President's Message

The faculty, administrators and staff join me in welcoming you to San Diego Mesa College. As one of the largest and most successful of California's 108 community colleges, Mesa College takes pride in its high academic standards, its excellent programs and services, and its personal approach to helping each individual student succeed.

At Mesa College, students will find a wide and diverse array of courses and programs leading to the A.A. or A.S. degree in both academic and vocational subjects, as well as programs leading to occupational certificates. Students may also pursue programs of general interest. Because of the college's comprehensive offerings, its excellent programs, its uniquely talented faculty, and its support services, Mesa College enjoys one of the highest student transfer rates in California. Many students who plan to transfer have great success in pursuing the college's Associate Degree in Transfer Studies, as well as the college's guaranteed transfer agreements with colleges and universities in California and throughout the nation. Students following the vocational track have similar success when they enter the job market.

Mesa College has a beautiful campus environment, recently enhanced by a new, state-of-the-art Learning Resource Center, which opened in April 1998. The new Center was constructed at a total cost of $20 million, and its four stories occupy 107,000 square feet in the middle of the campus. The facility offers expanded library holdings, an enormous computer lab for student use, and advanced media facilities. The campus also includes classroom buildings, science labs, an athletics complex and fields, a theatre and fine arts facilities, and beautiful landscaping. The college has also recently added a new Humanities, Languages and Multicultural Studies Building. The passage of a bond measure in November 2002 will provide even more new buildings and facilities improvements at the college.

Mesa College provides extensive collegiate and co-curricular experiences for students, including such opportunities as student government, 20 men's and women's intercollegiate athletic teams, clubs, performance groups, an Honors Program and a host of activities in which students learn leadership skills, expand their academic horizons, and celebrate cultural diversity.

As you read this catalog, you will also find complete information about the college's programs, courses, requirements, and policies. You will find information about the college's other services for students: counseling, library and media services, tutorial services, child care, financial aid, health services, and special services for students with disabilities, just to name a few. The college counselors will answer any questions you may have about programs and services at Mesa College and will assist you in making your educational plans. To contact a counselor, call (619) 388-2672.

Once again, welcome to San Diego Mesa College. Have a productive and enjoyable experience in realizing your educational goals.

Constance M. Carroll, Ph.D.
President

The San Diego Community College District

The San Diego Community College District is charged with educating all adults 18 years of age and older in the City of San Diego. The District provides education at several levels, from adult basic education through sophomore level college degree programs. The District has three fully accredited colleges, City, Mesa, and Miramar, the Educational Cultural Complex, and six major Centers for Education and Technology. The District is governed by a Board of Trustees consisting of five voting members elected by the people of San Diego and a student trustee elected by District college students. The Chancellor is the Chief Executive Officer in charge of day to day operations.
Board of Trustees

Marty Block
President

Wm H. Schwandt
Vice President

Richard S. Grosch
Member

Maria Nieto Senour
Member

Peter Zschiesche
Member

Student Members, 2003-2004
Eric Dobbs  City College
Jeremy Ruben  Mesa College
Dave Abad  Miramar College

District Administration

Augustine P. Gallego
Chancellor

Kenneth D. Fawson
Assistant Chancellor, Instructional Services

Lou Murillo
President, Auxiliary and Institutional Development

Wayne Murphy
Assistant Chancellor,
Human Resources and Administrative Services

Lynn Ceresino Neault
Assistant Chancellor, Student Services

Damon Schamu
Assistant Chancellor, Facilities Services

John Schlegel
Assistant Chancellor, Business Services

Joaquin Hernandez
District Affirmative Action Officer

San Diego Community College District Board of Trustees (from left, back row) Rich Grosch, Chancellor Augustine P. Gallego, Peter Zschiesche and (front row) Bill Schwandt, Maria Nieto Senour, Marty Block.
San Diego Mesa College Administrative and Supervisory Personnel

President
Dr. Constance M. Carroll
(619) 388-2721, Room A-104

Vice President, Instruction
Elizabeth J. Armstrong
(619) 388-2755, Room A-103

Vice President, Student Services
Dr. Richard Rose
(619) 388-2678, Room I-422

Admissions & Records Director
Ivonne Alvarez
(619) 388-2682, Room I-410

Articulation Officer
Dr. Carolyn B. Buck
(619) 388-2639, Room I-3202E

Director, Administrative and Business Services
Terry Davis
(619) 388-2746, Room A-104

Dean, School of Business, Computer Studies/Technology
Otto Lee
(619) 388-2803, Room J-106

Dean, School of Health Sciences/Public Service
Judith Pautler
(619) 388-2789, Room J-107

Dean, School of Humanities and Languages
Kit Foster
(619) 388-2797, Room G-201

Dean, School of Learning Resources and Instructional Support
Dr. William Craft
(619) 388-2799, Room LRC-444

Dean, School of Math & Natural Science
Dr. Saeid Eidgahy
(619) 388-2795, Room J-107

Dean, School of P.E./Health Ed. & Athletics
Dave Evans
(619) 388-2737, Room L-101

Dean, School of Social & Behavioral Sciences/Multicultural Studies
Dr. Kendra Jeffcoat
(619) 388-2801, Room G-201

Dean, Instructional Support Services/Economic Development
Yvonne Bergland
(619) 388-2509, Room A-111

Dean, Student Affairs
Loretta Adrian
(619) 388-2699, Room H-500

Dean, Student Development/Matriculation
Dr. Rachel Ruiz
(619) 388-2896, Room I-3-201

EOPS and Student Support Services Director
Adela Jacobson
(619) 388-2706, Room I-3-101

Financial Aid Officer
Gilda Maldonado
(619) 388-2817, Room I-3-100

Placement Officer
(Vacant)
(619) 388-2777, Room I-3-202
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General Information
History

San Diego City College, San Diego Mesa College and San Diego Miramar College are public two-year community colleges administered by the San Diego Community College District. Also under the auspices of this district are the Continuing Education division with six major centers throughout San Diego, and the Educational Cultural Complex which offers both college and continuing education courses. These educational programs carry out the charge made by the voters of San Diego in 1972, that the San Diego Community College District provide education for all high school graduates and adults 18 years of age and older in the district. This charge includes providing adult basic education through sophomore-level college degree programs, with both academic and vocational curricula.

Community college education in San Diego can be traced to 1914 when the Board of Education of the San Diego City Schools authorized postsecondary classes for the youth of San Diego. Classes opened that fall at San Diego High School with four faculty members and 35 students.

City College was first established in 1916 and was located at San Diego High School. For 25 years the Junior College program was located at San Diego State University. In 1938, the San Diego Vocational Junior College was established to offer training in technical-vocational skills to post high school students. The following year the San Diego Evening Junior College was set up to provide college classes in the evening for adults unable to attend day classes.

In 1964, San Diego Mesa College was opened to 1,800 students. Five years later, in 1969, San Diego Miramar College opened on 140 acres in what was then undeveloped land north of the Miramar Naval Air Station, now known as Mira Mesa. Unlike City and Mesa Colleges which offered a range of general education classes, Miramar College began by concentrating on law enforcement and fire science training. It has since broadened its curriculum to include the general education college courses needed by students in the rapidly growing northern area of the city.

In November 1972, the voters approved separating the San Diego Community College District from the San Diego Unified School District. The first election of community college district trustees was held in November 1973. The year 1976 brought the opening of a unique district campus, the Educational Cultural Complex, dedicated to offering both college and continuing education classes to the multicultural population surrounding its Ocean View Boulevard site. In 1979-80 the administration of the Evening College program was merged with those of the day college programs at San Diego City, San Diego Mesa, and San Diego Miramar Colleges.

With both college and continuing education programs, the San Diego Community College District is the second largest community college district in California and offers a choice of educational programs unparalleled in the region.

Statement of Philosophy

The general education program at the colleges in the San Diego Community College District is designed to broaden students’ knowledge and their understanding of methods of gaining knowledge in a variety of disciplines and to develop students’ abilities in critical thinking, in oral and written communication, and in mathematics.

The awarding of an Associate Degree symbolizes an attempt on the part of the college to lead students through patterns of learning experiences designed to develop an awareness 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, students should possess sufficient depth in some field of knowledge to contribute to lifetime interest.

Mission and Goals

San Diego Mesa College, as part of the California Community College system and the San Diego Community College District, has a vital role in higher education with a commitment to provide excellent educational programs and services to its students and the community.

San Diego Mesa College cultivates relationships with the total community, offering programs for the benefit of college students of all backgrounds and ages, including those wishing to re-enter the educational process. The College is committed to providing education and services that promote access, retention, and student success. Through participatory governance, all segments of the college promote excellence in college programs and governance, engage
in on-going dialogue about quality, assess how well learning is occurring, and implement institutional changes to improve student success.

The primary mission of San Diego Mesa College is to provide:

- "Programs which lead to an Associate Degree or Certificate,
- "Lower division curricula in arts and sciences with an emphasis on courses which transfer to baccalaureate institutions,
- "Programs in career and technical education, and
- "Programs that promote regional economic development.

To further this mission, educational programs and services offered by San Diego Mesa College include:

**General Education, Associate Degree Majors, and Transfer Education:** Courses and programs which contribute to the broad education of career, technical and transfer students. Included are critical thinking, writing, and oral communication skills; the ability to use and understand quantitative analysis; awareness of the arts and humanities; understanding of diversity, personal and civic responsibility, and of the physical, social and behavioral sciences as they affect one's participation in the diverse local and global community.

**Basic Skills:** Courses and programs which prepare students, including native and non-native speakers of English, for college level reading, writing, speaking, and mathematics, as well as other programs designed to enable those with special learning needs to reach their educational goals.

**Student Services:** Admission, orientation, assessment, counseling, tutorial, and other services which assist students in the matriculation process; including helping students select programs and courses that help satisfy their transfer and/or career goals and offering services that promote access, retention and student success.

**Co-curricular Activities:** Courses, programs and activities that further the students' learning experience through the practical implementation of curriculum-based methods, theories, and concepts resulting in the enrichment of both students' development and campus life.

**Economic and Career Development:** Courses and degree and certificate programs that advance California's economic growth and global competitiveness through education, training, and services that contribute to continuous work force improvement.

### Accreditation

San Diego Mesa College is accredited by the Western Association of Schools and Colleges and approved by the California State Department of Education. In addition, certain programs at Mesa College hold special accreditation:

- Animal Health Technology - California Department of Consumer Affairs, Veterinary Medical Board
- Health Information Technology - Commission on Accreditation of Allied Health Education Programs;
- Medical Assisting - Commission on Accreditation of Allied Health Education/American Association of Medical Assistants;
- Physical Therapist Assistant - Commission on Accreditation in Physical Therapy Education (American Physical Therapy Association);
- Radiologic Technology - Joint Review Committee on Education in Radiologic Technology.
- Interior Design - Foundation for Interior Design Education Research (FIDER)
- Dental Assisting - American Dental Association Commission on Dental Accreditation (and has been granted the accreditation status of full approval).

Mesa College is approved by the Office of Private Postsecondary Education for the training of veterans as well as by the U.S. Department of State and the U.S. Immigration Services for international student education. Courses paralleling university level work are accepted by the University of California, the California State Universities, and by other universities and colleges.

Persons interested in the institution's accreditation and program approvals may review documents describing these activities in the President's Office. These documents will be available for such review at a mutually convenient time during regular business hours, and an appropriate interpretation of their contents will be provided if requested.
Disclaimer
The San Diego Community College District is governed by its Board of Trustees. No oral or written representation by any employee of the College is binding on the San Diego Community College District without the express approval of the Board of Trustees.
Academic Calendar 2003-2004

Fall Semester 2003

16-WEEK SEMESTER: Fall Classes September 2, 2003 - December 20, 2003

SPECIAL DATES

June 13, 2003 . . . . . . . . . . . . . . . . . . Final day to file an application for admission for the Fall semester and
receive an appointment in the mail to register by telephone or online. Applications filed after this date will be assigned a registration appointment in the Admissions Office.

September 1, 2003 . . . . . . . . . . . . . . . RESIDENCE DETERMINATION DATE (APPLIES TO ALL SESSIONS)

September 1, 2003 . . . . . . . . . . . . . . . Holiday - Labor Day

October 24, 2003 . . . . . . . . . . . . . . . . Last day to file a petition for graduation for an Associate Degree or Certificate of Achievement for June or Summer 2004 graduation in order to receive an evaluation prior to beginning of Spring semester.

