Introduction to Fundamentals of Electronics . . . . . . . . . . . . . . . . . . . . . . . 3 units
ELEC 215 Introduction to PC Hardware . . . . . . . . . . . . 3 units
ELEC 216 PC Troubleshooting and System Maintenance 3 units

Plus, select 3 units from the following courses:
CIS 312 UNIX Operating Systems I . . . . . . . . . . . . . . 1 unit
CIS 313 UNIX Operating Systems II . . . . . . . . . . . . . . 1 unit
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . 1.5 units
BUSW 115 Windows Fundamentals II . . . . . . . . . . . . 1.5 units
Plus, select 9 units from the following courses:
ELEC 131 Copper-Based Network Cabling Fundamentals 4.5 units

AND
ELEC 133 Fiber Optic Network Cabling Fundamentals 2 units
ELEC 231 Basic Applied Electronic Mathematics 2 units AND
ELEC 232 Advanced Electronics Mathematics ...... . 1 unit
ELEC 201 D.C. Electronics . . . . . . . . . . . . . . . . . . . . . . 3 units AND
ELEC 202 A.C. Electronics 3 units
ELEC 262 Digital Electronics . . . . . . . . . . . . . . . . . . . 4 units

## CA Computer Support Specialist: Option 2 PC Hardware and System Support 31 semester 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.

## CS C++ Programming <br> 8 units <br> CIS 278 (CSI) Programming Methods: C++. . . . . . . . . 4 units <br> CIS 279 (CS2) Data Structures: C++ . . . . . . . . . . . . . . 4 units

## CS 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

## CS 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 Defense
3 units
CIS 491 Computer Forensics: Search and Seizure . . . . 3 units

## CS 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

## CS Java Programming - Option 1

8 units
CIS 255 (CS1) Programming Methods: Java . . . . . . . . . 4 units
CIS 256 (CS2) Data Structures: Java. . . . . . . . . . . . . . . . 4 units

## COSMETOLOGY

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

## AA Associate in Arts Degree

Cosmetology. . . . . . . . . . . . . . . . . . . . . . . . 60 units

## CA Certificate of Achievement

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

## Recommended high school preparation:

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

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

## Admission Requirements:

Student must complete the four items below.

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

Admissions priority is given to San Mateo Community College District residents.

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

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

## AA Major in Cosmetology

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

## Major requirements: 45 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 . . . . . . 13.5-17 units
COSM 742 Advanced Cosmetology II ...... 13.5-17 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

45 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.

## Special Course 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

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

## CS Certificates of Specialization

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

## University Transfer Program

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

## CS Leadership for Service 8 semester units

A grade of " C " or higher is required for each course.
Select 2 units from the following courses:

$$
\begin{aligned}
& \text { CRER } 150 \text { Leadership for Service . . . . . . . . . . . . . . . } 1 \text { unit } \\
& \text { CRER } 141 \text { Peer Relations and Community Service . . } 1 \text { unit } \\
& \text { Select } 3 \text { units from the following courses: } \\
& \text { SPCH } 100 \text { Public Speaking . . . . . . . . . . . . . . . . . . . } 3 \text { units } 3 \text { units } \\
& \text { SPCH } 120 \text { Interpersonal Communications . . . . . . . . . } 3 \text { units } \\
& \text { SPCH } 140 \text { Small Group Communication . . . . . . . . . } 3 \text { units } \\
& \text { SPCH } 150 \text { Intercultural Communication . . . . . . }
\end{aligned}
$$

Select 3 units from the following courses:
SOCI 100 Introduction to Sociology. . . . . . . . . . . . . . 3 units
SOCI 105 Social Problems.......................... . . . 3 units
SOCI 141 Race and Ethnic Relations . . . . . . . . . . . . . . 3 units
SOCI 200 Urban Sociology . . . . . . . . . . . . . . . . . . . 3 units
SOCI 300 Social Psychology . . . . . . . . . . . . . . . . . . 3 units
PSYC 100 General Psychology. . . . . . . . . . . . . . . . . . 3 units
PSYC 300 Social Psychology . . . . . . . . . . . . . . . . . . 3 units

## CS College Peer Advisor <br> 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. $\qquad$ OR
CRER 121 Planning for Sudent Success . . . . . . . . . . . 1 unit AND
CRER 122 Strategies for Achieving Education Success 1 unit AND

CRER 123 Career Exploration for Sudent 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 <br> Dental Assisting <br> 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 dental assisting major courses.
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 120 Interpersonal Communication. . . . . . . . . . 3 units
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.

| NT 716 | Dental Office Procedures (Fall) | 2.5 unit |
| :---: | :---: | :---: |
| DENT 721 | Dental Materials I (Fall) | its |
| DENT 722 | Dental Materials II (Spring) | 2 units |
| DENT 731 | Dental Science I (Fall) | nits |
| DENT 732 | Dental Science II (Spring) | its |
| 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) | nit |
| DENT 763 | Dental Radiology (Fall and Spring) | 2 units |
| DENT 647 | Work Experience (Spring). | 4 units |
| SPCH 86 | or 100 or 120 Communication in the Workplace. |  |

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

## AS Associate in Science Degree

CAD/Drafting Technology
60 units

## CA Certificates of Achievement <br> CAD/Drafting Technology <br> 21 units

## CS Certificates of Specialization

Computer-Aided Design 16-17 units

## Recommended high school preparation:

Coursework in Mechanical Drawing, Art, Computers, Mathematics

## University Transfer Program

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

## AS Major in CAD/Drafting Technology

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

Major Requirements: $\mathbf{2 1}$ 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)
ELEC (Electronics)
MANU (Machine Tool Technology)
MULT (Multimedia)
WELD (Welding)

## CA CAD/Drafting Technology

21 semester units
Complete major requirements listed under Associate in Science - Major in Drafting. A grade of "C" or higher is required in each course.

## CS Computer-Aided Design

## 16-17 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 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

## University Transfer Program

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

## ELECTRICAL TECHNOLOGY

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

## 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
ELEL 703 units
Electrical Apprenticeship III . . . . . . . . . . . 3 units
ELEL 704 Electrical Apprenticeship IV . . . . . . . . . 3 units
ELEL 705 Electrical Apprenticeship V . . . . . . . . . . . 3 units
ELEL 707 Electrical Apprenticeship VI Apprenticeship VII . . . . . . . . . . . . 3 units 3 units
ELEL 708 Electrical Apprenticeship VIII . . . . . . . . . . 3 units
ELEL 709 Electrical Apprenticeship IX . . . . . . . . . . 3 units
CA Electrical Technology:

Inside Wireman

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 CommunicationsApprenticeship VI3 units

## CA Electrical: Sound and Communications Installer

 18 semester unitsComplete 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

## CS Certificates of Specialization

Network Cabling Specialist. . . . . . . . . . . . . . . 10.5 unit
Electronics Assembly . . . . . . . . . . . . . . . . . . 7 units

## Recommended high school preparation:

Coursework in Electronics, Science, Mathematics, English

## AS Major in Electronics

 Technology Option 1: Wireless Communications SystemsComplete 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.
BUSW 114 Windows Fundamentals I. . . . . . . . . . . . . 1.5 units
BUSW 530 Introduction to Internet . . . . . . . . . . . . . . 1.5 units
ELEC 201 D.C. Electronics . . . . . . . . . . . . . . . . . . . . . . 3 units
ELEC 202 A.C. Electronics . . . . . . . . . . . . . . . . . . . . . 3 units
ELEC 215 Introduction to PC Hardware . . . . . . . . . . . . 3 units
ELEC 231 Basic Applied Electronic Mathematics . . . . 2 units
ELEC 232 Advanced Electronics Mathematics . . . . . . 1 unit
ELEC 262 Digital Electronics . . . . . . . . . . . . . . . . . . 4 units
ELEC 275 Active Devices . . . . . . . . . . . . . . . . . . . . . . 4 units
ELEC 282 Introduction to Soldering Rework. . . . . . . . 2 units
ELEC 290 Introduction to Communications Systems. . 3 units
ELEC 320 Linear Circuit Analysis . . . . . . . . . . . . . . . . 4 units
ELEC 332 Prototype Project Development . . . . . . . . . 2 units
ELEC 362 Radio-Frequency Communication . . . . . . . 4 units
Major in Electronics Technology continued on next page

## 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

Major Requirements: 43 semester units
A grade point average of 2.0 is required for the major courses.


## 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.


## 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 . . . . . . . . . . . 2 units
ELEC 282 Introduction to Soldering Rework. . . . . 3 units
ELEC 290 Introduction to Communications Systems. . 2 units
ELEC 332 Prototype Project Development . . . . . . . 2 un

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 <br> 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.

## CS Network Cabling Specialist <br> 10.5 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 Fundamentals . . . . . . . . . . . . . . . 4.5 units

CIS 110 Introduction to Computer and Information Science 3 units

## CS Electronics Assembly <br> 7 semester units

A grade of " C " or higher is required for each course.
ELEC 110 Introduction to Fundamentals of Electronics 3 units
ELEC 282 Introduction to Soldering Rework. . . . . . . . 2 units
ELEC 332 Prototype Project Development . . . . . . . . . 2 units

## ENGINEERING

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

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

## AS Associate in Science Degree

Engineering.
60 units
Engineering Technology: Electronics . . . . . . . 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 ..... 4 units
ENGR 230 Engineering Statics ..... 3 units
ENGR 260 Circuits and Devices. ..... 4 units
ENGR 270 Materials Science ..... 3 units
Plus, select 5 units from the following courses:
CHEM 220 General Chemistry II ..... 5 units
CHEM 231 Organic Chemistry I. ..... 5 units
CIS 278 (CS1) Programming Methods: C++ ..... 4 units
ECON 100 Principles of Macroeconomics ..... 3 units
ECON 102 Principles of Microeconomics ..... 3 units
ENGR 140 Introduction to Engineering ..... 1.5 units
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 ..... 3 units
PHYS 270 Physics with Calculus III ..... 4 units

## AS Major in Engineering Technology: Electronics

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

## Major Requirements: 26 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 I
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 300 Introduction to La Raza Studies. . . . . . . . . 3 units
ETHN 350 Native American Way of Life . . . . . . . . . . 3 units
ETHN 351 The Primal Mind and Cultural Diversity . . 3 units
ETHN 360 The People and Cultures of Polynesia . . . . 3 units
ETHN 440 Cultural Experience of
Asian-American Writers . . . . . . . . . . . . . . 3 units
ETHN 585 Ethnicity in Cinema . . . . . . . . . . . . . . . . 3 units

## FILM

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

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

## AA Associate in Arts Degree

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
FILM 215 Film and New Digital Media . . . . . . . . . . 3 units
Plus, select 9 units from the following courses:
FILM 110 American Cinema . . . . . . . . . . . . . . . . . . . 3 units
FILM 153 Screenwriting. . . . . . . . . . . . . . . . . . . . . . . 3 units
FILM 200 Film in Focus . . . . . . . . . . . . . . . . . . . . . . . 3 units
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 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 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 701 Sprinkler Fitter Apprentice I . . . . . . . . . . . . . 3 units
SPFI 702 Sprinkler Fitter Apprentice II . . . . . . . . . . . . 3 units
SPFI 703 Sprinkler Fitter Apprentice III . . . . . . . . . . 3 units
SPFI 704 Sprinkler Fitter Apprentice IV. . . . . . . . . . . . 3 units
SPFI 705 Sprinkler Fitter Apprentice V . . . . . . . . . . . . 3 units
SPFI 706 Sprinkler Fitter Apprentice VI . . . . . . . . . . . . 3 units
SPFI 707 Sprinkler Fitter Apprentice VII . . . . . . . . . . 3 units
SPFI 708 Sprinkler Fitter Apprentice VIII . . . . . . . . . . . . 3 units
SPFI 709 Sprinkler Fitter Apprentice IX . . . . . . . . . . . . 3 units
SPFI 710 Sprinkler Fitter Apprentice X . . . . . . . . . . . . 3 units

## CA Fire Sprinkler Technology

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

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

## CA Certificate of Achievement

Fire Technology
30 units

## Recommended high school preparation:

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

## University Transfer Program

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

## AS Major in Fire Technology

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

Major Requirements: $\mathbf{3 0}$ semester units
A grade of " C " or higher is required in all major courses.
FIRE 705 Fire Hydraulics . . . . . . . . . . . . . . . . . . . . 3 units
FIRE 715 (FT1) Fire Protection Organization. . . . . . . 3 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

Plus, select 12 units from the following courses:
FIRE 714 Wildland Fire Control . . . . . . . . . . . . . . . . . 3 units 3 units
FIRE 725 Fire Apparatus and Equipment. . . . . . . . . 9 units
FIRE 783 Firefighter I Academy . . . . . . . . . . . 7 units
FIRE 795 Emergency Medical Technician - Basic . . . . 3 units
FIRE 800 Fire Service Entrance Test Prep . . . . . . . . . . 3 units
FIRE 810 Firefighter Internship . . . . . . . . . . . .

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

33-38 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. Plus, completion of the General Education English requirement as outlined in Section C (2) of the Associate in Arts/Science Degree Requirements.

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.

## EMT Emergency Medical Technician

Completion of Fire Technology 795, a seven unit course, and passing the National Registry Test which is offered as part of the course, provides the student with a National Registry certificate as an EMT. This course is also required as a prerequisite for students who want to continue on with paramedic training.

## FRENCH

Meet with a CSM counselor to discuss h
academic goals and to develop a compr
educational plan (SEP).
University Transfer Program
$\mathbf{6 0} \mathbf{- \mathbf { 7 0 }}$ transferable units
California State University
University of California
Independent Colleges and Universities

## AA Associate in Arts Degree

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

## CS Certificate of Specialization

French. . . . . . . . . . . . . . . . . . . . . . 12 units

## University Transfer Program

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

## AA Major in French

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

## Major Requirements: 18 semester units

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


FREN 112 Elementary French II . . . . . . . . . . . . . . . . . 3 units
FREN 115 Beginning French I. . . . . . . . . . . . . . . . . . . 3 units
FREN 116 Beginning French II . . . . . . . . . . . . . . . . . 3 units
FREN 117 Advanced Beginning French I . . . . . . . . . . 3 units
FREN 118 Advanced Beginning French II . . . . . . . . . . 3 units
FREN 120 Advanced Elementary French. . . . . . . . . . . 5 units
FREN 121 Advanced Elementary French I. . . . . . . . . . 3 units
FREN 122 Advanced Elementary French II . . . . . . . . . 3 units
FREN 130 Intermediate French. . . . . . . . . . . . . . . . . . . 5 units
FREN 131 Intermediate French I. . . . . . . . . . . . . . . . . . 3 units
FREN 132 Intermediate French II . . . . . . ........... . . 3 units

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

## CS French

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

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

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

## University Transfer Program

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

## GEOLOGICAL SCIENCES

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

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

## AS Associate in Science Degree

Geological Science . . . . . . . . . . . . . . . . . . . 60 units

## Recommended high school preparation:

Coursework in Chemistry, Biology, Mathematics,

## University Transfer Program

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

## AS Major in Geological Science

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

## Major Requirements: 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

## CS Certificate of Specialization <br> 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: 18 semester units

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


GERM 112 Elementary German II . . . . . . . . . . . . . . . 3 units
GERM 120 Advanced Elementary German. . . . . . . . . 5 units
GERM 121 Advanced Elementary German I. . . . . . . . 3 units
GERM 122 Advanced Elementary German II . . . . . . . 3 units
GERM 130 Intermediate German. . . . . . . . . . . . . . . . 5 units
GERM 131 Intermediate German I . . . . . . . . . . . . . . . . 3 units
GERM 132 Intermediate German II . . . . . . . . . . . . . . 3 units
GERM 140 Advanced Intermediate German. . . . . . . . 3 units
may be accepted as part of the 18 units.

## CS German

## 12 semester units

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

| M 1 | 0 Ele |
| :---: | :---: |
| GERM 111 | 1 Elementary German I . . . . . . . . . . . . . . 3 units |
| GERM 112 | 2 Elem |
| GERM 120 A | 0 Advanced Elementary German |
| GERM 121 A | 1 Advanced Elementary German I . . . . . . . . 3 units |
| GERM 122 | 2 Advanced Elementary Germ |
| GERM 130 | 0 Intermediate German . . . . . . . . . . . . . . . 5 units |
| GERM 131 | 1 Intermediate Germ |
| GERM 132 I | 2 Intermediate German II . . . . . . . . . . . . . 3 units |
| GERM 140 A | 0 Advanced Intermediate German. . . . . . . . 3 units |
| The balance of units may be from the following courses: |  |
| GERM 801 | 1 Conversational German I, Elementary . . . 2 units |
| GERM 802 | Conversational German II, <br> Advanced Elementary . . . . . . . . . . . . . . 2 units |
| GERM 803 | Conversational German III, Intermediate . 2 units |
| GERM 804 | 4 Conversational German IV, Advanced Intermediate . |

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

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

## CS Certificate of Specialization

Global Studies. . . . . . . . . . . . . . . . . 17 units

## University Transfer Program

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

## CS Global Studies

## 17 semester units.

A grade of " C " or higher is required for each course.
BUS 125 International Business 3 units
PLSC 120 Area Studies 3 units

Plus, select 3 units from the following courses:
GEOG 110 Cultural Geography . . . . . . . . . . . . . . . . . 3 units
GEOG 150 World Regional Geography . . . . . . . . . . . 3 units
ECON 100 Principles of Macroeconomics . . . . . . . . . 3 units
ECON 102 Principles of Microeconomics . . . . . . . . 3 units
Plus, 3 units from the following course:
SPCH 150 Intercultural Communication . . . . . . . . . 3 units
Plus, select 3 units of any 100 level foreign language course
Plus, 2 units of any Cooperative Education class.

## GRAPHICS

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

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

## AA Associate in Arts Degree

Graphics . . . 60 units

## CA Certificate of Achievement

Graphics $\qquad$ 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: $\mathbf{3 9}$ 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 Web Design: Dreamweaver . . . . . . . . . . . 3 units

## CA Graphics

39 semester units
Complete major requirements listed under Associate in Arts - Major in Graphics. A grade of " C " or higher is required for each course.

## HISTORY

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

## University Transfer Program

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

## University Transfer Program

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

## HORTICULTURE

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

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

## AS Associate in Science Degree

Horticulture: Environmental Option 1: Landscape Constructional Design . . . . . . . . 60 units
Horticulture: Environmental Option 2:
Nursery Management . . . . . . . . . . . . . . . . . 60 units
Horticulture: Environmental Option 3:
Landscape Management . . . . . . . . . . . . . . . 60 units
Horticulture: Floristry . . . . . . . . . . . . . . . . . . 60 units

## CA Certificate of Achievement

Horticulture: Environmental Option 1:
Landscape Constructional Design . . . . . . 21-25 units
Horticulture: Environmental Option 2:
Nursery Management . . . . . . . . . . . . 21-25 units
Horticulture: Environmental Option 3:
Landscape Management . . . . . . . . . . . . . . . 21-29 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: 21-25 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
HORT 327 Nursery Management . . . . . . . . . . . . . . . 3 units
Plus, Group A below
Group A:
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/Design

 21-25 semester unitsComplete 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: 21-25 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 ........................... . . . 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

## 21-25 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

## 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,
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 ............................. . . 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 342 Landscape Construction. . . . . . . . . . . . . . 3 units
HORT 721 Landscape: Shrubs . . . . . . . . . . . . . . . . . . 3 units

## CA Horticulture: Environmental Option 3: Landscape Management <br> <br> 21-23 semester units

 <br> <br> 21-23 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 40 | Fl |
| :---: | :---: |
| HORT 40 | Floral Arranging II . . . . . . . . . . . . . . . . . 1.5 units |
| HORT 40 | Flowers to Wear and Carry I. . . . . . . . . . . 5 unit |
| HORT 40 | Flowers to Wear and Carry II . . . . . . . . . . 5 unit |
| HORT 41 | Retail Floristry Management. . . . . . . . . . 3 units |
| HORT 41 | European Floral Design |
| HORT 41 | Bridal and Party Design |
| HORT 42 | Contemporary Ikebana |
| HORT 42 | Cut Flower Identification . . . . . . . . . . . . 1 unit |
| HORT 42 | Sympathy Floral Design . . . . . . . . . . . . . 1.5 units |
| HORT 427 | Floral Design with Everlasting Flowers . . . 1.5 units |
| HORT 42 | Display Design for Florists . . . . . . . . . . . . 5 uni |

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:
HORT 326 Growing Orchids . . . . . . . . . . . . . . . . . . . 1 unit
HORT 421 Contemporary Ikebana. . . . . . . . . . . . . . . 1.5 units
HORT 422 Designs for Entertaining . . . . . . . . . . . . . . . . 5 unit
HORT 425 Cut Flower Identification . . . . . . . . . . . . . 1 unit
HORT 429 Corporate Accounts and Tropical Designs . 5 unit
COOP 641 Cooperative Education . . . . . . . . . . . . . . 1-4 units
HORT 690 Special Projects . . . . . . . . . . . . . . . . . . . . 1-2 units

## CA Horticulture: Floristry

21 semester units
Complete major requirements listed under Associate in Science - Major in Horticulture: Floristry. A grade of "C" or higher is required for each course.

## 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 $\qquad$

## University Transfer Program

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

## AA Major in Humanities

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.
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. $\qquad$
HUM 114 Film and Literature as
Communication in the Modern Era . . . . . . 3 units
Plus, 3 units from the following:
HUM 125 Technology/Contemporary Society/
Human Values
Select 3 units from:
HUM 131 Culture and Achievement
of African-Americans 3 units
HUM 133 Culture and Achievement of Asian Americans $\qquad$ 3 units
ANTH 370 Olmec, Maya, Aztec People and Cultures of Mexico \& Central America . . . 3 units
Plus, 3 units from the following:
HUM 140 Cultural Heritage of San Francisco and Its Environs 3 units

## HUMAN SERVICES

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

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

## AA Associate in Arts Degree

Human Services

## CA Certificate of Achievement

Human Services 19 units

## CS Certificates of Specialization

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 150 Rehabilitation and Recovery . . . . . . . . . 3 units
HMSV $151 \begin{aligned} & \text { Current Trends and Issues in } \\ & \text { Psychosocial Rehabilitation . . . . . . . . . . 1-3 units }\end{aligned}$
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.

## CS 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

## CS 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

## CS 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 $110 \begin{aligned} & \text { Introduction to Counseling } \\ & \text { and Interviewing . . . . . . . . . . . . . . . . . } 3 \text { units }\end{aligned}$
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

## CS 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

## INTERDISCIPLINARY STUDIES

(Pending approval from the State Chancellor's Office)
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

Interdisciplinary Studies with an
Area of Emphasis with three options:
Option 1 - Intercultural Studies.
60 units
Option 2 - Contemporary Issues
60 units
Option 3 - Science and Society.
60 units

## University Transfer Program

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

## AA Major in Interdisciplinary Studies, Option 1: Intercultural Studies

This degree option introduces students to multiple cultural perspectives to enable them to be informed, engaged citizens in a multicultural society. Depending on the student's focus, this degree offers transfer opportunities into areas such as World Arts and Cultures, Global Studies, Multicultural Studies, and Ethnic Studies. Students should work with a counselor to identify any additional supporting classes for transfer to a particular program and university. Note: most courses listed in this major can also be used to meet requirements for the California State University General Education or IGETC.

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

## Major requirements: A minimum of 18 units

At least 3 units of courses that examine more than one culture within the course to be selected from the following options:
ANTH 110 Cultural Anthropology. . . . . . . . . . . . . . . . 3 units 3 units
ANTH 180 Magic, Science \& Religion . . . . . . . . . 3 units
ETHN 351 The Primal Mind and Cultural Diversity . . . 3 units
ETHN 585 Ethnicity in Cinema . . . . . . . . . . . . . . . . . 3 units
GEOG 110 Cultural Geography . . . . . . . . . . .
LIT 220 Introduction to World Literature ..... 3 units
MUS 250 World Music ..... 3 units
PHIL 300 Introduction to World Religions. ..... 3 units
PLSC 110 Contemporary Foreign Governments. ..... 3 units
PLSC 260 Contemporary Ethnic Politics ..... 3 units
SPCH 150 Intercultural Communication ..... 3 units
At least 6 units of courses in the arts and literature to be selected
from the following options:
ART 100 Art of the Western World ..... 3 units
ETHN 288 African-American Cinema ..... 3 units
ETHN 350 Native American Way of Life ..... 3 units
ETHN 440 Cultural Experience of Asian-American Writers ..... 3 units
HUM 131 Cultural Achievements of African-Americans . ..... 3 units
HUM 133 Cultural Achievements of Asian Americans ..... 3 units
LIT 232 Survey of English Literature ..... 3 units
LIT 430 Mythology and Folklore ..... 3 units
MUS 240 Music of the Americas. ..... 3 units
At least 9 units of courses in the areas of social, political, andeconomic institutions to be selected from the following options:
ANTH 370 Olmec, Maya, and Aztec People and Cultures of Mexico and Central America. ..... 3 units
ETHN 101 Introduction to Ethnic Studies I ..... 3 units
ETHN 102 Introduction to Ethnic Studies II. ..... 3 units
ETHN 150 Social Dynamics of People of Color. ..... 3 units
ETHN 261 African-American Culture I ..... 3 units
ETHN 262 African-American Culture II ..... 3 units
ETHN 300 Introduction to La Raza Studies ..... 3 units
ETHN 360 The People and Cultures of Polynesia: An Introduction ..... 3 units
ETHN 440 Cultural Experience of Asian-American Writers ..... 3 units
HIST 100 History of Western Civilization I ..... 3 units
HIST 101 History of Western Civilization II. ..... 3 units
HIST 102 History of American Civilization ..... 3 units
HIST 260 Women in American History . ..... 3 units
PLSC 120 Area Studies ..... 3 units
PLSC 212 Introduction to American
Politics and Society. ..... 3 units
SOSC 220 British Life and Culture. ..... 3 units
SOSC 221 French Life and Culture ..... 3 units

## AA Major in Interdisciplinary Studies, Option 2: Contemporary Issues

This degree option provides students with both an introduction to the wide range of issues facing contemporary society and the tools to analyze these issues critically. Depending on the student's focus, this degree offers transfer possibilities into such majors as Communications, Environmental Studies, Ethnic Studies, Sociology, and Social Services. Note: most courses listed in this major can also be used to meet requirements for the California State University General Education or IGETC.

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

## Major requirements: A minimum of 18 units

At least 6 units of courses that introduce students to major disciplines in the social sciences. The 6 units of courses must be selected from the following options and include at least two different discipline areas:

$$
\begin{aligned}
& \text { BUS } 100 \text { Contemporary American Business . . . . . . . . } 3 \text { units } \\
& \text { ECON } 100 \text { Principles of Macroeconomics . . . . . . . . } 3 \text { units } \\
& \text { ECON } 102 \text { Prits } \\
& \text { GEOG } 110 \text { Cultural Geography . . . . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { PSYC } 100 \text { General Psychology . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { PSYC } 300 \text { Social Psychology. . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SOCI } 100 \text { Introduction to Sociology . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPCH } 100 \text { Public Speaking . . . . . . . . . . . . . . }
\end{aligned}
$$

At least 3 units of courses in statistics or critical thinking, selected from the following:

$$
\begin{aligned}
& \text { ECON } 123 \text { Business-Economic Statistics . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { ENGL } 165 \text { Advanced Composition . . . . . . . . . . } 4 \text { units } \\
& \text { MATH } 200 \text { Elementary Probability and Statistics . . . . . } 4 \text { units } \\
& \text { MATH } 147 \text { Mathematics and Global Studies . . . . . . . . } 3 \text { units } \\
& \text { PHIL } 103 \text { Critical Thinking . . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { PSYC } 121 \text { Basic Statistical Concepts . . . . . . . . . . } 3 \text { units } \\
& \text { SOSC } 111 \text { Critical Thinking and Writing . . . . . . . }
\end{aligned}
$$

At least 9 units of courses that explore particular issues facing contemporary society. The 9 units of courses must be selected from the following options and include at least two different discipline areas:
ARCH 100 Survey of Contemporary Architecture ..... 3 units
BIOL 102 Environmental Conservation ..... 3 units
BIOL 195 Biology Field Laboratory ..... 1 unit
BCST 110 Media in Society ..... 3 units
ETHN 151 Patterns of Prejudice and Racism I ..... 3 units
ETHN 152 Patterns of Prejudice and Racism II ..... 3 units
HSCI 112 Current Health Issues ..... 1 unit
HUM 125 Technology/Contemporary Society/Human Values3 units
JOUR 110 Mass Media in Society ..... 3 units

PHIL 244 Contemporary Social and Moral Issues . . . . 3 units PLSC 130 International Relations . . . . . . . . . . . . . . . 3 units PLSC 215 Contemporary Issues in American Politics . . 3 units PLSC 250 Civil Liberties and Civil Rights. . . . . . . . . . . 3 units SOCI 105 Social Problems . . . . . . . . . . . . . . . . . . . . . . 3 units SOCI 141 Race and Ethnic Relations. . . . . . . . . . . . . . 3 units SOCI 200 Urban Sociology. . . . . . . . . . . . . . . . . . . . . 3 units

## AA Major in Interdisciplinary Studies, Option 3: Science and Society

This degree provides students with the foundation from which to understand the impact of scientific issues on contemporary society. Depending on the student's focus, this major offers transfer possibilities in the social sciences, including Economics, Sociology, and Social/Behavioral Sciences, and in more specialized interdisciplinary majors such as Environmental Economics and Policy, Environmental Analysis and Design, Social Ecology, Community and Regional Development, and Development Studies. Students should work with a counselor to identify the appropriate mathematics classes and any additional supporting classes for transfer to a particular program and university. Note: most courses listed in this major can also be used to meet requirements for the California State University General Education or IGETC.

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

## Major requirements: A minimum of 19 units

At least 3 units of courses that link science with society, to be selected from:
HUM 125 Technology/Contemporary Society/
Human Values . . . . . . . . . . . . . . . . . . 3 units
MATH 147 Manits
PHIL 244 Contemporary Social and Moral Issues . . . . 3 units

At least 7 units of courses in the sciences to be selected from the following options:
BIOL 100 Introduction to Life Sciences . . . . . . . . . . . . 3 units
BIOL 102 Environmental Conservation . . . . . . . . . . . . 3 units
BIOL 110 General Principles of Biology . . . . . . . . . . . 4 units
BIOL 140 Animals, People, and Environment . . . . . . . 3 units
BIOL 145 Plants, People, and Environment . . . . . . . . . 3 units
BIOL 184 Wildlife Biology . . . . . . . . . . . . . . . . . . . . 3 units
BIOL 195 Biology Field Laboratory . . . . . . . . . . . . . . . 1 unit
GEOL 100 Survey of Geology . . . . . . . . . . . . . . . . . . . 3 units
GEOL 101 Geology Laboratory . . . . . . . . . . . . . . . . . . 1 unit
METE 100 Elementary Meteorology. . . . . . . . . . . . . . . 3 units
METE 101 Meteorology Laboratory . . . . . . . . . . . . . . . 1 unit
OCEN 100 Oceanography . . . . . . . . . . . . . . . . . . 3 units
OCEN 101 Oceanography Laboratory/Field Study. . . 1 unit

At least 9 units of courses in the social sciences to be selected from the following options:

| A | S |
| :---: | :---: |
| ANTH 180 Magic, Science \& Religion | its |
| ECON 100 Principles of Macroeconomics | its |
| ECON 102 Principles of Microeconomics . | 3 units |
| GEOG 100 Physical Geography | 3 units |
| GEOG 110 Cultural Geography | ts |
| GEOG 150 World Regional Geography. | 3 units |
| PLSC 215 Contemporary Issues in Americ | 3 units |
| PSYC 100 General Psychology | S |
| PSYC 220 Introduction to Psychobiology | 3 units |
| SOCI 100 Introduction to Sociology | 3 units |
| SOCI 105 Social Problems | 3 units |
| SOCI 200 Urban Sociology | 3 units |

## ITALIAN

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

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

## CS Certificate of Specialization

Italian . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 12 units

## University Transfer Program

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

## CS Italian

## 12 semester units

"Pass" or grade of " C " or higher is required for all courses.
Select at least 5 units from the following courses:
ITAL 110 Elementary Italian . . . . . . . . . . . . . . . . . . . . . 5 units
ITAL 111 Elementary Italian I . . . . . . . . . . . . . . . . . . . 3 units
ITAL 112 Elementary Italian II . . . . . . . . . . . . . . . . . . 3 units
ITAL 120 Advanced Elementary Italian. . . . . . . . . . . . 5 units
ITAL 121 Advanced Elementary Italian I . . . . . . . . . . . . 3 units
ITAL 122 Advanced Elementary Italian II . . . . . . . . . . 3 units
The balance of units may be from the following list of courses:
ITAL 115 Beginning Italian I. . . . . . . . . . . . . . . . . . . . 3 units
ITAL 116 Beginning Italian II . . . . . . . . . . . . . . . . . . . 3 units
ITAL 117 Advanced Beginning Italian I. . . . . . . . . . . . . 3 units
ITAL 118 Advanced Beginning Italian II . . . . . . . . . . . . 3 units
ITAL 801 Conversational Italian I, Elementary . . . . . . 2 units
ITAL 802 Conversational Italian II, Advanced . . . . . . . 2 units

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

## JAPANESE

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

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

## CS Certificates of Specialization

Japanese

## University Transfer Program

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

## CS Japanese

12 semester units
"Pass" or grade of " C " or higher is required for all courses.
Select at least 12 units from the following courses:
JAPN 110 Elementary Japanese . . . . . . . . . . . . . . . . 5 units
JAPN 111 Elementary Japanese I. . . . . . . . . . . . . . . . 3 units
JAPN 112 Elementary Japanese II . . . . . . . . . . . . . . . . 3 units
JAPN 120 Advanced Elementary Japanese . . . . . . . . . 5 units
JAPN 121 Advanced Elementary Japanese I . . . . . . . . 3 units
JAPN 122 Advanced Elementary Japanese II . . . . . . . 3 units
In special circumstances, the Dean of Language Arts may approve the limited use of other courses in the same language (such as those numbered 680 or taken at Skyline or Cañada Colleges). In rare circumstances, the Dean may approve using a course in another discipline if its content is closely related to the language studied.

## JOURNALISM

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

## University Transfer Program

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

## AA Associate in Arts Degree

Journalism 60 units

## Recommended high school preparation:

Coursework in English, Journalism, Creative Writing, Political Science, Mass Communication, Psychology, Sociology

## University Transfer Program

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

## AA Major in Journalism

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

## Major requirements: 19 semester units

A grade point average of 2.0 is required for the major courses.
JOUR 110 Mass Media in Society . . . . . . . . . . . . . . . 3 units
JOUR 120 Newswriting . . . . . . . . . . . . . . . . . . . . . . . 4 units
JOUR 300 Newspaper Production . . . . . . . . . . . . . . . 3 units
Plus, select 9 units from English and/or literature courses

## LIFE SCIENCES

> 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

Life Sciences: General. 60 units

## AS Associate in Science Degree

Life Sciences: Biological. . . . . . . . . . . . . . . . . . 60 units 60 units
Life Sciences: Biotechnology . . . . . . . . . . . . . 60 units
Life Sciences: Medical
(Pre-Med, Pre-Dental, Pre-Vet) . . . . . . . . . . 60 units
Life Sciences: Pre-Nursing . . . . . . . . .

## CS Certificate of Specialization

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.

## AA Major in Life Sciences: General

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

## Major requirements: 19-23 semester units

A grade point average of 2.0 is required for the 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 130 Human Biology . . . . . . . . . . . . . . . . . . . . 3 units
BIOL 140 Animals, People, and Environment . . . . . 3 units

| BIOL 145 Plants, People, and Environment . . . . . . . 3 units |
| :---: |
| BIOL 184 Wildlife Biology . . . . . . . . . . . . . . . . . . . 3 units |
| BIOL 195 Biology Field Laboratory . . . . . . . . . . . . . 1 unit |
| BIOL 210 General Zoology . . . . . . . . . . . . . . . . . . . 5 units |
| BIOL 220 General Botany . . . . . . . . . . . . . . . . . . . 5 units |
| BIOL 230 Introductory Cell Biology . . . . . . . . . . . . . 4 units |
| Plus, 3 units of a Physical Science - |
| ASTR, CHEM, GEOG, GEOL, METE, OCEN, PALN, PHYS, PSCI |
| Students are encouraged to group course selections as follows to emphasize their major interests. |
| Human Biology: BIOL 110, 130, CHEM 410 or 210 |
| Marine Biology: BIOL 110, OCEN 100 or GEOL 100 |
| Natural History: BIOL 110, 111, 200,GEOL 100 or METE 100 or GEOG 100 |
| Wildlife/Forestry: BIOL102, 110 or 184, GEOL 100 or METE 100 |

## AS Major in Life Sciences: Biological

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

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

A grade point average of 2.0 is required for the major courses.
$\qquad$
BIOL 220 General Botany . . . . . . . . . . . . . . . . . . . . . 5 units
BIOL 230 Introductory Cell Biology. . . . . . . . . . . . . . 4 units
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 110, CHEM 192, MATH 110, and PHYS 100 prior to beginning major coursework.

## AS Major in Life Sciences: Biotechnology

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

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

A grade point average of 2.0 is required for the major courses.
BIOL 123 Biotechnology Workshop . . . . . . . . . . . . . . 1 unit
BIOL 210 or 220 General Zoology. . . . . . . . . . . . . . . . 5 units
or General Botany. . . . . . . . . . . . . . . . . 5 units
BIOL 230 Introductory Cell Biology . . . . . . . . . . . . . . 4 units
BIOL 240 General Microbiology . . . . . . . . . . . . . . . . 4 units
BIOL 666 Careers in Biotechnology and Biology . . . . 1 unit
CHEM 210 General Chemistry I. . . . . . . . . . . . . . . . . . 5 units
CHEM 220 General Chemistry II . . . . . . . . . . . . . . . . 5 units
Students with little or no high school preparation should first complete BIOL 100, CHEM 100 or 192, and PHYS 100 prior to beginning major coursework.

Major in Life Sciences continued on next page

## CS 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 Sciences: Medical

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.
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 Sciences: Pre-Nursing

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

## Major requirements: 21-23 semester units

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

$$
\begin{aligned}
& \text { BIOL } 240 \text { General Microbiology . . . . . . . . . . . . . . . } 4 \text { units } \\
& \text { BIOL } 250 \text { Human Anatomy . . . . . . . . . . . . . . . . . . . . } 4 \text { units } \\
& \text { BIOL } 260 \text { Introduction to Physiology . . . . . . . . . . . . . } 5 \text { units } \\
& \text { Plus } 8 \text { or } 10 \text { units from one of the following groups } \\
& \text { Group } 1 \text { CHEM } 210 \text { and 220......... . . . . . . . . . . . . } 10 \text { units } \\
& \text { Group } 2 \text { CHEM } 410 \text { and } 420 \\
& 8 \text { units }
\end{aligned}
$$

## MANAGEMENT

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

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

## AA Associate in Arts Degree

Business Management . . . . . . . . . . . . . . . . . . . . . . . . . . . 60 units
Marketing Management . . . . . . . . . . . . . 60 units

## CA Certificate of Achievement

Business Management . . . . . . . . . . . . . . . . . 24 units
Marketing Management . . . . . . . . . . . . . . . . 24 units
Retail Management . . . . . . . . . . . . . . . . . . . . 32 units

## CS Certificates of Specialization

Human Resource Management 9 units
Project Management 12 units

## University Transfer Program

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

## AA Major in Management: Business Management

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

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

A grade 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 BUSW series . . . . . . . . . . . 3 units
Plus select 12 units from the following courses:
BUS 101 Human Relations I. . . . . . . . . . . . . . . . . . . . 3 units
BUS 150 Small Business Management . . . . . . . . . . . . 3 units
BUS 180 Marketing . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
CIS 110 Introduction to CIS . . . . . . . . . . . . . . . . . . . 3 units
MGMT 215 Management of Human Resources . . . . . 3 units
MGMT 220 Organizational Behavior. . . . . . . . . . . . . 3 units
MGMT 265 Project Management. . . . . . . . . . . . . . . . 3 units
COOP 641 Cooperative Work Experience Education . . 3 units

## CA Business Management

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 Introduction to Business Management . . 3 units
MGMT 235 Techniques of Supervision. . . . . . . . . . . . 3 units
BUS 100 Contemporary American Business . . . . . . . 3 units
BUS 180 Marketing . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
Plus select 12 units from the following courses:
CIS 110 Introduction to CIS . . . . . . . . . . . . . . . . . . . 3 units
MGMT 215 Management of Human Resources . . . . . 3 units
MGMT 220 Organizational Behavior. . . . . . . . . . . . . . 3 units
MGMT 265 Project Management. . . . . . . . . . . . . . . . . 3 units
BUSW series
$1.5-3$ units

## CA Marketing Management

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: $\mathbf{3 2}$ 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 units
BUS 101 Human Relations I. . . . . . . . . . . . . . . . . . . . 3 units
BUS 115 Business Mathematics . . . . . . . . . . . . . . . . . 3 units
BUS 180 Marketing . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 186 (Canada College) . . . . . . . . . . . . . . . . . . . . . OR
BUS 190 (Skyline College) . . . . . . . . . . . . . . . . . . . . . 3 units
BUS 295 Computer Systems in Business. . . . . . . . . . . . 4 units
BUS 401 Business Communications. . . . . . . . . . . . . . 3 units
MGMT 100 Introduction to Business Management . . OR
MGMT 235 Techniques of Supervision. . . . . . . . . . . . 3 units
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.