November 10, 2003. . . . . . . . . . . . . . . Holiday - Veterans Day

November 27 & 28, 2003 . . . . . . . . . . Holiday - Thanksgiving**


Spring Semester 2004

16-WEEK SEMESTER: Spring classes February 2, 2004 - May 29, 2004

SPECIAL DATES

Date to be determined . . . . . . . . . . . . Final day to file an application for admission for Spring semester and receive an appointment in the mail to register by telephone or online. Applications filed after this date will be assigned a registration appointment in the Admissions Office

February 1, 2004 . . . . . . . . . . . . . . . . RESIDENCE DETERMINATION DATE (APPLIES TO ALL SESSIONS)

February 13, 2004 . . . . . . . . . . . . . . . . Holiday - Lincoln's Day**

February 16, 2004 . . . . . . . . . . . . . . . Holiday - Washington’s Day

February 27, 2004 . . . . . . . . . . . . . . . Last day to file a petition for graduation for an Associate Degree or Certificate of Achievement for June or Summer 2004 completion

April 5 - 10, 2004. . . . . . . . . . . . . . . . Spring Recess

** No Saturday or Sunday classes after a Friday holiday. No Sunday classes before a Monday holiday.

Note: Holidays apply to all sessions.
Summer Session 2004

Summer classes June 14, 2004 - August 7, 2004

SPECIAL DATES

June 13, 2004 . . . . . . . . . . . . . . . . . . . RESIDENCE DETERMINATION DATE (APPLIES TO ALL SESSIONS)
June 18, 2004 . . . . . . . . . . . . . . . . . . . Last day to file a petition for graduation for an Associate Degree or Certificate of Achievement for Completion in Summer 2004
July 5, 2004 . . . . . . . . . . . . . . . . . . . Holiday - Independence Day

** No Saturday or Sunday classes after a Friday holiday. No Sunday classes before a Monday holiday.
Admissions and Registration
The College Matriculation Program

Steps to Student Success
The college matriculation program is designed to help students succeed in their academic program. To “matriculate” means to enroll and to commit oneself to an educational goal. The matriculation process requires a commitment on the part of the college as well as the student.

The steps in the matriculation process are:

1. Admission
2. Assessment
3. Orientation
4. Educational planning with a counselor
5. Follow-up of student progress

The matriculation program has been designed especially for students who intend to earn a certificate or degree at the college or to transfer to a four-year college or university. However, the services are available to all students admitted to the college.

All students are encouraged to participate in the various components of the matriculation program.

Students who meet the following criteria are exempt from the matriculation process:

1) Admission
   - No exemptions

2) Assessment:
   - Students with the following educational goals: preparation for a new career, advancement in their current job/career, maintenance of a certificate or license, educational development, or completion of credits for high school diploma
   - Students enrolled in an apprenticeship program
   - Students who have an associate degree or higher
   - Students concurrently enrolled at a four-year college
   - Students who have taken the placement tests within the last three years

3) Orientation:
   - Students with the following educational goals: preparation for a new career, advancement in their current job/career, maintenance of a certificate or license, educational development, or completion of credits for high school diploma
   - Students enrolled in an apprenticeship program
   - Students who have an associate degree or higher
   - Students concurrently enrolled at a four-year college

4) Counseling/Advising
   - Students with the following educational goals: preparation for a new career, advancement in their current job/career, maintenance of a certificate or license, educational development, or completion of credits for high school diploma
   - Students enrolled in an apprenticeship program
   - Students who have an associate degree or higher
   - Students concurrently enrolled at a four-year college
   - Students who have taken the placement tests in the last three years

5) Follow-up
   - No exemptions

Admission
Admission is open to anyone who meets one of the following criteria:

- Persons who possess a high school diploma or California high school proficiency exam certification or GED with an average score of 45 or higher.
- Persons 18 years of age or older or emancipated minors who do not possess a high school diploma or equivalent may be admitted by the college under provisional admission status.
High school students requesting concurrent enrollment may be admitted as “special part-time” students subject to the following criteria:

a. Students must have a grade point average of 4.0 (9th grade or lower) or 3.0 (10th-12th grade).

b. Students must satisfy prerequisites and eligibility requirements for each course.

c. Students may take a maximum of two courses not to exceed 8 units per semester or session. This maximum includes classes at City, Mesa, Miramar Colleges and ECC (excluding High School Honors classes).

d. The requested course is UC/CSU transferable or advanced technical.

e. The requested course is not available at the school of attendance.

f. Students will be given college credit for all courses.

Persons who are under 18 years of age who do not have a high school diploma and are not enrolled in a high school may be admitted as a special full-time student pursuant to Education Code §48800.5 subject to approval of the high school governing board and the college President where the student is planning to attend. Special full-time students will be admitted under provisional admission status.

Persons who do not meet one of the admission criteria stated above will not be admitted under any circumstances.

All new students must file an application for admission. Students who have not been in continuous attendance for one year must file a new application for admission.

Apply Online
Applications for admission to San Diego City, Mesa and Miramar Colleges are available on the Internet. Students access the on-line application at http://studentweb.sdccd.net.

Important Reminder
Every male citizen of the U. S. and male immigrant residing in the U. S., ages 18 through 25, must register with the Selective Service.

Assessment
Students will be given an assessment appointment at the time of application.

Assessment guides students through the college curriculum. It is commonly used by community colleges to assist students in selecting courses best suited to their abilities and educational goals.

Assessment includes testing as well as other measures and is intended to assist students in meeting course prerequisites.

Students may meet course prerequisites based on other factors such as past educational achievements in mathematics or English or course completion. Testing accommodations are available to students with disabilities. Contact Disabled Students Programs and Services.

Orientation
Matriculating students who have been admitted to the college are expected to enroll in Personal Growth 65 (Orientation to College) before registering for classes at the college. The orientation class provides important information to students about the programs and services available at the college as well as strategies for student success. Services include assessment for English/Math placement and developing Student Education Plan.

Educational Planning
The Student Education Plan (SEP) is an important tool to assist students in successfully attaining their goals without wasted time and effort. Counseling and career planning services are available to help students make informed choices concerning the programs and courses available.

The Student Education Plan (SEP) is an agreement which contains the official requirements for graduation and/or transfer. All transcripts of prior college work must be on file and evaluated by the Evaluations Office before an official education plan can be prepared. See the Graduation section on page 69 for graduation filing requirements.

A SEP typically lays out a program of study for a four or six semester period. These plans allow students to determine how long it will take to complete a program of study and to be sure that all program requirements can be met within a particular period of time. Education plans may be changed. The student should review plans periodically with a counselor. They are revised as a student’s goals or objectives change.
Assessment of interests and aptitudes is also available to those students who want more information or assistance in order to choose the “right” programs or courses.

Course Numbering System
The course numbering system has meaning with regard to level and transfer. See the description below:

- **1-49** Basic Skills or college preparatory courses. Credit does not apply toward an associate degree or transfer to a four-year college or university.
- **50-99** Course credit applies toward the associate degree but does not transfer to a four-year college or university.
- **100-299** Course credit applies toward the associate degree and credit is intended for transfer to a four-year college or university. (Some courses may be identified as associate degree.) Final decision in regard to transferability rests with the receiving institution.
- **300-399** Apprenticeship and in-service courses that may also count toward the associate degree, but credit may transfer.

Follow-up Services
Follow-up services are available to all students as part of the college’s commitment to student success. These services include a periodic review of student progress and education plans to assist students in reaching their educational goal. Students who need additional support services will be referred to those services.

Registration
With the exception of Special-Admit High School students, all students receive an appointment to register by telephone using ClassTalk or online using Reg-e. Special-Admit High School students must enroll in person at the time of their registration appointment.

By using the combined schedule of classes and ClassTalk or Reg-e, a student can enroll in any available course offered at ECC, City, Mesa, or Miramar Colleges. The class schedule is also available on the web at: http://www.sdccd.net/schedule

ClassTalk and Reg-e are easy to use. Written instructions for using ClassTalk may be found in the combined schedule of classes and in the Admissions Office. Instructions for using Reg-e are on the registration site.

The following information and services are available through ClassTalk and Reg-e:

- registration
- a record of the student’s class schedule, fees, and payment deadlines
- cancellation of registration
- adding and dropping classes
- academic deadlines and calendar
- grade information
- academic history
- purchase of parking permits
- purchase of an Associated Students college membership

Online Registration (Reg-e)
Students can register for classes using Reg-e, the San Diego Community College District’s online registration system. Students can visit the Student Services at: http://studentweb.sdccd.net and click on the Reg-e icon. Full instructions will lead students through the process.

Class Schedules on Internet
Up-to-date class schedule information and course descriptions for each campus is available on the Internet at www.sdccd.net/schedule. This web site displays new classes, cancellations, and changes after the printed schedule has been distributed. A search engine allows students to search for classes by academic subject, by time and day, or by key words.

Wait List
Students who attempt to register in a class that is closed may request to be placed on a Wait List.

**IMPORTANT NOTE:** Wait Listing is not a guaranteed priority for enrollment.

**Wait List Criteria**

- Students may place their name on only one Wait List for a specific course (subject and course number).
- Students who are on a Wait List and later enroll in
another section of the same subject and course number will be automatically removed from the Wait List.

- Students will be told their priority number on the Wait List.
- Students will have the capability to query their priority number on the Wait List.
- Students will have the option to remove themselves from the Wait List at any time.
- Wait List capability is available through both telephone and online registration.
- There will be a limit to the number of students allowed on each Wait List.
- Students must meet course prerequisites in order to be placed on the Wait List.
- Students must attend the first class meeting to have their Wait List priority considered.
- Being on the Wait List does not guarantee a space in the class.

Adding Classes
Students may add classes by telephone or online until the deadline date published in the schedule of classes. Students will not be allowed to add classes beyond the published deadline.

To add a class once the semester has begun, students must obtain an add code from the instructor, then must process and pay for the added class through ClassTalk or Reg-e. A student may also pay at the Accounting Office, Room I-412.

Students are not officially enrolled until the add code is processed through ClassTalk or Reg-e and fees are paid in full. Add codes for Special-Admit part-time high school and Joint Diploma students must be processed in person in the college Admissions Office prior to the add deadline.

If an instructor finds that a student has given his or her add code to another student, the instructor should administratively drop the student who was not issued the add code.

Dropping Classes
Students may drop or withdraw from classes by telephone or online until the deadline dates published in the schedule of classes. Deadline dates not published in the schedule of classes are available in the Admissions Office or online at http://studentweb.sdccd.net

It is the student's responsibility to drop classes. If a student remains on the class roster beyond the withdrawal deadline, the student must receive a letter grade even if he or she has stopped attending class.

^NOTE: The “withdrawal” deadline for the 16 week primary session is the Friday of the 10th week of instruction. Consult the class schedule for the published dates http://studentweb.sdccd.net

Administrative Drop
Registration may be administratively canceled for the following reasons:

1) Failure to pay all mandatory fees in accordance with the fee payment schedule;
2) Using an add code issued to another student;
3) Failure to meet the terms and conditions of a fee deferment;
4) Failure to meet academic or progress standards;
5) Denial of a “Petition to Challenge A Prerequisite.”

Exclusion from Classes
A student may be excluded from class or the college whenever the student:

1) Exhibits behavior which interferes with the educational process. An instructor may remove a student from two class sessions for disruptive behavior. (Refer to Policy 3100: Student Rights, Responsibilities and Administrative Due Process); or
2) Is found to have a communicable disease which requires isolation pursuant to a directive from the County Department of Public Health.

Children in Classrooms
No children are allowed in any classroom, or to be left unattended on the campus.

Study Load Limit
The maximum study load for a semester is 20 academic units exclusive of physical education activity units and/or 25 units including physical education. In special circumstances, in which a student has an exceptional record of academic achievement, the Counseling Department may consider a request to increase this limit.
Students are reminded that each unit of credit is calculated to involve a total of at least three hours of classroom and outside time per week. Thus, a 20-unit study load represents a minimum 60-hour work load each week. Students working full-time are advised NOT to attempt a full-time college program.

Twelve units of credit is considered a minimum full-time program during a semester; nine units is three-quarters time, and six units, half-time.

The maximum study load for summer session is twelve academic units excluding physical education and/or 15 units including physical education.

**Priority System**

Consistent with state law and the goal of providing a fair and equitable registration system for all students, the San Diego Community College District has established the following priority system for assigning registration appointments for Fall and Spring semesters:

1) EOPS and DSPS students
2) Continuing students
3) New matriculating students
4) New students
5) Students possessing a baccalaureate or higher degree who are not matriculating

Within each of the five groups, students are prioritized according to cumulative units, including transfer units and work in progress. New students are assigned an appointment on a first-come, first-served basis. The priority is as follows:

1) 50.0-69.9 units
2) 70.0-89.9 units
3) 49.9-0 units
4) More than 90 units (in ascending order)

The priority system for the Summer session is:

1) EOPS and DSPS students
2) Currently enrolled students
3) Previously enrolled students
4) New students

**Change of Name, Mailing or Email Address**

All students must report immediately any change of address to the college Admissions Office or online. Failure to provide this information will result in delays in registration, and other important information sent by the college. Name changes must be supported with legal documentation and a picture ID and reported in person at the Admissions Office.

**Prerequisites, Corequisites, and Limitations on Registration**

PLAN AHEAD! All prerequisites, corequisites, and limitations on enrollment stated in the course descriptions listed in this catalog will be strictly enforced at the time of registration. Students who do not meet the requisite requirements according to college records will not be permitted to register for the course. Students who believe they have met the prerequisite at another institution are strongly advised to have all transcripts of prior college work evaluated and on file well in advance of registration to minimize registration delays.

**Note: Unofficial transcripts are accepted for prerequisite clearance.**

Students should plan their schedules early and see a counselor for assistance.

**PREREQUISITES** are courses that must be completed with a “C” or better prior to registration in a specific course.

**COREQUISITES** are courses that are required to be taken the same semester as another course.

**LIMITATIONS ON ENROLLMENT** are other restrictions that are stated in the course description such as “not open to students with credit in...”
Challenge Procedures
Students who believe they have sufficient grounds may challenge a prerequisite, corequisite, or limitation on enrollment in a specific course (the student does not get units for a challenged class). A student may obtain a Petition to Challenge in the Admissions Office and a copy of Procedures 5500.2. The completed petition must be filed in the Admissions Office no later than ten working days prior to the published add deadline for the course being challenged. Students who challenge a prerequisite or corequisite after the start of the semester must obtain an add code issued by the instructor prior to completing the petition. Contact the Admissions Office for additional information. For credit by examination, please refer to page 44.

Residency

Residency is determined when a student applies for admission to the College. The following paragraphs summarize the rules and regulations related to student residency for tuition purposes. Details are found in the CA Education Code Section 68000, Title 5, sections 54000-54072.

Residency Status
Every person who is married or is age 18 or older and under no legal restriction may establish residence. Certain minors may also establish residence.

- A California “resident” is a person who has resided in the state for more than one year prior to the residence determination date and shows “intent” to make the state of California their permanent residence.
- An undocumented student is precluded from establishing residency. Restrictions also apply to some visas; please see the Residency Office.
- The residence determination date is the day immediately preceding the first day of classes for each semester.

Factors Considered to Determine Residency
No one factor determines residency. The following factors are called “indices of intent.” They, along with a person’s presence in California, are among the factors considered in determining California residency:
- Possessing a California driver’s license and a vehicle registered in California
- Voting in California
- Owning residential property in California for personal use
- Being licensed to practice a profession in California
- Having an active checking and/or savings account in a California bank
- Showing California on military records (Leave and Earnings Statement)
- Possessing a marriage license or a divorce decree issued in California
- Having paid nonresident tuition in another state

Exception to Residency Requirements
Several exceptions to the residency rules apply. They include, but are not limited to, the following:

- Active duty military personnel stationed in California
- Dependents of active duty military personnel stationed in California.
- Certain minors who remained in California when their parents moved
- Self-supporting minors
- Full-time employees of the college or a state agency, or a child or spouse of the full-time employee

Nonresident Students
A student's residency status is determined at the time of application. Nonresident students must pay nonresident tuition in addition to the enrollment fee and other fees for credit classes. Tuition must be paid in full at the time of registration.

Assembly Bill (AB) 540
Assembly Bill 540 exempts undocumented nonresident students, who meet the following criteria, from paying nonresident tuition:
- have attended high school in California for three or more years;
- have received a high school diploma or equivalent;
- have registered as an entering student at, or concurrent enrollment at an accredited institution of higher education in California.
• are in the process of obtaining legal status.

This provision applies to students attending community college after January 1, 2002. For additional information contact the college Residency Office.

Incorrect Classification
A student incorrectly classified as a California resident subject to reclassification as a nonresident and payment of all nonresident tuition. If incorrect classification results from false or misleading facts, a student may be excluded from classes or the college upon notification.

Reclassification
Reclassification to resident status must be requested by the student. Financial independence during the current year and preceding two years will be considered at the time the student requests reclassification. Information regarding requirements for reclassification is available in the Residency Office or Admissions Office.

Tuition may not be refunded to a student classified as a nonresident due to lack of documentation if, at a later date, documentation is presented for a previous semester.

Appeals
To appeal a residency determination decision, a student may file a Residency Determination Appeal form with the college Admissions and Records Supervisor.

Limitation of Residency Rules
Students are cautioned that this summary of rules regarding residency determination is by no means a complete explanation of their meaning or content.

For further information, contact the residency clerk in the Admissions Office. Changes may have been made in the statutes and in the regulations since this catalog was published.

False Information
Providing false information necessary for establishing residency will result in disciplinary action up to and including dismissal from the college.

Contact the Admissions Office for more details.

International Students
(F-1 Visa Students)

San Diego Mesa College welcomes applications from nonimmigrant F-1 visa students. Acceptance into a program at the college is necessary before Bureau of Citizenship and Immigration Service (formerly INS) Form I-20 (certificate of eligibility) is issued by the International Student Admissions Office. The decision to grant an acceptance will be based on all evidence received prior to the deadlines. Students may contact the International Student Admissions Office at the following address to request forms or information:

International Student Admissions Office, I-410
San Diego Mesa College
7250 Mesa College Drive
San Diego, CA 92111-6998

General Information

1) An international student must register for and maintain a minimum of 12 units each semester while at Mesa College. Part-time F-1 status will not be approved. The registration status and academic performance of all international students will be monitored by the college.

2) A recent photograph must be submitted with an application (passport size is acceptable).

3) Prospective international students are advised that they must comply with all requirements of the Bureau of Citizenship and Immigration Service (formerly INS) and of San Diego Mesa College to be admitted as international students.

4) A transfer student from another accredited United States college or university must:
   a. Follow set transfer procedures of the Bureau of Citizenship and Immigration Service (formerly INS); and
   b. Have pursued a full-time course of study with a minimum GPA of 2.0 (“C”) at the college the student was last authorized to attend (an official transcript must be filed).

Admission Requirements

Application Fee: All international students are required to pay a $100.00 non-refundable application fee. Upon admission to the college, the fee will be applied toward
the first semester nonresident tuition. The fee is valid for up to one year from the date processed.

Admission for Fall Semester: Students must complete all admissions requirements no later than May 1 to be admitted for the fall semester. Since the processing of an application normally requires a minimum of three to five months, students are strongly encouraged to file an application by March 1 of the current year. Students who meet the May 1 deadline will be notified as soon as possible of their admission status. Admission to summer session is restricted to international students properly cleared by May 1 for admission to the Fall semester.

Admission for Spring Semester: Students must complete all admissions requirements no later than October 1 to be admitted for the Spring semester. Students who meet the October 1 deadline will be notified as soon as possible of their admission status.

Academic Achievement
1) An international student must have graduated from high school (or its equivalent) with a GPA of 2.0 (“C”) or better.
2) Students who have obtained a GED (General Education Development) must have attained a minimum score of 45.
3) Transcripts of all previous secondary and college/university education must be submitted, including an English translation of the transcript, before an application will be considered.

English Proficiency Requirements
To be considered for admission, an international student whose native language is not English must present a minimum score of 500 on an International Test of English as a Foreign Language (TOEFL) or 173 on the computerized version. Institutional reports or photocopies will not be accepted. Students may petition to waive the TOEFL requirement under one of the following conditions:
1) Completion of a transfer level college English composition course at an accredited United States institution with a grade of “C” or higher;
2) Completion of ESL assessment and placement at a level of English 40 (formerly English 62) or higher; in addition, the student must take the prescribed course work at the level of assessment; or
3) A minimum ACT verbal score of 19 or SAT verbal score of 450.

Advanced Degrees: An international student in possession of an Associate Degree or its equivalent (completion of about 60 semester units) may be determined to be beyond the course offerings of Mesa college and is encouraged to apply to a four-year college or university.

Financial Resources
1) Each international student must submit verification of sufficient financial resources. The verification must indicate the ability of the student to finance each year’s education and living expenses to the satisfaction of the International Student Advisor (normally $15,200 a school year for two semesters).
2) An international student attending the college must pay all mandatory fees, including nonresident tuition, enrollment fees and health services fees.
3) Financial aid is not available to F-1 visa international students.
4) An international student may not accept off-campus employment while attending college unless approval is granted by the Immigration and Naturalization Service and the International Student Advisor.

Health Clearance
1) Students must be in good health and free of communicable diseases. The “Report of Health Examination” form or a medical examination report by a physician must be submitted prior to admission. The medical examination must certify immunization against polio, diphtheria, measles, rubella, and tetanus, and must provide tuberculosis clearance.
2) Each student must present and maintain satisfactory evidence of an active medical insurance policy while in attendance.
**Housing**
The college is located near public transportation and housing. The college does not provide or assist with housing. Housing is the responsibility of the student.

**Visa Students (other than F-1)**
All other visa categories or immigrant classifications, must see the Residency Office.

Students who are residing in the United States on other than F-1 student visas must comply with all restrictions on total units enrolled as specified by the Bureau of Citizenship and Immigration Service (formerly INS).

**Fees**

**Community College Enrollment Fee**
The enrollment fee is assessed of all students, including nonresidents. The fee is currently $11.00 per unit. However, this fee is subject to legislative and gubernatorial action, and may change without notice.

- Waiver of the enrollment fee is available to students who petition and qualify as recipients of benefits under the Temporary Assistance to Needy Families (TANF) program, the Supplemental Security Income/State Supplementary (SSI) program, or the General Assistance program.
- Indentured apprentices are exempt from enrollment fees for Apprenticeship Program classes only.
- Financial Aid may be available to students who qualify for assistance.
- Certain exemptions apply to “special part-time high school students.” Contact the Admissions Office for more information.

**Health Services Fee**
All students are assessed a mandatory fee for health services and accident insurance. The health services fee is currently $12.00 per semester ($9.00 for summer session). The following students are exempt from the health services fee:

1) Students attending under an approved apprenticeship program.

2) Students who, at the time of enrollment, are recipients of benefits under the Temporary Assistance to Needy Families program, the Supplemental Security Income/State Supplementary Program, or the General Assistance program.

3) Students exempt from payment of the enrollment fee.

4) Students enrolled exclusively in off-campus classes are not eligible for Student Health Services. These students pay only the accident insurance portion of the fee, which is currently $2.50.

5) Students who depend exclusively on prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization. These students may petition to have the fee waived.

For more information, contact the Admissions Office.

**Nonresident Tuition**
In addition to the enrollment fee and health fee, tuition is charged to students who are not legal residents of California for tuition purposes. The 2003-2004 nonresident tuition fee is $149.00 per unit.

**Liability Insurance**
Students enrolled in occupational courses that require directed clinical practice must pay a fee for liability insurance. Liability insurance fee is automatically assessed at the time of registration. The current fee is $7.00 per semester.

**Additional Fees**

Parking
Automobile permits per semester (hanger included) .................. $30.00
Carpool permits per semester (Mesa only) .............................. $30.00
Motorcycle permits per semester ............................ $15.00
Transcript of Record ................................................. $5.00
  (after two have been issued free of charge)
Loss or damage of equipment and books.............. Cost
A.S. College Membership (per academic year) ... $8.00
Credit by Examination..........................$11.00/unit
Student Representation Fee .......................... $1.00
  (Mesa and Miramar College classes only)

*Note: Students receiving public assistance, or who are determined eligible for financial aid, may purchase a single car permit for $20.*

*All fees are subject to change.*
Students are expected to buy all books and supplies needed for their courses. Certain occupational programs may require additional expenditures for tools, uniforms and/or liability insurance.

**Student Representation Fee:** All students attending a Mesa or Miramar College class are required to pay a $1.00 student representation fee. This fee is expended by the college solely for the purpose of student advocacy efforts to Federal, State and local governments. Students have the right to refuse to pay the fee for religious, moral, political or financial reasons.