## CS 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

## CS 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).

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

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

## MATHEMATICS

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

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

## AS Associate in Science Degree

Mathematics
. 60 units

## Recommended high school preparation:

Four years of Mathematics.

## University Transfer Program

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

## AS Major in Mathematics

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

## Major requirements: 22-24 semester units

A grade 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 <br> 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
60 units
Multimedia Option 3: Digital Audio
60 units

## CA Certificate of Achievement

Multimedia Web Design . . . . . . . . . . . . . . . 30 units
Multimedia Digital Video . . . . . . . . . . . . . . . 28.5 units
Multimedia Digital Audio . . . . . . . . . . . . . . . 25.5 units

## CS Certificates of Specialization

Multimedia Web Design .................. . . 12 units
Multimedia Digital Video . . . . . . . . . . . . . . . 12 units

## University Transfer Program

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

## AA Multimedia Option 1: Web Design

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

## Major requirements: $\mathbf{3 0}$ 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 172 Web Design: Dreamweaver (replaces 170 \& 171) . . . . . . . . . . . . . . . 3 units
MULT 177 Graphics for Multimedia (Photoshop/Fireworks) (replaces 175 \& 176) . . . . . . . . . . . . . . . 3 units
MULT 253 Multimedia Design (replaces 251 \& 252) . 3 units MULT 274 Flash (replaces 270 \& 271).............. . 3 units MULT 279 Flash Actionscript. . . . . . . . . . . . . . . . . . . 3 units CIS 111 Introduction to Internet Programming . . . . . 3 units MULT 392 Multimedia Internship (replaces 390 \& 391) 3 units

Design Electives: choose 6 units from the following: MULT 113, BCST 110, GRA 160, GRA 115/116

Developer Electives: choose 6 units from the following: CIS 254, 377, 380.

## CA Multimedia Web Design <br> 30 semester units

Complete major requirements listed under Associate in Arts Major in Multimedia Option 1: Web Design. A grade of "C" or higher is required for each course.

## AA Multimedia Option 2: Digital Video

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

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

A grade 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/Fireworks) . . . . . . . . . . . . . . . . 3 units
BCST 312 Field Lighting/Studio Lighting. . . . . . . . . . . 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

Electives - choose 3 units form the following:
MULT 113, BCST 110
Strongly recommended: MULT 392

## CA Multimedia Digital Video

## 28.5 semester units

Complete major requirements listed under Associate in Arts Major in Multimedia Option 2: Digital Video. A grade of " C " or higher is required for each course.

## AA Multimedia Option 3: Digital Audio

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

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

A grade point average of 2.0 is required for the major courses.
MULT 102 Introduction to Multimedia (replaces 105 \& 107). . . . . . . . . . . . . . . . . 3 units
MULT 192 Digital Audio (replaces 190 \& 191). . . . . . 3 units
MULT 297 Pro Tools LE (replaces 295 \& 296). . . . . . . 3 units
MULT 317 Digital Studio Recording (replaces 315 \& 316). . . . . . . . . . . . . . . . . 3 units
MUS 290 Electronic Music I. . . . . . . . . . . . . . . . . . . . . 3 units
MUS 291 Electronic Music II . . . . . . . . . . . . . . . . . . . 2 units
MUS 292 Sound Creation: Sampling and Synthesis . . 3 units
MUS 293 Audio for Visual Media. . . . . . . . . . . . . . . . . 2.5 units
Plus, 3 units from the following courses:
MULT 113 Fundamentals of Mac OS \&
File Management (replaces 111 \& 112) . . . 3 units
BCST 110 Media in Society . . . . . . . . . . . . . . . 3 units

## CA Multimedia Digital Audio

## 25.5 semester units

Complete major requirements listed under Associate in Arts Major in Multimedia Option 3: Digital Audio. A grade of " C " or higher is required for each course.

## CS Multimedia Web Design <br> 12 semester units

A grade of "C" or higher is required for each course.
MULT 172 Web Design: Dreamweaver (replaces 170 \& 171) . . . . . . . . . . . . . . . 3 units
MULT 177 Graphics for Multimedia (Photoshop) (replaces 175 \& 176). 3 units
MULT 253 Multimedia Design (replaces 251 \& 252) . 3 units
MULT 274 Flash (replaces 270 \& 271) 3 units

## CS Multimedia Digital Video <br> 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

Music . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 60 units
Electronic Music . . . . . . . . . .

## 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 452 Repertory Jazz Band |
| :---: | :---: |
|  | MUS 430 Symphonic Band |
|  | MUS 470 CSM Singers. |

MUS 452 Repertory Jazz Band . . . . . . . . . . . . . . . . . 1 unit
MUS 430 Symphonic Band . . . . . . . . . . . . . . . . . . . . 1 unit
MUS 470 CSM Singers. . . . . . . . . . . . . . . . . . . . . . . . 1 unit
MUS 665 Special topics in Music Performance . . . . . .5-1 unit
Plus, History, select 6 units from the following courses:

MUS 202 | Music Listening and Enjoyment |
| :--- |
| (required course) . . . . . . . . . . . . . . . . . . 3 units |

And 3 units from:
MUS 240 Music of the Americas . . . . . . . . . . . . . . . . . 3 units 3 units
MUS 250 World Music . . . . . . . . . . . . . . . . . . . . . . . 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

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
ELEC 110 Introduction to Fundamentals of Electronics 3 units
Plus, select 6 units from the following courses:
MUS 100 Fundamentals of Music . . . . . . . . . . . . . . . 3 units AND
MUS 101 Musicianship I . . . . . . . . . . . . . . . . . . . . . . OR
MUS 101 Musicianship I . . . . . . . . . . . . . . . . . . . . . . 3 units AND
MUS 131 Harmony I. . . . . . . . . . . . . . . . . . . . . . . . OR
MUS 102 Musicianship II. . . . . . . . . . . . . . . . . . . . . 3 units AND
MUS 132 Harmony II. . . . . . . . . . . . . . . . . . . . . . . . . OR
MUS 103 Musicianship III . . . . . . . . . . . . . . . . . . . . . 3 units AND
MUS 133 Harmony III . . . . . . . . . . . . . . . . . . . . . . . . OR
MUS 104 Musicianship IV . . . . . . . . . . . . . . . . . . . . 3 units AND
MUS 134 Harmony IV . . . . . . . . . . . . . . . . . . . . . . 3 units
Plus, select 1 unit from the following courses:
MUS 301-304 Piano I, II, III, IV $\qquad$ .1 unit each

Plus, select 3 units from the following courses:


## 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 <br> .68 units

## CA Certificate of Achievement

Nursing . . . . . . . . . . . . . . . . . . . . . . . . . . 68 units

| Perioperative Nursing (pending completion |
| :--- |
| of the approval process) . . . . . . . . . . . . . . 18 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 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: $\mathbf{6 8}$ semester units

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

| 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 | nit |
| 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 L | unit |
| NURS 241 Advanced Medical/Surgical Nursin | 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 un |
| 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 <br> 68 units

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

## CA Perioperative Nursing

18 units (pending completion of the approval process)
NURS 264 Perioperative Nursing . . . . . . . . . . . . . . . 8 units
NURS 265 Perioperative Nursing Preceptorship . . . 10 units
A grade of " C " or better for each course is required.

## 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.

## 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<br>California State University<br>University of California<br>Independent Colleges and Universities

## University Transfer Program

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

## PHYSICAL SCIENCE

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

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

## Associate in Science Degree

Physical Science $\qquad$

## 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 210 General Chemistry I. . . . . . . . . . . . . . . . . 5 units
CHEM 410 Health Science Chemistry I . . . . . . . . . . . 4 units
Group 3
GEOL 100 Survey of Geology . . . . . . . . . . . . . . . . . 3 units
GEOL 210 General Geology . . . . . . . . . . . . . . . . . . . 4 units
Group 4
PHYS 100 Descriptive Introduction to Physics . . . . . . 3 units
PHYS 210 General Physics I. . . . . . . . . . . . . . . . . . . . 4 units
PHYS 250 Physics with Calculus I . . . . . . . . . . . . . . 4 units
You may complete the required 18 units with courses selected from Groups 1, 2, 3, and 4. However, if you have not completed
the required 18 units from these groups you may complete the unit requirement by selecting courses from the following list.
CHEM 231 Organic Chemistry I. . . . . . . . . . . . . . . . 5 units
HUM 125 Technology/Contemporary Society . . . . . . 3 units
CIS 255 units
CIS 278 Programming Methods: Java I . . . . . . . . . . . 4 units
MATH 251 Calculus w/ Analytical Geometry I. . . . . . 5 units
MATH 252 Calculus w/ Analytical Geometry II . . . . 5 units
MATH 253 Calculus w/ Analytical Geometry III. . . . 5 units
MATH 275 Ordinary Differential Equations . . . . . . . . 3 units
METE 100 Elementary Meteorology . . . . . . . . . . . . . 3 unit
METE 101 Meteorology Laboratory . . . . . . . . . . . . 4 units
PHYS 250 Physics with Calculus I . . . . . . . . . . . . 4 units
PHYS 260 Physics with Calculus II. . . . . . . . . . . . . 4 units

## PHYSICS

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

## University Transfer Program

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

## AS Associate in Science Degree

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 . . . . . . . . . .

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

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

## 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<br>California State University<br>University of California<br>Independent Colleges and Universities

## University Transfer Program

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

## 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

## University Transfer Program

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

## REAL ESTATE

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

## AA Associate in Arts Degree

Real Estate 60 units

## CA Certificate of Achievement

Real Estate . . . . . . . . . . . . . . . . . . . . . . . . . 21 units

## Recommended high school preparation:

Coursework in Mathematics, Business, Accounting, English

## Pre-requisite Requirements:

For licensed Real Estate Agents, R.E. 100 and 105 may be waived as prerequisites for all real estate courses.

## AA Major in Real Estate

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

## Major requirements: 21 semester units

A grade 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 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

## CA Real Estate

## 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.

$$
\begin{aligned}
\text { PLUM } 741 & \text { Refrigeration \& Air Conditioning } \\
& \text { Apprenticeship I. . . . . . . . . . . . . . . . . . . } 3.5 \text { units }
\end{aligned}
$$

PLUM 742 Refrigeration \& Air Conditioning Apprenticeship II $\qquad$
PLUM 743 Refrigeration \& Air Conditioning Apprenticeship III. $\qquad$ 3.5 units

PLUM 744 Refrigeration \& Air Conditioning Apprenticeship IV 3.5 units

PLUM 745 Refrigeration \& Air Conditioning Apprenticeship V
3.5 units

PLUM $746 \begin{aligned} & \text { Refrigeration \& Air Conditioning } \\ & \\ & \text { Apprenticeship VI. . . . . . . . . . . . . . . . . . } 3.5 \text { units }\end{aligned}$
PLUM 747 Refrigeration \& Air Conditioning Apprenticeship VII
3.5 units

PLUM 748 | Refrigeration \& Air Conditioning |
| :--- |
|  |
| Apprenticeship VIII. . . . . . . . . . . . . . . . 3.5 units |

PLUM 749 Refrigeration\& Air Conditioning Apprenticeship IX. 3.5 units

PLUM 750 Refrigeration \& Air Conditioning Apprenticeship X . . . . . . . . . . . . . . . . . . 3.5 units

## CA Refrigeration and

 Air Conditioning Mechanics35 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 (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

Social Science. . . . . . . . . . . . . . . . . . . . . . . . 60 units

## University Transfer Program

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

## AA Major in Social Science

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

## Major requirements: 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<br>California State University<br>University of California<br>Independent Colleges and Universities

## University Transfer Program

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

## 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

## CS Certificate of Specialization <br> Spanish ................................... 12 units

## University Transfer Program

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

## AA Major in Spanish

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

## Major requirements: 18 semester units

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

$$
\begin{aligned}
& \text { SPAN } 110 \text { Elementary Spanish . . . . . . . . . . . . . . . . . . } 5 \text { units } \\
& \text { SPAN } 111 \text { Elementary Spanish I . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 112 \text { Elementary Spanish II . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 115 \text { Beginning Spanish I. . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 116 \text { Beginning Spanish II . . . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 117 \text { Advanced Beginning Spanish I . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 118 \text { Advanced Beginning Spanish II . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 120 \text { Advanced Elementary Spanish. . . . . . . . . . } 5 \text { units } \\
& \text { SPAN } 121 \text { Advanced Elementary Spanish I . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 122 \text { Advanced Elementary Spanish II ......... } 3 \text { units } \\
& \text { SPAN } 130 \text { Intermediate Spanish. . . . . . . . . . . . . . . . . } 5 \text { units } \\
& \text { SPAN } 131 \text { Intermediate Spanish I. . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 132 \text { Intermediate Spanish II . . . . . . . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 140 \text { Advanced Intermediate Spanish. . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 161 \text { Reading in Spanish Literature I . . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 162 \text { Reading in Spanish Literature II. . . . . . . . . } 3 \text { units } \\
& \text { SPAN } 251 \text { Hispanoamerica Contemporanea . . . . . . . } 3 \text { units }
\end{aligned}
$$

With Language Arts Division approval, ANTH 110 may be accepted as part of the 18 units.

## CS Spanish

12 semester units
"Pass" 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\mathrm{ units
SPAN 111 Elementary Spanish I. . . . . . . . . . . . . . . . . }3\mathrm{ units
SPAN 112 Elementary Spanish II . . . . . . . . . . . . . . . }3\mathrm{ units
SPAN 120 Advanced Elementary Spanish. . . . . . . . . . 5 units
SPAN 121 Advanced Elementary Spanish I. . . . . . . . . }3\mathrm{ units
SPAN 122 Advanced Elementary Spanish II . . . . . . . . }3\mathrm{ units
SPAN 130 Intermediate Spanish. . . . . . . . . . . . . . . . }5\mathrm{ units
SPAN 131 Intermediate Spanish I. . . . . . . . . . . . . . . . }3\mathrm{ units
SPAN 132 Intermediate Spanish II . . . . . . . . . . . . . . }3\mathrm{ units
SPAN 140 Advanced Intermediate Spanish. . . . . . . . . }3\mathrm{ units
SPAN 161 Reading in Spanish Literature I . . . . . . . . }3\mathrm{ units
SPAN 162 Reading in Spanish Literature II . . . . . . . . . }3\mathrm{ units
SPAN 251 Hispanoamerica Contemporanea . . . . . . }3\mathrm{ units
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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<br>60-70 transferable units<br>California State University<br>University of California<br>Independent Colleges and Universities

## AA Associate in Arts Degree

Speech Communication . . . . . . . . . . . . . . . . 60 units

## CS Certificate of Specialization

Speech Communication . . . . . . . . . . . . . . . . 12 units

## Recommended high school preparation:

Coursework in English, Speech, Psychology

## University Transfer Program

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

## AA Major in Speech Communication

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

## Major requirements: 21 semester units

A grade point average of 2.0 is required for the major courses.
Select 15 units from the following courses:
SPCH 100 Public Speaking . . . . . . . . . . . . . . . . . . . . . 3 units 3 units
SPCH 111 Oral Interpretation I . . . . . . . . . . . . . . . 3 units
SPCH 112 Oral Interpretation II . . . . . . . . . . . 3 units
SPCH 120 Interpersonal Communication. . . . . . . . 3 units
SPCH 140 Small Group Communication . . . . . . . . 3 units
SPCH 150 Intercultural Communication . . . . . . . . 3 units
SPCH 180 Family Communication. . . . . . . . . .

Plus, select 6 units from English and/or literature courses.
CS Speech Communication
12 semester unitsA grade of " C " or better for each course is required.SPCH 100 Public Speaking3 units
SPCH 120 Interpersonal Communication ..... 3 units
Plus, select 6 units from the following courses
SPCH 111 Oral Interpretation I 3 units
SPCH 112 Oral Interpretation II ..... 3 units
SPCH 140 Small Group Communication ..... 3 units
SPCH 150 Intercultural Communication ..... 3 units
SPCH 180 Family Communication ..... 3 units

## 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.

## UNIVERSITY TRANSFER

(Pending approval from the State Chancellor's Office)
Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

California State University
University of California
Independent Colleges and Universities

## CA Certificate of Achievement

## University Transfer with three options:

Option 1: California State University General<br>Education Certification (CSU/GE) . . . . . . . . . . 39 units<br>Option 2: Intersegmental General Education<br>Transfer Curriculum Certification CSU<br>(IGETC/CSU). . . . . . . . . . . . . . . . . . . . . . . . . . 37 units<br>Option 3: Intersegmental General Education<br>Transfer Curriculum Certification for UC<br>(IGETC/UC) . . . . . . . . . . . . . . . . . . . . . . . . 34--39 units

For all options, find courses approved to meet university transfer general education requirements at www.assist.org and search under College of San Mateo.

## CA University Transfer Option 1: California State University General Education Certification (CSUGE)

Complete 39 units of coursework to meet the California State University General Education Certification requirements as listed below.

## Complete 9 units of Area A:

Communications in the English Language and Critical Thinking. Courses in Area A must be completed with a grade of " C " or higher. Select a course from each area below.

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A1: Oral Communication.
3 units
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A2: Written Composition . . . . . . . . . . . . . . . . . . . . 3 units
A3: Critical Thinking . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units

## Complete 9 units of Area B:

Physical Universe and Its Life Forms. The course used to meet Area B4 must be completed with a grade of " C " or higher. One of the courses selected to meet Area B1 or Area B2 must be a lab course or have a lab component to meet the B3 lab requirement. Select a course from each area below.
B1: Physical Science
3 units
B2: Life Science 3 units

B3: Lab Course (the course selected to meet either B1 or B2 must be a lab course or have a lab component to meet the B3 requirement)
B4: Math Concepts/Quantitative Reasoning
3 units

## Complete 9 units of Area C:

Arts, Literature, Philosophy and Foreign Language. At least one course must be selected from Arts and one course from Humanities. The third course can be selected from either Arts or Humanities.
C1: Arts. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

## Complete 9 units in Area D:

Social, Political and Economic Institutions. Must complete coursework in at least two disciplines. Courses selected to meet Area D may also be used to meet a CSU graduation requirement in US History, US Constitutions, and California State and Local Government (referred to as AH\&I/CA State). (CSU Chico does not allow double counting of courses in Area D to meet AH\&// CA State.)
Area D
9 units

## Complete 3 units in Area E:

Lifelong Understanding and Self Development.
Area E
3 units

## CA University Transfer Option 2: Intersegmental General Education Transfer Curriculum Certification for CSU (IGETC /CSU)

Complete 37 units of coursework to meet the IGETC/CSU Certification requirements as listed below.

All courses must be completed with a grade of " C " or higher.
Complete 9 units in Area 1: English Communication
Area 1A: English Composition. . . . . . . . . . . . . . . . . . 3 units
Area 1B: Critical Thinking . . . . . . . . . . . . . . . . . . . . . . 3 units
Area 1C: Oral Communication . . . . . . . . . . . . . . . . . . . 3 units
Complete 3 units in Area 2:
Mathematical Concepts and Quantitative Reasoning.
Area 2. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units

## Complete 9 units in Area 3:

Arts and Humanities. At least one course must be selected from Arts and one course from Humanities. The third course can be selected from either Arts or Humanities.
Area 3A: Arts. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
Area 3B: Humanities . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
Area 3A or 3 B . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units

## Complete 9 units in Area 4:

Social and Behavioral Sciences. Must complete coursework in at least two disciplines.
Area 4.
9 units
Complete 7 units in Area 5:
Physical and Biological Sciences. At least one course must include a laboratory component.
Area 5A: Physical Science . . . . . . . . . . . . . . . . . . . . 3-4 units
Area 5B: Biological Science . . . . . . . . . . . . . . . . . . . . 3-4 units

## CA University Transfer Options 3: Intersegmental General Education Transfer Curriculum Certification for UC (IGETC/UC)

Complete 34-39 units of coursework to meet the IGETC/UC Certification requirements as listed below.

All courses must be completed with a grade of " C " or higher.
Complete 6 units in Area 1: English Communication
Area 1A: English Composition. . . . . . . . . . . . . . . . . . . 3 units
Area 1B: Critical Thinking . . . . . . . . . . . . . . . . . . . . . . 3 units
Complete 3 units in Area 2: Mathematical Concepts and Quantitative Reasoning.

Area 2.
3 units

## Complete 9 units in Area 3:

Arts and Humanities. At least one course must be selected from Arts and one course from Humanities. The third course can be selected from either Arts or Humanities.
Area 3A: Arts . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 units
Area 3B: Humanities . . . . . . . . . . . . . . . . . . . . . . 3 units
Area 3A or 3 B . . . . . . . . . . .

## Complete 9 units in Area 4:

Social and Behavioral Sciences. Must complete coursework in at least two disciplines.
Area 4 9 units

## Complete 7 units in Area 5:

Physical and Biological Sciences. At least one course must include a laboratory component.

Area 5A: Physical Science . . . . . . . . . . . . . . . . . . . . . 3-4 units
Area 5B: Biological Science . . . . . . . . . . . . . . . . . . . 3-4 units

## Language other than English - Area 6:

This area is a proficiency requirement that can be fulfilled through a number of options. Verification for any of the options listed below is required to complete certification.

- Completion of a CSM course approved to meet Language Other Than English Area 6 proficiency
- Completion of two years (4 semesters, level 1 through level 4 or higher) of one foreign language in high school with a grade of C or higher.
- Satisfactory score in SAT II - Foreign Language Subject Test
- Score of 3 or higher in AP examination in a foreign Language
- Satisfactory score in the International Baccalaureate Higher Level examination
- Satisfactory completion of two or more years of formal school at the 6th grade level or higher where the language of instruction is not English


## WELDING TECHNOLOGY

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

## University Transfer Program

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

## AS Associate in Science Degree

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 unitsA 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 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.

## Course Articulation

At the end of each course description there are letters that identify how the course applies to your educational goals, or in other words, how the course is articulated. "AA" indicates the course is applicable to the associate degree. "CSU" indicates the course is transferable to the California State University System. "UC" indicates the course is transferable to the University of California system. Absence of any of these letters indicates that the course is not degree applicable. In addition to these basic letters, other "attributes" appear that provide information about how the course may meet general education requirements for the associate degree, California State University General Education pattern, and the Intersegmental General Education Transfer Curriculum (IGETC) pattern for UC and CSU. An in depth description of these attributes and their meaning is provided on the last page of this Addendum. In addition, use PROJECT ASSIST (www.assist.org) for a more thorough understanding of articulation and how courses taken at College of San Mateo apply to transfer lower division general education requirements and lower division major requirements.

## Special Courses

The following special courses may be offered in instructional programs as recommended by the appropriate Division Dean and approved by the Committee on Instruction. See class schedule for specific course descriptions and current semester offerings.
641 Cooperative Work Experience Education (.5-8) (Pass/No Pass or letter grade option.) Work experience in a field related to a career goal, supplemented by individual counseling from an instructor-coordinator. (See Index: "Cooperative Work Experience Education.") (CSU)

## 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.

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 community-student 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.

879 Selected Topics (1-3) Hours by arrangement. Non-Transferable 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. Non-Transferable non 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. (Units do not apply toward AA/AS degree.)

## Accounting

## A materials fee in the amount shown in the Schedule of Classes ispayable upon registration for Accounting courses.

100 Accounting Procedures (3) Minimum of forty-eight lecture hours per term. Study of the accounting cycle for service and merchandising businesses. Preparation of journals, ledgers and financial statements using manual work papers and accounting software. Accounting 100 provides an important foundation for ACTG 121. (AA, CSU)

103 Ten-Key Skills (.5) (Pass/No Pass grading) (Open Entry/Open Exit) Minimum of twentyfour lab hours per term. Self-paced course covering development of speed and accuracy using a ten-key calculator and the ten-key pad on a computer keyboard. (AA, CSU)
121 Financial Accounting (4) Minimum of sixty-four lecture hours perterm. Recommended Preparation: ACTG 100. Preparation and interpretation of accounting information. Topics include application of generally accepted accounting principles to value assets, liabilities, and equity; accounting systems and internal controls; use of software applications to prepare and analyze accounting information; use of accounting information by decision makers. Students will demonstrate communication skills using PowerPoint and spreadsheet skills using Excel. (AA: Area C1, CSU, UC) (CAN BUS 2)

131 Managerial Accounting (4) Minimum of sixty-four lecture hours per term. Prerequisite: ACTG 121 with a C or better. Use of accounting information by management for analysis, planning, decision making and control; use of software applications to prepare and analyze accounting information. Topics include product costaccumulation, cost-volume-profit analysis, responsibility accounting, budgeting, and capital budgeting. Students will demonstrate communication skills using PowerPoint and spreadsheet skills using Excel.(AA, CSU, UC) (CAN BUS 4)

144 QuickBooks: Set-up and Service Business (1.5) Minimum of twenty-four lecture hours. Practical, hands-on introduction to QuickBooks accounting software. Covers set-up and service business transactions, including the sales cycle, the purchasing cycle, 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 Merchandising Business (1.5) Minimum of twenty-four lecture hours per term. Practical, hands-on introduction to QuickBooks accounting software. Covers payroll and merchandising business transactions, including the sales cycle, the purchasing cycle, and end-of-period procedures. ACTG 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) Minimum of sixty-four lecture hoursper term. Prerequisite: 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 analysis of cash, receivables, inventory, plant assets, and the related revenues and expenses. This course provides part, but not all, of the preparation needed for the CPA exam. (AA, CSU, UC)
162 Intermediate Accounting II (4) Minimum of sixty-four lecture hoursperterm. Prerequisite: 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 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) Minimum of forty-eight lecture hours per term. Prerequisite: ACTG 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) Minimum of forty-eight lecture hours per term. 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 report-
ing issues. This course will provide part, but not all, of the preparation needed for the CPA exam. (AA, CSU)

165 Cost Accounting (3) Minimum of fortyeightlecture hoursperterm. Prerequisite: $A C T G$ 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) Minimum of forty-eight lecture hours and sixteen lab hours per term. Preparation of Federal and California income tax returns for individuals; basic income tax law, theory, and practice. Students who successfully complete this course may apply to CTEC, the California Tax Education Council, to become a Registered Tax Preparer in California. (AA, CSU)
172 Business Income Taxes (3) Minimum of forty-eight lecture hours per term. 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) (Pass/No Pass or letter grade option) Minimum of twenty-four lecture hours per term. 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)

665 Special Topics in Taxation (.5-3) (Pass/No Pass or letter grade option) Minimum of eight to forty eight lecture hours plus zero to two hours by arrangementper term. Prerequisite: $A C T G 171$ 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 - $\mathbf{6 8 9}$ 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.)

## Administration of Justice (Law Enforcement)

## 100 Introduction to the Criminal Justice

 System (3) Minimum offorty-eightlecture hours perterm. Required ofallAdministration ofJustice 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838, 848 or equivalent. Legal processes from pre-arrest, arrest through trial and sentencing; federal and state 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 4 th, 5 th, 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) Minimum of forty-eight lecture hours per term. 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838, 848 or equivalent. Origin, development, philosophy, and constitutional basis of evidence; constitutional and procedural considerations affecting arrest, search, and seizure; kinds and degrees of evidence and rules governing 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-Cultural Policing Issues (3) Minimum of forty-eight lecture hours per term. 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838, 848 or equivalent; and $A D M J$ 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)

145 Basic Police Academy (22) Three hundred fifty lecture hours and four hundred fifty lab hours. Prerequisites: POST approved pre-entry English skills assessment exam provided by the Academy; medical clearance by a licensed physi-
cian; and criminal history clearance pursuant to Penal Code. This 880 hour course of training is certified by the California Commission on Peace Officers Standards and Training to meet the statutory basic training requirements. The course requires a significant commitment of time and dedication and both academic and physical skills in addition to extra motivation to endure the intensive agenda. Level 2 reading and writing. Students will be required to provide academy uniform, leather gear/equipment, physical training clothing, firearm, and abstract of driver's license. (AA, CSU)

153 Special Law Enforcement Issues (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 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) Minimum of thirty-two lecture hours and forty-eight lab hours per term. Recommended Preparation: appropriateskill levelsas 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 (.5-8) (See first page of Description of Courses section.) (AA, CSU)

680-689 Selected Topics (1-3) (Seefirstpage 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) Minimum of forty-eightlecture hoursperterm. Recommended Preparation: ENGL 838 or 848 or equivalent; ADMJ 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) (Pass/No Passgrading.) Minimum of forty-eight lecture hours per term. Arrest, search, and seizure; theory and practical application of related laws. Students must meet performance objectives upon completion of course. Course is certified by POST (Peace Officer Standards and Training Commission) as required under Penal Code Section 832.6 (a) (1). (AA)

775 Penal Code 832: Firearms Training (.5) (Pass/No Pass grading.) Minimum of eight lecture hours and sixteen lab hours per term. 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 ADMJ771 or successfulcompletion 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) (Pass/No Pass Grading) One hundred thirty-six lecture hours 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) (Pass/No Pass Grading) Two hundred thirty-six lecture hours andfifty-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) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hoursperterm. Recommended Preparation: eligibility for ENGL 838/848. Preparation to take FAA Private Pilot written examination. Principles offlight, Federal Aviation Regulations, flight environment, aircraft performance, and aviation weather. Weather charts, navigation, cross country flight planning, emergency procedures, and aviation medical considerations. (Since this course may cover an updated version of the code, it may be taken three times for a maximum of 9 units.) (AA, CSU)

680-689 Selected Topics (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.)

## 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Basic course in

American Sign Language taught as a second language using dialogue drills, commands, and creative ideas. (AA: Area E5c, CSU, UC)

112 Elementary American Sign Language II (3) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: ASL 111 or equivalent with Pass or a grade of C or higher. Encoding, decoding, interaction, and acquisition techniques for skilled hearing signers and deaf people. (AA: Area E5c, CSU, UC: Area 6)

121 Advanced Elementary American Sign Language I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: ASL 112 or equivalent with Pass or a grade of $C$ or higher. Covers the fundamental principles of Level II American Sign Language and introduces more advanced information about the Deaf community and Deaf culture. (AA: Area E5c, CSU: Area C2, UC: Area $6^{*}$ )
122 Advanced Elementary American Sign Language II (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: ASL 121 or equivalent with Pass or a grade of $C$ or higher. Covers the fundamental principles of Level II American Sign Language and introduces more advanced information about the Deaf community and Deaf culture. (AA: Area E5c, CSU: Area C2, UC: Area $6^{*}$ )
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ 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.)

## Anthropology

(Also see Biology 125)
110 Cultural Anthropology (3) (Pass/No Pass or letter grade option.) Minimum of fortyeight lecture hours per term. 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 culture as the
man-made environment of particular societies. Introduction to the anthropological point of view. Cross-cultural comparisons of cultural practices in specific societies and sub-cultures, including contemporary ethnic groups in the United States. (AA: Area E5b, CSU: Area D, UC: Area 4) (CAN ANTH 4)

180 Magic, Science \& Religion (3) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hoursperterm. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of Cor higher OR concurrent enrollment in READ 400, 405 or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Cross-cultural study of societies' on the nature of reality, and their religious, scientific, and magical practices as a consequence. (AA: Area E5b, CSU: Area C2/Area D, UC: Area 4)

350 Introduction to Archaeology (3) (Telecourse) (Pass/No Pass or letter grade option.) Recommended Preparation: ANTH 110 and eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Anthropological study of four million years of human biological evolution and the archaeological study of sociocultural adaptation. (AA: Area E5b, CSU: Area D)
370 Olmec, Maya, and Aztec People and Cultures of Mexico and Central America (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Develops an awareness and understanding of the major accomplishments of Olmec, Zapotec, Teotihuacan, Maya, Toltec, and Aztecsubcultures 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)
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ 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.)

## 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 studentsfulfilling the related instruction requirements of the State of California as indentured apprentices. For more information contact the Technology Division Office.
641 Cooperative Education (.5-8) (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.)

## Electrical Apprenticeship: <br> Inside Wireman (ELEL)

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

701 Electrical Apprenticeship I (3) Minimum offorty lecture hours and forty lab hours per term. 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) Minimum of forty lecture hours and forty lab hours per term. Safety, wiring methods, voltage drop, magnetism, grounding, principles of generation, electrical plans, circuit calculations, DC motors and generators, three-phase AC, resistive circuits, general lighting, and first aid.

703 Electrical Apprenticeship III (3) Minimum of forty lecture hours and forty lab hours per term. 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) Minimum of forty lecture hours and forty lab hours per term. 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) Minimum offorty lecture hours and forty lab hours per term. Safety, theory, wiring systems, distribution systems, basic principles of A/C motors, power in $\mathrm{A} / \mathrm{C}$ 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) Minimum of forty lecture hours and forty lab hours per term. 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 ApprenticeshipVII (3) Minimum offorty lecture hours and forty lab hours per term. Nuclear safety, foremanship, resonance (series and parallel), semiconductors, busways, transistors, wiring roughing, amplifiers, electric closets, coupling networks, and oscillators.

708 Electrical Apprenticeship VIII (3) Minimum of forty lecture hours and forty lab hours per term. 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) Minimum offorty lecture hours and forty lab hours per term. 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) Minimum offorty lecture hours and forty lab hours per term. Prerequisite: ELEL 709 with a grade of Cor 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) Minimum offorty lecture hours and forty lab hours per term. Prerequisite: Indenture in the ElectricalApprenticeship 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) Minimum of forty lecture hours and forty lab hours per term. 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) Minimum of forty lecture hours and forty lab hours per term. Prerequisite: Indenture in the Electrical Apprenticeship Program, approved by the California State Division of Apprenticeship Standards. Covers DC combination circuits and provides an indepth 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) Minimum of forty lecture hours and forty lab hours per term. 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 ApprenticeshipV (3) Minimum offorty lecture hours and forty lab hours per term. Prerequisite: Indenture in the Electrical Apprenticeship Program, approved by the California State Division of ApprenticeshipStandards. 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) Minimum offorty lecture hours and forty lab hours per term. 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) Minimum of forty-eight lecture hours and fortyeight lab hours per term. Safety, first aid, use and care of tools, history of and materials used in the plumbing industry, and shop assembly.
702 PlumbingApprenticeship II (3.5) Minimum of forty-eight lecture hours and forty-eight lab hours per term. Mathematics, science, and mechanics applying to plumbing.
703 Plumbing Apprenticeship III (3.5) Minimum offorty-eight lecture hours and fortyeight lab hours per term per term. Plumbing codes and water supply systems.
704 Plumbing Apprenticeship IV (3.5) Minimum of forty-eight lecture hours and fortyeight lab hoursperterm. Introduction to drawing and plumbing fixtures.
705 Plumbing Apprenticeship V (3.5) Minimum of forty-eight lecture hours and fortyeight lab hours per term. Advanced plumbing and piping layout, pipe fixtures and supports, and drainage.
706 Plumbing Apprenticeship VI (3.5) Minimum offorty-eight lecture hours and fortyeight lab hours per term. Aspects of plumbing service work.

707 Plumbing Apprenticeship VII (3.5) Minimum offorty-eight lecture hours and fortyeight lab hours per term. Cutting; gas and arc welding.

708 Plumbing Apprenticeship VIII (3.5)
Minimum of forty-eight lecture hours and forty-eight lab hours per term. Hydronic and solar heating.

709 Plumbing Apprenticeship IX (3.5) Minimum offorty-eight lecture hours and fortyeight lab hours per term. Further instruction in drawing and plan reading.
710 Plumbing Apprenticeship X (3.5) Minimum offorty-eight lecture hours and fortyeight lab hours per term. 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) Minimum offorty-eight lecture hours and forty-eight lab hoursper term. Safety and health; use and care of tools; soldering and brazing.
722 Steamfitter, Pipefitter Apprenticeship II (3.5) Minimum of forty-eight lecture hours and forty-eight lab hours per term. Mathematics and pipe measurements.
723 Steamfitter, Pipefitter Apprenticeship III (3.5) Minimum of forty-eight lecture hours andforty-eight lab hoursperterm. Oxyacetylene cutting and burning; basic shielded metal arc welding.
724 Steamfitter, Pipefitter Apprenticeship
IV (3.5) Minimum of forty-eight lecture hours and forty-eight lab hours per term. Drawing interpretation.
725 Steamfitter, Pipefitter Apprenticeship V (3.5) Minimum of forty-eight lecture hours and forty-eight lab hours per term. Rigging and signaling, pipe materials, and basic science.
726 Steamfitter, Pipefitter Apprenticeship
VI (3.5) Minimum of forty-eight lecture hours and forty-eight lab hours per term. Pumps and steam systems.
727 Steamfitter, Pipefitter Apprenticeship
VII (3.5) Minimum offorty-eight lecture hours and forty-eight lab hours per term. Introduction to industrial pipe fitting and hydronic heating systems.
728 Steamfitter, Pipefitter Apprenticeship VIII (3.5) Minimum of forty-eight lecture hours and forty-eight lab hours per term. Pipe drafting and blueprint reading.

729 Steamfitter, Pipefitter Apprenticeship IX (3.5) Minimum of forty-eight lecture hours and forty-eight lab hours per term. Advanced welding.

730 Steamfitter, Pipefitter Apprenticeship X (3.5) Minimum of forty-eight lecture hours andforty-eight lab hoursper term. Gas-tungsten arc welding.

## Refrigeration and Air Conditioning

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) Minimum of forty-eight lecture hours and forty-eight lab hours per term. Basic refrigeration.
742 Refrigeration \& Air Conditioning Apprenticeship II (3.5) Minimum offorty-eight lecture hours and forty-eight lab hours per term. Basic electricity.
743 Refrigeration \& Air Conditioning Apprenticeship III (3.5) Minimum offorty-eight lecture hours and forty-eight lab hours per term. Refrigerant controls.
744 Refrigeration \& Air Conditioning Apprenticeship IV (3.5) Minimum offorty-eight lecture hours and forty-eight lab hours per term. Basic and pneumatic controls.

745 Refrigeration \& Air Conditioning Apprenticeship V (3.5) Minimum of forty-eight lecture hours and forty-eight lab hours per term. Brazing, piping, and hydronics.
746 Refrigeration \& Air Conditioning ApprenticeshipVI (3.5) Minimum offorty-eight lecture hours and forty-eight lab hours per term. Advanced electricity.
747 Refrigeration \& Air Conditioning ApprenticeshipVII (3.5) Minimum offorty-eight lecture hours and forty-eight lab hours per term. Electrical controls and wiring diagrams.

748 Refrigeration \& Air Conditioning Apprenticeship VIII (3.5) Minimum of fortyeight lecture hours and forty-eight lab hours per term. Heat pumps.
749 Refrigeration \& Air Conditioning Apprenticeship IX (3.5) Minimum offorty-eight lecture hours and forty-eight lab hours per term. Supermarket installations and refrigerator box load.

750 Refrigeration \& Air Conditioning Apprenticeship X (3.5) Minimum of forty-eight lecture hours and forty-eight lab hours per term. 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)
Minimum offorty-eight lecture hours and sixteen lab hours per term. 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) Minimum offorty-eight lecture hours and sixteen lab hours perterm. 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) Minimum offorty-eight lecture hours and sixteen lab hours per term. Prerequisite: SPFI 702 with grade of $C$ or higher. Basic mathematics; operation and functioning of a sprinkler head; knot tying and rigging techniques; oxygenacetylene safety (part 1); heritage and future in the pipe trades.
704 Sprinkler Fitter Apprenticeship IV (3) Minimum offorty-eight lecture hours and sixteen lab hoursperterm. 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) Minimum offorty-eight lecture hours andsixteen lab hours per term. Prerequisite: SPFI 704 with a grade of C or higher. Safety and health issues related to underground construction; underground piping installation (NFPA 24); oxygen- acetylene safety (part 2); fundamentals of gas welding and flame cutting.