**Refunds**

1) Fees will be refunded to students who reduce their program in accordance with the following schedule:
   - Classes 1 week or shorter in duration, see Admissions
   - Short-Term Sessions (less than 16 weeks) - Monday of second week
   - Primary Session (16 weeks or more) - Monday of third week

2) Students who are administratively dropped when a Petition to Challenge is denied will receive a full refund of the class(es) petitioned.

3) Students who are academically disqualified and administratively dropped will receive a full refund.
   * No refund is given for classes dropped after the deadline.

Students with a valid address on file and who do not have an outstanding financial obligation to the district will receive a refund in the mail or credit to their credit card. Refunds will be automatically sent to students after the add/drop deadline. For payments by check, there is a five week waiting period for checks to clear the bank before refunds will be processed.

**NOTE:** Students who drop all classes and wish to receive a refund must also submit their parking permit before the refund will be granted. If the permit is not returned within the two-week refund period, the student will not receive a refund for the permit.
Student Services
Counseling Services
I-430 (619) 388-2672

Academic, career, and personal counseling are provided in the Counseling Department. Services include academic skills assessment and development of a Student Education Plan (SEP), which outlines what courses are needed for graduation and provides a checklist for requirements completed and those remaining. Students should have official transcripts from other colleges on file and evaluated before seeking to obtain an official SEP. Once students initiate the filing of their transcript(s) and confirm its arrival at the Mesa College Records Office (I-408), a request for the evaluation must be made in the Counseling Department. The entire process may take up to a month to complete. Students are advised to review the catalog and schedule for program and general information prior to meeting with a counselor. The Counseling Department offers college success and career planning through courses in Personal Growth listed in the schedule of classes.

Transfer Center
I3-202 (619) 388-2473

The San Diego Mesa College Transfer Center is the focal point of transfer activities on campus. College catalogs are available, including on-line resources such as College Source, ASSIST, CSU Mentor, and UC Pathways. Numerous transfer center reference materials are also available including College Blue Books, Guide to Competitive Colleges, Peterson’s Guide to Two-Year and Four-Year Colleges, Guide to Earning Degrees Non-Traditionally, Gourman’s Report of undergraduate programs, and many others. Students can arrange walk-in and counseling appointments with representatives from various four-year institutions. Students are encouraged to sign-up for application workshops, glance through advising sheets, and meet with a Mesa College counselor. The transfer center is the backbone in assisting successful transfers to four-year institutions.

Student Employment/Career Center
I3-202 (619) 388-2777 voice/tty

Hundreds of part-time and career employment listings, career/employment advice and resources, and software for career exploration and labor market research are available in the Student Employment/Career Center in I3-202. Free workshops including career assessment, high tech job search, resumes/business communication, and interview strategies are conducted in cooperation with campus and industry representatives. The Student Employment/Career Center coordinates employer recruitment visits to campus and sponsors Spring Career Week annually. The center is adjacent to the Transfer Center.

English for Speakers of Other Languages (ESOL)
I-430 (619) 388-2672

The English as a Second Language Program is designed to prepare students to read, write, speak and listen at a level that enables them to succeed in college courses. The program consists of four levels and the student is assigned a level based on the result of his/her placement test. Students interested in enrolling in ESOL courses should schedule an assessment test for placement into the appropriate skill level.

For more information on the English as a Second Language Program, students should contact the college Counseling Office.

Disabled Students Programs and Services (DSPS)
H-202 (619) 388-2780 (619) 388-2974/tty

Mesa College provides programs and services for students with disabilities in compliance with State and Federal legislation including Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA). Student participation in the program is voluntary.

Eligible students who have a verifiable disability qualify for support services through DSPS. The programs and services are designed to support students in the achievement of their academic and vocational goals. Specialized classes for students with disabilities are available to support the college academic and vocational programs through DSPS, Physical Education and English Departments. Services provided include priority enrollment, interpreters for deaf students, note-taking materials, test-taking modifications, tape recorders, braille readers, use of special equipment and adaptive devices, and specialized counseling and referral. Liaison with community agencies is also an important component of the program. The campus is physically accessible.
Anyone interested in receiving services must contact DSPS well before classes start to establish eligibility to ensure timely provision of services.

Extended Opportunity Programs and Services (EOPS) and Cooperative Agencies Resources for Education (CARE)

What is EOPS?
I3-101 (619) 388-2706

EOPS is a state-funded program. Its purpose is to provide enhanced recruitment, retention, and transition services to eligible students. The services offered are “above and beyond” those offered by the college’s Student Services division. The primary services include assistance in the following areas: priority enrollment, counseling/advisement and preparation for transition to four-year universities or the workplace. Services may also include book vouchers and financial assistance, depending on funding. For detailed information on all services offered and application procedures, please contact the EOPS Office.

EOPS students who are single parents, have a child less than 15 years of age, and receive public assistance are encouraged to apply for the program’s Cooperative Agencies Resources for Education (CARE) component. CARE provides additional support services, including grants, to address those needs that are unique to single parents.

You may be eligible for EOPS if you are enrolled full-time (at least 12 units). At least 9 of these units must be taken at Mesa College. In addition, you must meet all of the following criteria:

1) You are a resident of the state of California, as determined by the Admissions Office.
2) You are (or plan to be) a full-time student.
3) You qualify to receive a Board of Governors Waiver A or B.
4) You have not completed 70 (or more) units of degree-applicable college course work. This includes courses taken at other colleges.
5) You are determined to be educationally disadvantaged by meeting any one of the following criteria:
   a. You do not qualify to enroll for the minimum level English or Math courses required for your degree objective.
   b. You have not fulfilled the requirements for a high school diploma or General Educational Development (GED).
   c. Upon graduation from high school your high school grade point average (GPA) was 2.5 or less on a 4.0 scale.
   d. You have been enrolled in a Math or English course, or program that is considered developmental or remedial.
   e. You have been enrolled in an English as a Second Language (ESL) class or program.
   f. In the judgment of the EOPS director, using state guidelines, you are determined to be educationally challenged.

How to Apply

Students interested in applying for the EOPS program must complete an EOPS application and the Free Application for Federal Student Aid (FAFSA) or the Board of Governors Grant Waiver. These applications are available in the EOPS and Financial Aid Offices. Students should apply early to ensure that they receive consideration for all services. It is recommended that students complete the FAFSA by the priority filing date published by the Financial Aid Office.

Financial Aid

I3-100 (619) 388-2817

The Financial Aid Office is committed to assisting students who might otherwise be unable to continue their education because of a financial disadvantage. Financial Aid funds are administered in accordance with a nationally established policy of financial assistance for education. The basis of this policy is the belief that students and their parents have the primary responsibility for meeting educational costs. The amount of the contribution expected from students and their parents is determined by careful analysis of family financial strength taking into consideration net income, household size, allowable expenses, indebtedness, and assets. The U.S. Department of Education, in
cooperation with educational agencies, has established procedures which are used in making an evaluation of the amount families can be expected to contribute.

Application
Application materials are available in January for the following academic year. The priority filing date for aid is April 15. The Cal Grant deadline is March 1. Students filing their application by this date will be the first considered in the award process. However, applications for financial aid are accepted throughout the school year until June 30, 2004.

Prospective students do not have to be accepted for admission to Mesa College to apply for financial aid. In fact, students should apply for aid as soon as the applications are available whether or not they have been admitted to the college, since the application process for federal aid can take up to 12 weeks. However, students must be enrolled in order to be offered any financial aid funds.

All financial aid applicants must complete the Free Application for Federal Student Aid (FAFSA). The FAFSA is available and can be filed on the Internet at www.fafsa.ed.gov. Those who wish to file the paper application should mail the completed form directly to the processor according to the instructions.

Academic transcripts from prior colleges attended must be submitted before the processing of a financial aid application can be completed. Academic transcripts must be submitted directly to the District Records Office.

Eligibility
In order to be eligible to apply for financial aid, a student must be a citizen or permanent resident of the United States or be in the country for other than a temporary purpose with the intention of becoming a permanent resident.

Eligible non-citizens may be required to provide proof of permanent residency for Federal Aid. F-1 Visa students are not eligible for financial aid at Mesa College. For further information regarding other eligible immigration status, contact the Financial Aid Office.

Students who do not have a high school diploma or equivalent are required to demonstrate “Ability to Benefit” from instruction. Information is available in the Financial Aid Office.

Awards
Awards take the form of a “package” of financial aid, usually consisting of grant money and work-study, depending on the financial need of the applicant and the availability of funds. Awards may be adjusted at any time upon notice of receipt of resources not previously reported. Revisions to awards are always possible because personal financial circumstances can be very unpredictable. If funding is available, aid for valid educational expenses not already covered in the student cost budget may be increased.

Financial aid checks are usually ready for disbursement approximately four or five weeks after the start of classes. Pell Grant disbursements are based on enrollment levels at the time of payment and will not be adjusted. However, SEOG and Cal Grant payments will be adjusted according to enrollment status. If you withdraw from classes after aid has been disbursed to you, you may be required to repay all or part of this aid.

An automated system is available in the college bookstores to allow students to use a portion of their estimated Pell Grant to purchase books and supplies two weeks before and after the start of the semester. Funds will be set aside from each student’s estimated Pell Grant and placed in a special account in the bookstore. This account may be used for the purchase of books and supplies until the funds are exhausted. The account is valid at the City, Mesa, and Miramar College and ECC bookstores, regardless of where students are taking classes.

Student will be responsible for paying back the Bookstore for charges if the student does not attend classes.

Students who elect not to purchase books from the college bookstore, or have any funds remaining on account, will receive the funds in the mail with the remainder of their Pell Grant award.

Students must be making satisfactory academic progress as determined by the Standards of Satisfactory Academic Progress for Financial Aid Recipients. Copies are available in the Financial Aid Office.

Return of Title IV Funds
Federal law requires that if a student receives a grant and then drops/withdraws from all of his/her classes, he/she will owe money back to the Federal Government.

Note that the earlier a student drops/withdraws, the more money he/she will have to pay back.
If a student receives LOAN money and withdraws, he/she must pay back the money according to the normal rules of the loan program.

If a student receives WORKSTUDY money and withdraws, he/she does not owe anything back and may keep the salary earned; but must stop working.

For more detailed information, contact the Financial Aid Office.

Financial Aid Programs Available
Following is a basic description of the programs available. Contact the Financial Aid Office for detailed descriptions and eligibility requirements.

Enrollment Fee Assistance: Board of Governors Waiver (BOGW)
State law requires that students attending the college pay an enrollment fee. Students enrolled in credit classes are currently required to pay $11.00 per unit.

The college offers the Board of Governors Waiver (BOGW), a state-funded program which will waive the enrollment fee for all eligible applicants. Students who qualify for a BOGW will be exempt from paying the health fee.

If you are a California resident, you will qualify for a BOGW if any ONE of the following statements applies to your current status:

- You have already qualified for financial aid, such as a Federal Pell Grant or a Cal Grant.
- You have need as determined by Federal Methodology.
- You or your family are receiving TANF (Temporary Aid for Needy Families, SSI (Supplemental Security Income), or General Assistance/General Relief at the time of enrollment.
- You have a letter from the Department of Veterans Affairs certifying that you meet the eligibility requirements of “certain disabled veterans, dependents of certain deceased or disabled veterans.”
- You are a dependent of a deceased or disabled veteran of the California National Guard. You must submit a letter of certification from the California National Guard Adjutant General’s Office.

You meet the following income standards:

<table>
<thead>
<tr>
<th>Number in Household</th>
<th>Total Family Income for 2002 (adjusted gross income and/or untaxed income)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$13,290 or less</td>
</tr>
<tr>
<td>2</td>
<td>$17,910 or less</td>
</tr>
<tr>
<td>3</td>
<td>$22,530 or less</td>
</tr>
<tr>
<td>4</td>
<td>$27,150 or less</td>
</tr>
<tr>
<td>5</td>
<td>$31,770 or less</td>
</tr>
<tr>
<td>6</td>
<td>$36,390 or less</td>
</tr>
<tr>
<td>7</td>
<td>$41,010 or less</td>
</tr>
<tr>
<td>8</td>
<td>$45,630 or less</td>
</tr>
</tbody>
</table>

Add $4,620 for each additional family member.

To determine your eligibility for the Board of Governor’s Waiver based on the above income standards, you will be considered independent if:

- You do not live with your parents
- You were not claimed as an exemption on any federal income tax filed by your parents in 2001

Federal Pell Grant
The Federal Pell Grant is the largest federal grant program and is the foundation of a student’s total “aid package.” Eligibility is determined by the federal government using a standard formula for all applicants.

Enrollment status will be frozen after the add/drop period and will be the basis for Pell disbursement. Once the Pell Grant award has been processed it will not be adjusted for additional units added during the semester.

Federal Supplemental Educational Opportunity Grant (FSEOG)
FSEOG is a federal grant program designed to assist students who have the greatest demonstrated financial need. Awarding of FSEOG funds is determined by the Financial Aid Office based on available resources.

Cal Grants
The Cal Grant program is administered by the California Student Aid Commission to help low-income students attend college. Students at the college may receive Cal Grant B or C.

- To be eligible for Cal Grant B a student must be a California resident and pursuing an undergraduate academic program of not less than one academic year.
Cal Grant C is designed for students enrolled in a vocational program who are California residents from a low- or middle-income family.

See the Financial Aid Bulletin for important dates and deadlines.

Federal Work Study

Federal Work Study (FWS) allows students the opportunity to earn part of their financial aid by working in assigned jobs, both on and off campus. The salary received is at least equal to the current minimum wage, but many Federal Work Study jobs pay more than minimum wage. Federal Work Study differs from the other financial aid programs in that a student is allocated a certain amount of money to earn. As work on the job is completed, a time card is submitted for the hours worked just as at a regular job. Once a month the student receives a paycheck for the hours worked. Once the amount allocated in the financial aid package is earned, the job ends.

Student Loans

Applicants for student loans will be subject to college policy requirements regarding enrollment status, length of attendance, number of units completed, and total amount of previous loans.

Contact the Financial Aid Office for other requirements.

Federal Direct Loan (Subsidized)

The Federal Direct Loan is a federal loan program that replaced the Stafford Loan program. Instead of borrowing from a bank, students borrow directly from the Federal Government.

A community college student may borrow $2,625 as a first year student and $3,500 as a second year student. A student may not borrow more than a total of $23,000 as an undergraduate student. The interest rate is a variable rate that changes each school year. Borrowers are required to pay an origination and insurance fee which is currently 3%. These fees are deducted from the proceeds of the loan.

To qualify, a student must be enrolled in at least six units and must demonstrate financial need through the federal methodology. To apply for a Federal Direct Loan, students must complete a FAFSA. All new applicants must also complete a mandatory loan entrance counseling session. The counseling session is required even if a student has attended a Stafford loan workshop in the past. If a student has attended a Direct Loan workshop at City, Mesa or Miramar College in the past, it will not be necessary to conduct another entrance counseling session. You may complete the entrance counseling session on-line at www.ed.gov/ DirectLoan/students.html. The Financial aid Office will be notified when the session has successfully been completed. In addition, you must fill out a Loan Request Form from your Financial Aid Office.

Borrowers may also be required to submit a student educational program plan. The actual loan amount for which a student is eligible will be determined by the Financial Aid Office. Students must have financial need to qualify and must repay the loan. Checks will be disbursed twice per loan period. Checks for first-time borrowers will be disbursed at least 30 days after the start of the semester. For additional information call the Financial Aid Office.

Federal Direct Loan (Unsubsidized)

Effective July 1, 1999, City College, Mesa College and Miramar College will no longer participate in the Unsubsidized Federal Direct Loan Program.

Plus Loan

Parents of dependent undergraduate students may borrow from the PLUS loan program. The amount borrowed may be up to the cost of attendance minus any financial aid. Checks will be co-payable to the parent and the institution. Parents must begin repayment within 60 days of receiving the loan. The interest rate is a variable rate determined on June 1 for the following award year. Borrower must meet all other financial aid eligibility requirements, including completing the FAFSA.

Student Emergency Loans

Short term loans for limited amounts of money are available to students in emergency situations. Contact the Financial Aid Office for further information.

Gift Certificate Program

Gift certificates are available in the college bookstore and may be applied towards college fees and the purchase of books and supplies.
Service Learning Program

What is Service Learning?
A-109 (619) 388-2873
Recognizing the educational value of community service, Mesa’s Service Learning Office has been established to assist students and teachers incorporate community service into academic coursework. For more information, speak with your professor(s), or contact the Service Learning Office, A-109/ (619) 388-2873, or visit the web at sdmesa.sdccd.net/service-learning/.

Veterans and Service Members

Veterans Center Military Service Connected Benefit Programs
I-408 (619) 388-2805
The San Diego Community Colleges have been approved to offer military service connected benefit programs leading to a certificate, an Associate Degree or transfer to a four-year institution. The Veterans Affairs Office staff provides counseling and guidance to veterans and assists them in the selection of educational programs which qualify for veterans benefits. The final responsibility for monitoring the process of qualification for educational benefits resides with the individual. Each veteran must read, understand, and comply with the many rules, regulations, and procedures that influence the benefit process.

Failure to take the proper classes can result in an overpayment and the reduction or termination of benefits.

Disabled Veterans
Veterans who qualify for educational benefits as disabled veterans may be entitled to special educational benefits. Veterans should visit the Veterans Administration Regional Office, 8810 Rio San Diego Dr., San Diego, CA 92108, to determine their eligibility for disabled status (Telephone: 1-800-827-1000).

Veteran Dependent Exemption
Children and spouses of U.S. Veterans with service connected disabilities may be eligible for waiver of college fees and/or for a small monthly payment. For more information see the Veterans Affairs Office on campus.

Liability
The veteran assumes full liability for any overpayment of veterans benefits.

All persons receiving educational benefits must report to the Veterans Affairs Office after enrollment every semester to continue their benefits. In addition, a Student Educational Plan (SEP) must be on file by the end of the first semester; otherwise, certification of VA benefits will be delayed for the second semester. This plan must be developed and reviewed by a counselor. Veterans with disabilities are encouraged to pursue services offered through Disabled Students Programs and Services.

Number of Units Required
For students enrolled in a degree program, the following number of units are required each semester to qualify for educational and training allowance:

- 12 units or more full allowance
- 9 - 11.5 units three-fourths allowance
- 6 - 8.5 units one-half allowance
- 2 - 5.5 units one-quarter allowance*

* Chapters 32 and 106 only. All other chapters, tuition and fees only.

Short-term and summer session courses are computed proportionately for payment purposes.

Withdrawal/Change of Classes
Veterans are required to notify the campus Veterans Affairs Office when they stop attending class, withdraw from the college, or add or drop a class. Such changes should be reported immediately after completing the add/drop procedure through ClassTalk. Failure to comply with this regulation will be grounds for decertification.

Veterans Academic Progress
A veteran student on Academic or Lack of Progress probation status will be disqualified when his/her grade point average (GPA) falls below 2.0 for two consecutive semesters. The College Veterans Affairs Office is required to notify the Department of Veterans Affairs (DVA) of this status. The DVA will terminate benefits unless it can be shown that the student is pursuing an appropriate objective and has a reasonable chance for
success in the chosen program. Please contact the Veterans Affairs Office for more information.

Repeated Classes
Veterans may not receive benefits for a repeat of a course in which a grade of “A,” “B,” “C,” “D,” or “CR” has already been earned. Although District policy allows a student to repeat a course in which a “D” grade has been received; the course may be certified for benefits only if this catalog states that a grade of “C” or better in that course is required to earn a degree or meet a prerequisite.

Work Experience
Veterans may be approved for Work Experience classes only if work experience is required in their major or if they have electives available according to their education plan. Total work experience may not exceed four units per semester or a total of 16 cumulative units.

Transcripts
All official transcripts of prior college work and military schools, including copies of form DD214, DD295, Smart Transcript or DD2685 covering all periods of military service, must be on file in the Records Office by the end of the first semester of attendance at this college. Certification for benefits for the second semester will be withheld if transcripts are not received. Visit the Veterans’ Affairs Office (I-408) for necessary forms.

Academic, Vocational & Support Services Programs

Puente Project
I-430 (619) 388-2758
The Puente Project, co-sponsored by the University of California and the Community Colleges, is an academic, retention and transfer program. Puente is a year long program in which students participate in three components:

• Writing - students enroll in English 51 for the Fall and English 101 for the Spring semester. Course materials focus on Latino/Chicano literature & experience to enhance writing skills.

• Counseling - academic, personal, transfer and career counseling is offered. Students enroll in PERG 127 for the Fall semester.

• Mentoring - students are exposed to various career options through their close involvement with mentors.

All materials utilized in the Puente Project come from the Latino/Chicano perspective. All classes are open to all students. If interested in participating, please stop by the Counseling Office, I-430, and speak to the Puente Counselor.

Mesa Academy
I-430 (619) 388-2834

The Mesa Academy Program is an academic program which utilizes materials from an African American perspective to assist students to graduate and transfer to four-year colleges and universities. The Mesa Academy is open to all students. The Academy combines innovative teaching and counseling methods with community involvement to provide students with accelerated study skills, intensive counseling, and professional role models from the African American community.

Photo by Steve Manczuk
Learning Resources

Library and Audiovisual Services
Library (619) 388-2695
Audiovisual Services (619) 388-2690
Website: http://www.sandiegomesacollege.net/library

Location: The Library, Audiovisual Services, and The Center for Independent Learning are located in the Learning Resource Center (LRC) building. The Library is housed on the first three floors of the four-story structure (Floor One: Reference, Periodicals, and Checkout services; Floor Two: Individual study and group study rooms; Floor Three: Circulating book collection). The Center for Independent Learning and Audiovisual Services are located on the fourth floor.

Important Library Resources:
SandyPac Computer Catalog: The 105,000 books and 3,000 films, tapes, filmstrips, videos and records in the Mesa College Library and Audiovisual Services can be accessed easily by using any of the SandyPac computer terminals located in the Library and Audiovisual Services. The terminals also access the City College and Miramar College library collections.

*ProQuest: This comprehensive database includes citations, abstracts and full-text articles in 1900 periodicals, including the San Diego Union, the New York Times and the Wall Street Journal.

*Ebscohost: Similar to ProQuest, this full text database covers over 2,700 periodicals.

*NewsBank InfoWeb: A selection of full-text articles from over 500 U.S. newspapers can be accessed in this database. A similar database dealing with only business-related newspaper articles is also available.

*Literature Resource Center: This database is a comprehensive electronic resource which consists of full-text monographs and other literature reference sources.

*Ethnic Newswatch: This includes full-text articles from a wide variety of periodicals published in the United States by the ethnic and minority press.

*Gender Watch: This database contains articles about the impact of gender on various areas of life, many of which were published in non-mainstream publications.

Access to the Internet: Fourteen sit-down computers dedicated to Internet access. During busy times, students and faculty may also use the SandyPac computers to access the Internet for library research and browsing.

Career Collection: Books containing current information on colleges and universities, financial aid, occupations, college entrance examinations, and job examinations are kept in this special collection. Catalogs of most U.S. colleges and universities are also available here as well as in CollegeSource, an online, full-text database of college catalogs from American and Canadian colleges and universities. In addition, two computers accessing the EUREKA and DISCOVER career databases are available.

Additional Library Services and Facilities: Library instruction for classes and individuals (including a one-unit Information Literacy and Research Skills course); Reference services; Interlibrary loans; Group study rooms; Class reserves; Photocopiers; Microfiche and microfilm reader/printers; Laser printers for the library's computerized databases; Aladdin Genie Print Reader for vision-impaired students; SandyPac computer for vision-impaired students.

Important Audiovisual Resources and Services: Audiovisual Services contains 16mm films, audio cassettes, videotapes, DVD's, filmstrips and records. These audiovisual materials and the equipment needed to use them are circulated to instructors for use in the classroom. Students may review any of these materials in listening and viewing booths, and they may borrow materials and equipment for use in class presentations if they have the written approval of their instructor. Media production equipment is available for students to create original audiovisual materials for use in the classroom. (There may be a fee for materials used.) A color copier is also available. ($.50 per copy.)

Center for Independent Learning (CIL)
LRC - 4th Floor (619) 388-2769
Website: http://www.sandiegomesacollege.net/lrc and click on “Center for Independent Learning.”

The Center for Independent Learning (CIL) serves as one of the focal points for instructional innovation at Mesa College. It provides individualized learning experiences for students wanting to improve academic skills, to augment in-class activities, or to study a particular subject in depth. The collection includes a variety of media formats including audio cassettes, slides, videocassettes, and computer software.