706 Sprinkler Fitter Apprenticeship VI
(3) Minimum of forty-eight lecture hours and sixteen lab hours per term. Prerequisite: SPFI 705 with a grade of $C$ or higher. Operation of dry valves, accelerators, and exhausters; hydraulics and the physical properties of fluids; isometric drawing; building plans, including architectural, structural, mechanical, and electrical drawings.
707 Sprinkler Fitter Apprenticeship VII (3) Minimum of forty-eight lecture hours and sixteen lab hours per term. 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) Minimum of forty-eight lecture hours and sixteen lab hours per term. Prerequisite: SPFI 707 with a grade of C or higher. Use of the TDrill; automatic fire pump installation, startup, certification and maintenance; combined sprinkler standpipe systems; technical reports; fire protection supply.

709 Sprinkler Fitter Apprenticeship IX (3) Minimum offorty-eight lecture hours andsixteen lab hours per term. Prerequisite: SPFI 708 with a grade of $C$ or higher. Sprinkler alarms; AA rate of rise; protomatic rate of rise; fire detectors; good foremanship (part 1); backflow protection.
710 Sprinkler Fitter Apprenticeship X (3) Minimum offorty-eight lecture hours andsixteen lab hours perterm. 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 Modern Architecture (3) Minimum of forty eight lecture hours per term. Basic valves and concepts in contemporary architecture as a synthesis of art and science. Study of the significant design work, principles, and visions of influential architects, planners, and designers from the end of the 19th century into the 21 st century. Explores the critical relationships between architecture and environmental design and human experience, societal needs, building technique and community. Slides, films lecture hours and individual research. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA: Area E5c, CSU: Area C1, UC)

120 Architectural + Design Drawing I: Drawing andVisual Thinking (2) Minimum of sixteen lecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. 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*)
140 Architectural + Design Drawing II: Design Communication (2) Minimum of sixteen lecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. Prerequisite: ARCH 120 and 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*)

155 Architecture, Technology, and Building 1: Construction Materials and Methods (2) Minimum of sixteen lecture hours and forty eight lab hours plus sixteen hours by arrangement per term. Prerequisite: ARCH 140. Fundamental terminology, principles, and materials of construction and building components within the context of the design process in architecture. Emphasis placed upon the origin, history, nature and application of both traditional and emergent materials and processes in building construction. Includes discussion of sustainable materials and methods in construction and fundamental principles of structure, stability and form in building. (Fall only.) (CSU/UC)
165 Architecture, Technology, and Building 2: Construction Processes and Systems (2) Minimum of sixteen lecture hours and forty eight lab hours plus sixteen hours by arrangement per term. Prerequisite: ARCH 155. Fundamental aspects of construction systems, principles of structure, and the process of architectural project delivery. Topics include terminology and fundamental concepts of building codes and constraints, design principles of building structures, light wood and metal frame systems, and basic construction documentation and communication methods. Introductory exposure to concepts and applications of integrated building modeling technologies or Building Information Modeling (BIM). Sustainable and green building materials and methods in construction. Introduction to the format and life safety principles of building codes as an integrated element in the design process of architecture. (Spring only.) (AA,CSU)
210 Design I: Introduction to Architecture, Environmental Design, and the Design Process (4) Minimum of forty-eight lecture hours and forty-eight lab hours plus forty-eight hours by arrangement per term. Corequisites: concurrent enrollment or completion of $A R C H$ 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) Minimum of forty-eight lecture hours and forty-eight lab hours plus forty-eight hours by arrangement per term. Prerequisites: ARCH 120. Corequisite: concurrentenrollmentin 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. Students 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: Visioning and Building Architecture (4) Minimum offorty eight lecture hours and forty eight lab hours plus forty eight hours by arrangement per term. Prerequisite: ARCH 220. Corequisite: Concurrent enrollment in or completion of ARCH 155. Expands upon the environmental design principles introduced in ARCH 210 and 220. Introduction offundamental principles and opportunities in the design of elementary three dimensional architectural solutions and the making of buildings in response to specific program needs with in defined constraints. Design exercises explore the development of building forms and the materiality and construction of building solutions within the context of the problem solving process. The design studio fosters the development of integrated drawing, verbal, and model building design communication skills. Graphic supplies will be required. A materials fee as shown in the Schedule of Classes is payable upon registration. (Fall only.) (AA, CSU)

240 Design IV: Visioning Place and Community (4) Minimum offorty eight lecture hours and forty eight lab hours plus forty eight hours by arrangement per term. Prerequisite: $A R C H$ 230. Corequisite: Concurrent enrollment in or completion of Arch 165. Expands upon the environmental design principles fostered in Arch 210 and 220 and the building design principles introduced in Arch 230. Introduction and exploration ofbasic principles of site planning, context, community, and regionalism including sustainable design, urbanism, and livable communities. Design studio opportunities explore the development of architectural solutions within specific environmental settings, both urban and non-urban. Course exposes the student to principles of environmentally sensitive site planning, and fosters an understanding of site constraints, topography, and reading and analyzing an architectural context in the urban or suburban setting. Graphic supplies will be required. A materials fee as shown in the Schedule of Classes is payable upon registration. (Spring only) (AA, CSU)
666 Introduction to Architecture (1) (Pass/ No Pass) Minimum of sixteen lecture hours per term. An overview of professional opportunities and requirements in architecture and environmental design including licensure and education. Discussion of the process of design, the role of the architect, professional opportunities in architecture, and opportunities in related fields. Exploration of educational paths in architecture and environmental design including transfer programs and requirements. Fall only (AA, CSU)
680 - 689 Selected Topics (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.)

## Art

100 Art of the Western World (3) (Telecourse) (Pass/No Pass or letter grade option.) Recommended Preparation: ENGL 848. "Art of the Western World" traces the Western tradition in the visual arts from ancient Greece to the present day. Chronologically introducing the societies, values, and ideals that gave birth to Western Art, it explores the connection between great works and the environment that stimulated their creation. Not applicable to Art major. (AA: Area E5c, CSU: Area C1)

101 Art \& Architecture from the Ancient World to Medieval Times, (c. 1400) (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Ancient, Classical, Early Christian, Byzantine and Medieval art and architecture. Survey of artistic expression from Prehistoric to late Medieval times with emphasis on sculpture and architecture. Chronologically introducing the great works of the period, this course explores the connection between them and the societies, values, and ideals that stimulated their creation. (AA: Area E5c, CSU: Area 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) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours perterm. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. 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) (Pass/No Pass or letter grade option.) Minimum of fortyeight lecture hours per term. 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)

124 Old Masters' Aesthetics and Techniques (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and forty-eight lab hoursplusforty-eight hours by arrangementper term. Recommended Preparation: eligibility for ENGL 838/848. Art history and art studio classes are combined to introduce the aesthetics, materials, and techniques of the Renaissance and Baroque periods and their relationship to their cultural and historical context. Historical topics include the development of narrative and illusionistic painting in relationship to Humanism from the fourteenth, fifteenth, and 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) Minimum of forty-eight lecture-critique hours and forty-eight lab hours plus forty-eight lab hours by arrangement per term. Drawing proficiency not required. Basic drawing course for college students. Study of two- and three-dimensional form and space relationships and the elements of design in pictorial composition. Sequence of problems based on still life. Drawing in various dry media. (AA, CSU, UC*) (CAN ART 8)
202 Drawing and Composition II (3) Minimum of forty-eight lecture-critique hours and forty-eight lab hours plus forty-eight lab hours by arrangement per term. Prerequisite: ART 201. Advanced composition; further study of threedimensional form, in black and white and color; advanced pictorial composition in illustration and the fine arts. (AA, CSU, UC*)
206 Figure Drawing and Portraiture (3) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture-critique hours andforty-eight lab hours plus forty-eight lab hours by arrangement per term. Recommended Preparation: $A R T$ 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, markmaking, 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecturecritique hours and forty-eight lab hours plus forty-eight lab hours by arrangement per term. 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) Minimum of forty-eight lecture-critique hours and forty-eight lab hours plus thirty-two lab hours by arrangement per term. Drawing proficiency not required. Study of the physical and psychological properties of color. Stresses knowledge and skills needed to use color aesthetically and imaginatively. (AA, CSU, UC*)
223 Oil Painting I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture-critique hours and forty-eight lab hours plus forty-eight lab hours by arrangement per term. Recommended Preparation: ART 201 and 214. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecturecritique hours and forty-eight lab hours plus forty-eight lab hours by arrangement per term. Recommended Preparation: ART 223. A continuation of Oil Painting I with increased emphasis on a variety of painting techniques and development of a personal style. (To increase competency, may be taken three times for a maximum of 9 units, after which students may petition to audit. See Index: "Audit Policy.) (AA, CSU, UC*)
225 Acrylic Painting I (3) (Pass/No Pass or letter grade option.) Minimum of forty eight lecture-critique hours and forty eight lab hours plus thirty two lab hours by arrangementper term. Prerequisite Art 201. Introduction to acrylic painting techniques, including the use of value, color and light to model 3D form. Students are encouraged to develop personal style in the latter part of the course. (AA, CSU)

226 Acrylic Painting II (3) (Pass/No Pass or letter grade option.) Minimum of forty eight lecture-critique hours and forty eight lab hours plus thirty two lab hours by arrangement per term. Prerequisite Art 225. Continuation of Art 225 with emphasis on a variety of acrylic painting techniques and development of a personal aesthetic. (To increase competency, may be taken three times for a maximum of 9 units after which students may petition to audit. See Index: "Audit Policy".) (AA, CSU)
231 Watercolor I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture-critique hours and forty-eight lab hours plus forty-eight hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture-critique hours and forty-eight lab hours plus forty-eight hours by arrangement per term. Prerequisite: $A R T$ 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) (Pass/No Pass or letter grade option.) Minimum of thirtytwo to forty-eight lecture hours and thirty-two to forty-eight lab hours per term. Introduction to the three classic elements of Chinese art (brush painting, calligraphy, and aesthetics) and the development of these three elements from antiquity to the present. Emphasizes the series of Chinese masterpieces, both ancient and contemporary, focusing on the concepts of style, line, composition, perspective, and stroke. (May be taken up to four times for up to 12 units.) (AA, CSU)
301 Design (3) Minimum of forty-eight lecture-critique hours and forty-eight lab hours plusforty-eight lab hours by arrangement per term. Two-dimensional design elements and principles; line, shape, texture, balance, rhythm, pattern, and more. Collage, drawing, painting, and digital media. (AA, CSU, UC*)

315 Digital Printing and Mixed Media (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture-critique hours and fortyeight lab hours plus thirty-two lab hours by arrangement per term. A hybrid approach to two-dimensional art making, exploration in both digital and traditional art media. Students will make a portfolio using Photoshop techniques to create fine digital prints on a variety of media. Drawing and painting materials will be combined with digital tools to enrich visual art practice. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies will be required. (To increase competency, may be taken four times for a maximum of 12 units. (AA, CSU,UC)
350 Visual Perception (3) Minimum of forty-eight lecture-critique hoursperterm. 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) Minimum offorty-eightlecture-critique hours and forty-eight lab hours plus sixteen lab hours by arrangement per term. Recommended Preparation: ART 201 or 350 . The use of black and white photography as a means of increasing visual awareness. Introduction to basic black and white photographic skills and equipment including film processing, printing, print finishing. Exploration of the creative process: observation, discovery, examination, interpretation and response. Extensive darkroom work and a professional portfolio produced. Camera not required. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (AA:Area E5c, CSU: Area C1, UC*) (CAN ART 18)
352 Intermediate Black and White Photography (3) Minimum of forty-eight lecturecritique hours and forty-eight lab hours plus thirty-two lab hours by arrangement per term. Prerequisite: ART351. 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. Port-
folio is produced. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (AA, CSU, UC*)
353 Advanced Black and White Photography (3) Minimum offorty-eight lecture-critique hours and forty-eight lab hours plus thirty-two lab hours by arrangement per term. Prerequisite: Art 352. Designed for students who have intermediate camera and black-and-white darkroom skills. Further refinement of visual and technical skills. Covers studio lighting, advanced exposure and development techniques applied to fine printmaking, archival processing, portfolio presentation and use of the view-camera. Portfolio is produced. A materials fee as shown the Schedule of Classes is payable upon registration. Extra supplies may be required. (To increase competency, may be taken twice for a maximum of 6 units.) (AA, CSU, UC)
354 Color Photography I (3) Minimum of forty-eight lecture-critique hours and forty-eight lab hours plusthirty-two lab hours by arrangement perterm. Prerequisite: ART351. Introduction to the use of color materials as an expressive medium. Access to color processor. Emphasizes mastery of the technical aspect of color balance and exposure. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (AA, CSU)
355 Color Photography II (3) Minimum of forty-eight lecture-critique hours and forty-eight lab hours plusthirty-two lab hours by arrangement perterm. Prerequisite: ART354. 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) Minimum of forty-eight lecture-critique hours and forty-eight lab hours plus forty-eight lab hours by arrangement per term. 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, multiple-imagery, handcoloring and others. Portfolio is produced. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (To increase competency, may be taken four times for a maximum of 12 units.) (AA, CSU)

## 365 Intermediate Digital Photography

(4) Minimum of forty-eight lecture hours and forty-eight lab hours plus forty-eight lab hours by arrangement per term. Prerequisite: ART 351 and 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) Minimum of forty-eight lecture hours and forty-eight lab hours plus forty-eight lab hours by arrangement per term. Prerequisite: ART 365 with a grade of C or higher. Intermediate scanning from film and flat art; intermediate editing and printing using the current tools, technologies, and software. Development of a portfolio. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (AA, CSU)
374 Master Portfolio (2) Minimum of sixteen lecture hours and eight lab hours plus thirty-two lab hours by arrangementperterm. 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) Minimum of forty-eight lecture-critique hours plus forty-eight lab hours by arrangement per term. Recommended Preparation: Art 350. Advanced visual perception and refinement of composition using the computer to organize and display digital photographs. Covers principles of heightened visual awareness and the creation of digital photographs linked by a theme. Teaches the Macintosh operating system; organizing, managing and backing up digital photographs. Advanced instruction in the use of digital cameras, lenses, and the creation of a digital slide show are included. Extra supplies may be required. (To increase competency, may be taken twice for a maximum of 6 units.) (AA, CSU, UC)

405 Sculpture I (3) (Pass/No Pass or lettergrade option.) Minimum offorty-eight lecture-critique hours and forty-eight lab hours plus thirty-two lab hours by arrangement per term. Beginning modeling of abstract and human forms. May be cast, carved, or welded. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (AA, CSU, UC*)
406Sculpture II (3) (Pass/No Passorlettergrade option.) Minimum offorty-eight lecture-critique hours and forty-eight lab hours plus thirty-two lab hours by arrangement per term. Prerequisite: ART 405 or equivalent. Continuation of ART 405, with an emphasis on self-expression. Choice of media is open. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies may be required. (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) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture-critique hours and forty-eight lab hours plus thirty-two lab hours by arrangement perterm. 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) (Pass/No Passorlettergrade option.) Minimum offorty-eight lecture-critique hours and forty-eight lab hours plus thirty-two lab hours by arrangementperterm. 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*)
665 Special Topics in Art (.5-3) (Pass/No Pass or letter grade option.) Minimum of sixteen lecture hours to one hundred forty-four lab hours or combination of lecture hours and lab hours to equate to .5-3 units; plus additional lab hours by arrangement for certain topics per term. Recommended Preparation: Successful completion of a beginning art studio course. Advanced or specialized study in studio arts. Designed for students in ceramics, drawing, painting, photography, print-making, and sculpture. Course provides extended study of a particular media, technique, or artistic problem through selected themes as listed in
the class schedule. (May be repeated 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) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Ancient, Classical, Early Christian, Byzantine and Medieval art and architecture. Survey of artistic expression from Prehistoric to late Medieval times with emphasis on sculpture and architecture. Chronologically introducing the great works of the period, this course explores the connection between them and the societies, values, and ideals that stimulated their creation. (AA)
802 Art \& Architecture of Renaissance and Baroque Europe, (c. 1300-1700) (3) (Pass/ No Pass grading.) Minimum offorty-eightlecture hours per term. 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) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Survey of European and American artistic expression from the 18th Century to the present. Emphasizes the development of modern painting and sculpture as a reaction against earlier traditions. (AA)

804 Art of the 20th Century (3) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Survey of principal styles in Western art from 1888 to 1999, from Post-Impressionism to Modernism and PostModernism, from Paris to New York and the West Coast. (AA)
805 Art of Asia and the Near East (3) (Pass/ No Pass grading.) Minimum offorty-eightlecture hours per term. Introduction to some of the major monuments and themes of the visual arts of Asia and the Near East. Explores the connection between great works of art and the societies, values, and ideals that stimulated their creation. (AA)

824 Old Masters' Aesthetics and Techniques. (3) (Pass/No Pass grading.) Minimum of fortyeight lecture hours and forty-eight lab hours plus forty-eight hours by arrangement per term. Art history and art studio classes will be combined
to introduce the aesthetics, materials and techniques of the Renaissance and Baroque periods and their relationship to their cultural and historical context. Historical topics will include the development of narrative and illusionistic painting in relationship to 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) Minimum of thirty-two lecture hours and sixteen recitation hours plus sixteen hours by arrangement per term. Survey of astronomy satisfying science requirements in state colleges and universities. Includes descriptive material on the solar system, stars, galaxies and, life in the universe, together with an introduction to the methods employed by astronomers in gathering information. (AA: Area E5a, CSU: Area B1, UC: Area 5A)
101 Astronomy Laboratory (1) Minimum of forty-eight hours per term. Prerequisites: MATH 110 or equivalent $A N D$ 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)

 Minimum of forty-eight lab hours per term. 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 suppliesmay 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) Minimum offortyeight lecture hours, plus sixteen hours by arrangement per term. Study of the sun, planets, their moons, asteroids, and comets, as well as the age and formation of the solar system. Also covers the history of astronomy and the contributions of various cultures to astronomy. Emphasizes the connection between Newton's Laws and the conservation of energy to Kepler's laws of planetary motion. Discusses the discovery of extrasolar planets and the possibility of earthlike planets. Focuses on conceptual understanding of the solar system. (AA: Area E5a, CSU: Area B1, UC: Area 5A)
125 Stars and Galaxies (3) Minimum of forty-eight lecture hours per term. Study the sun, other stars, Milky Way galaxy, other galaxies and their evolution, black holes, quasars, dark matter, and the foundations of cosmology. Will become familiar with the basic tenets of general relativity and its application to black holes. The concept regarding stars as the primary producers of energy in the universe as well as the chemicals necessary for life, is emphasized. Focus is on conceptual understanding of stars, galaxies, and the rudiments of cosmology. (AA, 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.)

## Biology

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.
100 Introduction to the Life Sciences (3) Minimum offorty-eight lecture hoursplussixteen hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of Cor 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 nonscience majors with no previous experience in the biological sciences.) (AA: Area E5a, CSU: Area B2, UC: Area 5B)
102 Environmental Conservation (3) Minimum offorty-eight lecture hoursplussixteen hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of Cor higher OR concurrent enrollment in READ 400, 405 or 415 OR appropriate skill levels as indicated by the reading placement tests or other measures. Study of the relationship of humans to the immediate and global environments, including the conservation of renewable and non-renewable resources, dynamics of ecosystems, and the interaction of plant and animal populations; alternative energy sources; and current problems caused by human interactions with the environment. One or more field trips may be required. (AA: Area E5a, CSU: Area B2, UC: Area 5B)
110 General Principles of Biology (4) Minimum of forty-eight lecture hours and forty-eight lab hours plus sixteen hours by arrangement per term. Recommended Preparation: eligibility for $E N G L$ 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)

123 Biotechnology Workshop: Techniques and Applications of the Polymerase Chain Reaction (1) Minimum of sixteen lecture hours per term. 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)
130 Human Biology (3) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. 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) Minimum offorty-eight lecture hours plussixteen hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of Cor 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*)

184 Wildlife Biology (3) Minimum offortyeight lecture hours plus sixteen hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848. Study of wildlife species of North America, with emphasis on common mammals of the Pacific states. Additional selected and appropriate vertebrate species: identification, characteristics, life histories, abundance, and distribution. Basic biological and ecological principles directly applicable to wildlife issues of species and habitat conservation. One or more field trips may be required. (AA: Area E5a, CSU: Area B2, UC: Area 5B)
195 Biology Field Laboratory (1) Minimum of forty-eight lecture hours plus sixteen hours by arrangementperterm. 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 humanmade 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)

210 General Zoology (5) Minimum of forty-eight lecture hours and ninety-six lab hours plus sixteen hours by arrangement per term. 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 bigher 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) Minimum of fortyeight lecture hours and ninety-six lab hours per term. Prerequisites: MATH 120 or 123 or higher with a grade of $C$ or higher. Recommended Preparation: READ 830 with a grade of $C$ or bigher 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) Minimum of forty-eight lecture hours and forty-eight lab hours plus sixteen hours by arrangement per term. 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) Minimum of forty-eight lecture hours and forty-eight lab hours per term. 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) Minimum of forty-eight lecture hours andforty-eight lab hoursplussixteen hours by arrangement per term. 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, pre-medical, and pre-veterinary students.) Extra supplies may be required. Students may take either the BIOL 250-260 or the BIOL 265-266 series. (AA: Area E5a, CSU: Area B2/Area B3, UC: Area 5B*) (CAN BIOL 10) (Completion of BIOL 250 and $260=$ CAN BIOL SEQ B)

260 Introductory Physiology (5) Minimum of forty-eight lecture hours and ninety-six lab hours plus sixteen hours by arrangement per term. 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 (.5-8) See first page of Description of Courses section. (AA, CSU)
666 Careers in Biotechnology and Biology (1-2) (Pass/No Pass or letter grade option.) Minimum of sixteen to thirty-two lecture hours perterm. 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) Minimum of sixteen lecture hours per term. Prerequisite: limited to students in the Honors Program who have completed or are concurrently enrolled in an associated non-honors course in biology. Readings, discussion, and lectures covering selected advanced topics in biology to be determined by the Biology Department and the Honors Program. (AA, CSU, UC*)

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

690 Special Projects (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) (Pass/No Pass or letter grade option) Minimum offorty-eight lecture hours per term. Recommended Preparation: ENGL 838/848 or equivalent. Introduction to radio, television and cable TV. Includes a survey of the emerging technologies such as the internet, the web, direct satellite broadcast, interactive TV, digital radio and TV, Video On-Demand and podcasting. Other topics include: electronic media organization, history, programming and government
regulations, news-making and advertising. This course is designed for Broadcasting majors and non-majors. (AA: Area E5b/Area E5d, CSU: Area D)

210 Television Studio Techniques (Replacing BCST 231) (3) (Pass/No Pass or letter grade option.) Minimum of thirty-two lecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. 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 maximum of 6 units.) (AA, CSU)
230 On-Air Talent (Replacing BCST 120) (3) (Pass/No Pass or letter grade option) Minimum of thirty-two lecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. Recommended Preparation: ENGL 838 or ENGL 848 or equivalent. Introduction to basic announcing and communicating techniques for television and radio talent. Emphasizes format, delivery and 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) (Pass/No Pass or letter grade option.) Minimum of sixteen lecture hours and eight lab hours plus sixteen hours by arrangementperterm. Recommended Preparation: $E N G L 838$ or $E N G L 848$ or equivalent; BCST 210 or equivalent. Entry level course in directing talent for electronic media, including fiction, news, casting, motivation and dialogue, staging, blocking cameras to actors, choreography and beats. (To increase competency, may be taken two times for a maximum of 2 units.) (AA, CSU)

310 Studio Lighting Techniques (1.5) (Pass/ No Pass or letter grade option.) Minimum of twenty-four lecture hours and eight lab hoursplus sixteen hours by arrangement per term. 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)
312 Field Lighting Techniques (1.5) (Pass/ No Pass or letter grade option.) Minimum of twenty-four lecture hours and eight lab hours plus sixteen hours by arrangement per term. 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 field lighting techniques, discussion of differences in lighting equipment, routinely used grip equipment, real world solutions to commonly experienced lighting problems in location shoots, and equipment maintenance. (To increase competency, may be taken two times for a maximum of 3 units.) (AA, CSU)

316 Producing for Media (Replacing BCST 237) (3) (Pass/No Pass or letter grade option.) Minimum of thirty-two lecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. Prerequisites: BCST 210 or equivalent; BCST 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) Pass/No Pass or letter grade option.) Minimum of thirty-two lecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. Prerequisites: BCST 220 or equivalent. Recommended Preparation: ENGL 838 or ENGL 848 or equivalent. Introduction to digital video techniques and technologies for video production in a field setting. Comprehensive survey of digital television field production. Allows students to sharpen their skills in all field production positions including camcorder operation, audio, lighting, and grip; introduction to digital video editing. Covers field production from planning through final editing. (To increase competency, may be taken two times for a maximum of 6 units.) (AA, CSU)
410 Advanced Production Techniques (Replacing BCST 233) (3) (Pass/No Pass or letter grade grading option.) Minimum of thirty-two lecture hours and forty-eight lab hoursplus thirtytwo hours by arrangementperterm. 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)

420Advanced Audio Operations (Replacing BCST 132) (3) (Pass/No Pass or letter grade option.) Minimum of thirty-two lecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. 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) (Pass/No Pass or letter grade option) Minimum of thirty-two lecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. 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)

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.)

## Building Inspection Technology

700 Introduction to the Building Code (3) (Pass/No Pass or letter grade grading option.) Minimum of forty-eight lecture hours per term. Survey of the four required courses covering building inspections, code terminology, techniques of inspection, and construction practices. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA: E5d)

710 Non-Structural Provisions of the Uniform Building Code (3) Minimum of forty-eight lecture hours per term. Prerequisite: BLDG 700 or equivalent with a grade of $C$ or higher. Study of the fire and life safety provisions of the Uniform Building Code, and the International Building Code. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)

720 Electrical Inspection I (3) (Pass/No Pass or letter grade grading option.) Minimum of forty-eight lecture hours per term. Overview of the National Electrical Code. Covers the various aspects of electrical service as applied to building inspection, single-family dwellings and multi-family dwellings, commercial locations, industrial locations and specialized and hazardous locations. Includes recent electrical code changes, the application of research techniques for inspection, preparation of reports, and code interpretation considerations. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)

725 Electrical Inspection II (3) (Pass/No Pass or letter grade grading option.) Minimum of forty-eight lecture hours per term. Prerequisite: BLDG 720 or equivalent with a grade of $C$ or higher. In-depth advanced study of the sections of the National Electrical Code dealing with calculations. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)

730 Plumbing Inspection (3) (Pass/No Pass or letter grade grading option.) Minimum of forty-eight lecture hours per term. Building regulations governing drainage systems, vents and venting, plumbing, water systems, building sewers, and gas piping. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)

735 ADA Building Requirements (3) (Pass/ no Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Covers the essential concepts, reference materials, federal legislation, litigation and use of guidelines, codes and standards in the design and construction of built environments under the American Disabilities with American Barriers Acts. Participants learn how to apply federal and state access code regulations to legal case studies, field inspections, plan reviews and typical property improvement scenarios. Course emphasizes the intent of the laws and their proper interpretation. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)

740 Mechanical Code (3) Minimum of forty-eight lecture hours per term. Prerequisite: $B L D G 700$ or equivalent with a grade of $C$ or higher. Regulations and inspection methods governing mechanical construction, heating and cooling equipment, combustion air, floor furnaces, wall furnaces, unit heaters, venting, ducts, ventilation systems, and refrigeration systems and equipment. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)

750 Structural Provisions of the Uniform Building Code (3) Minimum of forty-eight lecture hours per term. Prerequisite: $B L D G$ 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) Minimum of forty-eight lecture hours per term. Prerequisite: $B L D G 700$ 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) Minimum of forty-eight lecture hours per term. Provides an overview of the building, mechanical, plumbing and electrical sections under the provisions of the International Residential Code. Suitable for jurisdictional or home inspectors, facility managers, contractors, architects, engineers and those in related fields of the real estate profession. (Since codes change, this course may be taken four times for a maximum of 12 units.) (AA)
790 Blueprint Reading for Construction (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Course provides an overview of the building, mechanical, plumbing and electrical sections under the provisions of the the International Residential Code. Suitable for jurisdictional or home spectors, facility managers, contractors, architects, engineers and those in related fields of the real estate profession. (Since this course may cover an updated version of the code, it may be taken four times for a maximum of 12 units.) (AA)
879 Selected Topics (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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Current concepts of American business including examination of societal issues affecting business in a dynamic economic environment. Includes the nature of major business functions and the roles of producer and consumer in the economy. (AA: E5b, CSU,UC)

101 Human Relations I (3) Minimum of
forty-eightlecture hoursperterm. Recommended Preparation: eligibility for ENGL 838 or 848. Designed to increase competence in personal and interpersonal skills, which are critical prerequisites for a successful career in business. Covers perception, self-management, self-image, communication, prejudice, conflict management, leadership, and resistance to change. (AA: Area E5b, CSU: Area E)
115 Business Mathematics (3) Minimum of forty-eight lecture hours per term. 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) Minimum of forty-eight lecture hours per term. 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)

131 Money Management (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Develops understanding and skill in dealing with consumer financial planning, saving and borrowing money, real estate and introduction to security investments, estate planning, and income tax preparation. (AA, CSU)
150 Small Business Management (3)
Minimum of forty-eight lecture hours per term. Prerequisite: BUS. 100 or equivalent. Recommended Preparation: eligibility for ENGL 848. Examination of the opportunities and hazards of small business operation. Designed for business students who plan to establish or supervise a small business. Explores significant areas of vital interest to the prospective independent businessperson, including pre-opening requirements. (AA, CSU)

180 Marketing (3) Minimum of forty-eight lecture hours perterm. Recommended Preparation: eligibility for ENGL 848. Broad study of marketing principles and methods applicable to both consumer and industrial goods and services. Includes retailing and wholesaling consumer goods, marketing industrial goods, marketing policies and practices, and government relationship to marketing. (AA, CSU)
201 Business LawI (3) Minimum offorty-eight lecture hours perterm. Recommended Preparation: eligibility for ENGL 848. Introduction to the study of business law, including sources, agencies, and enforcement procedures. Emphasizes the ability to understand and review simple contracts and a basic understanding of contract law. Discusses sales warranties and consumer protection legislation. (AA: Area E5d, CSU, UC) (CAN BUS 8)
295 Computer Systems in Business (4) Minimum of forty-eight lecture hours and thirty-two lab hours plus sixteen lab hour by arrangement per term. Prerequisites: BUSW 415 or equivalent; BUS. 115 or MATH 110 or equivalent; and concurrent enrollment in or completion of ACTG 100 or 121. Recommended Preparation: eligibility for 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) Minimum of fortyeight lecture hours plus thirty-two lab hours by arrangement per term. 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) Minimum of fortyeight lecture hours plus thirty-two lab hours by arrangement per term. Recommended Preparation: BUS. 315 or equivalent. Advanced course to increase keyboarding speed and accuracy as well as improve skills in formatting and producing letters, memos, reports, and tabulated material. A materials fee as shown in the Schedule of Classes is payable upon registration. (To increase competency, may be taken twice for a maximum of 6 units.) (AA: Area E5d, CSU)

317 Micro/Keyboarding: Skillbuilding
(1.5) Minimum of twenty-four lecture hours plus sixteen lab hours by arrangement per term. Recommended Preparation: BUS. 315 or equivalent. Increase keyboard speed and accuracy through the use of an interactive microcomputer skillbuilding program. A materials fee as shown in the Schedule of Classes is payable upon registration. (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) Minimum of twenty-four lecture hours plus sixteen lab hours by arrangement per term. Recommended Preparation: BUS. 315 or equivalent; eligibility for ENGL 838 or 848. Study of both manual and microcomputer filing methods from creation through maintenance of data records. Covers alphabetic, numeric, geographic, and subject filing rules. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)

352 Introduction to Insurance (1) (Pass/No Pass or letter grade option) Minimum of sixteen lecture hours per term. Course provides students with a basic background of the modern property/casualty insurance system. Topics include insurance products and services, reinsurance, civil and tort laws, basic commercial and personal ISO insurance contracts, and the importance of the risk management process. (AA, CSU)

353 Property and Liability Insurance Principles (3) (Pass/No Pass or letter grade option) Minimum of forty-eight lecture hours per term. 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) (Pass/No Pass or letter grade option) Minimum of forty-eight lecture hours per term. Recommended Preparation: Eligibility for ENGL 838 or 848 and BUS 352 or equivalent. Fundamentals of personal insurance. Course provides valuable information to anyone majoring in business 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) (Pass/No Pass or letter grade option) Minimum of forty-eight lecture hours per term. Recommended Preparation: Eligibility for ENGL 838 or 848 and BUS 352 or equivalent. Fundamentals of commercial insurance. Course covers information concerning commercial property insurance, business income insurance, commercial crime insurance, equipment breakdown insurance, inland and ocean marine insurance, commercial general liability insurance, commercial automobile insurance, business owners policies and farm insurance, worker's compensation and employer's liability insurance, and other miscellaneous coverage. (AA, CSU)
356 Code and Ethics (1) (Pass/No Pass or letter grade option) Minimum of sixteen lecture hours per term. 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) Minimum offorty-eight lecture hoursper term. Recommended Preparation: eligibility for ENGL 848 and ability to type. Comprehensive review of grammar, punctuation, and vocabulary used in business. Identifies, explains, and develops the communication skills and tools that contribute to effective verbal and written communications. Instruction includes exercises using microcomputers. (AA: Area E2b, CSU)
641 Cooperative Education (.5-8) (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.)

## Business Microcomputer Applications

## Business Applications Windows Platform (BUSW)

A materials fee in the amount shown in the Schedule of Classes is payable upon registration for Windows Platform courses.

105 Introduction to Microcomputers (1.5) (Pass/No Pass grading.) Minimum of twenty-four lecture hours plus sixteen lab hours by arrangement. Prerequisite: BUS. 315 or equivalent. Recommended Preparation: eligibility for ENGL 838/848. Introduction to microcomputers. Covers equipment, operating systems, and Windows software applications including word processing, spreadsheet, and business presentations. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)

114 Windows Fundamentals I (1.5) Minimum of twenty-four lecture hours plus sixteen lab hours by arrangement. Recommended Preparation: BUSW 105 or equivalent; eligibility for ENGL 838 or 848. Introduction to Microsoft Windows. Includes hardware needs, relationship between versions of Windows, customizing Windows, and networking capabilities, desktop concepts and organization, OLE, accessory applications, file search and management, updating, maintenance and security. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)
115 Windows Fundamentals II (1.5) Minimum of twenty-four lecture hours plus sixteen lab hours by arrangement. 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)
214 Word Processing I Using WORD for Windows (1.5) Minimum of twenty-four lecture hours plus sixteen lab hours by arrangement. Prerequisite: BUS. 315 or equivalent. Recommended Preparation: eligibility for ENGL 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) Minimum of twenty-four lecture hours plus sixteen lab hours by arrangement. 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) Minimum of twenty-four lecture hours plus sixteen lab hours by arrangement. 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 Presentations II Using Power Point for Windows (1.5) Twenty-four lecture hours plus sixteen lab hours by arrangement per week. Prerequisite: BUSW 383 or equivalent. Examination of advanced features of Power Point such as customizing templates, animation and slide show effects, charts, importing templates and clips from MS web site, self running presentations, making presentations available to others like workgroups and new features of the current version of Office. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)
415 Spreadsheet I Using Excel for Windows (1.5) Minimum of twenty-four lecture hoursplus sixteen lab hours by arrangement. 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)
416Spreadsheet II Using Excel forWindows (1.5) Minimum of twenty-four lecture hoursplus sixteen lab hours by arrangement. Prerequisite: BUSW 415 or equivalent. Advanced spreadsheet functions. Includes design and optimization of large and complex spreadsheets, advanced formulas and functions, database features, macros, and linking of spreadsheets with other software programs. (AA, CSU)

450 Microsoft Project Fundamentals I (1.5) (Pass/No Pass or lettergrade option.) Minimum of twenty-four lecture hours plus sixteen hours by arrangement. 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) (Pass/No Pass or letter grade option) Minimum of twenty-four lecture hours plus sixteen lab hours by arrangement. Continuation of BUSW 450. Covers baselines, updating and tracking, detailed customized reports, integration with other applications, multiple projects, and collaboration. Textbook includes trial version of Microsoft Project. (To increase competency, may be taken twice for a maximum of 3 units.) (AA, CSU)
464 Database Management Fundamentals Using Access for Windows (3) Minimum of forty-eight lecture hours plus thirty-two lab hours by arrangement per term. 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) Minimum of twenty-four lecture hours plus sixteen lab hours by arrangement. 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 HTMLI (Hypertext Markup Language) (1.5) Minimum of twenty-four lecture hoursplus sixteen lab hours by arrangement. 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 HTMLII (Advanced HypertextMarkup Language) (1.5) Minimum of twenty-four lecture hours plus sixteen lab hours by arrangement. 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)

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.

## Career and Life Planning

104 Transfer Essentials and Planning (.5) (Pass/No Pass grading.) Minimum of eight lecture hours. 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) (Pass/No Pass grading.) Minimum of eight lecture hours. 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) (Pass/ No Pass grading.) Minimum of eight lecture hours. 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) (Pass/No Pass grading.) Minimum of eight lecture hours. Course assists students to research and identify a college major and understand major requirements and course planning. Highly recommended for students who are undecided about a major for an Associate degree or for university transfer. University transfer students need to complete lower division major courses to assure successful transfer. A materials fee in the 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) (Pass/No Pass grading.) Minimum of eight lecture hours. Recommended for students who plan to complete a CSM Associate degree or Certificate program or are undecided about educational goals. Learn how to research programs, course requirements, and to use college resources to successfully identify and complete an AA/AS Degree and/or Certificate. Recommended for students who plan to transfer since it is possible to concurrently complete an associate degree and transfer requirements. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (May be taken two times for a total of 1 unit.) (AA: Area E5d, CSU)

112 Career Advantage (.5-2) (Telecourse.) (Pass/No Pass grading) (Open entry/open exit) For those who are undecided about career goals or are changing career direction. Stresses the significance of clearly defined values and the development of strategies and goals for life work. (May be taken up to four times for a maximum of 2 units.) (AA: Area E5d, CSU)

120 College and Career Success (3) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen hours by arrangementperterm. 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) (Pass/ No Pass or letter grade option.) Minimum of sixteen lecture hours per term. Provides students with the tools necessary to maximize academic success by developing their understanding of college expectations, resources, facilities, and requirements. A preliminary Student Educational Plan (SEP) is researched and developed. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU: Area E)
122 Study Skills (1) (Pass/No Pass or lettergrade option.) Minimum of sixteen lecture hours per term. Provides students with information about what is expected of a college student. Students practice a variety of techniques to increase confidence and to develop college-level study skills. Emphasizing individual learning styles, effective study habits and reducing test-taking anxiety. Each student will create a study plan reflecting his/her specific learning needs. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU)

123 Career Exploration for Student Success (1) (Pass/No Pass or letter grade option.) Minimum of sixteen lecture hours per term. Assists students in decision making process. Students explore career and work options in relation to college majors. Self assessment such as understanding personality, values, interests, abilities and skills is explored. Emphasizes personal strengths and self-knowledge. Each student creates an educational/career action plan. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU)

124 Study Skills for Success Part I (.5) (Pass/ No Pass grading.) Minimum of eight lecture hours. 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 selfmanagement 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) (Pass/No Pass grading) Minimum of eight lecture hours. 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) (Pass/No Pass grading) (Open entry/open exit) Minimum of eight lecture hours. This class is designed to help students determine an appropriate career, major or job choice. Self-assessment activities such as vocational surveys, personality assessments, work values, skill identification, decision making and goal setting may be used. Students will research career, majors, and life planning issues in order to make informed choices. A materials fee in the amount as shown in the Schedule of Classes is payable upon registration. (May be taken two times for a maximum of 1 unit.) (AA: Area E5d, CSU)

127 Career Choices II: Job Search (.5) (Pass/No Pass grading) (Open entry/open exit) Minimum of eight lecture hours. 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) (Pass/No Pass or letter grade option.) Minimum of eight to forty-eight lecture hours per term. A practical, contemporary, and diversified approach to maintaining a healthy, purposeful, well-balanced life. Emphasizes the importance of developing effective personal skills for career growth. (AA: Area E5d, CSU: Area E)
140 Peer Counseling (3) Minimum of fortyeight lecture hours per term. An orientation and training course to develop peer counseling skills, emphasizing the experiential process of interpersonal communication as well as the theoretical explanation of the counseling process and behavior. Students may be given the opportunity to do volunteer peer counseling work on campus or in the community. (AA: Area E5d, CSU: Area E)
141 Peer Relations and Community Service (1) (Pass/No Pass grading.) Minimum of sixteen lecture hours per term. 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) Minimum of forty-eight lecture hours per term. 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) (Pass/No Pass or lettergrade option.) Minimum of sixteen lecture hoursplussixteen hours by arrangement perterm. 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) (Pass/No Pass grading.) Minimum of eight to thirty-two lecture hours plus sixteen hours by arrangement. 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) Minimum of sixteen lecture hours per term. Prerequisite: admission to Honors Program. Introduction to college. The process and tradition of academic scholarship. The techniques oflearning, research, and student skills. (Fall only.) (AA: Area E5d, CSU)
404 Honors Seminar "B" (1) Minimum of sixteen lecture hours per term. 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) (Pass/ No Pass or letter grade option.) Minimum of thirty-two lecture hours per term. 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.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ 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.
192 Elementary Chemistry (4) Minimum of forty-eight lecture hours and forty-eight lab hours plus sixteen hours by arrangement per term. Prerequisite: MATH 110 or one semester course of algebra. It is recommended 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) Minimum of forty-eight lecture hours and ninety-six lab hours plus sixteen hours by arrangement per term. 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) Minimum of forty-eight lecture hours and ninety-six lab hours plus sixteen hours by arrangement per term. 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) Minimum of forty-eight lecture hours, sixteen recitation hours, and eighty lab hours plus sixteen hours by arrangement per term. Prerequisite: CHEM 220 or 225 . Introduction to basic concepts of structure and reactivity of organic compounds; reactions of major functional groups; reaction mechanisms; and synthesis. Principles and practice of laboratory techniques; methods of separation, purification, and synthesis. Theory and practice of instrumental methods, including spectroscopy. Designed as the first semester of a one-year organic course or as a one-semester survey. Extra supplies may be required. (AA: Area E5a, CSU: Area B1/Area B3, UC: Area 5A)

232 Organic Chemistry II (5) Minimum of forty-eight lecture hours, sixteen recitation hours, and eighty lab hours plus sixteen hours by arrangement per term. 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) Minimum of thirty-two lecture hours and ninety-six lab hours plus sixteen hours by arrangementperterm. 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) Minimum offorty-eight lecture hours and fortyeight lab hours plus sixteen hours by arrangement perterm. 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: AreaE5a, CSU: Area B1/Area B3) (CAN CHEM 6)

420 Health Science Chemistry II (4) Minimum of forty-eight lecture hours and fortyeight lab hours plus sixteen hours by arrangement perterm. 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 210-220 and CHEM 410-420 will receive credit for CHEM 210-220 only. (AA: Area E5a, 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.

## 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours by arrangement per term. A beginning course in Mandarin Chinese with instruction and practice in understanding, speaking, reading, and writing. (AA: Area E5c, CSU: Area C2, UC)

112 Elementary Chinese II (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours by arrangement per term. Prerequisite: CHIN 111 or equivalent with Pass 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: AreaE5c, CSU: Area C2, UC)
121 Advanced Elementary Chinese I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours by arrangement per term. Prerequisite: CHIN 112 or equivalent with Pass or a grade of $C$ or higher. The third course in elementary Mandarin, with continued emphasis on grammar and the spoken language. (AA: Area E5c, CSU: Area C2, UC)

122 Advanced Elementary Chinese II (3)
(Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours by arrangementperterm. Prerequisite: CHIN 121 or equivalent with Pass 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours by arrangement per term. Prerequisite: CHIN 122 or equivalent with Pass or a grade of $C$ or higher. Approximately the first half of the semester's work in intermediate Mandarin Chinese as taught at four-year institutions. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 6)

132 Intermediate Chinese II (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours by arrangement per term. Prerequisite: CHIN 131 or
equivalent with Pass or a grade of $C$ or higher. Approximately the second half of the semester's work in intermediate Mandarin Chinese as taught at four-year institutions. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 6)
134 Basic Chinese Writing Skills Online (3) (Pass/No Pass or letter grade option.) (Online Course) Prerequisite: CHIN 122 or equivalent with Pass or a grade of $C$ or higher. Advanced course in Mandarin designed to introduce basic Chinese writing skills. Provides a forum to improve comprehension, vocabulary, and 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) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: CHIN 132 or equivalent with Pass or a grade of $C$ or higher. A proficiency-oriented course designed for further practice in conversation, reading, and composition with pronunciation and continued grammar review. Conducted primarily in Mandarin Chinese. (AA: Area E5c, CSU, UC: Area $6^{*}$ )
201 Chinese Character Writing for Beginners (1) (Pass/No Pass grading.) Minimum of sixteen lecture hours plus eight lab hours by arrangement. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. A beginning conversational Mandarin Chinese course. Extensive oral training in Mandarin. Emphasizes practical vocabulary, pronunciation, and idiomatic usage, with sufficient grammar to give flexibility to the spoken language. The phonetic system Pinyin is used to represent sounds in Mandarin and substitute for characters as a written form. Designed for students who wish to acquire basic skills of spoken Mandarin Chinese. (AA: Area E5c, CSU)

212 Colloquial Mandarin Chinese II, Elementary (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: CHIN 211 or equivalent with Pass 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) (Pass/No Pass grading.) Minimum of eight lecture hours. 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.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848. Introduction to computers and information science. Includes computer terminology, computer hardware and software, networks, common operating systems, data representation, telecommunications, Internet access and security issues, computer ethics, and beginning programming in Visual Basic and/or HTML. Covers topics motivated by current issues and events. Examines such issues as privacy, intellectual property, and copyright infringements. A materials fee in
the amount shown in the Schedule of Classes is payable upon registration. (AA: Area E2b/ Area E5b, CSU, UC)

111 Introduction to Internet Programming (3) (Pass/No Pass or letter grade option) Minimum offorty-eightlecture hours andsixteen lab hours plus sixteen hours by arrangement per term. Recommended Preparation: eligibility for ENGL 838 or 848 . Course provides an introduction to the World Wide Web and internet programming. Basic XHTML and CSS will be introduced, as well as client-side scripting in JavaScript using variables, functions, and objects. DHTML (Dynamic HTML programming with XHTML, CSS, JavaScript, and the DOM (Document Object Model.) Server-side scripting with ASP, JSP, Perl and PHP will be demonstrated. Web 2.0 topics, such as Ajax, blogs, mashups, podcasts, RSS feeds, Web services, and wikis will be covered. (AA, CSU)
125 Visual Basic I (4) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and forty-eight lab hours plus sixteen hours by arrangement per term. 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)

## 151 Networks and Digital Communication

(3) (Pass/No Pass or letter grade option) Minimum of forty-eight lecture hours and sixteen lab hours plus sixteen hours by arrangement per term. 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)

254 Introduction to Object-Oriented Program Design (4) (Pass/No Pass or letter grade option.) Minimum offorty-eightlecture hours and forty-eight lab hours per term. Recommended Preparation: completion of MATH 110 or equivalent with a grade of $C$ or higher and eligibility for ENGL 838 or 848. Introduction to object-oriented computer programming for computer science majors and computer professionals. Includes simple data types; control structures; an introduction to array and string data structures and algorithms; debugging techniques; history of computer science, computer systems and environments; and the social implications of computing. Emphasizes object-oriented design, good software engineering principles and developing fundamental programming skills in Java. This course conforms to the ACM CS0 standards. A materials fee in the amount shown in the Schedule ofClasses is payable upon registration. (AA: Area E2b, CSU)

255 (CS1) Programming Methods: Java (4) (Pass/No Pass or lettergrade option.) Minimum of forty-eight lecture hours and forty-eight lab hours plus sixteen hours by arrangement per term. 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) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours and forty-eight lab hours plus sixteen hours by arrangement per term. 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. Objectoriented approach to a variety of abstract data types including: lists, stacks, queues, priority queues, trees, maps, sets and graphs. Also includes advanced sorting and searching topics, and algorithmic analysis using Big-O notation. This course conforms to the ACM CS2 standards. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU, UC)

278 (CS1) Programming Methods: C++ (4) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and forty-eight lab hours plus sixteen hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of fortyeight lecture hours and forty-eight lab hours plus sixteen hours by arrangement per term. Prerequisite: CIS 278 or equivalent. Recommended Preparation: eligibility for ENGL 838/848. Data abstract data type implementation and usage techniques for computer science majors and computer professionals. Object-oriented approach to a variety of 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) (Pass/No Pass or letter grade option.) Minimum of sixteen lecture hours and sixteen lab hours per term. 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) (Pass/ No Pass or letter grade option.) Minimum of sixteen lecture hours and sixteen lab hours per term. 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)

362 Enterprise Database Management (4) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and forty-eight lab hours per term. Prerequisite: CIS 254 or equivalent. Recommended Preparation: ENGL 838 or 848 or equivalent. Introduction to database design, implementation, and management methods; database administration issues; current issues and trends. Hands-on design and development of databases using Oracle and PL/SQL. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)
377 Internet Programming: JavaScript/ HTML (2) (Pass/No Pass or letter grade option.) Minimum of twenty-four lecture hours and twenty-four lab hours plus eight hours by arrangementperterm. Prerequisite: CIS 254 or equivalent coursework. Recommended Preparation: eligibility for ENGL 848 andfamiliarity with the Internet. Study of the object-oriented JavaScript programming language. Includes a quick overview of HTML (HyperText Markup Language), client-side programming, variables, functions, event handlers, objects, form validation, image and form objects, frames, windows, and cookies. (AA, CSU)
379 Internet Programming: XML (3) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours plus sixteen hours by arrangement per term. 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) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours plus sixteen hours by arrangement per term. 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 objectoriented 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) (Pass/ No Pass or letter grade option.) Minimum of twenty-four lecture hours and twenty-four lab hours plus eight hours by arrangement. 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 objectoriented 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) (Pass/No Pass or letter grade option.) Minimum of twenty-four lecture hours and twenty-four lab hours plus eight hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of twenty-four lecture hours and twentyfour lab hours plus eight hours by arrangement per term. 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) (Pass/ No Pass or letter grade option.) Minimum of twenty-four lecture hours and twenty-four lab hours plus eight hours by arrangement per term. Prerequisite: CIS 254 or equivalent coursework. RecommendedPreparation: eligibility for ENGL 848 and familiarity with the Internet. Access to a computer with Internet capability is strongly recommended. Covers the basic components of the Perl language, including arrays, lists, hashes, regular expressions, and subroutines. Addresses other supporting topics, such as installation, file handlers, debugging, and standard Perl modules. (AA, CSU)
479 Network Security Fundamentals (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. 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)

488 Firewalls and Network Security (1.5) (Pass/No Pass or letter grade option.) Minimum of twenty-four lecture hours plus eight hours by arrangement. Prerequisite: CIS 479 or equivalent. Recommended Preparation: eligibility for $E N G L$ 838. Provides a comprehensive look at firewalls and their use with other network security components to secure local area networks. Covers DMZ, Routers, VPN, Proxy, Authentication, and Encryption. Prepares students for industry standard tests for Network

Security Certification, such as Comptia and Microsoft. (May be taken twice for a maximum of 3 units.) (AA, CSU)
489 Computer Forensics (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours plus sixteen hours by arrangement per term. Prerequisite: CIS 151 and 489 or equivalent. Recommended Preparation: eligibility for ENGL 838 or 848. Access to a computer with Internet capability is strongly recommended. Comprehensive course that includes an overview of the foundations of network security, an introduction to protocol analysis, network security risk analysis, use of risk analysis to develop a network security policies, an overview of firewalls and VPNs, using and configuring intrusion detection systems, responding to network intrusions, preventing network intrusions, and managing and improving network defense. (AA, CSU)
491 Computer Forensics: Search and Seizure (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hoursplus sixteen hours by arrangementperterm. 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) (Pass/No Pass or letter grade option). Minimum offorty-eight lecture hours and sixteen lab hours plus sixteen hours by arrangement per term. Prerequisite: CIS 489 or equivalent. Recommended Preparation: eligibility for $E N G L 838$ 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) (Pass/ No Pass or letter grade option) Minimum offortyeight lecture hours and sixteen hours by arrangement per term. 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)
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ 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.)

## Consumer Arts and Science

310 Nutrition (3) Minimum of forty-eight lecture hours per term. Principles of good nutrition. Includes discussion of nutrients, food sources, and functions in the body as related to optimal health. Emphasizes the physiological processes, including digestion and metabolism of nutrients. Students also conduct a personal nutrition assessment. (May be substituted for HSCI 113 in meeting the Health Science requirement.)

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.)

## Cooperative Work Experience Education

Cooperative Work Experience education is offered in two basic programs: (1) general workplace experience; and (2) vocational experience. Students may choose between letter grading and Pass/No Pass grading.
640 Cooperative Work Experience Education/General Workplace Experience (.5-3) (Pass/No Pass or letter grade option) Designed for the student who has a job that does not necessarily relate to a specific occupational goal or college major. Under the direction of an instructor, students focus on career awareness and the development of desirable employment habits and attitudes. Each student must establish measurable learning objectives appropriate for his or her job. Students may be eligible for up to three units of credit per term, and the course may be taken for a total of six units of credit. Seventy-five hours of paid work (approximately 5 hours per week) or sixty hours of unpaid work (approximately 3.5 hours per week) is equivalent to one unit of credit. (AA: Area E5d, CSU)

641 Cooperative Work Experience Education (.5-8) (Pass/No Pass or letter grade option.) Work must be in a field related to a career goal or major. Under the direction of an instructor, students focus on career goals and development. Students may be eligible for up to 8 units of credit per term, 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 Pass. (AA: Area E5d, CSU)

## Cosmetology

The courses described below are open only to those students accepted in the Cosmetology Program. Completion of the tenth grade or equivalent required by California Board of Barbering and Cosmetology; completion of the twelfth grade is recommended. A grade of C or higher is necessary for progression in the sequence of courses. Concurrent enrollment in ESL classes is strongly advised for non-native speakers. Upon successful completion of the program, including satisfactory performance on a comprehensive "mock board" examination including both theory and practical performance, the candidate receives a Certificate in Cosmetology and is eligible to write for the California Bureau of Cosmetology licensing examination. Note: Applicants for the California Board of Barbering and Cosmetology licensure must be 17 years of age or older.
712 Fundamentals of Cosmetology I (4.5-9) Minimum of eighty lecture hours and two-hundred forty lab hours per term. (AA)
722 Fundamentals of Cosmetology II (4.5-9) Eighty lecture hours and two-hundred forty lab hours per term. 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) Minimum of eighty lecture hours and two-hundred forty lab hours per term. (AA)

742 Advanced Cosmetology II (4.5-9) Minimum of eighty lecture hours and two-hundred forty lab hours per term. 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) Minimum of eighty lecture hours and two-hundred forty lab hours 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-ofstate requirements. Course requirements must be met satisfactorily prior to state examination. (May be taken for a maximum of 18 units of credit.) (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.)

## 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 parttime students.

647 Dental Assisting Cooperative Work Experience Education (1-4) (Pass/No Pass 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) Minimum of thirty-two lecture hours and thirty-two lab hours per term. Perform basic dental office procedures, including telephone management, letter writing, appointment control, use of dental office software, dental office accounting procedures, management of recall systems, operation of office equipment, ethics, and jurisprudence. A materials fee as shown in the Schedule of Classes is payable upon registration. (Fall only.) (AA)
721 Dental Materials I (3) Minimum of thirty-two lecture hours and forty-eight lab hours per term. Equipment and safety procedures necessary in the dental laboratory and operatory. Physical properties, with study in dental cements, restorative impression materials, and
gypsum products. Designed to develop skills necessary for manipulation in both the dental treatment rooms and laboratory. Study of the principles of prosthodontics. Extra supplies may be required. (Fall only.) (AA)
722 Dental Materials II (2) Minimum of sixteen lecture hours and forty-eight lab hours per term. Study of impression materials, dental casting alloys, removable prosthodontics, with special emphasis on dental assisting and registered dental assisting duties pertaining to dental materials. Extra supplies may be required. (Spring only.) (AA)
731 Dental Science I (3) Minimum of fortyeight lecturehoursper term. 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) Minimum offortyeight lecture hours per term. 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) Minimum of sixteen lecture hours per term. Prepares allied health students to work and communicate effectively with patients, auxiliaries, practitioners, and other health professionals. (Fall only.) (AA)
740 Chairside Assisting I (3) Minimum of thirty-two lecture hours and forty-eight lab hours per term. 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) Minimum of thirty-two lecture hours and forty-eight lab hours per term. Further study in chairside procedures. Emphasizes students' individual development. Study of dental specialties; instrumentation, application, procedure, and patient instruction. Introduction to intra-oral functions. DA and RDA levels. Coronal Polish by arrangement. (Spring only.) (AA)
743 Coronal Polish (.5) (Pass/No Pass grading.) Minimum ofeight lecture hours and six lab hours perterm. 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) Minimum of forty-two lab hours. 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) Minimum of eightyfour lab hours. 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) Minimum of sixteen lecture hours and forty-eight lab hours per term. 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.)

## Dental Hygiene

200 Introduction to Dental Hygiene (3) Minimum of forty-eight lecture hours per term. Overview of the scope and responsibility for the dental hygiene profession. Course provides the prospective dental hygiene student with the ability to make an informed decision regarding entry into the profession. Required for admission to the Dental Hygiene program. (Fall only) (AA, CSU)

## Developmental Skills

811 Specific Learning Skills Assessment (.5) (Pass/No Pass grading.) (Open entry/open exit) Eight lecture hours by arrangement per term. Use of an assessment battery to determine specific learning capacity as well as academic skill levels in reading, spelling, and mathematics. Following assessment, students will design and implement, with the assistance of instructors, individual learning programs. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (Units do not apply toward AA/AS degree.)

817 Assistive Computer Access (.5-3) (Pass/No Pass grading.) (Open entry/open exit) Minimum of twenty-four to one-hundred forty-four lab hours per term. 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 microcomputers. Training in the use of computer access technologies will occur within the context of word processing. No previous computer experience is required. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (Units do not apply toward AA/AS degree.)
819 Study Skills for Academic Success (1) (Pass/No Pass grading.) Minimum of sixteen lecture hours per term. Designed to assist students with specific learning problems to obtain study skills and develop learning strategies to reach their educational objectives. Includes understanding learning styles, intervention strategies, time management, note taking, test preparation, memory techniques, critical thinking, and problem solving. (Units do not apply toward AA/AS degree.)
879 Selected Topics (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.

120 Principles of Technical Drawing (3) Minimum of thirty-two lecture hours and sixtyfour lab hours plus sixteen lab hours by arrangement. 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) Minimum of thirty-two lecture hours and sixty-four lab hours plus sixteen lab hours by arrangement per term. Prerequisite: one semester of college draftingorequivalent. 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) Minimum of thirty-two lecture hours and sixty-four lab hours plus sixteen lab hours by arrangement per term. Prerequisite: DRAF 100 or 121 or equivalent with a grade of Cor 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) Minimum of thirty-two lecture hours and sixty-four lab hours plus sixteen lab hours by arrangement perterm. 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 DraftingIV (3) Minimum of thirty-two lecture hours and sixty-four lab hours plus sixteen lab hours by arrangement perterm. Prerequisite: DRAF 122 orequivalent 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) Minimum of thirty-two lecture hours and sixty-four lab hours plus sixteen lab hours by arrangement per term. 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)

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.)

## Economics

100 Principles of Macroeconomics (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. The American economy; the price system; the role ofbusiness, 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: AreaE5b, CSU: Area D, UC: Area 4) (CAN ECON 2)

102 Principles of Microeconomics (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading 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) Minimum of sixty-four lecture hours per term. Prerequisite: MATH 120 or 123 or equivalent at a postsecondary institution ORequivalent skill level as measured by a satisfactory score on a math placement test. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Designed for the Business and Economics major. Graphic presentation, measures of central tendency, dispersion, index numbers, time series, seasonal indexes, probability, hypotheses testing, type I and type II error, Chi-square goodness-of-fit test, contingency tables, regression and correlation analysis, and non-parametric methods. Introduction to using a computer. (AA: Area C1/Area E2b, CSU: Area B4, UC: Area 2A*)
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ 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.)

## Electronics Technology

Extra supplies/lab fee may be required in all Electronics Technology courses.

110 Introduction to Fundamentals of Electronics (3) Minimum of thirty-two lecture hours and forty-eight lab hours plus thirty-two lab hours by arrangement per term. Reading simple schematic diagrams and constructing elementary electrical/electronics circuits; making measurements with multimeter and oscilloscopes; using DC power supplies and AC power sources; basic digital principles. Emphasizes laboratory experiments and techniques. For non-Electronics Technology majors. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

131 Copper-Based Network Cabling Fundamentals (4.5) Minimum of fifty-six lecture hours and sixty-four lab hours plus thirty-two lab hours by arrangement per term. 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) Minimum of sixteen lecture hours and forty-eight lab hours plus thirty-two lab hours by arrangement per term. 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 installation govern skill development and the evaluation process. Uses industry-based troubleshooting techniques and test equipment to develop diagnostic skills. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

201 D.C. Electronics (3) Minimum of thirty-two lecture and forty-eight lab hours plus thirty-two lab hours by arrangement per term. Prerequisite: Eligiblefor orsuccessfulcompletion 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) Minimum of thirtytwo lecture hours and forty-eight lab hours plus thirty-two lab hours by arrangement per term. 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 AC, AC and resistance, inductive and capacitive reactance, transformers, resonance, and the use of power supplies, multimeters, and oscilloscopes. (AA, CSU)

215 Introduction to PC Hardware (3) Minimum offorty lecture hours and twenty-four lab hours plus sixteen lab hours by arrangement per term. 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) Minimum of forty lecture hours and twenty-four lab hours plus sixteen lab hours by arrangement per term. 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) Minimum of thirty-two lecture hours plus thirty-two hours by arrangement per term. 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) Minimum of sixteen lecture hours plus thirty-two hours by arrangement per term. Prerequisite: ELEC 231 with a grade of C or higher. Corequisite: concurrent enrollment in ELEC 302. In-depth study of algebra, trigonometry, logarithms, and graphing, as applied to amplifier, oscillator, and microwave circuits. (AA: Area C1, CSU)
262 Digital Electronics (4) Minimum of forty-eight lecture hours and sixty-four lab hours plus thirty-two hours by arrangement per term. Prerequisite: ELEC 201 or the equivalent with a grade of $C$ or higher. Covers the analysis and troubleshooting of combinational and 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) Minimum offorty-eight lecture and sixty-four lab hours plus sixteen lab hours by arrangement per term. Prerequisite: ELEC 202 or equivalent with a grade of $C$ or higher. Study of circuit behavior when DC and/ or AC voltage is applied to various combinations of diodes and bi-polar and field-effect transistors. Emphasizes verification of basic circuit laws through experiments, lab procedures, basic electronic measuring equipment, and computerbased simulation. (AA, CSU)
282 Introduction to Soldering and Rework (2) Minimum of sixteen lecture hours and fortyeight lab hours plus thirty-two hours by arrangement per term. Recommended Preparation: ELEC110 or 202 OR their equivalentexperience with a grade of $C$ or higher. Introduces high reliability soldering and rework techniques including point-to-point, through-hole, and surface mount technologies. Identification of workmanship standards and self or peerevaluation against said standards is stressed. Includes preparation and care of soldering equipment. (AA, CSU)
290 Introduction to Communications Systems (3) Minimum of thirty-two lecture and forty-eight lab hours plus thirty-two hours by arrangement per term. Prerequisite: ELEC 202 or equivalent with a grade of $C$ or higher. Study of the reception and transmission of electromagnetic waves containing information. Includes AM and FM signal processing, television broadcasting, fiber optics, digital and satellite communications technologies, and PCS (cellular/pager) related technologies. (AA, CSU)
310 Introduction to Microprocessors (3)
Minimum of thirty-two lecture hours and fortyeight lab hours plus sixteen lab hours by arrangement per term. Prerequisite: ELEC 262 with a grade of C or higher or equivalent qualification. Covers the 16 -bit microprocessor: the CPU instructional set, basic system hardware, chip select systems, memory, and direct I/O. Emphasizes assembly language programming and software control of hardware. (AA, CSU)

320 Linear Circuit Analysis (4) Minimum of forty-eight lecture hours and sixty-four lab hours plusthirty-two lab hours by arrangementperterm. Prerequisite: ELEC 275 or equivalent with a grade of $C$ or higher or equivalent experience; completion of or concurrent enrollment in ELEC 232 or equivalent experience. Circuit parameter analysis, including frequency response techniques and computer-based simulation, of discrete and monolithic multistage audio voltage and power amplifiers and operational amplifiers. (AA, CSU)

## 332 Prototype Project Development (2)

 Minimum of sixteen lecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. Prerequisite: completion of BUSW 530; ELEC 110 or 202; ELEC 282 or their equivalent with a grade of $C$ or higher or equivalent experience. An introduction to the process of prototype project development in the electronics industry. Includes catalog research, parts identification and sizing, layout for functionality and style, circuit board layout and fabrication, final assembly and construction, final testing, and product documentation. (AA, CSU)360 Microcomputer Interfacing (3) Minimum of thirty-two lecture hours and forty-eight lab hours plus sixteen lab hours by arrangement per term. 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) Minimum of forty-eight lecture hours and forty-eight lab hours plus sixteen lab hours by arrangement per term. 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) Minimum offorty-eight lecture hours andsixty-four lab hours plus thirty-two lab hours by arrangementper term. Prerequisite: ELEC 320 or equivalent with a grade of $C$ or higher. Analysis and computerbased 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) Minimum of forty-eight lecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. Prerequisite: ELEC 262 and 275 or equivalent with a grade of $C$ or higher or equivalent experience. Theory, construction, and operation of fractional- 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) Minimum offorty-eight lecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. 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) Minimum of forty-eight lecture hours and forty-eight lab hours plus thirtytwo hours by arrangementper term. Prerequisite: ELEC 422 or equivalent with a grade of $C$ or bigher. 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) Minimum of forty-eight lecture hours and forty-eight lab hours plus thirty-two hours by arrangementper term. Prerequisite: ELEC262 and 275 or equivalent with a grade of Corhigher or equivalent experience. A practical course in industrial measurement of temperature, flow, pressure, and level, focusing on their physical basis and fundamental laws. Describes application concepts in industrial instrumentation systems, sensor troubleshooting, and factors that influence sensor and system accuracy, performance, and calibration while stressing basic sensor theory of operation, faults, and calibration. (AA, CSU)
442 Electronic and Pneumatic Process Control Systems (4) Minimum offorty-eightlecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. Prerequisite: ELEC 441 or equivalent with a grade of $C$ or higher. A practical course in industrial electronic and industrial pneumatic control systems. Stresses calibration theory, a review of transmitter calibration, electronic systems, pneumatic systems, controller operation, control loop theory, PID, loop tuning, and control loop troubleshooting. (AA, CSU)

444 Automated Process Control System Design (4) Minimum offorty-eightlecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. Prerequisite: ELEC 442 or equivalent with a grade of C or higher. A practical course in process control system design and tuning. Covers integration of sensors, transmitters, indicators, controllers and final control elements. Stresses documentation of system (PCSU.ID), control loop theory, PID, loop tuning, and control loop troubleshooting. (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ 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) Minimum of thirty-two lecture hours andforty-eight lab hoursplussixteen hours by arrangement per term. Prerequisites: MATH 130 or equivalent. 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) Minimum of forty-eight lecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. Prerequisite: MATH 130. 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) Minimum of thirty-two lecture hours and forty-eight lab hours plus sixteen hours by arrangement per term. Prerequisite: MATH 241 or MATH 251. Introduction to problem solving, programming and computational methods using the MATLAB programming environment. Procedural programming, recursion, sorting, object-oriented representations and data structures. Plotting and data visualization, introduction to statistical analysis of data, systems of linear equations, numerical methods. Applications in engineering, mathematics, and the sciences. A material fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU/UC*)
230 Engineering Statics (3) Minimum of forty-eight lecture hours plus sixteen hours by arrangementper term. Prerequisites: PHYS 250; MATH 252. Corequisite: concurrentenrollment 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) Minimum of forty-eight lecture hours per term. Prerequisite: ENGL 230. Fundamentals of kinematics and kinetics of particles and rigid bodies. Topics include kinematics of particle motion; Newton's second law, work-energy and momentum methods; kinematics of planar and three-dimensional motions of rigid bodies; D'Alembert's principle, work-energy and momentum principles for rigid body motion; introduction to mechanical vibrations. (AA, CSU, UC*)
260 Circuits and Devices (4) Minimum of forty-eight lecture hours and forty-eight lab hours per term. 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 transistors and diodes. Laboratory assignments include both hardware techniques and computer- aided analysis. (Spring only.) (AA, CSU, UC*) (CAN ENGR 6)
270 Materials Science (3) Minimum of thirty-two lectur hours and forty-eight lab hours plus sixteen hours by arrangement per term. Prerequisites:MATH251; CHEM210. Recommended Preparation: PHYS250. Application of basic principles of physics and chemistry to
the engineering properties of materials. Atomic and crystal structures, phase transformation, heat treatment of metals. The relationship between atomic- and micro-structure and the mechanical and electrical properties of metals, concrete, polymers, ceramics, and semiconducting materials. (AA, CSU, UC*) (CAN ENGR 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.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ 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 Pass 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 non-transfer courses in composition, film, language, literature, reading, and speech communication. Entering students should enroll first in one of the following courses in composition:

| Transfer Courses | Non-Transfer Courses |
| :--- | :--- |
| English 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, 135,
Non-Transfer Courses
English 875
ESL 400 Speech 855
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 and 135, 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 Non-Transfer courses are those numbered 800 or above.

The following English courses are pass-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) Minimum of forty-eight lecture hours plus sixteen hours by arrangementperterm. Prerequisite: ENGL 838 or 848; or ESL 400, with a grade of C or bigher (orappropriate skill level indicated by the English placementtests andother measures orequivalent). 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/AreaE2a, CSU: AreaA2, UC: Area 1A) (CANENGL2) (ENGL 100 and 110 or ENGL 100 and $165=$ CAN ENGL SEQ A)

101 English Practicum (1) (Pass/No Pass grading.) Minimum of thirty-two lecture hours per term. 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) Minimum of forty-eight lecture hours plussixteen hours by arrangement per term. 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) Minimum of forty-eight lecture hours plussixteen hours by arrangement per term. Prerequisite: ENGL 100 with a grade of C or bigher. Designed to introduce students to the study of the short story novel. Students will write eight to ten thousand words in expository essays and otherkinds of assignments employing methods of literary analysis and demonstrating skill in critical thinking. (AA: Area E2a, CSU: Area A3/Area C2, UC: Area 1B)

161 Creative Writing I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. 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. (AA: Area E2a, CSU: Area C2, UC) (CAN ENGL 6)

162 Creative Writing II (3) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture hoursperterm. Prerequisite: ENGL 161 with a grade of C or higher. Further instruction in the writing offiction and/or poetry. Students plan and complete an extensive creative writing project through agreement with the instructor. (AA: Area E2a, CSU: Area C2, UC)
163 Creative Writing III (3) (Pass/No Pass or letter grade option) Minimum of forty-eight lecture hours per term. Prerequisite: ENGL 162 with a grade of C or higher. Instruction in the writing of fiction or poetry for advanced students, with an emphasis on longer works. (To increase competency, may be taken twice for a maximum of 6 units.) (AA: Area E2a, CSU: Area C2, UC)
165 Advanced Composition (3) Minimum of forty-eight lecture hours plus sixteen hours by arrangementper term. Prerequisite: ENGL 100 with a grade of Corhigher. 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 oflanguage 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 (.5-8) (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) Minimum of eighty lecture hours plus sixteen hours by arrangement per term. Recommended Preparation: appropriateskill level indicated by the English placement tests and other measures or READ 816 or 825 with a grade of $C$ or higher. Practice in composition and reading based on the study of essays and other reading material. Composition of short essays, with focused work on reading, paragraph development, and sentence structure. (Units do not apply toward AA/AS degree.)

838 Intensive Introduction to Composition and Reading (5) Minimum of eighty lecture hours plus sixteen hours by arrangement per term. All students who received a grade of C in ENGL 828 are strongly advised to enroll in ENGL 838. Prerequisite: appropriate skill level indicated by the English placement tests and other measures; OR ENGL 828 or 400 with a grade of C or higher; OR ESL 400 with a grade of C or higher; OR ENGL 826 with a grade of C or higher and READ 826 with Pass or a grade of C or higher (or eligibility for READ 836 or 400 -level reading course). Intensive practice in reading, writing, listening, speaking, and thinking to develop and refine composition proficiency. Includes intensive instruction in reading comprehension and vocabulary development, elements of the essay, and composing techniques necessary for college writing (writing from source materials, analytical reading, and English usage and mechanics). Designed mainly to prepare students to meet competency standards required for entrance into English 100. (AA: Area C2/Area E2a)

848 Introduction to Composition and Reading (4) Minimum of sixty-four lecture hours plus sixteen lab hours by arrangement per term. All students who received a grade of $C$ in $E N G L$ 828 are strongly advised to enroll in ENGL 838.

Prerequisite: appropriateskill level indicated by the English placement tests and other measures OR ENGL 828 or 400 with a grade of $C$ or higher OR ESL 400 with a grade of C or higher OR ENGL 826 with a grade of $C$ or higher and READ 826 with Pass or a grade of $C$ or higher (or eligibility for READ 836 or 400 -level reading course). Practice in 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 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)
850 Writing Workshop (.5-3) (Pass/No Pass grading.) (Open entry/open exit) Minimum of twenty-four to one-hundred forty-four lab hours per term. For students having difficulty with their writing. Includes individual appointments with a faculty member who will help the student identify writing deficiencies and correct writing errors. Some writing areas that might receive attention are organization, development, and mechanics, although help will be tailored to the specific needs of the student. (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) (Pass/ No Pass grading.) Minimum of sixteen lecture hours. Introduction to skills required in workplace writing, including judging purpose and audience, writing clearly and grammatically, cultivating a professional and appropriate tone, and mastering any writing tasks specific to particular professions. Offered in self-contained, one-unit modules. Descriptions of the specific modules offered will be printed each semester in the Schedule of Classes. (Not degree applicable; not transferable.)

875 English Grammar (3) Minimum of forty-eight lecture hours per term. Comprehensive review of English grammar, including topics such as syntax, agreement, verb tenses, precision, coordination and subordination, the absolute phrase, the elliptical clause, and punctuation and graphics. (Units do not apply toward AA/AS degree.)
879 Selected Topics (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) Minimum offorty-eight lecture hoursplussixteen hours by arrangement per term. Prerequisite: ENGL 100 or equivalent with a grade of $C$ or bigher. Study of a representative selection of the 20th Century fiction, poetry, and drama. Authors may include T.S. Eliot, Pablo Neruda, Vladamir Nabokov, Samuel Beckett, Virginia Woolf, Gabriel Garcia Marquez, Sylvia Plath, Eugene O'Neil, Toni Morrison, among others. Emphasis on innovations of the Century's major writers within the context of literary and cultural movements. Lectures, discussions, related reading, and writing of critical papers. (AA: Area E2a/Area E5c, CSU: Area C2, UC: Area 3B)

105 The Bible as Literature (3) Minimum of forty-eight lecture hours per term. 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)
113 The Novel (3) Minimum of forty-eight lecture hoursper term. 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) Minimum offorty-eight lecture hoursperterm. 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) Minimum of forty-eight lecture hours per term. 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) Minimum of forty-eight lecture hours per term. 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: Area3B) (CANENGL 16) (LIT. 201 and 202 = CAN ENGL SEQ C)
220 Introduction to World Literature (3) Minimum offorty-eight lecture hoursplus sixteen
hours by arrangement per term. 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) Minimum offorty-eight lecture hoursplussixteen hours by arrangement per term. Prerequisite: ENGL 100 or equivalent with a grade of $C$ or bigher. 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) Minimum offorty-eight lecture hours plussixteen hours by arrangement per term. Prerequisite: $E N G L$ 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)
277 Film and Literature (3) Minimum of forty-eight lecture hours and sixteen lab hours per term. 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 not be taken for pass following FILM 277. (May be taken three times for a maximum of 9 units.) (AA: Area E2a/Area E5c, CSU: Area C1, UC: Area 3A)

430 Mythology and Folklore (3) Minimum of forty-eight lecture hours per term. 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)
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)

804 Twentieth-Century Literature (3) (Pass/No Pass grading.) Minimum offorty-eight lecture hours plus sixteen hours by arrangement per term. 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) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Study of selected texts from the Old and New Testaments and from the Apocrypha. Lectures, discussions, related readings, quizzes, and optional special project. (AA)
820 Introduction to World Literature (3) (Pass/No Pass grading.) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. Study of World Literature and texts (poetry, prose, drama and film) from antiquity to the present with a focus on major authors representing literary traditions world-wide. Lectures, discussions, recorded readings, and writing of critical essays. (AA)

823 American Literature I (3) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Study of American literature from its beginning through Mark Twain. Lectures, reading, discussions, and writing of optional critical essays. (AA)
824 American Literature II (3) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Study of American literature since Mark Twain. Lectures, readings, discussions, and writing of optional critical essays. (AA)
830 Mythology and Folklore (3) (Pass/No Pass grading.) Minimum of forty-eight lecture hoursplussixteen hours by arrangementperterm. 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) (Pass/No Pass grading.) Minimum offorty-eight lecture hoursplussixteen hours by arrangement per term. Study of representative plays and poems, with emphasis on Shakespeare's poetic and dramatic skills and his understanding of human nature. Readings, discussions, and writing of optional critical papers. (AA)

837 Survey of English Literature I (3) (Pass/No Pass grading.) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. Study of the typical works of major English writers from Chaucer to the end of the 18th Century. Lectures, discussions, recorded readings. (AA)

838 Survey of English Literature II (3) (Pass/ No Pass grading.) Minimum offorty-eight lecture hours plussixteen hours by arrangement per term. Study of the typical works of major English writers of the 19th and 20th Centuries. Lectures, discussions, recorded readings. (AA)

877 Film and Literature (3) (Pass/No Pass grading.) Minimum of forty-eight lecture hours and sixteen lab hours per term. 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)

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.)

## English as a Second Language

A materials fee in the amount shown in the Schedule of Classes is payable upon registration for ESL courses.

400 Composition for Non-Native Speakers (5) Minimum of eighty lecture hours plus sixteen hours by arrangement per term. Prerequisite: ESL 828 with a grade of $C$ or higher or appropriate skill level indicated by the English placement tests and other measures. Recommended Preparation: READ 830 (or appropriate skill level indicated by the English as a Second Language placement test and other measures. It is recommended that students enroll concurrently in READ 400 or 405 and SPCH 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)
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)

825 Writing for Non-Native Speakers I (5) (Pass/No Pass grading.) Minimum of eighty lecture hours perterm. Recommended Preparation: appropriate skill level indicated by placement tests and other measures. It is recommended that students enroll concurrently in ESL 855 or higher course, ESL 845 or higher course, and READ 807. Students practice beginning-level grammar structures in exercises and writing assignments. (Units do not apply toward AA/ AS degree.)
$\mathbf{8 2 6}$ Writing for Non-Native Speakers II (5) (Pass/No Pass grading.) Minimum ofeighty lecture hours per term. Recommended Preparation: Pass in ESL 825 (or appropriate skill level indicated by placement tests and other measures). It is recommended that students enroll concurrently in ESL 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/non-count 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) (Pass/No Pass or letter grade option.) Minimum of eighty lecture hours per term. Recommended Preparation: Pass in ESL 826 (or appropriate skill level indicated by placement tests and other measures). Students are strongly advised to enroll concurrently in ESL 857, READ 825 or 830, and ESL 847 or higher course. Focuses on writing organized and well-developed academic paragraphs. Covers intermediate level grammar structures, form, meaning, and use. (Units do not apply toward AA/AS degree.)
828 Writing for Non-Native Speakers IV (5) Minimum of eighty lecture hours per term. Recommended Preparation: ESL 827 with a grade of C or higher (or appropriate skill level indicated by placement tests and other measures) and completion of ESL 857 or higher level reading course with a grade of C or higher (or appropriate skill level indicates by placement tests and other measures.) Students are strongly advised
to enroll concurrently in READ 825 or higher level reading course and ESL 848 or higher level speech communication course. Practice in writing paragraphs and essays to develop composition skills. Work on high-intermediate-level grammar structures and editing within the context of the student's own work. (Units do not apply toward AA/AS degree.)