Students may work with instructors to select self-paced instructional materials geared to their own needs, or

* Students with an email box may transmit articles to their box without charge.
they may use the CIL to supplement regular class assignments. The CIL supports many of the one-unit courses that are offered in conjunction with basic courses throughout the campus; for instance, American Sign Language, Biology and Nutrition.

The CIL Student Computing Lab has more than 130 computers and current software all running in a Windows 2000 network environments. The CIL lab provides Internet access and there are over 100 academic programs covering a wide spectrum of subjects including: Astronomy, Biology, Geology, Mathematics, Nutrition, and Psychology. Of course, there is also word processing and spreadsheet software to use when preparing reports and class assignments.

A Faculty/Staff Computing Lab is also available, with a wide variety of equipment and programs to support development of materials for instruction in the classroom. Computer training is also provided to faculty and staff on many applications of interest.

If you have questions, please come see us; we're user friendly!

Tutorial Services

Mesa College provides comprehensive tutoring services to students. Various tutoring programs work together to help meet the wide array of student learning needs. Each tutoring center has its own specialization and brings resources that help students achieve their educational objectives.

The Bridging Lab

H-218 (619) 388-2869

The Bridging Lab instructors provide free individual help in English, algebra, basic mathematics, Spanish, French, and study skills. Students may also review for college or course entry, Mesa’s placement test, PT/Radiology, TOEFL or GED tests. Macintosh computers for writing, instructional software, and research are available. A Mesa counselor for personal or academic counseling is in the Lab twice a week. Bridging Lab instructors work with students on a walk-in basis and the lab is open to all students.

Mesa College Tutoring Center

K-211 (619) 388-2898

The Mesa College Tutoring Center provides free tutoring in a variety of subjects for all Mesa College students. The Center is open Monday - Thursday 8:30 AM to 6:30 PM; and Friday 8:30 AM to 2:00 PM. Tutoring in mathematics and science courses is available on a walk-in basis. (For tutoring in American Sign Language, foreign languages and other subjects, students reserve times in advance.) Tutoring is provided by trained peer tutors and faculty volunteers. A schedule of subjects tutored is available in the Tutoring Center. To be eligible for tutoring services students must enroll in a zero-unit Supervised Tutoring course at no cost to the student. The service is free to all Mesa College students and is available on a first-come, first-served basis. For additional information please call the Tutoring Center.

The Student Tutorial and Academic Resources (STAR) Program

I3-101 (619) 388-2706

STAR is a retention program for low income, first generation, and disabled students. The program provides learning-centered counseling, intensive weekly tutoring and student grants to students who meet eligibility criteria and have been admitted into the program. Individual tutoring is available by appointment in all subject areas. Day and evening hours are available. STAR also provides a series of academic success workshops as well as a study skills assessment. All services are free to students. For an application or additional information, please come to the office or call.

Writing Center

C-108 (619) 388-2570

The Writing Center is available to Mesa College students and provides one-on-one and small group assistance with all aspects of the writing process across all disciplines. Students enroll in a zero-unit supervised tutoring course, and open enrollment is available throughout the semester. One-on-one tutoring is provided on a first-come-first-served basis, while group sessions may be arranged in advance. Also available through the Writing Center are resource materials and various writing skills workshops.

Student Health Services

L-504 (619) 388-2774

The Student Health Services supports the success of students by attending to their physical and emotional well-being through the following services:

- Nursing Assessment & Management
A nurse or nurse practitioner is on duty daily. A medical doctor and psychological counselors are available by appointment only. Nurse and doctor visits are free. Psychological counseling appointments are $5 in cash for each visit. Some medical procedures may also require a fee.

For the protection of college students and personnel, students may be asked to supply health records. In addition, the college may require health consultations and physical examinations when they appear necessary. All students are strongly encouraged to obtain immunizations against communicable diseases as recommended by public health authorities.

**Student Accident Insurance**

The Student Accident Insurance Plan provides coverage for on-campus or college-related injuries. This insurance covers most reasonable charges. The student, however, is ultimately responsible for any medical expenses incurred. Evening students taking physical education or designated “hazardous” classes are also covered.

Student Accident Insurance is co-insurance. Students covered by a primary health organization or any other type of medical insurance should first seek treatment and payment from the provider or insurance company. All student claims are made through the Student Health Services office. The student, however, is ultimately responsible for any medical expenses incurred.

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**Child Development Center**

**Building R**

(619) 388-2812

The Child Development Center is a campus laboratory school that provides students with the opportunity to observe and study growth and development patterns in young children. The center offers an educational program for children 2-5 years of age. The center also participates in a collaboration with NHA Head Start to provide a pre-school program for children 3-5 years old.

Enrollment in the Center is limited to the children of parents attending day classes at Mesa College. Due to limited space, priority is given based on eligibility as defined by the Child Development Division, California State Department of Education. Parents of children participating in the Center are required to enroll in specific child development courses that support the operation of the children’s program. The courses have a lab participation requirement which is completed by working in the Center. Course requirement varies according to the program in which the child is enrolled.

**Hours of Operation:**

- **3 - 5 year old:**
  - 7:45 a.m. - 5:15 p.m., M-Th
  - 7:45 a.m. - 3:30 p.m. M-TH
  - 7:25 a.m. - 1:45 p.m., F

License #372005155 - preschool

This institution is an equal opportunity provider.
Campus Life

Life on the Mesa College campus is rich and dynamic. Students and staff have a variety of educational, social, and cultural events and activities to engage in according to his/her needs and interests.

Community Events

Mesa College actively supports various community events. Students and staff are invited and encouraged to participate in these events as representatives of the college and as concerned community members.

Student Activities

Student Clubs and Organizations

H-500  (619) 388-2699

The many activities sponsored by student clubs and organizations provide a rich and exciting multicultural dimension to college life at Mesa. While some clubs tend to be more active than others, all clubs contribute to a lively and student-oriented environment on campus. Examples of student activities include:

- Asian-American/Pacific Islander History Month
- Black History Month Celebration
- Cultural Shows
- Chinese Lunar New Year Celebration, sponsored by Vietnamese Students Association
- Cinco de Mayo Celebration
- Community Service activities sponsored primarily by Alpha Gamma Sigma
- Club-Rush
- Festival of Colors
- Disability Awareness Day

An alphabetical listing of the active and inactive clubs at Mesa is available in the Student Affairs Office. Students who do not find a club that interests them are encouraged to start a new club.

Honor Societies

San Diego Mesa College has three active honor societies on campus.

Alpha Gamma Sigma (ΛΓΣ)

Sigma Upsilon Chapter is the California State Community College Honor Society. To be eligible, students must have completed 12 semester units, and have a 3.0 cumulative grade point average (GPA). Members are required to engage in community service.

Advisors: Val Ontell, Judith Ross & Paula Hjorth-Gustin  (619) 388-2696

Phi Theta Kappa (ΦθΚ)

Beta Beta Upsilon Chapter is an international honor society. To be eligible, students must have completed 12 semester units and have a 3.5 GPA. PTK provides international recognition for academic excellence.

Advisors: Sondra Frisch and Dickson Phiri. Call (619) 388-2989 for more information.

Psi Beta (ΨΒ)

Psi Beta is a National Honor Society in Psychology for Community and Junior Colleges. It is a national honor society for students enrolled in or majoring in Psychology. To be eligible for membership, students must have a cumulative GPA of 3.0, or range in the top 35% of enrollment, “B” average in Psychology courses, and completion of one introductory Psychology course and 12 semester hours.

Advisor: Jaye Van Kirk  (619) 388-2290

Associated Students/Student Government

H-500  (619) 388-2903

The Associated Students Government is the representative body of the students in the shared governance process at Mesa College. The Associated Students Government provides students with practical leadership experience in the area of budget/financial planning, parliamentary procedures, and in the development of programs and services which are designed to meet the students’ needs. The student leaders and the staff of the Student Affairs Office encourage you to get involved and take part in the many leadership opportunities available at Mesa College.

Any student who participates in student government may not have any Policy 3100 violations of suspension or greater, as stated on their official student record.

Associated Students Membership

H-600  (619) 388-2903/2904

A.S. membership provides a benefit package that includes both internal and external benefits. Internal benefits include book loans, emergency loans, free gifts, free admission to athletic events, free tax preparation services, and many others. External
benefits include discounts for movie passes, local restaurants, and merchants all throughout San Diego. While purchase of this membership is voluntary, students are strongly encouraged to purchase it in order to gain access to valuable benefits.

Associated Students of San Diego Mesa College

With Your A.S. Membership Fee You Receive Free:

- Free Gift (Academic Planner)
- Free Transcript
- Short-term Loans, Book Loans
- Tax Preparation Assistance
- Scholarship Opportunities
- Admission to Athletic Events/Pep Rallies
- Admission to Homecoming Activities
- Entertainment & Guest Speakers
- Selected A.S. Sponsored Lunches/Events
- Free Scantrons and Computer Packet discounts

Discounts:

- Theatre and Campus Performances
- Edwards and AMC Movie Passes
- Local Restaurants & Merchants
- Signs, Banners, and Posters
- A.S. Fax Machine and much more!

Your College Services Card Supports:

- Mesa College Departments and Programs
- Scholarships & Awards
- Tutoring Programs & Services
- High School College Day
- Intercultural Events
- Associated Students Government
- All Student Clubs & Organizations
- The Mesa Press
- Leadership Opportunities
- Athletics, Pep Rallies & Homecoming
- Extended Library Book Selection
- Special Assistance Programs

Looking for Leadership Opportunities?

Want to Get Involved?

The Associated Students Government meets every Monday and Wednesday, 12:30 p.m.-1:30 p.m. Please keep these times open and become part of your Student Government.

We need leaders, planners, recorders, and student representatives. We offer experience in student governance and opportunities for you to express your ideas.

For more information, please come to the Student Affairs Office, Room H-500 or call (619) 388-2699.

Athletics

San Diego Mesa College provides intercollegiate competition for our students in the following sports: men's and women's cross country, football, men's and women's basketball, men's and women's volleyball, men's and women's soccer, men's and women's water polo, baseball, softball, men's and women's tennis, men's and women's swimming, men's and women's track and field, and women's badminton.

Students must meet academic requirements established by the Community College League of California under the direction of the Commission of Athletics and pass a physical examination before they are determined to be eligible to participate in intercollegiate sports.

Academic eligibility requires enrollment in a minimum of 12 units, 9 units of which must be in courses other than physical education activity classes. To be eligible for a second season in the same sport, the student must have completed a minimum of 24 units, 18 of which are in courses other than physical education activity classes. In addition, once a student has participated in intercollegiate athletics he/she must maintain a 2.0 grade point average or higher. An education plan developed through the counseling office must be on file by the student's second semester of attendance.

Physical Education Classes/Intercollegiate Sports Disclaimer

Participation in all sports and physical education activities involves certain inherent risks. Risks may
include, but are not limited to, neck and spinal injuries that may result in paralysis or brain injury, injury to bones, joints, ligaments, muscles, tendons and other aspects of the muscular skeleton system; and serious injury, or impairment, to other aspects of the body and general health, including death. The San Diego Community College District, its officers, agents and employees are not responsible for the inherent risks associated with participation in physical education classes/intercollegiate sports.

Students are strongly advised to consult a physician prior to participating in any physical education activity.

**Mesa Athletics and Academic Program (MA²P)**

The Mesa Athletics and Academic Program (MA²P) is a cooperative effort between the Counseling and Physical Education/Athletic Departments. We are dedicated to helping you attain academic success. For most students, college is both exciting and challenging. We want to help you develop and achieve your educational, athletic, and personal goals. Counseling and guidance is offered in educational planning, athletic eligibility, personal concerns, and athletic and academic issues.

**Dramatic Arts Program**

The Dramatic Arts Program at Mesa College offers courses for all Mesa Students, as well as a two-year theatre-training program for theatre majors. The Mesa College Theatre Company requires majors to participate in all aspects of production including acting, design, technical theatre, and management. The Department sponsors five productions a year; four of these are Mesa College Theatre Company productions and one production holds auditions open to the college community. All of the productions of the Mesa College Theatre Company use student designers, actors, and technicians. In addition, the Company offers majors the opportunity to direct in an Evening of One Acts. The program also offers courses in acting, movement, make-up, cinema, and theatre.

**Speech and Debate**

The new Olympian Speech and Debate Program is dedicated to improving students' speaking skills. The team will travel to several tournaments a year, competing in all eleven of the American Forensic Association's Individual Speech Events (Informative, Persuasion, After Dinner Speaking, Poetry, Prose, Dramatic Interp, Programmed Oral Interp, Duo, Communication Analysis, Impromptu, Extemp) and Parliamentary Debate. If you wish to become a better speaker, have some fun, and enjoy a truly competitive activity, the San Diego Mesa College Speech and Debate Team is for you.

**Journalism**

The English Department's Journalism Program is dedicated to familiarizing students with the demands of the journalism profession and providing them with a realistic experience in media production. In accordance with that vision for journalism education, the program provides an introductory course on news writing, reporting, editing, and media law and ethics. An advanced course devoted to the publication of *The Mesa Press*, San Diego Mesa College's campus newspaper, allows students to engage in all phases of newspaper production, including news writing, reporting, editing, photography, advertising, design and lay-out.

**Support Services**

**Campus Bookstore**

H-110
The Mesa College Bookstore located on campus, stocks ALL required and optional textbooks and academic supplies. In addition, the Bookstore also carries a large assortment of school supplies, software, emblematic clothing, gifts, and snacks. Faculty, students, and staff can save 30% - 60% on academically priced software.

The Mesa Bookstore buys back textbooks everyday. For the best return on your investment, sell your books for cash during finals week.

Hours of operation are extended during the first few weeks of each semester. Regular Semester Hours are as follows: Monday - Thursday 7:45 AM - 7:00 PM, Friday 7:45 AM - 12:00 PM.

City Bookstore Hours: Monday - Thursday 7:45 AM - 7:00 PM, Friday 7:45 AM - 1:00 PM.

Miramar Bookstore Hours:
Monday - Thursday 9:00 AM - 7:00 PM
Friday - Closed
Cafeteria
H-105 (619) 388-2727
The cafeteria serves both day and evening students.

Fall & Spring Hours
7:00 AM - 8:45 PM Monday - Thursday
7:00 AM - 2:00 PM Friday

Summer hours may vary depending on term. See the summer class schedule for more information.

College Police Department
J-202 (619) 388-2749
The College Police Department is responsible for providing public safety, law enforcement and crime prevention services. Its mission is to maintain peace and order and a safe learning environment for all members of the campus community. It is also responsible for administering the campus parking program, lost and found and building security program.

Emergency services are provided 24 hours a day. Police business offices are open as follows.

Mesa College (J-202) & City College (T-211)
7:00 AM - 10:00 PM Monday - Thursday
7:00 AM - 5:00 PM Friday

Miramar College (B-102)
8:00 AM - 7:00 PM Monday - Thursday
Closed Friday

For information and general assistance, call (619) 388-2749. For POLICE assistance, call (619) 388-6405.

Police Escort and Related Services
The college police are available to provide escort, dead battery and vehicle lockout service during regular hours of operation as published above. Students who wish to use these services, should go to the College Police Office at the following locations for assistance:

City College ............................................T211
Mesa College ...........................................J202
Miramar College .......................................B102

Escorts and police services at other campuses available anytime by calling College Police Dispatch at (619) 388-6405.

Parking
Parking permits are available for purchase during registration through ClassTalk, Reg-e, or at the Accounting Office. Permits purchased at the Accounting Office after the add deadline must be picked up at the College Police Office in room T-211. Automobile permits (hanger included) are $30.00. See College Police for Carpool (Mesa only) information. Motorcycles are $15.00 (per semester). Carpool regulations and applications are available in the College Police Office, Room J-202.

Vehicles parked on campus without valid permits are subject to citation. Holds will be placed on student records for outstanding parking fine balances in excess of $100. Special parking is available for students with disabilities with a valid state issued placard.

Parking permits are not required in the student lots, 12:00 noon to 6:00 p.m. daily.

Transportation for Disabled Students:
Paratransit (curb-to-curb) service is available for a fee to persons with disabilities who cannot use public transportation. ADA certification is required and available from the American Red Cross (619) 542-7515. Please contact DSPS for additional information or forms for certification.

Carpool

Vehicle Immobilization (“Booting”) Warning: Vehicles that accumulate five (5) or more unpaid parking citations may be immobilized “booted” or impounded.

Emergency Calls
The college will not interrupt classroom instruction to deliver messages, except in an extreme emergency. All calls/inquiries should be referred to the College Police Dispatch at (619) 388-6405.
Academic Information and Regulations
Academic Information

Honors
G-306  (619) 388-2341, 388-2351, 388-2989, 388-2347

The Honors Program serves self-motivated and qualified students by providing exceptional and intense learning experiences in classes that are usually highly interactive. Topics are explored in depth; typical assignments emphasize critical thinking, extensive reading and writing, and student presentations and critiques. Activities may also include opportunity for individual research projects, close interaction with faculty and participation in community and cultural events. In addition to Honors class sections, the program also offers Honors Contracts through which individuals can pursue Honors-level course work in a non-Honors section.

The Honors Program offers enhanced transferability to our partner institutions which include University of California campuses in Los Angeles, Irvine, Santa Cruz, and Riverside; Chapman University; Pitzer and Pomona Colleges; and San Diego State University. And for qualified students, the program also has a Book Award Scholarship designed to defray the cost of textbooks.

The Honors Program is open to all students (part-time or full-time, day or evening) and can be found in all disciplines (vocational, liberal arts, fine arts, sciences, business, etc.). For specific criteria and other information, please consult the schedule of classes or contact the campus Honors Coordinator.

Study Abroad Programs
San Diego Mesa College offers students the opportunity to study in different countries around the world in order to develop global competencies and to increase cultural awareness while making progress towards completion of academic goals.

Classes are held at educational institutions in the host country. Field trips, excursions, and visits to sites of cultural and historical interest are components of the program. Housing arrangements include family homestays, student apartments, and/or residence halls. Costs vary from approximately $4,500 to $5,500 for semester programs and are less for summer programs. Financial aid is available for students who qualify.

Semester Abroad Programs: San Diego Mesa College, through a Study Abroad Consortium, offers academic programs in countries around the world. Courses are taught by faculty from San Diego & Imperial Valley community colleges. Classes offered abroad meet general education requirements and are selected to take advantage of the host country’s history, environment, and culture.

Summer Abroad Programs: Programs from 3 to 6 weeks in length are often available during the summer in various locations.

Contact Information: Additional information is available from the International Education Coordinator at (619) 388-2672 or the Dean of Social/Behavioral Sciences and Multicultural Studies at (619) 388-2801.

Accelerated College Program
Transferable community college courses in calculus and political science are provided for qualified high school students at local high schools. The Accelerated College Program (ACP), located at Mesa College, is the districtwide program responsible for providing and administering these classes, following guidelines established by a joint agreement between the San Diego Community College District and San Diego Unified School District. When an ACP student becomes a first-year or transfer student, credits transfer and are widely applicable in fulfilling general education and pre-major requirements at most universities.

Dean’s List
A Dean’s Honor List is compiled at the close of each academic year. To be eligible for the Dean’s Honor List, a student must complete 12 units or more during the academic year and have earned a grade point average of 3.5 or better.

Cooperative Work Experience
F-215H  (619) 388-2271

Under certain circumstances, students can receive academic credit for their current employment or volunteer service. For registration information refer to the class schedule or contact the Work Experience Office at the beginning of each semester.

Class Attendance
Enrollment in college assumes maturity, seriousness of purpose, and self-discipline. Every student is expected
to attend each meeting of all classes for which he/she is registered, to arrive on time, and to stay for the full class period. The college recognizes that absences occur as a result of circumstances beyond a student’s control as well as from a student’s failure to accept responsibility for attending class regularly. It is with the intent of providing for the orderly management of the colleges that the Board of Trustees established the following rules:

1) Attendance shall be taken and recorded at each regularly scheduled class meeting.

2) Instructors may excuse absences when the absence results from illness, accident, religious observances, holidays, other circumstances beyond the student’s control, or participation in authorized professional or college activities.

3) Instructors shall determine what work should be made up.

4) Any student absent from the first meeting of a class may be dropped by the instructor.

5) All rosters shall be cleared of inactive enrollment as of the census date. Inactive enrollment results when students do not attend the first class meeting, or when students have accumulated unexcused absences in excess of 12% of the total class hours.

6) Any student accumulating absences that exceed 6% of the total hours a class is scheduled to meet during its full term may be dropped by the instructor.

Note: It is the student’s responsibility to drop by the withdrawal deadline or a letter grade will be assigned.

7) FOR VETERANS ONLY: To satisfy Veterans reporting requirements, the interval between the last date attended and the date dropped (the date the drop is processed) shall not exceed 22 calendar days.

8) Tardiness and leaving class early may be treated in the same manner as are absences.

9) All drops (administrative, instructor, or student initiated) shall be recorded on the student’s record in the same manner.

10) Final grades may be affected by attendance to the extent that the instructor has included attendance in the “method by which the final grade is determined” and has provided this information to the students in the course syllabus.

Grading System

Unit of Credit: A unit of credit represents one hour of lecture or recitation and two hours of preparation per week, or three hours of laboratory per week for one semester.

Academic Grades

<table>
<thead>
<tr>
<th>Grades</th>
<th>Standing</th>
<th>Grade Points per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Passing - less than satisfactory</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Fail</td>
<td>0</td>
</tr>
<tr>
<td>CR</td>
<td>Credit</td>
<td>Units earned not counted in GPA</td>
</tr>
<tr>
<td>NC</td>
<td>No Credit</td>
<td>Units not counted in GPA</td>
</tr>
</tbody>
</table>

The grade point average (GPA) is determined by dividing the total grade points earned by the total grade point units completed as listed in the chart above.

Administrative symbols: CR/NC - Credit/No Credit;
I - Incomplete; W - Withdrawal; IP - In Progress; RD - Report Delayed. Administrative symbols are not used in the computation of GPA. See below for further explanation.

Credit/No Credit (CR/NC) is a non-punitive grading system where such units earned will be counted in satisfaction of curricular requirements but will be disregarded in determining a student's grade point average. For more specific information, refer to the discussion of the Credit/No Credit Policy on page 44.

Incomplete: A symbol of “I,” Incomplete, may be assigned by an instructor when a student has been unable to complete academic work for unforeseeable emergency and/or justifiable reason at the end of term. A copy of the “Assignment of Incomplete” form will be mailed to the student and the original retained in the Office of the Vice President, Student Services. A final grade will be assigned when the work stipulated has been completed and evaluated by the instructor or when the time limit for completion of the work has passed. An “I” must be made up no later than one year following the end of the term in which it was assigned. In the event of unusual, verifiable circumstances beyond the student’s control, a petition may be filed in the Office of the Vice President, Student Services for extension of the one-year time limit. Course repetition is not permitted to remove an Incomplete.
Withdrawal: An official withdrawal from classes may be requested by the student or initiated on his/her behalf by the instructor or Vice President, Student Services.

The following conditions apply to official withdrawal:

1) No record of the class will be entered on the student’s permanent record if the official withdrawal is made by the deadline to drop without a “W” being recorded as published in the schedule of classes.

2) If the withdrawal is made after the deadline for withdrawing without a “W” and prior to the deadline for withdrawal published in the class schedule for that session, a “W” will be recorded on the student’s permanent record. No exceptions to this policy will be made. Petitions will not be accepted for exception to policy.

3) A student attending a session after the deadline for withdrawal will not be eligible to receive a “W” and must be assigned an academic grade or other administrative symbol by the instructor. Exceptions to this policy will be made only upon verification of extreme circumstances beyond the control of the student. Petitions requesting exception must be filed in the Admissions Office.

4) Withdrawal (W) symbols will be used in the calculation of lack of progress probation and disqualification status.

5) Students on active duty or reserve duty may petition for a “military” withdrawal. This withdrawal is not calculated in the determination of academic progress and is noted on the student’s academic record.

In Progress: A symbol of “IP,” In Progress, will be assigned when a class extends beyond the normal end of a semester or summer session, that is, when the class “carries over” from one term to the next. The appropriate grade, however, shall be assigned and appear on a student’s record for the term during which the course is completed. The “IP” will remain on the academic record. The “IP” shall not be used in the calculation of a student’s grade point average.

Grade Challenge

Final grades will be issued at the end of each semester. In the absence of mistake, fraud, incompetency, or bad faith, the determination of the student’s grade by the instructor shall be final once they have been filed in the Admissions Office and recorded by the Registrar’s Office.