845 Conversation for Non-Native Speakers I (3) (Pass/No Pass grading.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. It is recommended that students enroll concurrently in ESL 825 or higher course, ESL 855 or higher course, and READ 807. Practice in basic listening and speaking skills on a range of personal and classroom topics. (Units do not apply toward AA/AS degree.)

## 846 Conversation for Non-Native Speakers

II (3) (Pass/No Pass grading.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangementperterm. Recommended Preparation: ESL 845 with Pass (or appropriateskill 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 lowintermediate 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Recommended Preparation: ESL 846 with Pass (or appropriate skill level as indicated by placement tests and other measures). It is recommended that students enroll concurrently in ESL 827 or higher course and ESL 857. Advanced practice in conversational, listening, and pronunciation skills. (Units do not apply toward AA/AS degree.)

848 Conversation for Non-native Speakers IV (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: Recommended Preparation: ESL 847 with Pass or a grade of C or higher (or appropriate skill level indicated by placement tests and other measures). Students are strongly advised to enroll concurrently in ESL 828 or higher course and READ 825 or higher course. Advanced practice in conversation, listening, and the use of idiomatic expressions on a range of academic and informal topics. (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) (Pass/ No Pass grading.) (Open entry/Open Exit.) Twenty-four hours by arrangement per term. For native speakers of languages other than English who want to improve their conversation skills. Includes individual appointments and conversation circle activities with a faculty member or instructional aide. Students identify problem areas in their conversation skills and learn to correct errors in spoken English. Areas that might receive attention are listening skills, pronunciation, word choice, and specific grammar problems, although help will be tailored to the specific needs of each student. (Units do not apply toward AA/AS degree.) (To increase competency, may be taken four times for a maximum of 2 units.) (Not Degree Applicable; Not Transferable.)
850 Writing Workshop (.5-3) (Pass/No Pass grading.) (Open Entry/Open Exit.) Minimum of twenty-four to one-hundred forty-four lab hours per term. A total of 24 hours equals. 5 unit. For native speakers of languages other than English having difficulty with their writing. Includes individual appointments with a faculty member who assists the students in identifying problem areas in writing and helps students learn to correct writing errors in English Some writing areas that might receive attention are organization, development, and specific grammar concerns, although help is tailored to the specific needs of each student. (Units do not apply towardAA/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) (Pass/No Pass grading.) Minimum offorty-eight lecture hoursplussixteen lab hours by arrangement per term. It is recommended that students enroll concurrently in ESL 825 or higher course, ESL 845 or higher course, and READ 807. Designed to build basic vocabulary skills, improve the understanding of written instructions, and introduce main ideas and details. (To increase competency, may be taken twice for a maximum of 6 units.) (Units do not apply toward $\mathrm{AA} / \mathrm{AS}$ degree.)

856 Reading for Non-Native Speakers II (3) (Pass/No Pass grading.) Minimum offorty-eight lecture hours plussixteen lab hours by arrangement per term. Recommended Preparation: Pass in ESL 855 (or appropriate skill level indicated by the reading placementtests andothermeasures). 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) (Pass/No Pass orlettergrade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangementperterm. Recommended Preparation: Pass in ESL 856 (or appropriate skill level indicated by the reading placement tests andother measures). It is recommended that students enroll concurrently in ESL 827 or higher writing course and ESL 847 or higher level conversation course. Designed to emphasize high-intermediate vocabulary and comprehension skills (context clues, main idea/supporting details, critical reading) and introduce fiction. (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.)
890 ESL for Parents (2) (Pass/No Pass grading.) Minimum of thirty two lecture hours per term. Recommended Preparation: ESL 845 with Pass or higher course (or appropriate skill level as indicated by placement tests and other measures.) Designed to help ESL parents improve their ability to speak with and about their children. Students will discuss a variety of topics, including: school-related issues (cultural norms related to education and discipline, communication between parents and teachers, helping children communicate with other children at school), and issues at home (establishing routines, sibling rivalry, and parent-child communication). Vocabulary, grammar, and pronunciation skills will be addressed in context. (May be taken twice for a maximum of 4 units.) (Units do not apply toward AA/AS degree.)
891 Accent Reduction for Non-Native Speakers (3) (Pass/No Pass grading.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: SPCH 842 or ESL 846 or equivalent with Pass or eligibility for SPCH 843 or ESL 847 or higher. Designed for non-native speakers of English. Accent reduction focusing on the production of vowels, diphthongs, and consonants and on the correct use of pitch, rate, volume, vocal quality, and vocal image. (Units do not apply toward AA/AS degree.)

895 Individualized Reading Improvement for Non-Native Speakers (.5-3) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of twenty-four to one-bundred forty-four lab hours per term. Improve reading skills. Practice methods of increasing comprehension and vocabulary to meet specific student needs. May include Internet, computer-assisted and/or DVD assignments. Uses self-paced programs based on individual diagnostic test results to meet specific student needs. Designed for nonnative 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) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of twenty-four to seventy-two lab hours per term. A self-paced, individualized course designed to help non-native speakers of English build their vocabulary skills through a words-in-context approach. Students will use textbooks and computer programs to study basic words. Designed for ESL Level I students. (May be taken three times for a maximum of 1.5 units.) (Units do not apply toward AA/AS degree.)
897 Vocabulary for Non-Native Speakers of English II (.5-1.5) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of twenty-four to seventy-two lab hours per term. A self-paced, individualized course designed to help non-native speakers of English build their vocabulary skills through a words-in-context approach. Students will use textbooks and computer programs to study basic words. Designed for ESL Level II students. (May be taken three times for a maximum of 1.5 units.) (Units do not apply toward AA/AS degree.)
898 Comprehensive Grammar Review for Non-Native Speakers (3.0) (Pass/No Pass or letter grade option) Minimum of forty-eight lecture hours per term. Recommended Preparation: Completion of ESL 827 with a grade of C or higher, or appropriate skill level as indicated by placement tests and other measures. A maintenance course designed specifically for 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)
Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848; completion of READ 400 or 405 or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of the historical and cultural presence of Native and Latin Americans in the United States, with special emphasis on their contributions to California's social, political, and economic institutions. Studies the roots of these groups from California and national perspectives. Provides the student with the general background of two of California's oldest ethnic groups and stimulates dialogue related to contemporary issues in California's institutional processes. (Satisfies State and Local Government requirement.) (AA: Area E1b/Area E5b, CSU: Area D/Area F3, UC: Area 4/Area 7C)
102 Introduction to Ethnic Studies II (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of Cor higher OR concurrentenrollment in READ 400, 405, or 415 ORappropriate 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placementtests 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of Cor higher OR concurrent enrollment in READ 400, 405, or 415 ORappropriate skill level as indicated by the reading placement tests or other measures. Analyzes patterns of prejudice and racism from a social-psychological perspective. Focuses on the prejudiced personality and how it develops, functions, and affects both the prejudiced individual and the victim. Examines both external and internal dynamics of prejudice and its manifestation in discriminatory behavior. (AA: Area E5b, CSU: Area D/Area E, UC: Area $4^{*}$ )

152 Patterns of Prejudice and Racism II (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. 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, AfricanAmericans, 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)
261 African-American Culture I
Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of Cor 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Emergence of modern African-American social movements in the United States, their leaders and philoso-
phies, and contemporary issues, including the African-American consciousness movement, Pan-Africanism, counter-cultural forms of expression, and social problems. (AA: Area E5b, CSU: Area D, UC: Area 4)

265 Evolution of Hip Hop Culture: A Socio-Economic and Political Perspective (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Traces the evolution of Hip Hop from its African roots through the diaspora as a cultural form of expression by examining music, dancing, spoken word, philosophy, and lifestyles. 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placementtests or othermeasures. Contributions of African-Americans in the film industry and their historical relationship to the industry. Extensive use of films, supplemented by lecture and presentations by African-Americans involved in the film industry. (AA: Area E5c, CSU: Area C1, UC: Area 3A)
300 Introduction to La Raza Studies (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to the philosophy, methodology, and structure of La RazaStudies (Chicano/Chicana, Latino/Latina studies). Analyzes the relationships between social institutions and their effects upon the La Raza individual, especially in the United States setting. (AA: Area E5b, CSU: Area D, UC: Area 4)

350 Native American Way of Life (3) Minimum offorty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of 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 Diversity (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Theory of origin and evolution of life. Migration from Africa. Comparative study of Native Americans with Eurasians. Origin of consciousness, self image and ego. Primal mind of the child; conception, pregnancy and birth. Intuitive mind and development of linear thinking. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 4)
360 The People and Cultures of Polynesia: An Introduction (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to the history and cultures of the Polynesian islands. Focuses on the history, geography, social institutions, languages, traditions, and recent issues affecting the people, both on the islands and the United States mainland. Compares and contrasts selected islands of the Pacific. (AA: Area E5b, CSU: Area D, UC: Area 4)
440 Cultural Experience of Asian-American Writers (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to Asian American writers' experiences as shaped by the treatment of minorities in the U.S. and by institutional racism. Analyzes writers' works in the context of historical, social
and political influences and compares Asian Americans with other ethnic groups and the majority society. (AA: Area E5b, CSU: Area C2/Area D, UC: Area 3B/Area 4)
585 Ethnicity in Cinema (3) Minimum of forty-eight lecture hoursperterm. Recommended Preparation: elizibility 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours per term. Recommended Preparation: ENGL 848. Introductory survey of fundamental film techniques and styles of expression. Emphasizes film appreciation, the language of film, and analysis for full film enjoyment. Lectures, screenings, discussions, quizzes, and writing of critical papers. (AA: Area E5c, CSU: Area C1, UC: Area 3A)
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 Film History I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours per term. Recommended Preparation: ENGL 838/848 with a grade of $C$ or higher. Chronological survey of important American and international films from 1895 to World War II. Emphasizes the evolution of film as a distinct art form and
the intersection of film and society. Lectures, screenings, discussions, quizzes, and writing of critical papers. (AA: Area E5c, CSU: Area C1, UC: Area 3A)

121 Film History II (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours per term. Recommended Preparation: ENGL 838/848 with a grade of $C$ or higher. Chronological survey of important American and international films from World War II to the present. Emphasizes the evolution of film as a distinct art form and the intersection of film and society. Lectures, screenings, discussions, quizzes, and writing of critical papers. (AA: Area E5c, CSU: Area C1, UC: Area 3A)

153 Screenwriting (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. 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)

200 Film in Focus (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours per term. Recommended Preparation: FILM 100, 120, or 121 or equivalent. Study of the art and history of film by focusing on selected film topics, such as genres, directors, stars, gender, race, national cinemas, and new technologies (course topics vary from semester to semester). Lectures, screenings, discussions, quizzes, and writing of critical papers. (May be taken three times for a maximum of 9 units.) (AA: Area E5c, CSU: Area C1, UC: Area 3A)

215 Film and New Digital Media (3) (Pass/No pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours per term. Recommended Preparation: Film 100, 110, 120 or 121, or equivalent. Explores the new role of digital media in the art of film. Historical survey of digital special effects and digital independent film practice since the 1990s; critical overview of the interface between film and other digital media, such as computer animation, video games, and the Internet. Lectures, screenings, discussions, quizzes and writing of critical papers. (AA: Area E5c, CSU)

277 Film and Literature (3) Minimum of forty-eight lecture hours and sixteen lab hours per term. Prerequisite: FILM 100, 110, 120, or 121 or equivalent with Pass 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 not be taken for credit following LIT 277. (May be taken three times for a maximum of 9 units.) (AA, 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)

800 Film in Focus (3) (Pass/No Pass grading.) Minimum offorty-eight lecture hours and sixteen lab hours per term. Study of the art and history of film by focusing on selected film topics, such as genres, directors, stars, gender, race, national cinemas, or new technologies. (Course topic varies from semester to semester). Lectures, screenings, readings, discussions and writing of optional critical essays. (May be taken four times for a maximum of 12 units.) (AA)
815 Film and New Digital Media (3) (Pass/No Pass grade or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours per term. Explores the new role of digital media in the art of film. Historical survey of digital special effects and digital independent film practice since the 1990s; critical overview of the interface between film and other digital media, such as computer animation, video games, and the internet. Lectures, screenings, readings, discussions, and optional critical essays. (Units do not apply toward AA.)

877 Film and Literature (3) (Pass/No Pass grading.) Minimum offorty-eight lecture hours and sixteen lab hours per term. 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.)

880-889 Selected Topics (1-3) (See first page of Description of Courses section.)

## Fire Technology

641 Cooperative Education (.5-8) (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) Minimum of fortyeight lecture hours per term. Basic mathematics, principles of hydraulics, calculations of engine and nozzle pressures, discharge, fire streams, friction loss, and pump operation and characteristics. Application of formulas to hydraulics and water supply problems. (AA, CSU)

714 Wildland Fire Control (3) Minimum of forty-eight lecture hours per term. Focuses on the principles and techniques used to extinguish wildland fires and to prevent and control their occurrence. Subjects include: California's wildland fire problem, safety, weather effects, wildland fuels, fire behavior, attack methods, urban-interfaces, and investigation. (AA, CSU)

715 (FT1) Fire Protection Organization (3) Minimum of forty-eight lecture hours per term. History and philosophy of fire protection; organization of public and private fire protection services; laws and regulations affecting the fore service; basic fire chemistry and physics; and basic fire systems, fire strategy, and tactics. (AA: E5d,CSU)
720 (FT2) Fire Prevention Technology (3) Minimum of forty-eight lecture hours per term. 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) Minimum of forty-eight lecture hours per term. Covers the operation, care and maintenance, specifications, capabilities, and effective use of fire service apparatus and related equipment. (AA, CSU)
730 (FT5) Fire Behavior and Combustion (3) Minimum of forty-eight lecture hours per term. Theory and fundamentals of how fires start, spread, and are controlled; an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents, and fire control techniques. (AA, CSU)

740 (FT4) Building Construction for Fire Protection (3) Minimum of forty-eight lecture hours per term. Components of building construction that relate to fire safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, pre-planning fire operations, and operating at fires. Covers the development and evolution of building codes in relationship to past fires in residential, commercial, and industrial occupancies. (AA, CSU)

745 (FT3) Fire Protection Systems and Equipment (3) Minimum offorty-eight lecture hours per term. Provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. (AA, CSU)

783 Firefighter I Academy (9) Minimum of one-hundred twenty-eight lecture and one-hun-dredforty-four lab hours per term. Prerequisite: six units of Fire Technology coursework (excluding EMT) with a grade of $C$ or higher. 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) (Pass/No Pass grading.) (Open entry/open exit) Eight to twenty-four lecture hours per semester per term. 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) (Pass/ No Pass grading.) Minimum ofone-hundredsixty lecture and four-hundred forty-four lab hours per term. Prerequisite: sponsorship by a fire service agency as a professional firefighter. In-service and pre-service instruction in basic firefighter skills and knowledge. Includes all areas of fire suppression, handling hose/ladders, operating hand and power tools, completing salvage functions, performing rescue operations, and responding to hazardous materials emergencies. Intensive, physically demanding course that meets daily for eight hours. For State certification as a firefighter and/or to receive a "Certificate of Completion" for firefighter training from College of San Mateo, the student must be EMT certified. (AA)

790 Wildland Fire Academy (3) Minimum of forty-four lecture and twenty-four lab hours. Recommended Preparation: completion of one or more Fire Technology courses; appropriatephysical 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) Minimum of ninety-six lecture and sixty-four lab hours per term. Prerequisite: Current certification in health care provider CPR (Cardiopulmonary Resuscitation) through an accredited agency. Instruction in basic life support/pre-hospital care using the National Registry curriculum. Students who qualify will be given the National Registry exam at the end of the course. Non-refundable testing/ materials fee required. (May be taken twice for a maximum of 14 units.) (AA)
800 Fire Service Entrance Test Preparation (3) Minimum of forty-eight lecture hours per term. Covers models for written examinations and oral interviews for firefighter positions; mathematical concepts relating to fire service; reading and writing skills for resumes and applications; physical requirements; test preparation; and career opportunities. (AA)

810 Firefighter Internship (3) (Pass No/ Pass grading.) Minimum of one-hundred and forty-four lab hours per offering. Prerequisite: Sponsorship by a fire service agency as a firefighter intern. Under the direction of a coordinator, students will learn to work in a firehouse environment alongside professional firefighters. Includes hands-on training, emergency response, clerical duties and other duties as assigned. Students will be able to use these hours towards their requirement for their Firefighter I State Certification. (AA)

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 four-year institution are strongly advised to study a foreign language at CSM. See information on Foreign Language Certificates of Specialization in the Major and Certificate Requirements section.

For information on specific languages, see American Sign Language, Chinese, French, German, Italian, Japanese, and Spanish.

## Numbers and Levels

The beginning courses in the classroom transfer sequences are numbered 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) (Pass/No Pass or letter grade option.) Minimum of eighty lecture hours plus thirty-two lab hours by arrangement per term. 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: Area C2, UC)

111 Elementary French I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Recommended Preparation: eligibility for ENGL 848 or a higher English course. Introduction to the French language and Francophone cultures with emphasis on practical vocabulary, basic sentence structures, and clear pronunciation. Skills in speaking, listening, reading, and writing are developed through practice, including prepared work, role-playing, and other activities. Laboratory work includes audio, video, DVD, and computer resources to improve proficiency. (Covers approximately the first half of the semester's work in French 110.) (AA: Area E5c, CSU: Area C2, UC*)
112 Elementary French II (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: FREN 111 or equivalent with Pass or a grade of $C$ or higher. Continued elementary study of the French language and Francophone cultures with emphasis on practical vocabulary, basic sentence structures, and clear pronunciation. Skills in speaking, listening, reading, and writing are developed through practice, including prepared work, role-playing, and other activities. Work done by arrangement. includes audio, video/DVD, and computerized resources to improve proficiency. (French 111 and 112 are equivalent to French 110.) (AA: Area E5c, CSU: Area C2, UC*)
115 Beginning French I (3) (Telecourse) (Pass/No Pass or letter grade option.) A televised, entry-level course that introduces basic French vocabulary and language structures and enhances appreciation of worldwide 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: Area C2)

116 Beginning French II (3) (Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: FREN 115 or equivalent with Pass or a grade of $C$ or higher. The second semester of a televised, entry-level course that introduces basic French vocabulary and language structures and enhances appreciation of worldwide Francophone cultures. Workbook and audio tape exercises focus on reading, writing, and listening comprehension. This course parallels French 112 but without the oral component. (AA: Area E5c, CSU: Area C2)

117 Advanced Beginning French I (3)
(Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: FREN 116 or equivalent with Pass 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: Area C2, UC)
118 Advanced Beginning French II (3)
(Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: FREN 117 or equivalent with Pass or a grade of C or higher. The fourth semester of a televised, entry-level course that introduces basic French vocabulary and language structures and enhances appreciation of worldwide Francophone cultures. Workbook and audio tape exercises focus on reading, writing, and listening comprehension. This course parallels French 122 but without the oral component. (AA: Area E5c, CSU)
120 Advanced Elementary French (5) (Pass/ No Pass or letter grade option.) Minimum of eighty lecture hours plus thirty-two lab hours by arrangementper term. Prerequisite: FREN 110 or 112 or equivalent with Pass or a grade of $C$ or higher. Continued study of the basics of the French language and Francophone cultures with emphasis on practical vocabulary, common sentence structures, and clear pronunciation. Skills in speaking, listening, reading, and writing are developed through practice, including prepared work, role-playing, and other activities. Laboratory work includes audio, video, and computerized resources to improve proficiency. (AA: Area E5c, CSU: Area C2, UC: Area $6^{*}$ )

121 Advanced Elementary French I (3) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: FREN 110 or 112 or equivalent with Pass or a grade of C or higher. Continued study of the basics of the French language and Francophone cultures with emphasis on practical vocabulary, common sentence structures, and clear pronunciation. Skills in speaking, listening, reading, and writing are developed through practice, including prepared work, role-playing, and other activities. Laboratory work includes audio, video, and computerized resources to improve proficiency. (AA: Area E5c, CSU: Area C2, UC*)

122 Advanced Elementary French II (3) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: FREN 121 or equivalent with Pass or a grade of $C$ or higher. Advanced study of the basics of the French language and Francophone cultures with emphasis on practical vocabulary, common sentence structures, and clear pronunciation. Skills in speaking, listening, reading, and writing are developed through practice, including prepared work, role-playing, and other activities. Laboratory work includes audio, video, and computerized resources to improve proficiency. (French 121 and 122 are equivalent to French 120.) (AA: Area E5c, CSU: Area C2, UC: Area $6^{*}$ )
130 Intermediate French (5) (Pass/No Pass or letter grade option.) Minimum of eighty lecture hours plus sixteen lab hours by arrangement per term. 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: Area C2, UC: Area 3B/Area 6)
131 Intermediate French I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus eight lab hours by arrangement per term. 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, the level following French 120 or 122. Study of authentic French and Francophone culture through materials such as fiction, plays, film, and periodicals. Work on listening and pronunciation with a view toward improving oral communication, further study of grammar and vocabulary. Conducted largely in French. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area6*)
132 Intermediate French II (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus eight lab hours by arrangement per term. Prerequisite: FREN 131 or equivalent with a grade of Corbigher. Covers approximately the second half of the semester's work in French 130, the level following French 120 or 122. Continued study of authentic French and Francophone culture through materials such as fiction, plays, film, and periodicals. Advanced work on listening and pronunciation with a view toward improving oral communication, further study of grammar and vocabulary. Conducted largely in French.

140 Advanced Intermediate French (3) (Pass/ No Pass or lettergrade option.) Minimum offortyeightlecture hoursper term. 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 grammar and vocabulary. Conducted largely in French. (AA: Area E5c, CSU: Area C2, UC: Area 3B/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)
801 Conversational French I, Elementary (2) (Pass/No Pass grading.) Minimum of fortyeight lecture hours per term. A practical course in French language and Francophone cultures approached through the spoken language. Practice in the expressions of daily speech, supported by enough grammar study and authentic materials to allow for flexibility and accuracy in communication. An appropriate course for those who have never studied a foreign language. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)
802 Conversational French II, Advanced Elementary (2) (Pass/No Pass grading.) Minimum offorty-eightlecture hours perterm. Prerequisite: FREN 801 or equivalent with Pass. A practical course in French language and Francophone cultures approached through the spoken language, on a more advanced level than French 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.) (AA)
803 Conversational French III, Intermediate (2) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Prerequisite: FREN 802 or equivalent with Pass. More advanced work in conversation following the model of French 802. (This course will not fulfill the language requirements at California State Universities or at the University California.) (AA)

804 Conversational French IV, Advanced Intermediate (2) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Prerequisite: FREN 803 or equivalent with Pass. Further advanced work in conversation following the model of French 803. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)
880 - 889 Selected Topics (1-3) (See first page of Description of Courses section.)

## Geography

100 Physical Geography (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term plus field trips. 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. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hoursperterm. 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) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hoursperterm. 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 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)

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.)

## Geology

100 Survey of Geology (3) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. 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. (AA: Area E5a, CSU: Area B1, UC: Area 5A*)

101 Geology Laboratory (1) Minimum of forty-eight lab hours plus sixteen hours by arrangement per term. 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*)

210 General Geology (4) Minimum offortyeight lecture and forty-eight lab hours plus sixteen hours by arrangement per term. 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)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ 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) (Pass/No Pass or letter grade option.) Minimum of eighty lecture hours plus thirty-two lab hours by arrangement perterm. 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 pronunciation. Skills in listening, speaking, reading, and writing are developed through practice, including prepared work, small-group and paired activities, and other exercises. (AA: Area E5c, CSU: Area C2, UC)
111 Elementary German I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: GERM 111 or equivalent with Pass or a grade of $C$ or higher. Elementary study of the German language and culture with emphasis on practical vocabulary, basic sentence structures, and clear pronunciation. Skills in listening, speaking, reading, and writing are developed through practice, including prepared work, small-group and paired activities, and other exercises. Covers approximately the second half of the semester's work in German 110. (German 111 and 112 are equivalent to German 110.) (AA: AreaE5c, CSU: Area C2, UC*)

120 Advanced Elementary German (5)
(Pass/No Pass or letter grade option.) Minimum of eighty lecture hours plus thirty-two lab hours by arrangement per term. Prerequisite: GERM 110 or 112 or equivalent with Pass 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: GERM 110 or 112 or equivalent with Pass or a grade of Corhigher. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangementperterm. Prerequisite: GERM 121 or equivalent with Pass or a grade of C or higher. Advanced study of the basics of the German language and culture with emphasis on practical vocabulary, common sentence structures, and clear pronunciation. Skills in speaking, listening, reading and writing are developed through practice, including prepared work, small group and paired activities. Laboratory work includes audio, video, and computerized resources to improve proficiency. Covers approximately the second half of the semester's work in German 120. (German 121 and 122 are equivalent to German 120.) (AA: Area E5c, CSU: Area C2, UC: Area $6^{*}$ )
130 Intermediate German (5) (Pass/No Pass or letter grade option.) Minimum of eighty hours plus sixteen lab hours by arrangement per term. Prerequisite: GERM 120 or 122 or equivalent with Pass or a grade of $C$ or higher. Review of grammar and syntax; reading of short works of fiction and nonfiction. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 6)
131 Intermediate German I (3) (Pass/No Pass or letter grade option.) Minimum of fortyeight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: GERM 120 or 122 or equivalent with Pass 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 German-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) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: GERM 131 or equivalent with Pass 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Prerequisite: GERM 130 or 132 or equivalent with Pass or a grade of C or higher. Reading and discussion of selections from German literature; further practice in conversation and composition; continued review of principles of grammar. (AA: Area E5c, CSU: Area C2, UC: Area 3B/Area 6)
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ 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 Conversational German I, Elementary (2) (Pass/No Pass grading.) Minimum of fortyeight lecture hours per term. A practical course in the German language approached by way of conversation. Intensive drill in the patterns and idioms of daily speech, supported with sufficient grammar to give flexibility in the spoken language. May be considered an excellent preparatory course for students who have not taken a foreign language before. (This course will not fulfill the language requirement at California State Universities or at the University of California.) (AA)
802 Conversational German II, Advanced Elementary (2) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Prerequisite: GERM 801 or equivalent with Pass. 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) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Prerequisite: GERM 802 or equivalent with Pass. Advanced work in German following the model of

German 802. (This course will not fulfill the language requirement at California State Universities or at the University of California.) (AA)

804 Conversational German IV, Advanced Intermediate (2) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Prerequisite: GERM 803 or equivalent with Pass. More advanced work in conversation following the model of German 803. (This course will not fulfill the language requirement at California State Universities or at the University of California.) (AA)
$880 \mathbf{- 8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.)

## Graphics

115 Designing with Type I: Essentials of Typographic Expression (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours andsixteen lab hours plusthirty-two hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours plus thirty-two hours by arrangement per term. 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 howwe read, intelligent choice of typeface, size, leading, line length, and other factors affecting readability. Extracting and creating a typographic hierarchy; visual punctuation; selecting, creating and using grids. Theory applied to practical typographic problems. Extra supplies required. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

135 Graphic Design Foundations (4) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture and forty-eight lab hoursplus thirty-two hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of twenty-four lecture and eight lab hours plus sixteen hours by arrangement. 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) (Pass/No Pass or lettergrade option.) Minimum of forty-eight lecture and sixteen lab hours plus thirty-two hours by arrangement per term. 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: Area E5d, 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.

151 Adobe Illustrator for Print and Web
Design II (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours plus thirty-two hours by arrangement per term. Prerequisite: GRA 150 or equivalent. Creating digital illustrations destined for print or web applications. Students complete a challenging series of projects using some of the more advanced features of Illustrator. Extra supplies required. A materials fee shown in the Schedule of Classes is payable upon registration. (AA, CSU)
160 Adobe Photoshop for Print and Web Design I (3) (Pass/No Pass or lettergrade option.) Minimum offorty-eight lecture hours and sixteen lab hours plus thirty-two hours by arrangement perterm. Prerequisite: MULT 113 or equivalent Macintosh andlor Windows operating system experience. Creating and manipulating digital illustrations and photographs for web or print, including color correction. Class designed for the graphic arts/web design generalist. Extra supplies required. A materials fee shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 6 units.) (AA: Area E5d, CSU)

| New GRA | New Course Title | New <br> Units | Old GRA | Former Course Title | Old <br> Units |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 115 | Designing with Type I: Essentials of Typographic Expression | 3.0 | 110 | Typography I | 2.0 |
| 116 | Designing with Type II: Delivering the Message Effectively | 3.0 | 111 | Typography II | 2.0 |
| 135 | Graphic Design Foundations | 4.0 | $\begin{aligned} & 130 \\ & 131 \end{aligned}$ | Graphic Design Foundations I Graphic Design Foundation II | $\begin{aligned} & 2.0 \\ & 2.0 \end{aligned}$ |
| 150 | Adobe Illustrator for Print \& Web Design I | 3.0 | $\begin{aligned} & 100 \\ & 101 \end{aligned}$ | Adobe Illustrator I Adobe Illustrator II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours plus thirty-two hours by arrangement per term. Prerequisite: GRA 160 orequivalent. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and sixteen lab hours plus thirty-two hours by arrangement per term. 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) Minimum of thirty-two lecture hours and thirty-two lab hours plus thirty-two hours by arrangement per term. Prerequisite: GRA 135 and 170 or equivalent. Examines the role in the marketplace of a wide variety of publication formats and provides practical experience creating them. Analyzes the best approaches for communicating editorial and informational messages. Explains editorial design and the expression of content through design as well as the dynamics and principles of page layout. Extra supplies required. (AA)
235 Graphic Design: Theory and Application (4) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours and forty-eight lab hours plus thirty-two hours by arrangement per term. Prerequisite: GRA 135 or equivalent. Students visually express content and meaning while exploring and applying design principles to a variety of practical design projects. Covers a strategic approach to the design problem solving process, including the role of the designer and working with various types of clients. Extra supplies required. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)
242 Image on Paper: the Possibilities of Print (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Examination of the print production cycle, from concept through finishing. Enables designers and production artists to work more effectively with printers and provides a solid
understanding of the creative capabilities of printers and other printing industry vendors. (AA, CSU)

255 Digital Publishing (3) (Pass/No Pass or lettergrade option.) Minimum of thirty-two lecture hours and sixty-four lab hours plus thirty-two hours by arrangement per term. 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) Minimum of sixteen lecture hours and sixteen lab hours plus thirty-two hours by arrangement per term. Prerequisite: completion of three semesters of GRA curriculum or equivalent. Students initiate, develop, and complete substantial individual projects in consultation with and under the direction of the instructor. Emphasizes development of a marketable portfolio. Extra supplies required. (AA, CSU)

680 - 689 Selected Topics (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.)

## 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) Minimum of thirty-two lectures hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill levels as indicated by the reading placement tests or other measures. Survey of today's most prevalent health problems, including nutrition, obesity, heart disease, cancer, sexually transmitted diseases, birth control, drug abuse, emotional mental, and holistic health. Emphasizes detection, treatment, prevention, and maintenance of personal and social health problems as well as the promotion of physical
and emotional mental, and holistic health. (AA: Area E3, CSU: Area E, UC*)
101 Heredity and Birth Defects (1) Minimum of sixteen lecture hours. Study of the principles of human genetics, cell division, and prenatal development. Emphasizes the causes, prevention, and treatment of the most common hereditary and environment-induced birth defects. (AA: Area E3, CSU: Area E)

112 Current Health Issues (1) Minimum of sixteen lecture hours. Analysis of the most important and most controversial health issues making today's headlines. Class discussions, supported by appropriate biological, medical, legal, and historical information. (AA: Area E3, CSU: Area E)

113 Selected Topics in Nutrition (1) Minimum of sixteen lecture hours. Practical study of the principles of nutrition. Focuses on the concepts of nutritional wellness with an emphasis on the role of essential micro and macro nutrients, food guide pyramids, fad diets, nutritional label facts, food labels, caloric metabolism, and understanding body composition. (May not be taken for credit following P.E. 113.) (AA: Area E3, CSU: Area E)

114 Fitness (1) Minimum of sixteen lecture hours. Practical study of the principles of fitness as a contributing factor to total wellness. Provides tools for the student to develop a self-directed and self-monitored fitness program. Includes cardiovascular fitness, muscle strength, muscle endurance, flexibility, body composition, ergogenic aids, and guidelines for exercise testing and prescription. (May not be taken for credit following P.E. 114.) (AA: Area E3, CSU: Area E)

119 Exercise and the Aging Process (3) Minimum of forty-eight lecture hours per term. 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) Minimum of forty-eight lecture hours per term. Introduces the fundamentals of exercise science. Includes aspects of scientific method; physiologic adaptations to training of pulmonary, cardiovascular, and neuromuscular function as well as principles of exercise training, ergogenic aids, fitness assessment, and human physiology as it pertains to fitness and training. (May not be taken for credit following P.E. 125.) (AA, CSU)

641 Cooperative Education (.5-8) (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)
880 - $\mathbf{8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.)

## History

(Also see Humanities)
100 History of Western Civilization I (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. The rise and decline of the civilizations of the ancient world, the rise of Christianity, the growth and decline of Medieval society, the Renaissance, the Reformation, and the opening of the modern world. (AA: Area 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) Minimum of forty-eight lecture hours per term.
Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. The rise of modern Europe and its expansionism; the Enlightenment; the age of revolutions (American, French, Industrial) and the growth of liberalism, nationalism, and imperialism; modern ideologies; the emergence of totalitarianism; the World Wars and subsequent global and cultural developments. (AA: Area 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Social, cultural, constitutional, and political development of the area of the United States from the colonial period through the age of revolution, early independence, reform and
sectional crisis in the 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*)
201 United States History I (3) Minimum of forty-eightlecture hoursperterm. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of Cor 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. 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)

260 Women in American History (3) (Pass/ No Pass or letter grade option.) Minimum of forty-eightlecture hoursper term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of Cor 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)

310 California History (3) Minimum of forty-eight lecture hoursperterm. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of Cor 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) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hoursperterm. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of Cor higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Survey of the county's development to the present. The natural setting; discovery and exploration; mission-ranchero era; establishment of county government; advent of railroads; lumbering; industry; growth of Bayside and Coastside communities; and the Peninsula's relation to the state and the nation. (AA: Area E1a/Area E5b, CSU: Area D)
350 History of the American West (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 or 415 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. The movement of Americans west of the Mississippi River, with an emphasis on fur trading, cattle raising, farming, mining, railroads, 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.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.)

## Horticulture

311 Plant Materials I: Trees (3) (Pass/No Pass or letter grade option.) Minimum of thirty-two lecture and forty-eight lab hours plus sixteen hours by arrangement per term. Growth habits, cultural requirements, and landscape uses of ornamental trees adapted to the climates of California. (AA: Area E5a, CSU, UC)

312 Plant Materials II: Shrubs and Groundcovers (3) (Pass/No Pass or letter grade option.) Minimum of thirty-two lecture and forty-eight lab hours plus sixteen hours by arrangement per term. Growth habits, cultural requirements, and landscape; uses of ornamental shrubs and ground covers adapted to the climates of California. (AA: Area E5a, CSU, UC)
315 Landscape Management (3) (Pass/No Pass or letter grade option.) Minimum of thirtytwo lecture and forty-eight lab hours (day class) or forty-eight lecture and thirty-two hours by arrangement (evening class) per term. Culture and maintenance of turf areas, ground covers, annuals, perennials, shrubs and trees. Landscape water management. Operation of landscape maintenance equipment. (AA, CSU)
320 Introductory PlantScience. (3) (Pass/No Pass or letter grade option.) Minimum of thirtytwo lecture and forty-eight lab hours per term. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Study of various types of plant materials, containers, and growing media and of the environmental factors that affect plants used in interior plantscaping of commercial and home settings. (AA, CSU)
326 Growing Orchids (1) (Pass/No Pass or letter grade option.) Minimum of eighteen lecture hours for six weeks per term. Principles and techniques of growing orchids. Study of their history, growth habits, culture, media selection, potting techniques, diseases, pests, fertilizer requirements and propagation. Identification and culture of popular orchids used in the nursery, floral design industries, and for collectors of orchids. Field trips to outstanding orchid growers' greenhouses. (AA, CSU)

327 Nursery Management (3) (Pass/No Pass or letter grade option.) Minimum of thirty-two lecture and forty-eight lab hours perterm. Overview of the nursery industry. Practical application of the principles of nursery practice, including location, greenhouse design, and equipment. Plant propagation and plant growing techniques, using the college greenhouse. Field trips to outstanding nurseries. (AA, CSU)
330 Integrated Pest Management (3) (Pass/ No Pass or letter grade option.) Minimum of thirty-two lecture and forty-eight lab hours plus sixteen hours by arrangement per term. Symptoms, identification, and methods of control of the principal diseases, pests, and weeds important in California landscape industry. Emphasis on integrated pest management including biological, cultural, and chemical controls. Calibration and use of application equipment and pesticide safety. Preparation for State Applicator's License. (AA, CSU)
342 Landscape Construction (3) (Pass/No Pass or letter grade option.) Minimum of thirtytwo lecture and forty-eight lab hours (day class) or forty-eight lecture and thirty-two hours by arrangement (evening class) per term. Planting and construction techniques: design, installation, and maintenance of sprinkler systems; cost finding and estimating for the landscape trades, including legal aspects of contracting. (Assists students in preparing for Landscape Contractor's License Examination.) (AA, CSU)

350 Principles of Landscape Design (3) (Pass/No Pass or letter grade option.) Minimum of thirty-two lecture and forty-eight lab hours plus forty-eight hours by arrangement per term. Graphics, drafting, perspective, surveying, environmental planning, history, and design for the residential landscape. Extra supplies required. (AA: Area E5a, CSU)
400 Floral Arranging I (1.5) (Pass/No Pass or letter grade option.) Minimum of sixteen lecture and thirty-two lab hours plus sixteen hours by arrangementper term. In-depth study of Western Geometric floral design using current methods of fresh flower arranging and incorporating the principles and elements of the art of floral design. Covers industry standards of design and construction as well as correct care and handling techniques for fresh floral materials. Includes historical as well as contemporary design styles. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU)

401 Floral Arranging II (1.5) (Pass/No Pass or letter grade option.) Minimum of sixteen lecture and thirty-two lab hours plus sixteen hours by arrangement per term. 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) (Pass/ No Pass or letter grade option.) Minimum of eight lecture and sixteen lab hours. Study of the mechanics, techniques, skills, and designs of flowers to wear and carry. Includes history and meaning of body flowers, present styles, and use. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 1 units.) (AA, CSU)

405 Flowers to Wear and Carry II (.5) (Pass/ No Pass or letter grade option.) Minimum of eight lectureand sixteen lab hours. Prerequisite: HORT 404. Continuing study of the mechanics, techniques, skills, and designs of flowers to wear and carry introduced in Horticulture 404. Emphasizes advanced styles and unique interpretations. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 1 unit.) (AA, CSU)
415 Retail Floristry Management (3) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Principles and procedures of working in and owning a floral business. Covers employment, customer care and relations, product pricing, delivery, and handling fresh product. Introduces potential floral business owners to financing, purchasing and operating a business in the floral industry. Concepts discussed include: merchandising, cost of goods, inventory, wire services, delivery, accounting, profit and loss statements, advertising, employee relations, planning, buying and marketing. (AA, CSU)
417 European Floral Design (1.5) (Pass/No Pass or letter grade option.) Minimum of sixteen lecture hours and thirty-two lab hours per term. 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) (Pass/ No Pass or letter grade option.) Minimum of sixteen lecture and thirty-two lab hours per term. 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) (Pass/No Pass or letter grade option.) Minimum of sixteen lecture and thirty-two lab hours by arrangementperterm. Study of Japanese flower arranging, its history, philosophy, method and practice. 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 (.5) (Pass/No Pass or letter grade option.) Minimum of eight lecture hours and sixteen lab hours. An in-depth study of creative application of floral design skills used in floral decorating for large and small events. Development of a theme, budget, and buying plan and coordination with event specialists. A materials fee in the amount shown in the Schedule ofClasses is payable upon registration. (AA, CSU)
425 Cut Flower Identification (1) (Pass/No Pass or letter grade option.) Sixteen lecture hours. 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) (Pass/ No Pass or letter grade option.) Minimum of sixteen lecture and thirty-two lab hours per term. Prerequisite: HORT 400. In-depth study of historical and current styles, trends, and techniques used in the construction of floral designs for funeral tributes. Highlights stages of the grief process, correct salesmanship, and good relations with mortuaries. This is an intermediate level course. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)

427 Floral Design with Everlasting Flowers (1.5) (Pass/No Pass or letter grade option.) Minimum of sixteen lecture and thirty-two lab hours plus sixteen hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of eight lecture and sixteen lab hours plus eight hours by arrangement. 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) (Pass/No Pass or letter grade option.) Minimum of eight lecture and sixteen lab hours pluseighthours by arrangement. 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)
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Fundamental principles of soil, soil management, fertility, and plant nutrition. Soil types, origins characteristics, and biological relationships. Commercial and natural fertilizers; soil conditioners; growing media; land and plant relationships. (AA, CSU)

706 Plant Propagation (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Principles and practices of propagating plants for sale for landscape use, including laboratory work in making cuttings, grafting and budding, potting, and canning. Visits to wholesale and retail nurseries. Seedage, cuttage, layerage, and plant breeding and improvement. (AA, CSU)
709 Principles of Landscaping (3) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Introduction to principles of residential landscaping, emphasizing fundamental design and construction. (AA, CSU)
711 Landscape Trees (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus thirty-two hours by arrangement per term. Tree classification, description, nomenclature, and morphology. Study in class of trees commonly used in California parks and gardens. Emphasizes plant identification. (AA, CSU)
712 Landscape Shrubs, Groundcovers and Vines (3) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture hoursplus thirtytwo hours by arrangement per term. Study of shrubs, ground covers, and vines commonly used in California. (AA, CSU)
742 Greenhouse Management (3) (Pass/No Pass or letter grade option.) Minimum of fortyeight lecture hours per term. 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) (Pass/No Pass or letter grade option.) Minimum of thirty-two lecture hours andsixteen lab hours per term. 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) (Pass/No Pass or letter grade option.) Minimum of thirty-two lecture hours and sixteen lab hours per term. 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) (Pass/No Pass or letter grade option.) Minimum of eighteen lecture hours per term. 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.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ 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) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture hours. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Explores the major cultural and intellectual movements of Western Civilization from Greece through the Reformation. Considers the development of literature, art, architecture, and music, along with their relationship to mythological, religious, and scientific attitudes toward man, nature, and God. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

102 Introduction to Humanities: Reformation to Present (3) (Pass/No Pass or letter grade option.) Minimum offorty-eightlecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Explores the major cultural and intellectual movements of Western Civilization from the Reformation to the present. Considers the development of literature, art, architecture, and music, along with their relationship to mythological, religious, and scientific attitudes toward man, nature, and God. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

111 Religion, Literature, and Philosophy in Ancient Greece (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher

OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Examples drawn from Greek tragedy and philosophy focus on changing attitudes toward the gods, the hero, nature, society, and personal development. Explores concepts of justice, the significance of suffering and attitudes toward fate, human freedom, and responsibility. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

114 Film and Literature as Communication in the Modern Era (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. 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)
131 Cultural Achievements of AfricanAmericans (3) Minimum offorty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to Black aesthetics, concentrating on the religious, philosophical, literary, musical, and art forms of Africa and AfricanAmericans. Explores the relationship that philosophy, myth, religion and socio-political traditions have had with each other by examin-
ing the arts, literature, film, music, and other creative forces. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

133 Cultural Achievements of Asian Americans (3) Minimum offorty-eight lecture hours perterm. Recommended Preparation: previous Ethnic Studies courses and eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Develops an awareness and understanding of Asian cultures through study of the heritage in religion, family, literature, music, arts, crafts, and foods. Includes guest lecturers, tours, demonstrations, and hands-on experiences. (AA: Area E5c, CSU: Area C2, UC: Area 3B)

140 Cultural Heritage of San Francisco and Its Environs (3) Minimum offorty-eightlecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Survey of the history, art, architecture, music, literature, and geography of San Francisco. Covers early California as well as the present but emphasizes the decades from the Gold Rush to the early part of the 20th Century. (AA: Area E5c, CSU: Area C2)

676 Honors Colloquium in Western Civilization II (1) Minimum of sixteen lecture hours per term. Prerequisite: limited to students in the Honors Program who have completed or are concurrently enrolled in an associated non-honors course in Western Civilization or the equivalent. Recommended Preparation: Completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures Readings, discussion, and lectures covering selected advanced topics in Western Civilization to be determined by the Humanities Department and the Honors Program. (AA: Area E5c, CSU: Area C2)

680-689 Selected Topics (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.)

## Human Services

100 Introduction to Human Services (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: Completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures 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) Minimum offorty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to the 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of Cor higher OR concurrent enrollment in READ 400, 405, or 415 ORappropriate 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 PublicAssistance and Benefits Programs (1) Minimum of sixteen lexture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent
enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. 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) Minimum of sixteen to forty-eight lecture hours per term. 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. 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)

150 Rehabilitation and Recovery (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to the 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) Minimum of sixteen to forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment
in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Survey of 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 a maximum of 6 units. (AA: Area E5b, CSU)
262 Empowerment Skills for Family Workers (3) Minimum offorty-eight lecture hoursper term. Recommended Preparation: Completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to family support services designed to prepare human services students and workers with the values, knowledge, and skills needed to empower families to achieve self-reliance. Focuses on the principles of family development, family empowerment skills, self-support for family workers, effective communication with families, and cultural competency. (AA, CSU)
264 Supporting Family Success (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: Completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. A 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 - $\mathbf{8 8 9}$ 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) (Pass/No Pass or letter grade option.) Minimum of eighty lecture hours plus thirty-two lab hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Recommended Preparation: eligibility for ENGL 838 or higher English course. Introduction to elementary communication in Italian based on oral and written exercises; acquisition of basic vocabulary and structures as well as cultural material studied in graded readings. (AA: Area E5c, CSU: Area C2, CSU*)

112 Elementary Italian II (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: ITAL 111 or equivalent with Pass 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.) (Pass/No Pass 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) (Pass/ No Pass or letter grade option.) Prerequisite: ITAL 115 or equivalent with Pass or a grade of $C$ or higher. Continuation of a televised, entry-level course that introduces basic Italian vocabulary and language structures and enhances appreciation of Italian culture. Workbook and audiotape exercises focus on reading, writing, and listening comprehension.

This course parallels Italian 112 but without the oral component. (AA: Area E5c, CSU)
117 Advanced Beginning Italian I (3) (Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: ITAL 116 or equivalent with Pass or a grade of $C$ or higher. First half of a televised second-semester course that continues to introduce basic Italian vocabulary and language structures and enhances appreciation of Italian culture. Workbook and audio tape exercises focus on reading, writing, and listening comprehension. This course parallels Italian 121 but without the oral component. (AA: Area E5c, CSU)

118 Advanced Beginning Italian II (3) (Telecourse) (Pass/No Pass or letter grade option.) Prerequisite: ITAL 117 or equivalent with Pass or a grade of C or higher. Second half of a televised second-semester course that completes the introduction to basic Italian vocabulary and language structures and enhances appreciation of Italian culture. Workbook and audio tape exercises focus on reading, writing, and listening comprehension. This course parallels Italian 122 but without the oral component. AA: Area E5c, CSU)

120 Advanced Elementary Italian (5) (Pass/ No Pass or letter grade option.) Minimum of eighty lecture hours per term. Prerequisite: ITAL 110 or 112 or equivalent with Pass 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: ITAL 112 or equivalent with Pass or a grade of $C$ or higher. Further study of grammar and sentence structure, oral and written exercises, conversation in Italian, and dictation. Further study of Italian culture. (AA: Area E5c, CSU: Area C2, UC*)

122 Advanced Elementary Italian II (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: ITAL 121 or equivalent with Pass or a grade of $C$ or higher. Further study of grammar and sentence structure, oral and written exercises, conversation in Italian, and dictation. Further study of Italian culture. (AA: Area E5c, CSU: Area C2, UC: Area $6^{*}$ )
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ 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.)

801 Conversational Italian I, Elementary (2) (Pass/No Pass grading.) Minimum of fortyeight lecture hours per term. A practical course in the Italian language. Intensive drill in the patterns and idioms of daily speech with sufficient grammar to give flexibility in the spoken language. May be considered an excellent preparatory course for students who have not taken a foreign language before. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)

802 Conversational Italian II, Advanced (2) (Pass/No Pass grading.) Minimum of fortyeight lecture hours per term. Prerequisite: ITAL 801 or equivalent with Pass. 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) (Pass/ No Pass grading.) Minimum of eight lecture hours. 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) (Pass/No Pass or letter grade option.) Minimum ofeighty lecture hoursplusthirty-two lab hours by arrangementper term. A beginning course in Japanese emphasizing oral expression, reading, and written forms. (AA: Area E5c, CSU: Area C2, UC)

111 Elementary Japanese I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: JAPN 111 or equivalent with Pass 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) (Pass/No Pass or letter grade option.) Minimum of eighty lecture hours plus thirty-two lab hours by arrangement per term. Prerequisite: JAPN 110 or 112 or equivalent with Pass or a grade of $C$ or higher. Further study of basic patterns of Japanese. (AA: Area E5c, CSU: Area C2, UC: Area 6)
121 Advanced Elementary Japanese I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: JAPN 110 or 112 or equivalent with Pass 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) (Pass/No Passor letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangementper term. Prerequisite: JAPN 121 or equivalent with Pass 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*)
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.)

## Journalism

110 Mass Media in Society (3) Minimum of forty-eight lecture hours per term. 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) Minimum offorty-eight lecture and forty-eight lab hours per term. Prerequisite: eligibility for ENGL 848. Techniques of news gathering, judging news values, and writing the news story. For practical experience, students write for the college paper, The San Matean, thus preparing them for future newspaper work. (AA, CSU) (CAN JOUR 2)
300 Newspaper Production (3) Minimum of sixteen lecture hours and ninety-six hours by arrangementperterm. 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) Minimum of sixteen lecture and thirty-two hours by arrangement per term. A flexible course designed to provide students from a variety of disciplines an opportunity to participate in student publications. This course has flexible hours and work assignments designed for the convenience of students. Assignments can include newswriting, editing, opinion writing, page design and layout, photography, and advertising. (May be taken four times for a maximum of four units.) (AA)
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 - $\mathbf{8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.)

## Library Studies

100 Introduction to Library Research (1) (Pass/No Pass or letter grade option.) Minimum of sixteen lecture hours per term. An introduction to library resources and research. Provides practical, hands-on introduction to library research. Topics covered include formulating and refining a research question, library organization, using reference materials, searching the online catalog and databases, avoiding plagiarism, and citing sources. (AA: Area E5d, CSU, UC)

105 Advanced Online Research (3) (Pass/ No Pass or letter grade option.) Minimum of forty-eightlecture hoursperterm. Recommended Preparation: LIBR 100 or 107. Development of advanced online research skills with an emphasis on effective techniques for accessing and searching online databases and other research tools to identify and evaluate quality information. (AA: Area E5d, CSU)
107 Online Research Basics (1) (Pass/No Pass grading) Minimum of sixteen lecture hours per term. 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.) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours plus thirty-two hours by arrangement per term. Comprehensive introduction to information competency skills needed by college students, researchers, and the general public with emphasis on a particular discipline (business, allied health, humanities, law, social, biological, or physical sciences, etc.). Students will learn how to efficiently search, retrieve, evaluate and manipulate relevant general, scholarly, professional, and specialized resources in print and electronic formats. Particular subject emphasis will be noted in the schedule of classes. (May be taken two times for a maximum of 6 units.) (AA: Area E5d, CSU, UC)
665 Special Topics: Library and Information Studies (.5-2) (Pass/No Pass grading.) (Open Entry/Open Exit) Minimum ofeight to thirty-two lecture hours plus sixty-four hours by arrangement per term. Designed to present opportunities to gain in depth knowledge of a particular library and information research tool, strategy, topic, or issue. (May be taken four times for a minimum of 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 Technology (2) Minimum of sixteen lecture hours and forty-eight lab hours per term. Survey course for students who require a generalized experience in machine tools. Includes instruction in bench work, measurement, threads, cutting tools, lathe, mill, grinding, saws and, others. Lab supplies required. A materials fee in the amount shown in the Schedule of Classes is payable upon registration. (AA, CSU)
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ 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.)

## Management

100 Introduction to Business Management
(3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for $E N G L$ 848. Study of the principal functions of contemporary management, including planning, organizing, staffing, controlling, and decision-making. (AA: Area E5d, CSU)

215 Management of Human Resources (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Line supervision and personnel function in industry: selection and placement; wage and salary procedures; training and evaluation. (AA, CSU)

220 Organizational Behavior (3) Minimum of forty-eight lecture hours per term. 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 ofSupervision (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Role of the supervisor: understanding and motivating employees; leadership, communications, problem solving, and decision-making; employee training, performance evaluation, and labor relations; supervising different types of workers; delegation; improving work methods; reducing costs; planning and managing time. (AA, CSU)

265 Project Management (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Principal functions of contemporary project management, including defining, organizing, tracking, and communicating information in order to meet project goals. Focuses on the science of project management as well as the art of managing projects. (AA, CSU)

641 Cooperative Education (.5-8) (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 - $\mathbf{8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.)

## Manufacturing and Industrial Technology

100 Science for Technology (3) Minimum of forty-eight lecture hours per term. Study of physical science with examples and applications selected to support students in technology programs. Units and measurement, mechanics, properties of matter, heat, electricity and magnetism, waves, atomic physics. Application areas include sensors and instrumentation, welding and non-destructive evaluation, construction. (AA: Area E5a, CSU)

120 Industrial Materials and Processes (3) Minimum of forty-eight lecture hours per term. The study of metals common to industry and related industrial manufacturing processes. Includes the removing, shaping, and joining of metals as well as the processing of plastics, rubber, glass, and some exotic materials currently used in local industries. (AA, CSU)

130 Beginning Blacksmithing and Industrial Forging (2) (Pass/No Pass or letter grade option.) Minimum of sixteen lecture and forty-eight lab hours plus sixteen hours by arrangement per term. Fundamentals of blacksmithing, metal properties, surface treatments, tool design, and manufacturing processes. Shop skills and techniques are demonstrated. Covers basic techniques in manipulating mild and tool steels and fabrication of simple tools. A materials fee as shown in the Schedule of Classes is payable upon registration. Extra supplies required. (May be taken twice for a maximum of 4 units.) (AA: Area E5d, CSU)

680 - 689 Selected Topics (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 Transfer Math Sequence* Liberal Arts/Business<br>MATH 125 or MATH 200 or MATH 145<br>or MATH 147 or MATH 241 V/<br>MATH 242<br>(MATH 130 prerequisite)

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The Transfer Math Sequence* Science/Engineering/Math
MATH 130
V
MATH 222
V
MATH 251 \(V\) V
MATH 252 MATH 268
V
MATH 253 or MATH 270
V
MATH 275
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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 ofC 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.

Extra supplies may be required in all Mathematics classes except MATH 811 and 812.
110 Elementary Algebra (5) Day: Minimum of eighty lecture hours; evening: ninety-six lecture hours; plus sixteen hours by arrangement per term. Prerequisite: Appropriate score on the College Placement Test and other measures as appropriate OR MATH 811 with a grade of C or higher; OR MATH 802 with a grade of $C$ or higher. Recommended Preparation: concurrent enrollment in READ 830. A study of elementary algebra including introduction to: signed number operations, order of operations, linear equations and inequalities in one and two variables, systems of linear equations, exponents, polynomial operations, factoring, rational expressions and equations, roots, radicals and radical equations, and quadratic equations. (AA: C1)

111 Elementary AlgebraI (FIRSTHALF) (3) Minimum offorty-eight lecture hoursplussixteen hours by arrangement per term. Prerequisite: Appropriate score on the College Placement Test and other measures as appropriate OR MATH 811 with a grade of C or higher; OR MATH 802 with a grade of C or higher. Recommended Preparation: concurrent enrollment in READ 830. Covers the first half of MATH 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) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. Prerequisite: Satisfactory completion of MATH 111. Recommended Preparation: Concurrent enrollment in READ 830. Covers the second half of MATH 110. 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. (Note: MATH 111 and MATH 112 together are the equivalent of MATH 110.) (AA: C1)

115 Geometry (5) Day: Minimum of eighty lecture hours; evening: ninety-six lecture hours; plus sixteen hours by arrangement per term. 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: Minimum of eighty lecture hours; evening: ninetysix lecture hours; plus sixteen hours by arrangement per term. 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 concurrentenrollment 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) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. Prerequisite: Satisfactory completion of MATH 110 or 112 or higher with a grade of C or higher OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation:MATH 115 and READ 830. First half of MATH 120, a comprehensive review of elementary algebra with certain topics studied in greater depth. Extension of fundamental algebraic concepts and operations, problem solving and applications, linear, quadratic, rational equations, equations in two variables, graphs, systems of equations, complex numbers, exponential and logarithmic functions, sequences and series. MATH 122 and 123 together are equal to MATH 120. (AA)

## 123 Intermediate Algebra II (SECOND

HALF) (3) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. Prerequisite: MATH 122 with a grade of C or higher. Recommended Preparation: MATH 115 and READ 830. Covers the Second half of MATH 120, a comprehensive review of elementary algebra with certain topics studied in greater depth. Extension of fundamental algebraic concepts and operations, problem solving and applications, linear, quadratic, rational, and radical equations, equations in two variables, graphs, systems of equations, complex numbers, exponential and logarithmic functions, sequences and series. Math 122 and 123 together are equivalent to Math 120. (AA)

125 Elementary Finite Mathematics (3) Minimum offorty-eight lecture hours plussixteen hours by arrangement. 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 (4) Minimum of sixty-four lecture hours plus sixteen hours by arrangement per term. Prerequisites: MATH 120 or 123 OR appropriate score on the College Placement Testandothermeasures as appropriate.
Recommended Preparation: MATH 115 and READ 400 or 405 . Trigonometric functions of real numbers and angles, their graphs and periodicity; reduction formulas; function of multiple angles; identities and equations; radian measure; inverse functions; and solution of triangles. (AA: Area E2b, CSU: Area B4) (CAN MATH 8)
145 Liberal Arts Mathematics (3) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. 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 nonEuclidean geometry, Platonic Solids, topology, probability, problem solving, and logic. (AA, CSU: Area B4, UC: Area 2A)
147 Mathematics and Global Issues (3) Minimum offorty-eight lecture hoursplussixteen hours by arrangement per term. Prerequisite: Satisfactory completion of MATH 120 or 123 with a grade of C or higher OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: Completion of READ 400 or 405 with a grade of C or grade or appropriate skill level as indicated by the reading placement tests or other measures. The use of mathematics and basic scientific reasoning to address complex political, social, environmental, and scientific issues: global warming, endangered species, nuclear waste, world population and others. Mathematical topics will include: functions and mathematical
models; inverse functions, linear, exponential and logarithmic models, data exploration and analysis; the use of a computer to describe and understand the implications of a mathematical model. (AA, CSU)

200 Elementary Probability and Statistics (4) Day: Minimum of sixty-four lecture hours; evening: eighty lecture hours plus sixteen hours by arrangementper term. 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 non-parametric methods. (AA: Area E2b, CSU: Area B4, UC: Area $2 A^{*}$ ) (CAN STAT 2)

222 Precalculus (5) Day: Minimum of eighty lecture hours; evening: ninety-six lecture hours; plus sixteen hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of sixteen lecture hours plus eight hours by arrangement. 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: Minimum of eighty lecture hours; evening: ninety-six lecture hours; plus sixteen hours by arrangement per term. Prerequisites: MATH 120 or 123 OR appropriate score on the College Placement Test and other measures as appropriate. Recom-
mended 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) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. 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: Minimum of eighty lecture hours; evening: ninety-six lecture hours; plus sixteen hours by arrangement per term. Prerequisites: MATH 222 OR appropriate score on the College Placement Test and other measures as appropriate. Recommended Preparation: READ 400 or 405. Study oflimits, 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: Minimum of eighty lecture hours; evening: ninety-six lecture hours; plus sixteen hours by arrangement per term. 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: Minimum of eighty lecture hours; evening: ninety-six lecture hours; plus sixteen hours by arrangement per term. Prerequisite: MATH 252. Recommended Preparation: READ 400 or 405 . Study of the calculus of functions of several independent variables, partial derivatives, multiple integration, vectors and vector calculus to include Green's theorem, Stokes' theorem, and the divergence theorem. (AA, CSU: Area B4, UC: Area 2A*) (MATH 251, 252, and 253 = CAN MATH SEQ C)

268 Discrete Mathematics (4) Day: Minimum of sixty-four lecture hours; evening: eighty lecture hours; plus sixteen hours by arrangement per term. 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) Minimum offorty-eight lecture hours plussixteen hours by arrangementper term. Prerequisite: MATH 252 or equivalent.
Recommended Preparation: concurrentenrollment 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) Minimum offorty-eight lecture hoursplus sixteen hours by arrangement per term. Prerequisite: MATH 253 or equivalent. Recommended Preparation: READ 400 or 405 . With permission of the instructor, may be taken concurrently with MATH 253. Differential equations of first, second, and higher order; simultaneous, linear and homogeneous equations; solutions by power series; numerical methods, Fourier series, Laplace transforms, and applications. (AA, CSU: Area B4, UC: Area 2A) (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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. 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) (Pass/No Pass grading.) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. 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) (Pass/No Pass grading.) (Open entry/open exit) Minimum offorty-eight hours of individualized instruction perterm. Prerequisite: MATH 110 or 111/112. A review of elementary algebra. (Units do not apply toward AA/AS degree.)
850 Mathematics Supplement I (.5-2) (Open entry/open exit) (Pass/No Pass grading.) Minimum of twenty-four to ninety-six hours by arrangement per term. For students who need to strengthen their basic math skills. Instructor will help students identify deficiencies and promote mastery of skills necessary for success in developmental mathematics courses. (To increase competency, may be taken four times for a maximum of 8 units.) (Units do not apply toward an AA/AS degree.)
852 Mathematics Supplement II (.5-2) (Open entry/open exit) (Pass/No Pass grading.) Minimum of twenty-four to ninety-six hours by arrangement per semester per term. For students who need to strengthen their math skills. Instructor will help students identify deficiencies and promote mastery of skills necessary for success in college level mathematics and science courses. (To increase competency, may be taken four times for a maximum of 8 units.) (Units do not apply toward an AA/AS degree.)
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.)

## Meteorology

100 Elementary Meteorology (3) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. Basic course in descriptive meteorology. Includes the atmosphere's structure, the earth's heat budget, cloud forms and precipitation, pressure systems and wind, and air mass and frontal weather. Leads to a better understanding of the obvious and subtle ways of the weather. (AA: Area E5a, CSU: Area B1, UC: Area 5A)

101 Meteorology Laboratory (1) Minimum of forty-eight lab hours plus sixteen hours by arrangement per term. 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) (Pass/No Pass grading) (Open Entry/Open Exit) Minimum 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Recommended Preparation: $E N G L 838$ 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture and sixteen lab hours plussixteen hours by arrangement perterm. Prerequisite: eligibility for ENGL 838 or 848 or equivalent. Topics include basic Mac OS functionality, launching and quitting applications, managing files and folders, and system configuration. Learn about file management, using various storage devices (external hard drives, USB Flash drives), burning CDs \& DVDs, file conversions, and back-up strategies, computer upgrades, and application operability. (May be taken twice for a maximum of 6 units.) (AA, CSU)
172 Webdesign: Dreamweaver (3) (Replacing MULT $170 \& 171$ ) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture and sixteen lab hours plus sixteen hours by arrangementperterm. Prerequisite: MULT 177 or equivalent. Recommended Preparation: eligibility for ENGL 838 or 848 or equivalent; 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 Multimedia Graphics (Photoshop/ Fireworks) (3) (Replacing MULT 175 \& 176) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture and sixteen lab hours plus sixteen hours by arrangement per term. Prerequisite: GRA 160, MULT 102 or equivalent. Recommended Preparation: eligibility for ENGL 838 or 848 or equivalent; MULT 113 or equivalent. Introduction to professional graphics applications Photoshop and Fireworks. Covers the basics of various graphic file formats as applied to media production including media and web design features as well as workflow between the two applications. Students will complete a functional interface design. (May be taken twice for a maximum of 6 units.) (AA, CSU)
184 Digital Video (3) (Replacing MULT 180 \& 181) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture hours andsixteen lab hours plus sixteen hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours andsixteen lab hours plus sixteen hours by arrangement per term. Prerequisite: MULT 184 or equivalent; eligibility for ENG 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture and sixteen lab hours plus sixteen hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: MULT 177 or equivalent. Recommended Preparation: eligibility for ENG 838 or 848 or equivalent; 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 informative 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture and sixteen lab hours plus sixteen hours by arrangement per term. Prerequisite: MULT 177 or equivalent. Recommended Preparation: eligibility for ENG 838 or 848 or equivalent; MULT 113 or equivalent. Introduces Flash, which is used to create vector animations and websites. Covers basic animation principles, interactivity, intro to action script, Flash Fundamentals, and basic software functionality. (May be taken twice for a maximum of 6 units.) (AA, CSU)

279Flash Actionscript (3) (Replacing MULT 272 \& 273) (Pass/No Pass or lettergrade option.) Minimum of forty-eight lecture and sixteen lab hours plus sixteen hours by arrangementper term. Prerequisite: MULT 274 or equivalent. Recommended Preparation: eligibility for ENGL 838 or ENGL 848 or equivalent; MULT 113 or equivalent. Advanced Flash course focuses on dynamic content design and development, using actionscript, clip events and smart clips. Students will learn dynamic interface creation for web, Quicktime, Real Player files and Internet devices such as handheld computer devices. (May be taken twice for a maximum of 6 units.) (AA, CSU)

## 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 <br> Dreamweaver II | $\begin{aligned} & 1.5 \\ & 1.5 \\ & \hline \end{aligned}$ |
| 177 | Graphics for Multimedia (Photoshop) | 3.0 | $\begin{aligned} & 175 \\ & 176 \\ & \hline \end{aligned}$ | Photoshop \& Illustrator I Photoshop \& Illustrator II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 184 | Digital Video | 3.0 | $\begin{aligned} & 180 \\ & 181 \\ & \hline \end{aligned}$ | Digital Video I Digital Video II | $\begin{aligned} & 1.5 \\ & 1.5 \\ & \hline \end{aligned}$ |
| 187 | Final Cut Pro | 3.0 | $\begin{aligned} & 182 \\ & 183 \end{aligned}$ | Final Cut Pro I Final Cut Pro II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 192 | Digital Audio | 3.0 | $\begin{aligned} & 190 \\ & 191 \end{aligned}$ | Digital Audio I Digital Audio II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 253 | Multimedia Design | 3.0 | $\begin{aligned} & 251 \\ & 252 \\ & \hline \end{aligned}$ | 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 Flash II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 279 | Flash Actionscript | 3.0 | $\begin{aligned} & 272 \\ & 273 \end{aligned}$ | Flash III <br> Flash IV | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 282 | After Effects | 3.0 | $\begin{aligned} & 280 \\ & 281 \\ & \hline \end{aligned}$ | After Effects I <br> After Effects II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 292 | DVD Studio Pro | 3.0 | $\begin{aligned} & 290 \\ & 291 \end{aligned}$ | DVD Studio Pro I DVD Studio Pro II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 297 | Pro Tools LE | 3.0 | $\begin{aligned} & 295 \\ & 296 \end{aligned}$ | Pro Tools LE I Pro Tools LE II | $\begin{aligned} & 1.5 \\ & 1.5 \end{aligned}$ |
| 317 | Digital Studio Recording | 3.0 | $\begin{array}{r} 315 \\ 316 \\ \hline \end{array}$ | 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture and sixteen lab hours plus sixteen hours by arrangement per term. 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) Pass/No Pass or letter grade option.) Minimum of forty-eight lecture and sixteen lab hoursplussixteen hours by arrangement perterm. Prerequisite: MULT 177, 187 or equivalent. Recommended Preparation: eligibility for ENGL 838 or 848 or equivalent; MULT 113 orequivalent. Covers the basic DVD principles working with Apple's DVD Studio Pro to learn DVD production, authoring, menus, subtitling, slide shows, and compression. Students will create a final DVD as part of the class. (May be taken twice for a maximum of 6 units) (AA, CSU)
297 Pro Tools LE (3) (Replacing MULT 295 \& 296) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture and sixteen lab hours plus sixteen hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture and sixteen lab hours plus sixteen hours by arrangement per term. 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, voice-over, and foley. Covers digital audio pre-production, small studio set-up, live mincing, and DI (direct input) recording. Pro Tools LE is used for live recording and mixing. Students will be introduced to critical listening, mix down, and mastering to produce an audio CD and will use trans-code the final audio files for web distribution. (May be taken twice for 6 units.) (AA, CSU)
387 Digital Video Workflow (3) (Replacing MULT 385 \& 386) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture and sixteen lab hours plus sixteen hours by arrangement per term. 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 $390 \& 391$ ) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture plus sixteen hours by arrangement per term. Prerequisite: MULT 253 or equivalent; one of the following: MULT 172 or 187 or 274 or equivalent. Recommended Preparation: MULT 113 or equivalent; eligibility for $E N G L$ 838 or 848 . This is the capstone courses to the Multimedia program. Create multimedia projects using production and design techniques covered in previous courses. Students are given "real" projects and work directly with a client. Hands-on experience in client interviewing and management. (May be taken twice for a maximum of 6 units.) (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ 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.)
880 - $\mathbf{8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.) (AA, CSU)

## Music

100 Fundamentals of Music (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848. Designed for students who wish to learn how to read music and perform it at sight. Recommended 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) Minimum of fortyeight lecture hoursper term. 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) Minimum of fortyeight lecture hoursperterm. Prerequisite: MUS. 101 or equivalent. Corequisite: concurrent enrollment in MUS. 132. Recommended Preparation: eligibility for $E N G L$ 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) Minimum of forty-eight lecture hours per term. Prerequisite: MUS. 102 or equivalent. Corequisite: concurrent enrollment in MUS. 133. Continuation of Music 101-102. (AA, CSU, UC)
104 Musicianship IV (3) Minimum of forty-eight lecture hours per term. Prerequisite: MUS. 103. Corequisite: concurrentenrollment in MUS. 134. Continuation of Music 103. (AA, CSU, UC)

131 Harmony I (3) Minimum of forty-eight lecture hours per term. 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) Minimum of forty-eight lecture hours per term. Prerequisite: MUS. 131. Corequisite: concurrentenrollment in MUS. 102. Continuation and advanced study of topics introduced in MUS. 131. (AA, CSU, UC)

133 Harmony III (3) Minimum offorty-eight lecture hours perterm. 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) Minimum offorty-eight lecture hoursper term. Prerequisite: MUS. 133. Corequisite: concurrent enrollment in MUS. 104. Continuation and advanced study of topics introduced in Music 133. (AA, CSU, UC)

202 Music Listening and Enjoyment (3) Minimum offorty-eight lecture hours plus selected listeningper term. 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 off-campus concerts may be required. (AA: Area E5c, CSU: Area C1, UC: Area 3A)
240 Music of the Americas (3) Minimum of forty-eightlecture hours perterm. 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)

250World Music (3) Minimum offorty-eightlecture hours per term. 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) Minimum of fortyeight lecture hours per term. 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) Minimum of thirty-two lecture and forty-eight lab hours per term. 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) (Pass/No Pass or letter grade option) Minimum of thirty-two lecture and thirty-two lab hours per term. Prerequisite: MUS. 290. Advanced MIDI applications, focusing on the uses of MIDI in music composition, music production, and multimedia. MIDI applications include MIDI sequencing programs for both the Macintosh and IBM platforms and music printing software. (To increase competency, may be taken twice for a Minimum of 4 units.) (AA, CSU)

292 Sound Creation: Sampling and Synthesis (3) (Pass/No Pass or letter grade option.) Minimum of thirty-two lecture and forty-eight lab hours per term. Prerequisite: MUS. 290 or equivalent. Creating original sounds for composition, live performance, and sound effects. Practical musical instruction on fully utilizing the technical and artistic potential of samplers and synthesizers. (AA, CSU)
293 Audio for Visual Media (2.5) (Pass/ No Pass or letter grade option.) Minimum of thirty-two lecture and thirty-two lab hours per term. 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) Minimum of forty-eight lab hours plus thirty-two individual practice hours per term. Study in the techniques of piano playing. Individual attention, assignments, and performance in a class situation. Designed only for those students who have no previous piano playing experience. (AA, CSU, UC*)
302 Piano II (1) Minimum offorty-eight lab hours plus thirty-two individual practice hours perterm. Prerequisite: MUS. 301 orequivalent. Continuation of study in the techniques of piano playing. Individual attention, assignments, and performance in a class situation. (AA, CSU, UC*)
303 Piano III (1) Minimum offorty-eight lab hours plus thirty-two individual practice hours perterm. Prerequisite: MUS. 302 orequivalent.

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) Minimum offorty-eight lab hours plus thirty-two individual practice hours perterm. Prerequisite: MUS. 303 orequivalent. 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*)
371 Guitar I (1) Minimum of forty-eight lab hours plus thirty-two individual practice hours per term. Techniques of guitar performance and reading music to enable students to play accompaniments to compositions written for the guitar. Students must supply their own instruments. (AA, CSU, UC*)
372 Guitar II (1) Minimum offorty-eight lab hours plus thirty-two individual practice hours per term. 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) Minimum offorty-eightlab hours plus thirty-two individual practice hours per term. Prerequisite: MUS. 372. Continuation of MUS. 372 with emphasis on solo performances. Students must supply their own instruments. (AA, CSU, UC*)
374 Guitar IV (1) Minimum of forty-eight lab hours plus thirty-two individual practice hours per term. 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) Minimum of forty-eight lab hours plus thirty-two practice room hours per term. Elementary vocal problems analyzed and corrected through exercises and songs. (AA, CSU, UC*)
402 Voice II (1) Minimum of forty-eight lab hours plus thirty-two practice room hours per term. Prerequisite: MUS. 401 or equivalent. Intermediate songs and recital performance as ability merits. (AA, CSU, UC*)

403 Voice III (1) Minimum offorty-eight lab hours plus thirty-two practice room hours per term. Prerequisite: MUS. 402 or equivalent. Advanced songs and recital performance as ability merits. (AA, CSU, UC*)

404 Voice IV (1) Minimum of forty-eight lab hours plus thirty-two practice room hours per term. 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) Minimum of forty-eight lecture-critique hours per term. Prerequisite: Demonstration of proficiency. Study and performance of music for concert band. Correct playing techniques as well as group performance will be emphasized. Performance is required. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU, UC*)
451 Jazz Workshop (1) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture-critique hoursperterm. 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) Minimum of forty-eight lecture-critique hours per term. Prerequisite: demonstration of proficiency in advanced reading and interpretation of jazzstyles. 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*)
465 Music for Minors Training (3) (Pass/ No Pass or letter grade option.) Minimum of fifty-five lecture hours 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 elementary-age children. (AA, CSU)

470 CSM Singers (1) Minimum of fortyeight lecture-critique hours plus thirty-two hours by arrangement per term. 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*)

665 Special Topics in Music Performance (.5-1) (Pass/No Pass grading.) Minimum of eight to sixteen lecture hours plus up to ninety-six lab hours by arrangement per term. 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) Minimum of twenty-four lab hours per semester per term. 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)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ 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) Minimum of thirty-two to thirty-six lecture hours and onehundred twenty lab hours plus sixteen to eighteen hours by arrangement for eight to nine weeks. Prerequisite: Admission to the A.S. Degree Nursing Program. Corequisite: concurrentenrollment 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) Minimum of thirty-two to thirty-six lecture hours and one-hundred twenty lab hours plus sixteen to eighteen hours by arrangement for eight to nine weeks. Prerequisite: completion of NURS 211. Corequisite: concurrentenrollment in NURS 215. Continuation of the study of human health needs and the principles, facts, concepts, and skills basic to nursing care using the nursing process to promote homeostasis. Supervised learning experiences corresponding with classroom instruction in off-campus health care facilities. (Fall only.) (AA: Area E3, CSU)

215 Nursing Skills Lab I (.5) (Pass/No Pass grading.) Minimum of twenty-four lab hours per term. Prerequisite: admission to the A.S. Degree Nursing Program. Corequisite: concurrentenrollment in NURS 211 and 212. This course is an adjunct to the corequisite nursing courses listed above. It provides individual and group practice of nursing skills with competency evaluation of the skills identified for the concurrent nursing courses. (Fall only.) (AA)

221 Pediatric Nursing (4.5) Total forty to forty-five lecture and ninety-six lab hours plus sixteen to eighteen hours by arrangement for eight to nine weeks. Prerequisites: NURS 212.. Corequisite: concurrent enrollment in NURS 225. Developmental assessment and common health issues from infancy to young adulthood. Supervised learning experiences corresponding with classroom instruction in off-campus health care facilities. (Spring only.) (AA: Area E3, CSU)

222 Maternity Nursing (4.5) Total forty to forty-five lecture and ninety-six lab hours plus sixteen to eighteen 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) (Pass/No Pass grading.) Minimum of twenty-four lab hours per term. Prerequisite: NURS 212 or equivalent with a grade of $C$ or higher. Corequisite: concurrent enrollment in NURS 221 and 222. This course is an adjunct to the corequisite nursing courses listed above. It provides individual and group practice of nursing skills with competency evaluation of the skills identified for the concurrent nursing courses. (Spring only.) (AA)
231 Psychiatric Nursing (5) Minimum of forty to forty-five lecture and one-hundred twenty lab hours plus sixteen to eighteen hours by arrangement for eight to nine weeks. Prerequisite: NURS 222. Corequisite: concurrentenrollment 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) Minimum of forty to forty-five lecture and one-hundred twenty lab hours plus sixteen to eighteen hours by arrangement 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) (Pass/No Pass grading.) Minimum of twenty-four lab hours per term. Prerequisite: NURS 222 or equivalent. Corequisite: concurrent enrollment in NURS 231 and 232. Provides for nursing skill development with competency evaluation of the skills identified for concurrent nursing courses. Extra supplies may be required. (Fall only.) (AA)

241 Advanced Medical/Surgical Nursing (5) Minimum of forty to forty-five lecture and one-hundred twenty lab hours plus sixteen to eighteen hours by arrangement for eight to nine weeks. Prerequisite: NURS 232. Corequisite: concurrentenrollmentin 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) Minimum of forty to forty-five lecture and one-hundred twenty lab hours plus sixteen to eighteen hours by arrangement for eight to nine weeks. Prerequisite: NURS 241. Corequisite: concurrentenrollment in NURS 245. Transition to the graduate role. Student initiate the nursing process with emphasis on the determination of priorities, on decision-making 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) (Pass/No Pass grading.) Minimum of twenty-four lab hours per term. Prerequisite: completion of NURS 232 or equivalent. Corequisite: concurrent enrollment in NURS 241 and 242. Provides for nursing skill development with competency evaluation of the skills identified for concurrent nursing courses. Extra supplies may be required. (Spring only.) (AA)
264 Perioperative Nursing (8) (Formerly NURS 261) Minimum of one-hundred twelve lecture hours and five-hundred twelve lab practice hours per term. Prerequisite: current $R N$ license or acceptance into the course by the Nursing Department. Recommended Preparation: one year of recent experience in nursing. This semester course provides entry-level knowledge required to work as a novice practitioner in perioperative nursing. Course focuses on the theoretical framework of perioperative nursing and is intended to be taken in conjunction with NURS 265; the clinical preceptorship. Extra supplies may be needed. (Spring only) (AA, CSU)
265 Perioperative Nursing Preceptorship (10) (Formerly NURS 262) Minimum offivehundred forty-four lab hours 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. This course provides covers entry level knowledge and skills required to work as an entry-level practitioner in perioperative nursing. Focuses on learning in the perioperative clinical setting. Student applies the learned concepts in an operating room under the supervision of assigned preceptors. The course is intended to be taken with NURS 264, the theory component. Extra supplies may be required. (Spring only) (AA, CSU)
610 Basic Medication Dosage Calculations for Nurses (1) (Pass/No Pass grading.) Minimum of sixteen lecture hours per term. 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 Place-
ment test Two). Designed to meet the needs of current and potential practitioners of nursing. Covers the safe and accurate administration of medications to a client, is an important and primary responsibility of the nurse. Includes a step-by-step approach to medication dosage calculations by various routes of administration will be used. Assists students in applying basic mathematical concepts to real world clinical situations. Emphasizes dosage accuracy in clinical scenarios that apply critical thinking skills. (May be taken four times for a maximum of 4 units) (AA, CSU)
615 Pharmacology for Nurses: Practical Applications (1) (Pass/No Pass grading.) Minimum of sixteen lecture hours per term. Course provides practical application of the pharmacological principles of drug therapy to the nursing practice. Discussion will stress the utilization of key drugs prescribed to treat different disease states. Lectures are organized by body system in order to correlate with the nursing pharmacology text currently being used. (AA, CSU)
620 Bridge Course for Advanced Entry Students (1.5) (Pass/No Pass grading) twenty-four lecture hours per semester per term. This bridge course is designed for students who have been accepted into the CSM Nursing. Program at an advanced entry point. Students for whom this course is appropriate include returning students, transfer students, LVN's, and international RN's. Course will help students adjust to CSM's RN program, develop a learning profile, meet other students, and build a support network. Provides an opportunity for students to demonstrate competency in adult physical assessment, in a timed Medication Dosage Calculation Test and in Oral Medication Administration. (AA, CSU)
630 Introduction to Medical Terminology (3) Minimum offorty eight lecture hoursperterm. Course is designed to familiarize students with the basics of vocabulary used in the medical and health professions. Medical terminology is taught by using a systematic word-building approach. This four week self-paced course requires excellent time management skills, computer skills and commitment by the student. (To increase competency, may be taken twice for a maximum of 6 units.) (AA, CSU)

641 Cooperative Education (.5-8) (See first page of Description of Courses section.) (AA, CSU)

666 Careers in Nursing (1) (Pass/No Pass grading.) Minimum of sixteen lecture hours per term. Provides an overview of nursing roles, educational requirements, responsibilities, job opportunities, and settings for nursing practice. Includes the historical evolution of current nursing roles, contemporary health care issues, and career pathways available in nursing. Designed for potential nursing majors and nonnursing majors. (AA: Area E5d, 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)

800 Success Strategies for an RN Program (1) (Pass/No Pass grading.) Minimum of sixteen lecture hoursper term. Recommended Preparation: BIOL 250; Math 110; eligibility for ENGL 100. Course allows interested students a safe "transitional time" prior to beginning an RN program to maximize personal and educational strengths, resources, and experiences in preparation to successfully meet the expectations of a Nursing Program. The goal of this course is to offer additional preparation opportunities to socialize students to the student nurse role. Includes preparing for nursing; refining existing educational skills; aspects of the student role; and stress management. (AA)
815 Transition from 1st Year to 2nd Year: Medical Surgical Nursing (. 5 to 1.5 ) (Pass/ No Pass grading.) Minimum of sixteen lecture hours over one week for Medical-Surgical portion. Twenty-four lecture hours over one week for Medical-Surgical portion plus advanced medication dosage calculations. Eight lecture hours for advanced medication dosage calculations. Prerequisite: Completion of NURS 212 or equivalent. Grade lower than C in NURS 221 or NURS 222. Course focuses on refining and practicing competency in knowledge and skills application as the first year nursing student transitions to the second year. Areas of focus include multi-system physical assessment and communication skills, nursing process, IV therapy and vascular assesses, wound care and healing, and medication dosage calculations. Knowledge and skills will be used in simulation activities and case scenarios. (May be taken twice for a maximum of 3 units) (Units do not apply to AA/AS degree)

845 Review: Registered Nurse Exam (.5) (Pass/No Pass grading.) Minimum of twenty-four lecture and twelve lab hours. 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.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ 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) Minimum of fortyeight lecture hours plus sixteen hours by arrangement per term plus one or more field trips may be required. Introduction to marine geology, chemistry, and biology. Includes the hydrologic cycle and properties of sea water and marine organisms; currents, waves, tides, coastal processes, and ecology of the ocean; continental drift; and sea-floor spreading. (AA: Area E5a, CSU: Area B1/Area B2, UC: Area 5A)

## 101 Oceanography Laboratory/Field Study

 (1) Minimum offorty-eight lab hoursplussixteen hours by arrangement per term. Prerequisite: concurrentenrollment in or completion ofOCEN 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.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.)

## Office Administration <br> (See Business)

## Paleontology

110 General Paleontology (3) Minimum offorty-eight lecturelrecitation hours plus sixteen hours by arrangement per term. Evolution of life through the past 3.8 billion years of earth history. Includes the study of fossils as evidence of the history of life; animals and plants related to modern and ancient environments; methods of interpreting the fossil record; and the impact of drifting continents on speciation and mass extinction. Emphasizes the complexity and diversity of life with an environmental and ecological approach. One or more field trips may be required. (AA: Area E5a, CSU: Area B1/Area B2, UC: Area 5A/Area 5B)

111 Paleontology Laboratory/Field Studies (1) Minimum of forty-eight lab hours per term. Prerequisite: completion of or concurrentenrollment in PALN 110. Optional introductory paleontology laboratory course designed to be taken concurrently with or following PALN 110. Laboratory exercises in dating methods, fossil preservation, rock, fossil and ecosystem identification and interpretation, stratigraphic correlation, natural selection and extinction processes, fossil collection and preparation. Field trips to depositional/ecological environments and fossil sites required. (AA: Area E5a, CSU: Area B1/Area B2, UC: 5A/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.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.)

## Philosophy

(Also see Humanities)

100 Introduction to Philosophy (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introductory survey of philosophical questions about the nature of reality; the prospects for human knowledge; and moral, political, and religious issues. Intended to help students clarify their own thinking about such questions, through learning and discussing how philosophers have dealt with them. (AA: Area E5c, CSU: Area C2, UC: Area 3B) (CAN PHIL 2)

103 Critical Thinking (3) Minimum of forty-eightlecture hoursperterm. 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. Presents techniques for analyzing arguments used in political rhetoric, advertisements, editorials, scientific claims, and social commentary. Develops the ability to create and refine written arguments. Includes inductive and deductive arguments, the validity and consistency of arguments, the relationship between evidence and conclusions, and the use of arguments in science. (AA: Area E2b, CSU, UC)
244 Contemporary Social and Moral Issues (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term.
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) (Pass/ No Pass 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. 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) (Pass/No Pass or lettergrade option.) Minimum of forty-eight lecture hoursperterm. Recommended Preparation: eligibility for ENGL 100 and completion of READ 400 or 405 with a grade of Cor 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)
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ 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.)

## 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.)

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

## Adapted (ADAP)

100 Adapted Aquatics (.5 or 1) (Pass/No Pass grading.) Minimum of twenty-four to forty-eight lab hours plus sixteen lab hours by arrangement per term. Offered primarily for students with physical limitations. Disability verification recommended. Students practice techniques to increase range of motion and strengthen weakened extremities through water-oriented exercises and swim instruction. (May be repeated according to results of individual testing.) (AA: Area E4, CSU, UC: limit 4 units*)

110 Adapted General Conditioning (. 5 or 1) (Pass/No Pass grading.) Minimum of twenty-four to forty-eight lab hours plus sixteen lab hours by arrangement per term. Offered primarily for students with physical limitations. Disability verification recommended. Prescription and implementation of adapted exercises for a number of limiting conditions, ranging from stroke injuries to orthopedic problems. (May be repeated according to results of individual testing.) (AA: Area E4, CSU, UC: limit 4 units*)

130 Adapted Sports (. 5 or 1) (Pass/No Pass grading.) Minimum of twenty-four to forty-eight lab hours per term. Adapted sports for students with and without disabilities. Designed to increase awareness of adapted sports. Focus on the adaptations to the sport, vocabulary specific to the sport, equipment and rules. Class will also involve developing and strengthening sport skills. (To increase competency, may be taken four times for a maximum of 4 units.) (AA: Area E4, CSU)

140 Adapted Weight Training (. 5 or 1) (Pass/ No Pass grading.) Minimum of twenty-four to forty-eight lab hours plus sixteen lab hours by arrangement per term. Designed primarily for students with physical disabilities. Instruction includes various weight lifting techniques and exercises to enhance the student's physical well being. An individualized exercise program includes: Circuit weight training, whole body movement lifts, set training, single muscle isolation and stabilization lifts, and stretching techniques. (May be repeated according to results of individual testing for a maximum of 4 units.) (AA: Area E4, CSU, UC)

155 Adapted Back Care (.5 or 1.0) (Pass/No Pass grading.) Minimum of twenty-four to fortyeight lab hoursper term. Students will participate in flexibility training and a progressive exercise program to build musculature and correct posture. Students will also learn how to perform daily living activities while maintaining back health. (AA: Area E4, CSU)

165 Adapted Lifelong Fitness (. 5 or 1) (Pass/ No Pass grading.) Minimum of twenty-four to forty-eight lab hours plus sixteen lab hours by arrangementperterm. 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*)
875 Adapted Evaluation (.5) (Pass/nopassgrading.) (Open entry/open exit.) Minimum of sixteen hours by arrangement per term. Recommended Preparation: Recent physical examination and disability verification form. Course designed to assess the physical ability of students enrolled in Adapted Physical Education class(es). Based on the results of the assessment, an appropriate exercise program will be determined for
the student. (To increase competency and continued evaluation of improvement, may be taken four times for a maximum of 2 units.) This is NOT an activity class. (Units do not apply toward AA/AS degree.)

## Aquatics (AQUA)

109 Intermediate Swimming and Beginning Water Polo (1) Minimum of forty-eight lab hours per term. Prerequisite: ability to swim comfortably in deep water. Instruction in the basic swimming strokes, water polo fundamentals, and intra-class competition. Progressive skill development in picking up the ball in water, passing, catching, shooting, dribbling. Introduction to basic strategies and water polo rules. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)

127 Swim for Conditioning (. 5 or 1) Minimum of twenty-four to forty-eight lab hours plus sixteen lab hours by arrangement per term. Prerequisite: ability to swim. Endurance swimming for all swimmers at all levels of fitness. Interval training using all strokes. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)

133 Individual Swim Conditioning (. 5 or 1.) (Pass/No Pass or letter grade option.) Minimum of twenty-four to forty-eight lab hoursplussixteen hours by arrangement per term. Prerequisite: must be able to swim one length without touching the bottom or side walls. Students who wish to workout and learn the basic techniques of each stroke at their own pace. Class utilizes a tailored workout that is comprised of various drills and exercises to demonstrate the value of swim fundamentals and training, making swimming easier by becoming more efficient. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU)

135 Aqua Exercise (. 5 or 1) (Pass/No Pass or letter grade option.) Minimum of twenty-four to forty-eight lab hours plus sixteen hours by arrangementperterm. 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, UC: limit 4 units*)

## Dance (DANC)

117 Tap Dance (. 5 or 1) (Pass/No Pass or letter grade option.) Minimum of twenty-four to forty-eight lab hours plus sixteen hours by arrangement per term. Beginning and Intermediate Tap Dance technique. Students will earn tap vocabulary, rhythmic patterns and style while developing strength, musicality and basic performance skills. Opportunities will be available to play the roles of performer and choreographer, dance critic and historian in order to better appreciate tap dance. Choreography and improvisational group projects/ presentations develop over the course of the semester. (To increase competency, may be repeated four times for a maximum of 4 units). (AA: Area E4, CSU)

121 Contemporary Modern Dance (1) Minimum of forty-eight lab hours plus sixteen lab hours by arrangement per term. 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) Minimum offorty-eight lab hours plus sixteen lab hours by arrangement per term. Beginning techniques in jazz-stage, jazz movements, fast jazz, jazz rock, jazz blues, and various other jazz combinations. (AA: Area E4, CSU, UC: limit 4 units*)
132 Jazz Dance II (1) Minimum offorty-eight lab hours plussixteen lab hours by arrangementper term. 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) Minimum of forty-eight lab hours plus sixteen lab hours by arrangement per term. 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) Minimum of forty-eight lab hours plus sixteen lab hours by arrangementper term. 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 or 1) (Pass/ No Pass or letter grade option.) Minimum of twenty-four to forty-eight lab hours plus sixteen hours by arrangementperterm. 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, UC: limit 4 units*)

153 Intermediate Social Dance (.5 or 1) (Pass/No Pass or letter grade option.) Minimum of twenty four to forty eight lab hours per term. Prerequisite: DANC 151 or equivalent. An overview course in Social Dance that goes beyond the basics. Learn variations in Latin, Swing, Waltz and other dance styles with partners who have graduated from the basic levels. No partner required (To increase competency, may be taken twice for a maximum of 2 units.) (AA: Area E4, CSU)
161 Tango Argentino (. 5 or 1) (Pass/No Pass or letter grade option.) Minimum of twenty-four to forty-eight lab hours plus eight to sixteen hours by arrangementperterm. 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, UC: limit 4 units*)
167 Swing Dance I (. 5 or 1) (Pass/No Pass grading.) Minimum of twenty-four to forty-eight lab hoursplussixteen hours by arrangementper term. Introduction, shorthistory, demonstration and instruction of several versions of this popular ballroom dance called Swing. Class emphasizes principles of fitness and enjoyment in a dance and cultural environment. Attention is paid to proper technique in both the lead and follow dance positions, including proper footwork, alignment and posture. Music is varied to broaden experience with different tempos and styles. No prior experience in dance is needed, no partner required. (AA: Area E4, CSU)

195 Dancing Without Limits (. 5 or 1) (Pass/ No Pass) Minimum of twenty-four to forty-eight lab hours plus sixteen hours by arrangement per term. Dance for abled and disabled students with or without previous dance experience. Designed to give people an artistic outlet, to reassure them of their range of movement possibilities and to bring music into their lives. Intended to nourish individual creativity in Dance by using the language of everyday bodies to express imagery and to develop choreography for performance. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU, UC: limit 4 units*)
400 Dance Production (.5-2) (Open entry/ open exit.) (Pass/No Pass grading.) Minimum of twenty-four to ninety-six lab hours plus sixteen hours by arrangement per term. Recommended Preparation: one semester of dance, or equivalent. Preparation of repertory or new dance works created by students, staff and guest choreographers culminating in performance. Focus on developing rehearsal skills and achieving performance excellence through the preparation of completed works. Includes individual rehearsal and choreographic studio work as well as group discussions critiquing existing works. (To increase competency, may be taken 4 times for a maximum of 8 units.) (AA: Area E4, CSU)

## Fitness (FITN)

116 Body Conditioning (. 5 or 1) Minimum of twenty-four to forty-eight lab hours plussixteen lab hours by arrangement per term. Individual flexibility, agility, strength, aerobic fitness, and relaxation. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)

195 Fitness Lab (.5-1.5) (Pass/No Pass or letter gradeoption.) (Open entry/open exit) Twenty-four to seventy-two lab hours plus six to eight hours by arrangement 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, UC: limit 4 units*)
205 Weight Conditioning (1 or 1.5) Minimum of twenty-four to seventy-two lab hours plus sixteen lab hours by arrangement per term. 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 offitness 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.) Minimum of twenty-four to forty-eight lab hours plus sixteen lab hours by arrangementperterm. 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*)
220Weight Conditioning forVarsity Football (.5-2) (Openentry/openexit.)Minimum oftwentyfour to ninety-six lab hoursperterm. Recommended only for Varsity Football candidates. Designed to teach students to use overload weight training to build bulk and strength. Students workon 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.) Minimum of twenty-four to ninety-six lab hours plus sixteen hours by arrangement per term. 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 units.) (AA: Area E4, CSU, UC: limit 4 units*)

235 Cross Training Boot Camp (. 5 or 1) (Pass/No Pass or letter grade option.) Minimum of twenty-four to forty-eight lab hours plus sixteen hours by arrangement per term. Designed to incorporate various exercises including: dumbbell weights, calisthenics, whole body lifts, abdominal (core) movements, bicycle ergometer intervals, jump rope, speed drills, and flexibility exercises. Emphasizes multiple body aerobic and anaerobic exercises to produce cross training effect. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU, CSU: limit 4 units*)

237 Total Core Training (. 5 or 1) (Pass/No Pass or letter grade option.) Minimum of twenty-four to forty-eight lab hours per term. Designed to incorporate various core movement exercises including: dumb bell weights, calisthenics, whole body lifts, jump rope, speed drills, various agility drills, medicine ball throws and core movements and flexibility exercises. Emphasizes multiple body aerobic and anaerobic exercises to prduce cross training effect. (To increase competency, may be taken 4 times for a maximum of 4 units.) (AA: Area E4, CSU)
301 Spinning ${ }^{\circ}$ (. 5 or 1) (Pass/No Pass or letter grade option.) Minimum of twenty-four to fortyeight lab hours plus sixteen hours by arrangement per term. Course includes cycling technique, proper bike set up, body positioning, terminology, gearing, cadence, race strategies, breathing, mind training, injury prevention/ management, flexibility, hydration and nutrition. Designed for both the beginner spinner as well as advanced spinners which allows all who participate to spin at their own maximum capacity. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU, UC: limit 4 units*)

312 Spinning ${ }^{\ominus}$ Heart Rate (. 5 or 1) (Pass/No Pass or letter grade option.) Minimum of twentyfour to forty-eight lab hours per term. Course includes a heart rate monitored cycling technique, proper bike set up, body positioning, terminology, gearing, cadence, race strategies, breathing, mind training, injury prevention/management, flexbility, hydration and nutrition. Designed for both the beginner spinner as well as advanced spinners which allows all who participate to spin at their own maximum capacity. (To increase competency, may be taken 4 times for a maximum of 4 units.) (AA: Area E4, CSU)
334 Yoga (. 5 or 1) (Pass/No Pass or letter grade option.) Minimum of twenty-four to forty-eight lab hours plus sixteen hours by arrangement per term. A fitness class using yoga postures to increase flexibility and strength; improve balance and posture, learn breathing techniques to relax the mind and the body. Class is appropriate for all ages and abilities. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU, UC: limit 4 units*)
335 Pilates (.5 or 1) (Pass/No Pass or letter grade option.) Minimum of twenty-four to forty-eight lab hours plus sixteen hours by arrangement per term. Training of muscles of the torso through controlled exercises that increase core strength and postural stability to optimize performance in athletics, dance and everyday activities. (To increase competency, may be taken 4 times for a maximum of 4 units.) (AA: Area E4, CSU)

## Individual Sports (INDV)

120 Badminton (. 5 or 1) Minimum of twentyfour to forty-eight lab hours plus sixteen lab hours by arrangement per term. Skill techniques, proper footwork, rules of play, strategies, and doubles and singles play for various skill levels of ability. Tournaments in singles and doubles. (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 or 1) Minimum of twenty-four to forty-eight lab hours plus sixteen lab hours by arrangement per term. Lectures on techniques, rules, etiquette, and philosophy for the beginning golfer; practical experience associated with grip, stance, and swings relative to iron and wood shots. (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 or 1) Minimum of twenty-four to forty-eight lab hours plus sixteen lab hours by arrangement per term. Rules and strategies of tennis, including the fundamentals of grip, strokes, footwork, and court coverage through drills and competition. Testing on rules and the various techniques taught. Class play in singles and doubles. (AA: Area E4, CSU, UC: limit 4 units*)
252 Beginning/Intermediate Tennis (. 5 or 1) Minimum of twenty-four to forty-eight lab hours plus sixteen lab hours by arrangement per term. Emphasizes service, forehand, and backhand strokes. Includes rules of play, net play, and doubles and singles strategy. (AA: Area E4, CSU, UC: limit 4 units*)

254 Intermediate/Advanced Tennis (. 5 or 1) Minimum of twenty-four to forty-eight lab hours plus sixteen lab hours by arrangement perterm. Recommended Preparation: successful completion of college level beginning tennis course. Techniques and skills of basic tennis strokes used in playing doubles and singles. Philosophy 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.) Minimum of twenty-four to onehundred ninety-two lab hours plus sixteen lab hours by arrangement per term. Recommended Preparation: interscholastic baseball or equivalent. Training class for students seeking to
participate in Varsity Baseball. Practice in fundamental as well as advanced skills and techniques in baseball. Written and practical testing. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)

110 Basketball (. 5 or 1) Minimum of twentyfour to forty-eight lab hours plus sixteen lab hours by arrangementperterm. Recommended Preparation: high school team play or equivalent. Basketball for students with previous experience and knowledge ofbasketball. 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.) Minimum of twenty-four to one-hundred forty-four lab hours plus sixteen lab hours by arrangement per term. Recommended Preparation: interscholastic basketball or equivalent. A class for women wishing to compete on Women's Varsity Basketball Team. Advanced skills ofbasketball 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 or 1) (Pass/No Pass or letter grade option.) Minimum of twenty-four to forty-eight lab hours plus six to eight hours by arrangement 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, UC: limit 4 units*)
135 Advanced Football and Conditioning (.5-2.5) (Open entry/open exit.) Minimum of twenty-four to one-hundred twenty lab hours per term. Recommended Preparation: interscholastic varsity football experience or equivalent. Review of basic skills and introduction to advanced techniques and strategies in offensive and defensive football. Stresses conditioning necessary to play the game and to achieve lifelong 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) (Pass/No Pass or letter grade option.) Minimum of twenty-four to forty-eight lab hours plus sixteen hours by arrangement per term. Activity course includes instruction and practice in the fundamentals of individual and team play. Emphasis on the skills of dribbling, passing, receiving, heading and defense. Skill development continues through individual and group drills. Individual and team strategy taught through lecture and demonstration. Skills applied in competitive class tournament. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU, UC: limit 4 units*)
150 Softball ( .5 or 1) Minimum of twenty-four to forty-eight lab hours plus sixteen lab hours by arrangementper term. 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*)

158AdvancedSoftball:Women (.5-2) (Open entry/open exit.) Minimum of twenty-four to ninety-six lab hours plus sixteen lab hours by arrangement per term. 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 entrylopen exit.) Minimum of twenty-four to ninety-six hours plus sixteen lab hours by arrangement per term. Recommended Preparation: interscholastic participation in track and field or cross country or equivalent. Designed to increase conditioning through weight training, with emphasis on individual needs in specific track events. Includes running and instruction in all aspects of track and field. Designed for athletes planning to participate in Varsity Track and Field in the spring semester. (To increase competency, may be taken four times.) (AA: Area E4, CSU, UC: limit 4 units*)
171 BeginningVolleyball (. 5 or 1) Minimum of twenty-four to forty-eight lab hours plus sixteen lab hours by arrangement per term. Fundamentals of serving, passing, setting, spiking, and team play. Emphasizes knowledge of rules. Round-robin team play, including class-ending tournaments. (AA: Area E4, CSU, UC: limit 4 units*)

173 Intermediate Volleyball (.5 or 1) Minimum of twenty-four to forty-eight lab hours plus sixteen lab hours by arrangement per term. 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 or 1) Minimum of twenty-four to forty-eight lab hours plussixteen lab hours by arrangementper term. 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*)

## Intercollegiate Sports (VARS)

Participation in varsity sports is available to students who possess the highest level of athletic proficiency. Participation includes competition against colleges in the Coast Conference and other California Community Colleges. Student-athletes must be actively enrolled and attending 12 units during their first semester of competition ( 9 of which must be academic) including enrollment in the varsity sport class. Student-athletes must maintain a 2.0 grade point average and have passed a cumulative 24 units (18 of which must be academic) to qualify for their second season of the same sport. Student-athletes can only compete in two years of the same sport. A student transferring for academic or athletic participation, who has previously participated in intercollegiate athletics at another California Community College, must complete 12 units in residence prior to the beginning of the semester of competition of which a maximum of 8 units may be earned during the summer session. Participants must pass a physical examination prior to being released to compete. See Athletic Director for more information.
100 Varsity Baseball (.5-2) (Open entry/open exit.) Minimum of two-hundred forty lab hours by arrangementperterm. 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 (.5-1) (Pass/No Pass or letter grade option.) (Open entry/ open exity) )Minimum of twenty-four to forty-
eight lab hours plus sixteen hours by arrangement per term. A class for members of the CSM Baseball team to Condition themselves for intercollegiate baseball competition through a program of stretching, weight training and running and other fitness activities related to the physiological development of studentathletes competing in baseball. (To increase competency, may be taken four times for a maximum of 4 units.) (AA, CSU)

120Varsity Cross Country: Men (.5-2) (Open entry/open exit.) Minimum of two-hundredforty lab hours per term. Recommended Preparation: interscholastic participation in varsity cross country or equivalent. Running against local and state-wide competition. Competitive distance: four miles. (AA: Area E4, CSU, UC: limit 4 units*)
130 Varsity Football (.5-2) (Open entry/ open exit.) Minimum of two-hundred forty lab hours per term. 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) (Pass/No Pass or later grade option.) Minimum of twenty-four to one-hundred forty-four lab hours plus sixteen hours by arrangement per term. Maintenance weight training program for in-season competition. Emphasis will be on free weights, flexibility exercises, and anaerobic training. Instruction on form, technique, and muscle development. Participation will increase muscle size, strength, and endurance. (To increase competency, may be taken four times for a maximum of 12 units. (AA, CSU)
134 Defensive Varsity Football Lab (.5-3) (Pass/No Pass or letter grade option.) (Open entry/open exit) Minimum of twenty-four to onehundred forty-four lab hours plus sixteen hours by arrangement per term. Maintenance weight training program for in-season competition. Emphasis will be on free weights, flexibility exercises, and anaerobic training. Instruction on form, techniques, and muscle development. Participation will increase muscle size, strength, and endurance. (To increase competency, may be taken four times for a maximum of 12 units. (AA, CSU)

160 Varsity Swim (.5-2.) (Pass/No Pass or letter grade option.) (Open entry/open exit) Minimum of two-hundred forty lab hours per term. Prerequisite: This is an intercollegiate swim class that requires extensive swimming. Must be able to swim one length without touching the bottom or side walls. Intercollegiate swim competition. Emphasizes both the conditioning and the proper technique of all strokes with emphasis on how to swim efficiently, effectively and faster. (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.) Minimum of two-hundred forty lab hours. 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*)

300Varsity Basketball:Women (.5-2) (Open entry/open exit.) Minimum of two-hundredforty lab hours per term. Recommended Preparation: interscholastic participation in basketball or equivalent. Intercollegiate competition in the Coast Conference and California Championships. (AA: Area E4, CSU, UC: limit 4 units*)

310 Varsity Cross Country: Women (.5-2) (Open entry/open exit.) Minimum of twohundred forty lab hours by arrangement per term. Recommended Preparation: interscholastic participation in cross country or track or equivalent. Cross-country and distance running competition on an intercollegiate level in the Coast Conference; participation in conference meets, invitational meets, and State Championship meets for those who qualify. Racing distance is three miles. (AA: Area E4, CSU, UC: limit 4 units*)

320 Varsity Softball: Women (.5-2) (Open entry/open exit.) Minimum of two-hundredforty lab hours per term. 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 entrylopen exit.) Minimum of twohundred forty lab hoursperterm. 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) (Pass/No Pass or letter grade option.) (Open/entry/open exit) Minimum of two-hundred forty lab hours perterm. 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) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture hours plus sixteen hours by arrangement per term. Concepts of modern baseball are explored including: strategy, coaching techniques, history, game rules and umpiring; developmental drills, theory of strength and conditioning programs and fundamentals of coaching youth baseball. This is NOT an activity class. (AA, CSU)
102 Theory of Offensive Football (3) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen hours by arrangementperterm. Current concepts of offense are examined using game footage, practices, and computer assisted analysis. Concepts are examined and applied to attack opponent's offensive strategies. Strategy, techniques, game rules, developmental drills, strength and conditioning programs are covered. This is NOT an activity class. (AA, CSU)
103 Theory of Defensive Football (3) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen hours by arrangementperterm. 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. Current concepts of special teams are examined using game footage, practices, and computer assisted analysis. Concepts are examined and applied to attack opponent's special teams strategies. Strategy, techniques, game rules, developmental drills, strength and conditioning programs are covered. This is NOT an activity class. (AA, CSU)
120 First Aid/CPR (1) (Pass/No Pass or letter grade option) Minimum of sixteen lecture hours. Recognizing and caring for breathing and cardiac emergencies for life threatening bleeding, sudden illness and injuries, heart disease prevention. This course is taught in compliance with the American Red Cross, and students may earn a CPR/First Aid Certificate. This is NOT an activity class. (AA, CSU, UC)
135 Introduction to College and Intercollegiate Athletics (2) (Pass/No Pass orletter grade option.) Minimum of thirty-two lecture hoursplus sixteen hours by arrangementper term. Designed for student athletes. Instruction on how to get organized; take effect notes, prepare for tests and quizzes. Provides organizational skills for a lifetime. Teaches attitude development while building self-esteem. Course can also address various college services, community college eligibility requirements, and NCAA/NAIA transfer regulations. Study skills instruction and academic planning. Extra supplies may be required. This is NOT an activity class. (AA, CSU)

301 Introduction to Personal Training (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. Recommended Preparation: Eligibility for ENGL 828. Prepares students to take the National Council of Strength and Fitness Certified Personal Trainer Exam. Study of basic human anatomy, exercise physiology, health screening and assessment, nutrition, aerobic and anaerobic conditioning. This is NOT an activity class. (AA: Area E4, CSU)

641 Cooperative Education (.5-8) (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.)

## Physical Science

(Also see Humanities 127 and 128)
676 Physical Reality and Measurement Honors Colloquium (1) Minimum of sixteen lecture hours. Prerequisite: eligibility for the Honors Program and completion of or enrollment in any physical science course that includes a laboratory. Covers the nature of measurement, particularly the effects of objectivity versus subjectivity upon the observer and hence upon the observed. Discusses the reality of concepts, the quantum dilemma, and the prospect of having a perfect "God's-Eye" view of the physical universe. (AA: Area E5a, CSU)

680 - 689 Selected Topics (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.)

## Physics

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

100 Descriptive Introduction to Physics (3) Minimum offorty-eight lecture hoursplus sixteen hours by arrangement per term. Recommended Preparation: one semester of algebra. Open to all students except those who have completed or are taking PHYS 210 or 250 . Description with experimental demonstrations of the more important phenomena of physics. (AA: Area E5a, CSU: Area B1, UC: Area 5A*)

101 Conceptual Physics Lab (1) Minimum of forty-eight lab hours per term. 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) (Pass/No Pass grading.) Minimum of forty-eight lecture and forty-eight lab hours plus sixteen hours by arrangementper term. 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) Minimum offortyeight lecture and forty-eight lab hours plussixteen hours by arrangement per term. 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) Minimum of sixteen lecture hours per term. 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) Minimum of forty-eight lecture and forty-eight lab hours plus sixteen hours by arrangement per term. 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) Minimum of sixteen lecture hours per term. 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) Minimum of forty-eight lecture, sixteen recitation hours, and forty-eight lab hours plus thirty-two hours by arrangement per term. Prerequisite: PHYS 150 or equivalent and completion of or concurrent enrollment in MATH 252. Mechanics, wave motion, and special relativity. Extra supplies required. (AA: Area E5a, CSU: Area B1/Area B3, UC: Area 5A*) (PHYS 250, 260 and 270 = CAN PHYS SEQ B)

260 Physics with Calculus II (4) Minimum of forty-eight lecture and forty-eight lab hours plus thirty-two hours by arrangement per term. 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) Minimum of forty-eight lecture and forty-eight lab hours plus thirty-two hours by arrangement per term. 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)

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.)

## Political Science

100 Introduction to Political Science (3)
Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to the nature of politics and to political science as a field of study. Examines the nature of the state, forms of government and political institutions, political theory and ideology, public law and administration, and international relations. (AA: Area E5b, CSU: Area D, UC: Area 4)
110 Contemporary Foreign Governments (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term.
Recommended Preparation: previous course in political science and eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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) Minimum of forty-eight lecture hours perterm. 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) Minimum of forty-eight lecture hoursperterm. 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Study of classical and modern political thought designed to develop understanding of various theoretical approaches to politics, basic political problems, and proposed solutions to these problems. (AA: Area E5b, CSU: Area D, UC: Area 4)

200 National, State and Local Governments (5) Minimum of eighty lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400, 405 or 415 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the readingplacementtests 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: AreaE1/Area E5b, CSU:Area D/Area F2, UC: Area 4/Area 7B/Area 7C*)

210 American Politics (3) Minimum of forty-eightlecture hoursperterm. 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 844 or ESL 828 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Recommended for international students and recent immigrants but designed to meet the needs of all students. Introduction to the institutions, constitutional framework, and dynamic processes of American democracy and to unique aspects of American society, culture, and historical development which are relevant to American politics and to the formation of national values and character. (Satisfies the American Institutions requirement.) (AA: Area E1a/Area E5b, CSU: Area D/Area F2, UC: Area 4/Area 7B)

215 Contemporary Issues in American Politics (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Explores, within the constitutional framework, current issues of importance to well-informed citizens in a democracy, including goals and tactics of American foreign policy, presidential elections and campaigns, corporate power, criminal justice and individual rights, interpretations of the Founders' political philosophy, Congress. (Satisfies the American Institutions requirement.) (AA: Area E1a/Area E5b, CSU: Area D/Area F2, UC: Area 4/Area 7B)

250 Civil Liberties and Civil Rights (3)
Minimum of forty-eight lecture hours per term.
Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Survey 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)
260 Contemporary Ethnic Politics (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Survey 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 Government (2) (Pass/No Pass or lettergrade option.) Minimum of thirty-two lecturehours. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 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 - $\mathbf{8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.)

## Psychology

(Also see Sociology)
100 General Psychology (3) Minimum of forty-eightlecture hoursperterm. 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. 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) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. 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) (Pass/No Pass or letter grade option.) Minimum of fortyeight lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Application of psychological principles to problems of everyday living, in contrast to the technical-scientific approach of Psychology 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. History and development of marriage as a social institution, including dating; courtship; love; mate selection; personality adjustment in marriage; children; parenthood; the family; anatomical, physiological, psychological, and sociological aspects of sex; religious factors; and divorce. (May not be taken for credit following SOCI 110.) (AA: Area E5b, CSU: Area D/Area E, UC: Area 4)

121 BasicStatistical Concepts (3) Minimum offorty-eight lecture hoursperterm. 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) Minimum of forty-eight lecture hours per term. 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) Minimum of forty-eight lecture hours per term. 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) Minimum of forty-eight lecture hours per term. 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) Minimum of forty-eight lecture hoursper term. 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) Minimum of forty-eight lecture hours per term. 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 concurrentenrollment 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*)

410 Abnormal Psychology (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hoursperterm. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrentenrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. 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) Minimum of sixteen lecture hours per term. Prerequisite: limited to students in the Honors Program who have completed or are concurrently enrolled in an associated non-honors course in Psychology. Recommended Preparation: Completion of READ 400 or 405 with a grade of $C$ or higher $O R$ 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.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ Selected Topics (1-3) (See first page of Description of Courses section.)

## Reading

400 Academic Textbook Reading (3) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen hours by arrangementper term. Prerequisite: READ 830 with a grade of C or higher (or appropriate skill level indicated by the reading placement tests and other measures). Experience the reading of fulllength 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) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen hours by arrangementperterm. 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) (Pass/No Pass grading) (Open entry/open exit) Minimum of twenty-four to one-hundred forty-four hours by arrangement perterm. 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 reading materials. May include internet, computer-assisted, and/or DVD assignments. Uses self-paced programs based on individual diagnostic test results to meet specific student needs. Students may enroll any time through the twelfth week of the semester. (May be taken four times for a maximum of 12 units.) (AA, CSU)
415 Reading Across the Disciplines: Individualized Preparation (.5-1.5) (Pass/No Pass grading.) Open entry/open exit. Minimum of twenty-four to eighty lab hours by arrangement per term. Recommended Preparation: Eligibility for ENGL 838 or 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400 or 405 or appropriate skill level as indicated by the Reading placement tests and other measures. Corequisite: concurrent enrollment in a specific 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, note-taking, annotating, disci-pline-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)

454College-Level Vocabulary Improvement I (.5-1.5) (Pass/No Pass grading) (Open entry/ open exit) Minimum of twenty-four to eighty hours by arrangement per term. Recommended

Preparation: eligibility for READ 400 or 405 or ENGL 100. A self-paced, individualized course designed to improve college-level vocabulary skills through a words-in-context approach. Students will use textbooks and computer programs to study up to 300 words. (May be taken three times for a maximum of 1.5 units.) (AA, CSU)
455 College-Level Vocabulary Improvement II (.5-1.5) (Pass/No Pass) Minimum of twenty-four to eighty hours by arrangement per term. Recommended Preparation: eligibility 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-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)

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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. It is recommended that students enroll concurrently in ESL 825 or higher course, ESL 845 or higher course, and ESL 855 or higher course. Introduction to the study of basic speech sounds and practice in techniques for pronouncing unknown words. Group and individual review of dictionary symbols, diacritical marks, syllabication, and fundamental phonic generalizations. (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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plussixteen lab hours by arrangement per term. Introduction to basic speech sounds and practice in techniques for pronouncing unknown words. Group and individual review of dictionary symbols, diacritical marks, syllabication, and fundamental phonic generalizations. (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 NonNative Speakers of English (3) Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Recommended Preparation: READ 807 or 808 with Pass or a grade of $C$ or higher or eligibility for ESL 857, READ 825, or higher (as indicated by the Reading placement tests and other measures). Improvement or
spelling skills for academic, professional, and personal needs. Includes basic and advanced rules of spelling, commonly misspelled words, and individualized spelling word lists. (To increase competency, may be taken twice for a maximum of 6 units.) (Units do not apply toward AA/AS degree.)
812 Individualized Reading Improvement (.5-3) (Pass/No Pass grading.) (Open entry/ open exit.) Minimum of twenty-four to onehundred forty-four lab hours by arrangement per term. Practice methods of increasing comprehension, vocabulary, critical reading, studyreading 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) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of twenty-four to forty-eight hours by arrangement per term. Self-paced, individualized course to facilitate basic spelling mastery. Includes basic plural rules, final $e$ rules, ielei 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) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of twenty-four to forty-eight hours by arrangement per term. Self-paced course to facilitate advanced spelling mastery. Includes advanced plural rules for doubling final consonants, rules for words ending in able/ible, ance/ence, ceid, sede, and cede, advanced homonyms, and higher-level misspelled words. (Units do not apply toward AA/AS degree.)
825 Introduction to College Reading (3) (Pass/No Pass or letter grade option) Minimum of forty-eight lecture hours plus sixteen hours by arrangement per term. Recommended Preparation: ESL 857 (or appropriate skill level indicated by the Reading placement tests and other measures). Instruction in techniques for improving skills basic to college reading. Focus on comprehension, vocabulary building, and college study reading skills using a variety of nonfiction and fiction materials. Includes reading books for enjoyment, written responses to text, and use of computers. Qualifies as preparation for READ 830. (May be taken twice for a maximum of 6 units.) (Units do not apply toward AA/AS degree.)

830 College and Career Reading (3) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen hours by arrangementperterm. 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 and careerrelated 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 (.5-1.5) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of twenty-four to eighty lab hours per term. 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) (Pass/No Pass grading.) (Open entry/open exit.) Minimum of twenty-four to eighty lab hours per term. 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.)
$\mathbf{8 8 0} \mathbf{- 8 8 9}$ 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) Minimum of forty-eight lecture hours per term. Property, contracts, agency, financing, liens and encumbrances, taxes, escrows, land description. (Meets State requirements for admission to the salesperson's license exam.) (AA: Area E5d, CSU)

105 Property Investments, Valuation, and Management (3) Minimum offorty-eight lecture hours per term. Real estate markets, financing investment purchases, value of money and a well-diversified 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) Minimum of forty-eight lecture hours per term. Comprehensive presentation of real estate brokerage skills in California, emphasizing the daily activities of agents and brokers. (Meets the State requirements as one of two additional courses to move from the initial or temporary salesperson's license to a regular renewable salesperson's license. Accepted for credit for the broker's license.) (AA, CSU)

121 Legal Aspects of Real Estate I
Minimum of forty-eight lecture hours per term. Legal aspects of real estate brokerage, real estate sales, property management, real estate ownership, building of an estate, and related topics, along with a study of the facts and principles of California Real 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)

131 Real Estate Finance I (3) Minimum of forty-eight lecture hours per term. 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)

141 Real Estate Appraisal: Basic (3)
Minimum of forty-eight lecture hours per term. Basic real estate appraisal, including the analysis of residential and commercial properties. Techniques for determination of loan, market, and insurance values. (Meets the State requirements as one of two additional courses to move from the initial or temporary salesperson's license to a regular renewable salesperson's license. Accepted for credit for the broker's license.) (AA, CSU)

200 Real Estate Economics (3) Minimum of forty-eight lecture hours per term. Economic aspects of real estate designed to provide a grasp of the dynamic economic conditions and related factors underlying the real estate business. (Meets the State requirements for the salesperson's and broker's licenses.) (May be taken twice for a maximum of 6 units.) (AA, CSU)

215 Commercial and Investment Property (3) Minimum of forty-eight lecture hours per term. For licensed real estate agents and brokers, financing officials, and investors. Emphasizes the process of selecting properties for investment, including analyzing income, operating expenses, and income tax implications. (Meets the State requirements for the salesperson's and broker's licenses.) (May be taken twice for a maximum of 6 units.) (AA, CSU)
220 Real Estate Property Management (3) Minimum of forty-eight lecture hours per term. Basic elements of investment property management. Covers cash flow projection and valuation, merchandising, maintenance, and evictions. Emphasizes apartment property. (Meets the State requirements as one of two additional courses to move from the initial or temporary salesperson's license to a regular renewable salesperson's license. Accepted for credit for the broker's license.) (May be taken twice for a maximum of 6 units.) (AA, CSU)
301 Escrow Procedures: Basic (3) Minimum of forty-eight lecture hours per term. Methods and techniques of escrow procedure for various types of business transactions with emphasis on real estate. (Meets the State requirements for the salesperson's and broker's licenses.) (AA)
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ 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) Minimum of twenty-four lecture hours. Preparation for the California Real Estate License Exam. Includes the following topics: agency, ethics, contract, ownership, encumbrances, taxation, escrow, and land descriptions. (Units do not apply toward AA/AS degree.) (May be taken twice for a maximum of 3 units.)

879 Selected Topics (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.)

## Social Science

111 Critical Thinking and Writing (3) Minimum of forty-eight lecture hours per term. Prerequisite: ENGL 100. Recommended Preparation: Completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Designed to develop critical thinking and critical writing skills. Presents techniques for analyzing arguments used in political rhetoric, advertising, editorials, scientific claims, and social commentary. Develops the ability to create and refine written arguments, with particular emphasis on advanced composition techniques. Includes inductive and deductive arguments, the validity and consistency of arguments, the relationship between evidence and conclusions, the use of arguments in science, persuasive writing strategies, the concerns of style and audience, and impediments to good writing. (AA: Area E2b, CSU: Area A3, UC: Area 1B) (CAN PHIL 6)
220 British Life and Culture (3) (Pass/No Pass or letter grade option.) Minimum of twentyfour lecture hours and eighty lab hours per term. Recommended Preparation: Completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to 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) (Pass/No Pass or letter grade option.) Minimum of twentyfour lecture hours and eighty lab hours per term. Recommended Preparation: Completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Introduction to French society and civilization by various lecturers in the Paris Semester program of the SMCCCD. Combines lectures with visits to and briefings 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 or 415 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. An introductory course for students who are interested in any area of human services and who wish to increase their knowledge of substance abuse (alcohol and other drugs) in society. Covers the history of alcohol and other drug abuse, its impact on the community and the community's responses. Includes cultural factors of use and abuse of chemical prevention strategies and individual/society intervention. Also covers theories of substance abuse and identification of signs and symptomatology, as well as treatment resources and myths of use. (AA: Area E5d, CSU)

302 Pharmacology and Physiological Effects of Alcohol and Other Drug Abuse (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 or 415 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. 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) Minimum of forty-eight lecture hoursperterm. Recommended Preparation: SOSC 301 and eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of Cor higher OR concurrentenrollment in READ 400, 405, or 415 ORappropriate
skill level as indicated by the reading placement tests orother 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: SOSC301 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848 and completion of READ 400 or 405 or 415 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Designed to assist the significant persons (family, employer, etc.) in the lives of chemically dependent persons. The AOD (alcohol and other drug) counselor will develop strategies to address the dynamics of the interrelationships of the family members. (AA, CSU)
308 Group AOD (Alcohol and Other Drug) Counseling Process (3) Minimum of fortyeight lecture hours per term. Recommended Preparation: eligibility for English 800 and completion of READ 400 or 405 with a grade of Cor 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)
310 Special Population Groups in Alcohol and Other Drug Studies (3) Minimum of forty-eightlecture hoursperterm. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of Cor 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) Minimum of forty-eight lecture hours per term. Prerequisite: SOSC301, 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Explores beginning counseling techniques as well as interviewing and referral skills. Also includes intervention skills and relapse prevention strategies. Using the experiential format, participants study and practice skills in attentive listening and recognizing and responding to different levels of client communication. (AA, CSU)
315 Field Studies and Seminar I (3) Minimum offorty-eight lecture hours plus completion of at least one-hundred hours of documented work in an agency or organization in the alcoholldrug abusefield ( 255 hours if CAADAC certification is sought) per term. 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) Minimum offorty-eight lecture hours plus completion of at least one-hundred hours of documented work in an agency or organization in the alcoholldrug abuse field ( 255 hours if CAADAC certification is sought) per term. 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Overview of domestic violence and its impact on the family and on the social and criminal justice systems involved with violent families. Examines the history and the law regarding domestic violence and the psychological, sociological, and cultural aspects of domestic violence. Examines the relationship of chemical dependency and family violence, assessment/interventions, and current resources in the community. (AA, CSU)
319 Co-occuring Substance Abuse and Mental Disorders (3) Minimum of fortyeight lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400, 405 or 415 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Covers the relationship between alcohol and other drug dependency/addiction and psychological/mental disorders. Focuses on identification and assessment of individuals diagnosed with multiple/dual disorders, current treatment approaches, medication, referral procedures, and interface with the professional mental health community. (AA, CSU)

321 Adolescent Alcohol and Other Drug Prevention, Treatment and Recovery (3) Minimum of forty-eight lecture hours per term. Recommended Preparation: Eligibility for English 848. This course is designed to explore current adolescent AOD prevention strategies, AOD substance use and abuse problems, and AOD treatment and recovery strategies. The emphasis will be place on adolescent biological,
psychological, emotional and social growth issues as related to the abuse of drugs, and other addictions. (AA, CSU)
$\mathbf{6 8 0}$ - $\mathbf{6 8 9}$ 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.)

## Sociology

100 Introduction to Sociology (3) (Pass/No Pass or letter grade option.) Minimum of fortyeight lecture hours per term. Recommended Preparation: eligibility for ENGL 838 or 848; and completion of READ 400, 405, or 415 with a grade of C or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Group behavior and interaction of the individual and society; personality development in different cultures as shaped by customs, attitudes and values. Study of family, politico-economic, educational, and religious institutions; social movements; population; mass society and communications; community structure; social class and status; ethnic and racial minorities; work and leisure. (AA: Area E5b, CSU: Area D, UC: Area 4) (CAN SOC 2)

105 Social Problems (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400, 405 or 415 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. This course in contemporary social issues uses the methodology and paradigms of sociology to examine the nature and types of social problems. Topics included are the nature and definition of social problems, theory and research in social problems, race, social inequality, gender population growth, urbanization deviance, world economy, and family, etc. Course contains theoretical and descriptive studies, of crime delinquency, mental illness, drug abuse, suicide, and other social problems of mass society. (AA: Area E5b, CSU: Area D, UC: Area 4) (CAN SOC 4)

110 Courtship, Marriage and the Family (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 838/848 and completion of READ 400 or 405 or 415 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate 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) Minimum of forty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. Sociological analysis of ethnic relations in the United States, concentrating on the roles, status, and efficacy of major ethnic groups. Brief socio-historical sketch of their backgrounds, ethnic group contacts, competition, conflict, acculturation, assimilation, and discrimination. (AA: Area E5b, CSU: Area D, UC: Area 4*)
200 Urban Sociology (3) Minimum offortyeight lecture hours per term. 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 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)

340 Human Sexuality (3) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture hours per term. Recommended Preparation: eligibility for ENGL 848 and completion of READ 400 or 405 with a grade of $C$ or higher OR concurrent enrollment in READ 400, 405, or 415 OR appropriate skill level as indicated by the reading placement tests or other measures. A look at human sexuality from a psychological,
physiological, and cultural point of view. Survey of sexual research; emphasizes the need for affiliation, commitment, and intimacy. (AA: Area E5b, CSU: Area D/Area E, UC: Area 4)

680 - 689 Selected Topics (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.)

## 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) (Pass/No Pass or letter grade option.) Minimum of eighty lecture hoursplus thirty-two lab hours by arrangementper term. Recommended Preparation: eligibility for ENGL 838 or a higher English course. Study of elementary spanish structures and active vocabulary based on oral and written pattern drills. Conversation based on short readings containing only the structures already practiced. (AA: Area E5c, CSU: Area C2, UC)
111 Elementary Spanish I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Recommended Preparation: eligibility for ENGL 838 or a higher English course. Study of elementary Spanish structures and active vocabulary based on oral and written pattern drills. Conversation based on short readings containing only the structures already practiced. This course covers approximately the first half of the material covered in SPAN 110. (AA: Area E5c, CSU: Area C2, UC*)
112 Elementary Spanish II (3) (Pass/ No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: SPAN 111 or equivalent with Pass or a grade of $C$ or higher. Continued study of elementary Spanish structures and active vocabulary based on oral and written pattern drills. Conversation
based on short readings containing only the structures already practiced. SPAN 112 is the second half of SPAN 111. (AA: Area E5c, CSU: Area C2, UC*)

115 BeginningSpanish I (3) (Telecourse) (Pass/ No Pass or lettergrade 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) (Pass/No Pass 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) (Pass/No Pass or letter grade option.) Prerequisite: SPAN 116orequivalent. 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) (Pass/No Pass 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) (Pass/No Pass or letter grade option.) Minimum of eighty lecture hours plus thirty-two lab hours by arrangement per term. Prerequisite: SPAN 110 or 112 or equivalent with Pass 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) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: SPAN 110 or 112 or equivalent with Pass or a grade of C or higher. Includes short readings that serve as a basis for classroom conversation. Covers approximately the first half of the semester's work in Spanish 120. (AA: Area E5c, CSU: Area C2, CSU*)

122 Advanced Elementary Spanish II (3) (Pass/No Pass or letter grade option.) Minimum offorty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: SPAN 121 or equivalent with Pass or a grade of $C$ or higher. Includes short readings that serve as a basis for classroom conversation. Covers approximately the second half of the semester's work in Spanish 120. (Spanish 121 and 122 are equivalent to Spanish 120.) (AA: Area E5c, CSU: Area C2, CSU: Area $6^{*}$ )
130 Intermediate Spanish (5) (Pass/No Pass or letter grade option.) Minimum of eighty lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: SPAN 120 or 122 or equivalent with Pass or a grade of $C$ or higher. Practice of conversation and composition; review of grammar; in-class and collateral reading of Spanish and Spanish-American literature. Equivalent to Spanish 131 and 132. (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area 6)

131 Intermediate Spanish I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. Prerequisite: SPAN 120 or 122 or equivalent with Pass or a grade of $C$ or higher. Practice of conversation and composition; review of grammar; in-class and collateral readings of Spanish and Spanish-American literature. Covers approximately the first half of the semester's work in Spanish 130. (AA: Area E5c, CSU: Area C2, CSU: Area 3B/ Area 6*)
132 Intermediate Spanish II (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement perterm. Prerequisite: SPAN 131 or equivalent with Pass or a grade of $C$ or higher. Practice of conversation and composition; review of grammar; in-class and collateral readings of Spanish and Spanish-American literature. Covers approximately the second half of the semester's work in Spanish 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) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Prerequisite: SPAN 130 or 132 or equivalent with Pass or a grade of $C$ or higher. Further practice in conversation and composition based on in-class reading of modern Spanish and Latin American authors; review of grammar; collateral reading of Spanish and Spanish-American literature. (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area 6)
161 Reading in Spanish Literature I (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Prerequisite: SPAN 140 or equivalent with Pass 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 (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours per term. Prerequisite: SPAN 161 or equivalent with Pass or a grade of Cor higher. Further oral and written composition; in-class reading of Spanish and Spanish American literature; extensive collateral reading of Spanish and Spanish-American literature, and review of grammar. (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area 6)

251 Hispanoamerica Contemporanea (3) (Pass/No Pass or letter grade option.) Minimum offorty-eightlecture hours perterm. Prerequisites: SPAN 140 with Pass or a grade of $C$ or higher or equivalent. An overview and study of contemporary Spanish American issues, concerns, problems and culture through the collateral study of Spanish American Literature, e.g. essay, short story, poetry, drama, novel and periodicals. Conducted in Spanish. Note: For transfer, course must be taken for a letter grade. (AA: Area E5c, CSU: Area C2, CSU: Area 3B/Area 6)
$\mathbf{6 8 0} \mathbf{- 6 8 9}$ 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 Conversational Spanish I, Elementary
(2) (Pass/No Pass grading.) Minimum of fortyeight lecture hours per term. Intensive drill in the patterns and idioms of daily speech, supported by sufficient grammar to give flexibility in the spoken language. May be considered an excellent preparatory course for students who have not taken a foreign language before. (This
course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)
802 Conversational Spanish II, Advanced Elementary (2) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Prerequisite: SPAN 801 or equivalent with Pass. 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) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Prerequisite: SPAN 802 or equivalent with Pass. More advanced work in conversation following the model of Spanish 802. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)

804 Conversational Spanish IV, Advanced Intermediate (2) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Prerequisite: SPAN 803 or equivalent with Pass. Further advanced work in conversation following the model of Spanish 803. (This course will not fulfill the language requirements at California State Universities or at the University of California.) (AA)
805 Conversational SpanishV, Advanced (2) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Prerequisite: SPAN 804 or equivalent with Pass. Provides an all-Spanish 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 adult-level 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) (Pass/No Pass grading.) Minimum of forty-eight lecture hours per term. Prerequisite: SPAN 805 or equivalent with Pass. 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) (Pass/No Pass grading.) Minimum of eight lecture hours. 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 - $\mathbf{8 8 9}$ 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) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. 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) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangementperterm. 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) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangement per term. 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) Minimum offorty-eight lecture hoursplus sixteen hours by arrangement per term. 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) Minimum offorty-eight lecture hours plus sixteen hours by arrangement per term. 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) Minimum offorty-eightlecture hoursplussixteen hours by arrangementperterm. 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)

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)
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)
855 Speech for Non-Native Speakers (3) (Pass/No Pass or letter grade option.) Minimum of forty-eight lecture hours plus sixteen lab hours by arrangementperterm. Recommended Preparation: ESL 847 with Pass or a grade of C or higher (or appropriate skill level indicated by placement tests and other measures). It is recom-
mended 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) (Pass/No Pass grading.) Minimum of sixteen lecture hours. 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) (Pass/No Pass grading.) Minimum of sixteen lecture hours plus four hours by arrangement. 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) Minimum of sixty-four lecture hours per term. 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) Minimum of one-bundred forty-four lab hours plus sixteen lab hours by arrangement per term. 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) Minimum of sixty-four lecture hours per term. Prerequisites: WELD 110/111. Corequisite: concurrentenrollment 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) Minimum of one-hundred forty-four lab hours plus sixteen lab hours by arrangementperterm. 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)
210Advanced Welding TheoryI (4) Minimum of sixty-four lecture hours per term. 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) Minimum of two-hundred forty lab hours plus sixteen lab hours by arrangement per term. 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) Minimum of sixty-four lecture hours per term. Prerequisite: WELD 210/211. Corequisite: concurrentenrollment 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) Minimum of two-hundred forty lab hours plus sixteen lab hours by arrangementper term. Corequisite: concurrent enrollment in WELD 220. Practical experience in the welding of exotic metals, flame spraying, and pulsed TIG (GTAW), pipe, and MIG (GMAW) welding. Practical experience in job estimation, production welding techniques, and maintenance welding techniques. Instruction in manipulative skills required in metal fabrication processes: hand and power shearing, punching, forming, mechanical fastening, and sheet metal layout. (AA, CSU)

## 250 Fundamentals of Non-Destructive Test-

ing (2) Minimum of thirty-two lecture hours per term. Introduction to nondestructive testing: types, methods, materials, costs, limitations, and personal requirements. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA, CSU)

300 Welding for Technology (2) Minimum of sixteen lecture hours and forty-eight lab hours plus sixteen lab hours by arrangement per term. Introduction to welding for the non-welding major. Covers theory and practice of oxyacetylene welding, bronze brazing, silver soldering, and conventional shielded metal arc, lowhydrogen shielded metal arc, and resistance welding. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA: Area E5d, CSU)
350 Beginning Welding and Metal Fabrication (3) Minimum of thirty-two lecture and sixty-four lab hours plus sixteen hours by arrangement per term. Designed to inform students about metal joining processes, materials, and equipment. Demonstrations and hands-on lab covers sheetmetal fabrication; arc welding processes (Stick, Mig, and Tig) and oxy-acetelyne welding, brazing and cutting. Students are encouraged to design and fabricate a final project that encompasses skills learned during the semester. Materials for final project supplied by the student. A materials fee as shown in the Schedule of Classes is payable upon registration. (May be taken twice for a maximum of 6 units.) (AA: Area E5d, CSU)

680 - 689 Selected Topics (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)

700TIGWelding Technology (4) Minimum of thirty-two lecture and ninety-six lab hours plus sixteen lab hours by arrangement per term. Practical experience in corner, fillet, and butt welding of aluminum, steel, and stainless steel. Study of TIG (GTAW) welding of aluminum, steel, and stainless steel; basic metallurgy; and welding symbols as they apply to blueprints. A materials fee as shown in the Schedule of Classes is payable upon registration. (AA)

879 Selected Topics (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.)


## ARTICULATION ATTRIBUTE LEGEND

Identifies how each course meets associate degree general education requirements, California State University General Education certification, IGETC certification

> AA - Associate Degree applicable
> CSU - transferable to the California State University system
> UC - transferable to the University of California system

Course notations indicate how course is applied to CSM AA/AS degree general education requirements
AA Area C1 - Math/Quantitative Reasoning competency
AA Area C2 - English/Reading competency
AA Area E1 - American History and Institutions, CA State and Local Government
AA Area E1a - American History and Institutions (US History and US Constitution)
AA Area E1b - CA State and Local Government
AA Area E2a - English, Literature, Speech Communication
AA Area E2b - Communication and Analytical Thinking
AA Area E3 - Health Science
AA Area E4 - Physical Education
AA Area E5a - Natural Science
AA Area E5b - Social Science
AA Area E5c - Humanities
AA Area E5d - Career Exploration and Self-Development

Course notations indicate how course is applied to the Intersegmental General Education Transfer Curriculum (IGETC)<br>UC Area 1A - English Composition<br>UC Area 1B - Critical Thinking<br>UC Area 1C - Oral Communication<br>UC Area 2 - Mathematical Concepts and Quantitative Reasoning<br>UC Area 3A - Arts<br>UC Area 3B - Humanities<br>UC Area 4 - Social and Behavioral Sciences<br>UC Area 5A - Physical Science<br>UC Area 5B - Biological Science<br>UC Area 6 - Language Other than English (LOTE)<br>UC Area 7A - U.S. History and American Ideals<br>UC Area 7B - U.S. Constitution<br>UC Area 7C - CA State and Local Government

Course notations indicate how course is applied to the California State University General Education/Breadth (CSU)
CSU Area A1 - Oral Communication
CSU Area A2 - Written Communication
CSU Area A3 - Critical Thinking
CSU Area B1 - Physical Science
CSU Area B2 - Life Science
CSU Area B3 - Lab Course
CSU Area B4 - Math Concepts, Quantitative Reasoning and Application
CSU Area C1 - Arts
CSU Area C2 - Humanities
CSU Area D - Social, Political and Economic Institutions
CSU Area E - Lifelong Understanding and Self Development
CSU Area F1 - U.S. History and American Ideals (can be used to satisfy CSU GE Area D)
CSU Area F2 - U.S. Constitution (can be used to satisfy CSU GE Area D)
CSU Area F3 - CA State and Local Government (can be used to satisfy CSU GE Area D)
The course descriptions marked with a $\left(^{*}\right)$ are transferable with limitations. See a counselor for information about course applicability to educational goals. Additional articulation and university transfer information is located on the College of San Mateo website and Project Assist www.assist.com.

## Faculty

(Date of original appointment follows name.)
Aguirre-Alberto, Sylvia (1989)
Counselor
A.A., College of San Mateo
B.A., M.S., Hayward State University

Alunan, Juanita (1995)
Professor, English
B.A., M.A., M.A., San Francisco State University

Ambrose, Rick (1985)
Professor, Accounting
B.A., Western Kentucky University
M.B.A., Golden Gate University

Appel, Patricia (2000)
Professor, Graphics
B.A., University of Santa Clara
M.F.A., University of California, Los Angeles

Avakian, John S. (1980)
Director, Economic and Workforce
Development, Multimedia/Entertainment
Initiative
B.A., M.A., California State University,

Los Angeles
Ball, Jeremy C. (2001)
Professor, Philosophy
B.A., University of California, Irvine, M.A.,

Ph.D. Claremont Graduate University
Bartels, Sharon L. (1997)
Health Services Coordinator
B.S.N., California State University, Sacramento|
M.P.A., University of San Francisco
M.S.N, Holy Names

Behrens, Audrey (1997)
Associate Professor, Dental Assisting
A.A., College of San Mateo
B.A., Saint Mary's College

Bednarek, Martin (2006)
International Student Program
Counselor/Coordinator
B.S., Nazareth College of Rochester
M.S., San Francisco State University

Beliz, Tania (1990)
Professor, Biology
B.S., University of Panama

Ph.D., University of California, Berkeley
Bennett, Diana (2001)
Associate Professor, Multimedia
A.A., Fashion Institute of Design
\& Merchandising
B.A., M.A., California State University, Hayward
Black, Janet (1988)
Professor, Art
B.S., M.S. Miami University
M.A., Ohio State University

Ph.D., Boston University

Blake, Craig (1992)
Professor, Business
B.S., M.B.A., University of California, Berkeley
D.P.A., University of Southern California

Bobrowski, Christine (1999)
Associate Professor, Music
B.A., Dartmouth College
M.F.A., Mills College

Boosalis-Oler, Maribeck (2007)
Associate Professor, Cosmetology
Borg, Nicole F. (2006)
Assistant Professor, Physical Education, Athletics
A.A., College of San Mateo
B.S., University of Tennessee
M.A., Saint Mary's College

Boosalis-Oler, Maribeck (2007)
Cosmetology
Brannock, Patricia A. (1983)
Professor, Business
B.A., M.A., San Francisco State University

Brixen, Roy E. (1980)
Professor, Electronics
B.A., M.A., San Jose State University

Brown, Kathryn (1977)
Counselor, Professor, Career \& Life Planning
A.A., College of San Mateo
B.A., San Francisco State University
M.S., San Diego State University

Brown, Kenneth M. (2002)
Professor, Mathematics
B.S., Stanford University
M.S., California State University, Hayward

Ph.D., Indiana University
Brown, Michelle M. (2006)
Assistant Professor, Broadcasting
B.A., Central Michigan University
M.A., San Francisco State University

Brown, Ronald (1995)
Professor, Computer and Information Science B.A., Rutgers College

Burke, Michael C. (1976)
Professor, Mathematics
B.A., University of California, Santa Barbara
M.A., Stanford University
M.A., University of Oregon

Carranza, James (2000)
Associate Professor, English
B.A., University of California, Santa Barbara
M.A., San Francisco State University

Castillo, Richard P. (1969)
Professor, Spanish
B.A., University of California, Berkeley
M.A., Middlebury College, Vermont

Caviel, Arnett B. (1970)
Counselor, Professor, Career and Life Planning B.A., M.A., San Francisco State University

Church, Gary (1991)
Professor, Mathematics
B.A., M.S., San Jose State University

Claire, Michael E. (1988)
President
B.S., M.B.A., California State University, Hayward

Clare, Dennis (2001)
Professor, Psychology
B.A., Occidental College

Ph.D., Cornell University
Clay, Michael E. (1983)
Professor, Chemistry
B.A., University of West Virginia

Ph.D., Arizona State University
Clifford, James (1997)
Professor, Psychology
A.A., Cañada College
B.A., B.A., M.A., San Francisco State University

Ph.D., University of California, Santa Cruz
Combs, Durella (1997)
Associate Professor, Welding,
Machine Tool Technology
A.S., College of San Mateo
A.A., Cañada College
B.A., San Francisco State University

Comerford, Sandra Stefani (1990)
Dean, Language Arts
B.A., Lone Mountain College
M.A., San Francisco State University

Ed.D., University of San Francisco
Cooney, Steven (1988)
Professor, Cooperative
Work Experience Education
A.A., Shasta College
B.A., San Francisco State University

Cutler, Merle (1981)
Professor, English
B.A., M.A., San Francisco State University

Danielson, David (1990)
Professor, Philosophy
A.A., De Anza College
B.A., San Jose State University
M.A., The Claremont Graduate School

Davis, W. Lloyd (1981)
Professor, Mathematics
B.A., Harvard University
M.S., Stanford University

Deline, Charlotte (1995)
Professor, Chemistry
B.A., University of California, Irvine
M.S., University of California, Los Angeles
M.S., Cornell University

Demsetz, Laura A. (1999)
Professor, Computer and
Information Science; Engineering
B.S., University of California, Berkeley
M.S., Ph.D., Massachusetts Institute of Technology

Diamond, Kathleen (2000)
Professor, Biology
B.A., University of California, Santa Cruz
M.A. University of California, Los Angeles

Ph.D., University of California, San Francisco

Diskin, Thomas R. (1981)
Professor, Electronics
B.S., California Polytechnic State University, San Luis Obispo
M.S., Oregon State University

Dorsett, Darrel (1984)
Professor, Business
B.S., Illinois State University
M.B.A., College of Notre Dame

Estes, Susan J. (1988)
Vice President, Instruction
A.B., Monmouth College
M.A., Ph.D., University of Missouri

Fiori, Carolyn (1991)
Assistive Technology Specialist
B.A., Sacramento State University
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Ford, Lorrita E. (2002)
Director of Library Services
A.A., Los Angeles City College
B.A., MLIS, University of California, Berkeley

Freeman, Ann (1985)
Professor, English
B.A., Smith College
M.A., University of Wisconsin

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Frontiera, Charlene (2006)
Dean, Math/Science
B.S., California State University, Long Beach Ph.D., University of California, Los Angeles

Galisatus, Michael (2005)
Professor, Music
B.A., San Jose State University
M.A., San Francisco State University

Gamelin, Jacqueline (1979)
Counselor, Professor
A.A., Pensacola Junior College
B.A., Pacific College
M.B.A., Golden Gate University

Gaines, Frederick L. (2007)
Associate Professor, Ethnic Studies
B.A., Wichita State University
M.A., San Francisco State University

Garcia, Modesta (1987)
Counselor, Professor, Career \& Life Planning
B.A., Santa Clara University

Ed. M., Harvard University
Gershenson, Bernard M. (1984)
Professor, English
A.B., University of Illinois
M.A., University of Kentucky
M.A., San Francisco State University

Gomes, Lyle (1984)
Professor, Art; Photography
B.A., M.A., San Francisco State University

Gonzales, Andres A. (1987)
Professor, Anthropology;
English as a Second Language
B.A., California State University, Long Beach
B.A., California State University,

Dominguez Hills
M.A., Middlebury College
M.A., University of Chicago
M.Ed., University of Massachusetts

Grasso, Stacey (2001)
Associate Professor, Computer and Information Science
B.A., Windham College
M.S., University of New Hampshire

Green, Melissa (2001)
Associate Professor, Computer and Information Science
B.A., University of New Orleans
M.A., Mills College

Gregory, Cheryl (2000)
Professor, Mathematics
B.S., M.Ed., University of South Alabama

Hand, Linda (1993)
Professor, Geology; Paleontology
B.S., Boise State University
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Hasson, Robert L. (1984)
Professor, Mathematics
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Haynes, Andria Lynn (2005)
Associate Professor, Cosmetology
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Dean, Creative Art, Social Science
B.A., Michigan State University
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Heyman, Joyce E. (2006)
Associate Professor, English
B.A., University of Michigan
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Hom, Melvin (1991)
Professor, Computer and Information Science; Mathematics
B.A., B.S., M.A., M.A., San Francisco State University
Hughes, Jennifer (2007)
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Professor, Nursing
B.S., M.S., University of California, San Francisco
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Jackson, Jane (2008)
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James, Katherine (1997)
Professor, English
B.A., William Smith College
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Janatpour, Mohsen (1983)
Professor, Astronomy; Mathematics; Physics
B.A., M.S., San Jose State University

Keller, Daniel J. (2002)
Associate Professor, English
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Kirby-Banas, Colleen T. (2008)
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Komas, Robert (1991)
Professor, Mathematics
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B.A., California State University, Northridge
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Lawrence, Yin Mei (2006)
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
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Lehmann, J. Jay (1989)
Professor, Mathematics
B.S., University of Illinois
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Li, Yaping (1995)
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People's Republic of China
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Locke, David (2001)
Associate Professor, Physics
B.S., University of Missouri, Columbia
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Lohmann, Richard (1997)
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MacDonald, James R. (1984)
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Mach, Jean (1989)
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B.A., University of Washington
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A.A., DeAnza College
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B.A., M.A., University of Illinois
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Martin, Theresa (1995)
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B.A., University of California, Santa Barbara
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McAteer, Jane (1987)
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McConnell-Tuite, Milla L. (1987)
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Mellor, Sandra L. (1974)
Dean, Corporate and Continuing Education B.A., M.A., San Jose State University

Miller, Lee R. (2008)
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Morris, Teresa M. (2006)
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B.A., University of California, Berkeley
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Motoyama, Catherine T. (1991)
Professor, Speech Communication
B.A., University of Hawaii
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Murphy, Madeleine (1997)
Professor, English
B.A., King's College, Cambridge
M. Litt., Edinburgh University

Nakata, Rory (1990)
Professor, Art
B.A., San Francisco State University
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Nishanian, Harutiun (2006)
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O'Brien, Eileen (2000)
Counselor, Professor, Career \& Life Planning A.A., Foothill College
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M.S., San Francisco State University

O'Connell, Kathryn M. (1985)
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M.A., San Francisco State University

Owens, Larry (1990)
Head Football Coach
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Paoli, Patricia J. (1979)
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Paolini, Nancy M. (1988)
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Phipps, Linda M. (1985)
Professor, Mathematics
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M.A., Columbia University

Piper, Louise (1990)
Child Development Services Coordinator
B.A., University of Michigan
M.A., San Francisco State University

Pittman, Judith (2001)
Professor, Art
B.A., University of Massachusetts
M.A., San Francisco State University

Pollack, Bret (2000)
Assistant Football Coach
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M.A., St. Mary's College

Ramsey, Carolyn O. (1974)
Counselor, Professor, Career \& Life Planning
B.A., M.S., 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)
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a Second Language
B.A., Drake University
M.S., University of Southern California

Robertson, James (2005)
Associate Professor, History
B.A., Yale University
M.A., Stanford University

Robinson, David G. (1985)
Professor, Mathematics; Meteorology
B.S., M.S., San Jose State University

Ross, Kathleen (2008)
Dean, Business, Technology
B.A., California State University, Long Beach
M.B.A., Pepperdine University

Russell, Suzanne (1998)
Professor, Cosmetology
A.A., College of San Mateo

Ryan, Janis (1994)
Professor, Nursing
A.A., Skyline College
B.S., M.S., University of San Francisco

Sanchez, Samuel (2000)
Associate Professor, Multimedia
Schmidt, Mikel (2000)
Professor, Adapted P.E./P.E.; Health Science
B.A., University of California, Davis
M.A., San Francisco State University

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)
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Smith, Brandon (2005)
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English as a Second Language
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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, Coastside \& Special Projects
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, Professor
B.A., Wichita State University
M.S., San Francisco State University

Uchida, Barbara (1990)
Professor, Physics
B.A., University of California, Berkeley
M.S., University of California, San Diego

Ueda, Makiko (2007)
Counselor, Psychological Services
B.A., Meisei University
M.A., California Institute of Integral Studies

Upshaw, D. Aisha (1975)
Counselor, Professor, Career \& Life Planning
B.S., Central State University
M.Ed., University of Cincinnati

Valenti, Mary (1996)
Counselor, Professor, Career \& Life Planning
B.S., Notre Dame de Namur University
M.A., San Jose State University

Villareal, Henry (2001)
Dean, Enrollment Services
B.S., M.S., University of Wisconsin

Ed.D., Arizona State University
Vorobey, Lilya (2000)
Associate Professor, Drafting Technology;
Machine Tool Technology; Manufacturing
Technology; Welding Technology
B.F.A., California College of Arts and Crafts

Warner, Michelle (1998)
Professor, Physical Education;
Head Women's Basketball Coach
B.A., University of California, Davis
M.A., University of Iowa

Williams, Douglas (1997)
Head Baseball Coach
A.A., College of San Mateo
B.A., University of California, Santa Barbara
M.A., St. Mary's College

Willis, Janice M. (1977)
Professor, Business
B.S., Pennsylvania State University
M.A., San Francisco State University

Wills, Carole R. T. (1982)
Professor, Reading
B.A., M.A., San Francisco State University

Wolf ,Andreas R. (2006)
Dean, Physical Education
B.A. M.A., San Francisco State University

Wong, Alyssa (2007)
Assistant Professor, Mathematics
B.A., University of California, Santa Barbara
M.A., San Francisco State University

Wright, Randy S. (2002)
Associate Professor, Physical Education
B.A., University of California, Los Angeles
M.E., Azusa Pacific University

Wu, Jing (1998)
Professor, Mandarin Chinese
B.A., Shanghai Normal University
M.A., San Francisco State University

Young, Shana Kudo (2007)
Assistant Professor,
Physical Education, Adapted
A.A./A.S., College of San Mateo
B.S., University of California, Davis
M.A., San Jose State University

## Emeriti

(Date of retirement follows name.)

Albert A. Acena (2007)
Dean, Social Science
Roland K. Abercrombie (1963)
Business
Marvin Alexander (1975)
Chairperson, Social Sciences Division

Alvin A. Alexandre (1988)
English; Journalism
Garlan Andrews (1989)
Music
Marian R. Anenson (1984)
Nursing
Robert D. Anderson (1997)
Physics
George Angerbauer (1984)
Electronics Technology; Counselor
Jeanne Angier (1996)
English
Marlene C. Arnold (1994)
Nursing
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
Michael C. Bucher (2008)
Biology
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
Dean Chowenhill (2008)
Counselor; Drafting
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/Athletics
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

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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/Athletics
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
Vance A. Kennedy (2008)
Business
Dr. Noel W. Keys (1995)
Psychological Services
Michael B. Kimball (2004)
English
John R. Kirk (2008)
Economics
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
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 /Athletics
Ruth McCracken (2003)
Nursing
Mary J. McCue (1999)
English
Dr. Joseph M. McDonough (1995)
Psychology
Thurman McGinnis (2008)
Administration of Justice
Pamela N. McGlasson (2008)
Business
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
Diane W. Musgrave (2008)
English; German
Robert C. Newell (1992)
Electronics
John L. Noce (1992)
Physical Education/Athletics
Colette J. Norman (2003)
Librarian
Daniel C. Odum (1989)
Broadcasting Arts
Robert A. Olson (1988)
Speech
Dr. Rosalie M. O'Mahony
(2003)

Mathematics
Adrian Orozco (2002)
Director, EOPS
William H. Owen (1996)
Manufacturing \& Industrial Technology

Peter H. Owens (1994)
Chemistry
Marie T. Paparelli (2006)
Learning Disabilities Specialist
Susan Y. Petit (2008)
English; French
Betty C. Pex (1990)
English
Richard S. Phipps (1984)
Political Science; Career and Personal Development; Counselor

Wilson G. Pinney (1986)
Director, Language Arts
Rosemary Piserchio (1999)
Business; Counselor
Dr. Stephen H. Polansky (2003)
Political Science
Robert D. Pounds (2002)
Physical Education/Athletics

Dolores I. Price (1985)
Physical Education
Joe A. Price (1994)
Art
Jean Pumphrey (1993)
English
Theodore L. Rankin (1987)
Administration of Justice
Vincent P. Rascon (1988)
Art
Dr. Edward H. Rategan (1989)
Computer \& Information Science
Robert Ratto (2008)
Cosmetology
Elizabeth K. Rempel (1977)
Art
James Roach (2003)
Psychology
JoAnn C. Rock (2000)
Cooperative Education
Ernest Rodriguez (2008)
Psychology
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/Athletics
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/Athletics
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


Mathematics
Yoneo Yoshimura (1998)
Counselor
William H. Zempel (1990)
Meteorology; Physics
Paul C. Zimmerman (2002)
Architecture
Christe P. Zones (1992)
Geology

## Parking Regulations

## (summary)

Students are responsible for knowing and following campus parking regulations. Complete parking regulations are available online at collegeofsanmateo.edu/parking, or a copy may be obtained at CSM's Security Office (Bldg. 1, Room 269) or CSM's Business Office (Bldg. 1, Room 147).

All persons driving motor vehicles (except motorcycles) onto campus and utilizing the parking facilities during regular class hours (Monday-Friday; 7 a.m.-10 p.m.), including final examinations, are required to obtain a parking permit. A parking permit is not required for students riding motorcycles and parking must be in designated Motorcycle Parking in Lots 7A and 11A. Student parking permits are available for $\$ 40$ each for the Fall and Spring semesters, and $\$ 20$ for the summer session. A two-term (Fall/Spring) permit is available for $\$ 70$. Parking permits for students with California Board of Governors (BOG) waivers are $\$ 20$ per semester. An additional fee of $\$ 20$ will be charged to replace a permit that has been lost or stolen.
Students who intend to purchase a parking permit may do so online using WebSMART. For information on how to obtain your paid parking permit, please visit our website.
Daily parking permits (\$2) are available from machines in Lots 1, 2, 10 and 14. Parking permits for disabled students who have paid the parking fee are issued only by the Disability Resource Center (Bldg. 16, Room 150, 574-6438)

A grace period allowing for the purchase of permits will be in effect during the first two weeks of the Fall/Spring semesters, and the first week of the Summer term. The grace period pertains only to permits, with all other parking regulations enforced at all times in all parking lots. After the
grace period, permit requirements will be strictly enforced in all lots. (Please see website or Schedule of Classes for specific dates.)
Parking spaces are available on a first-come, firstserved basis. Therefore, a permit is not a guarantee of a parking space. The College and San Mateo County Community College District accept no liability for vandalism, theft or accidents. Use of parking facilities is at the user's risk.

## Visitor Parking

Visitors to campus may park in metered Visitor Parking Lot 2 using the pay-by-space meter. After parking the car, the visitor notes the number of the parking space, enters the number into the meter and deposits coin or currency. The receipt does NOT need to be displayed in the vehicle. Visitors may also park in a student lot after purchasing a daily permit. For location of parking permit machines, please refer to campus map on next page.

## Public Transit

SamTrans bus service has two direct routes to the campus (\#250 and \#260) and connecting bus routes from the Hillsdale Shopping Center and the Caltrain Station serving the CSM campus throughout the day. All buses have wheelchair lifts and also serve students attending evening classes. Routing information is available by calling 1-800-660-4BUS or via the Web at www. samtrans.com and www.caltrain.com. Printed schedules and maps are also available at the College of San Mateo Student Activities Office (Building 13).

## Elevators

Elevator access is available in the following buildings: $1,2,4,8,9,12,14,18$ and 36.

## Parking by Permit Only During Class Hours (See Campus Map, next page)

One-day Permits
$\$ 2$ per day - Permit machine locations indicated by D (Lots 1, 2, 10 and 14)
Visitor Parking
Visitors may park in Lot 2 (permit machine location indicated by $\mathbf{V}$ ) or in a student lot after purchasing a daily permit.

## Student Parking

Lots 1, 2, 9, 10, 11A, 14, 15, 15A, 16, 18, 19, 22

## Staff Parking

Lots 2, 5, 6, 7A, 7B*, 11, 12A*, 13, 17, 20*, 20A, 20M, 23
(*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 7A, 11A


## Buildings:

1. Administration

- Admission \& Records
- Articulation \& Research
- Cashier
- Corporate \& Continuing Ed.
- Counseling
- Financial Aid
- Health Center
- International Student Center
- President's Office
- Psychological Services
- Public Relations \& Marketing
- Security
- Veterans
- VP Office, Instruction
- VP Office, Student Services

2. Under Construction
3. Theatre, Under Construction
4. Under Construction

4A. Ceramics/Sculpture
5. Under Construction
6. Under Construction
7. Maintenance
8. Gymnasium
9. Library, KCSM-TV/FM
10. Art, Music
11. Art, Middle College
12. Accounting, Business
13. Student Activities
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., ITS/Media Services
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. Bookstore
35. Moore Regional Public Safety Center
36. Science Building/Planetarium
A. District Administrative Offices - 3401 CSM Drive
B. College Vista - District Faculty/Staff Housing
K. Kiosko (Temporary Cafeteria)

T1. Student Activities (Fall 2008 only)

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## Notes



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## COLLEGE ${ }^{\circ}$ SANMATEO

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