The college will not accept a challenge to a grade change or request for change of a student’s academic record beyond five years from the date of issuance. Challenges must be processed under District Policy 3001.1 in the Office of the Vice President, Instruction. Students wishing to challenge a grade should first attempt to resolve the challenge informally with the instructor. If not resolved at the level of the instructor, the student should proceed by submitting the complaint in writing to the department chair, school dean, Vice President of Instruction, and finally, to the College President.

Credit/No Credit Grading Policy

Consistent with District policy, a student in good standing may elect to be graded on a Credit/No Credit basis in a course. A grade of “Credit” (CR) shall be awarded only for work which otherwise would have received a grade of “C” or better. Work that would have received a “D” or “F” will be graded “No Credit” (NC). The units earned will be counted in satisfaction of program requirements, but will be disregarded in determining a student’s grade point average.

IMPORTANT: Students who plan to transfer to a four-year institution should review the Credit/No Credit acceptance policy of the transfer institution prior to petitioning for this grading option. Restrictions in the San Diego Community College District also apply.

Limitations:

1) No course required in the student’s major may be taken for Credit/No Credit. Some departments may limit this option further.

2) No more than 12 units of a student’s coursework completed in the San Diego Community College District may be graded on a Credit/No Credit basis.

Conditions:

1) Students who wish to be graded on a Credit/No Credit basis must submit a petition to the Admissions Office by the deadline date listed in the schedule of classes. No exceptions to the deadline will be made.

2) An evaluation on a Credit/No Credit basis may not later be changed to a letter grade nor may the reverse occur. No exceptions to this condition will be made. Petitions will not be accepted for exception to policy.

There are courses in which Credit/No Credit grades are used exclusively; these are designated in the catalog.
course description by the statement “Credit/No Credit Only.” In addition, there are courses which cannot be taken on a Credit/No Credit basis; these are designated in the course description by the statement “Letter Grade Only.”

Standards of Academic Progress

Students are in good academic standing when they have a 2.0 grade point average or higher and have completed at least 60% of units they have attempted. There are two kinds of probation and disqualification, one based upon GPA (Academic Performance) and the other based upon the number of units completed (Progress Performance).

Certain programs may have more stringent standards for academic progress. Consult the program director for more information.

Students enrolled in the core curriculum of medically-related programs will be governed by the probation and disqualification policies as outlined in the program policy manuals that reflect the tenets of safe medical practice and respond to program accreditation guidelines.

Academic Probation*

Students whose grade point average falls below a 2.0 after completion of 12 units in the San Diego Community College District will be placed on academic probation and remain there until their overall GPA reaches or exceeds 2.0.

Academic Disqualification

A student on academic probation status is disqualified when his/her non-cumulative GPA falls below 2.0 in a subsequent semester. An enrollment hold will be placed on the student’s record. Students who are disqualified after registering for the subsequent semester will be administratively dropped from all classes.

Lack of Progress Probation*

A student who has attempted a total of 12 or more units as shown by the official academic record, shall be placed on lack of progress probation when the percentage of all (cumulative) units for which entries of “W,” “I,” and “NC” are recorded reaches or exceeds 40%.

Lack of Progress Disqualification

A student who has been placed on lack of progress probation shall be disqualified and an enrollment hold placed on the student’s record when the percentage of units for which entries of “W,” “I,” and “NC” are recorded in a subsequent semester (not-cumulative), reaches or exceeds 40%. Students who are disqualified after registering for the subsequent semester will be administratively dropped from all classes.

* Exceptions:

Provisional, Joint Diploma and Special Admit High School students who do not maintain good academic standing will be automatically disqualified.

PROBATIONARY STATUS WILL NOT APPLY!

- If disqualified:
  - Special Admit High School students will not be readmitted until they reach 18 or graduate from high school.
  - Joint Diploma students must see a JD counselor for readmission.

Readmission after Disqualification

Note: Disqualification status is determined based upon Progress Performance, Academic Performance, or a combination of both.

- First Disqualification

Students who wish to be considered for readmission after the first disqualification will be required to meet with a counselor and develop a Student Success Plan prior to being readmitted. Students who are disqualified after registering for the next semester will be administratively dropped from all classes.

- Second Disqualification

Students who are disqualified a second time will be required to sit out for one semester. Students who are disqualified after registering for the next semester will be administratively dropped from all classes.

- Third Disqualification

Students who are disqualified a third time (and each disqualification thereafter) will be required to sit out for one year. Students who are disqualified after registering for the next semester will be administratively dropped from all classes.
Academic Regulations

Honest Academic Conduct
Honesty and integrity are integral components of the academic process. Students are expected to be honest and ethical at all times in their pursuit of academic goals in accordance with Policy 3100, Student Rights, responsibilities and Administrative Due Process. Procedure 3100.3 describes the Academic and Administrative Sanctions for Students who are found to be cheating. A copy of Procedure 3100.3 can be obtained in the Office of the Vice President of Student Services in I-422.

Course Repetition Policy
No course in which a “C” or better grade has been earned may be repeated. Students who believe that they have a compelling reason for an exception to policy may file a “Petition for Exception to Course Repetition Policy.” Petitions are available in the Evaluations Office, I3-201 and the Counseling Department, I-430.

Additional repetitions of a course to accommodate a student’s disability-related needs may be permitted. For students with disabilities, course repetition is determined on an individual student basis. Contact a DSP&S counselor or DSP&S instructor for more information.

Academic Renewal by Course Repetition
Each course in which an unsatisfactory grade (“D,” “F,” or “NC”) has been earned may be repeated one time only. The course being repeated must be the same as the original course, not its equivalent. Only the newly-earned units and grades will be used in computing the grade point average.

Academic Renewal Without Course Repetition
A student with a record of substandard academic performance that is not reflective of present demonstrated ability may petition to have the substandard grades disregarded in computation of grade point average.

The following conditions apply:

1) The student must be enrolled in, and attending a regionally accredited college/university, and working toward a degree or certificate of achievement.

2) A maximum of 24 semester units or two semesters or summer sessions may be disregarded. For purposes of academic renewal for summer work, a summer session will be defined as ALL COURSES WHICH COMMENCE AFTER THE TERMINATION OF THE SPRING SEMESTER AND END PRIOR TO THE COMMENCEMENT OF THE FALL SEMESTER. MAC, short-term, and carryover classes will be considered to be part of the semester or session in which they are posted to the student’s permanent record.

3) For any semester/session in which course work is to be disregarded, all courses in that semester/session will be disregarded.

4) No courses taken during the disregarded semester(s) or session(s), even if satisfactory, may be applied toward degree or certificate requirements.

5) One year must have lapsed since the semester to be disregarded was completed.

6) The student must successfully complete 12 units in an accredited college or university with a grade point average of 2.0 subsequent to the work to be disregarded. ALL courses taken during the semester in which the student reaches or exceeds this 12-unit minimum will be used in computing the 2.0 grade point average.

7) Similar actions by other accredited institutions will be honored under the district policy; however, similar actions by another institution will be counted as part of the maximum of 24 units to be disregarded.

8) The permanent academic record shall be annotated in such a manner that the record of all work remains legible, ensuring a true and complete academic record.

9) Recalculation of grade point average may be used toward qualification for graduation with honors.

10) Work taken at another institution may be forgiven in the computations of that work for purposes of graduation from one of our District colleges, under the regulations stated above.

11) Students with previously earned degrees: Courses used to fulfill requirements of a degree are not eligible for Academic Renewal.

NOTE: Transcripts from all institutions attended must be officially on file.

Transcripts of Record
A student may obtain an official transcript of record by filing a request in person at the Accounting Office at
the college, or in person or by mail at the Office of the Registrar, San Diego Community College District, Administrative Office, 3375 Camino del Rio South, San Diego, CA 92108. Payment of fees must be made prior to processing a request for transcripts. The following policy has been adopted by the San Diego Community College District Board of Trustees regarding the issuance of transcripts of record:

1) The first two transcripts will be issued without charge.
2) There will be a charge of $5.00 for each additional transcript.
3) All transcript requests are processed within 10 working days except “RUSH” orders.
4) A $5.00 special handling fee will be charged for all “RUSH” order transcript requests. The special handling fee will be charged per request.

All official copies of the student’s permanent record are in the Office of the Registrar. The Office of the Registrar will certify only to the accuracy of the records prepared by and issued directly from that office to another institution.

Transcripts of Prior Academic Credit

Students with credit from other colleges and universities must file official transcripts at the time of application for admission.

- Official transcripts are those sent directly from one institution to another.
- Transcripts will only be accepted for one year after issuance.

Please note: Foreign transcripts are not evaluated by the college. This service is available through outside companies for a fee. Contact the college Evaluation Office for additional information.

Transcripts brought in by students may be accepted for unofficial purposes only.

Transcripts are required even if prior credits do not appear relevant or if units were taken years ago.

Students receiving financial aid or veterans benefits must have transcripts on file within one semester.

Certain programs require transcripts before admission to the program.

Official transcripts from other institutions become the property of the college and will not be duplicated or returned.

- Official transcripts should be sent to the following address:
  San Diego Community College District
  3375 Camino del Rio South, Rm. 100
  San Diego, CA 92108-3883

Academic Credit for Nontraditional Education

Academic credit may also be available to currently enrolled SDCCD students for skills or knowledge not obtained by formal scholastic experience or for prior course work with content determined equivalent to district courses.

Credit is available through the following:

- Advanced Placement Examinations (AP).
- College-Level Examination Program (CLEP).
- Defense Activity for Non-Traditional Education Support (DANTES).
- International Baccalaureate (IB).

A maximum of 30 cumulative units may be granted for acceptable scores on any combination of Advanced Placement (AP), College Level Examination Program (CLEP), Defense Activity for Non-Traditional Education Support (DANTES), or International Baccalaureate (IB) examinations. All official transcripts must be on file, and official copies of test scores must be submitted to the college Evaluations Office to receive credit.

To obtain credit, the student must be currently enrolled and working toward an associate degree or certificate of achievement. Credit granted cannot be used to meet the district in-residence requirements nor will such credit be included in the student’s current study load.

Limitations on credit by standardized examination:

- Tests cannot be used to meet the American Institutions nor laboratory requirements. The English composition requirement can be met by the AP and IB exams.
- Credit will not be granted for equivalent courses completed.
- Grades are not assigned, nor is the credit used in calculating grade point average.
- Departmental approval is required to satisfy requirements in the student’s major.
- Credit granted by SDCCD does not necessarily transfer to other institutions. Transferability of
### Advanced Placement Test

**Academic Information and Regulations**

<table>
<thead>
<tr>
<th>Test Subject</th>
<th>SDCCD Course Equivalent(s)</th>
<th>CSUGE Certification</th>
<th>IGETC Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>Art 110 or 111 Art C (6 units)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>Biology 3, 4, or 5 Area B (3 units)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>Chemistry 200 &amp; Elective (6 units)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classical Languages</td>
<td>Classic Foreign Language Requirement</td>
<td></td>
<td></td>
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<tr>
<td>Computer Science - A</td>
<td>Computer Science - A (6 units)</td>
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</tr>
<tr>
<td>Computer Science - AB</td>
<td>Computer Science - AB (6 units)</td>
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<tr>
<td>Economics - Micro</td>
<td>Economics 121 (3 units)</td>
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<tr>
<td>Economics - Macro</td>
<td>Economics 120 (3 units)</td>
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<tr>
<td>English Composition</td>
<td>English Composition (6 units)</td>
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<tr>
<td>Essays</td>
<td>English Composition (6 units)</td>
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<td></td>
</tr>
<tr>
<td>French Language</td>
<td>French Language 3, 4, or 5 Area C (6 units)</td>
<td></td>
<td></td>
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<tr>
<td>German Language</td>
<td>German Language 3, 4, or 5 Area C (6 units)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government - Comparative</td>
<td>Government - Comparative (3 units)</td>
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<tr>
<td>Government - U.S.</td>
<td>Government - U.S. (3 units)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>History 109 and Elective (6 units)</td>
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<td></td>
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<tr>
<td>Mathematics - AB</td>
<td>Mathematics 119 (3 units)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics - BC</td>
<td>Mathematics 119 (3 units)</td>
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</tr>
<tr>
<td>Music Theory</td>
<td>Music Theory (3 units)</td>
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<td>Statistics</td>
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<tr>
<td>Statistics</td>
<td>Statistics (3 units)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To request an official AP transcript, write to:

College Board / SAT Program, Princeton, NJ 08541
credit is determined by the receiving college or university.

The tables below indicate the score necessary, the credit allowed, and the area(s) satisfied for each of the examinations accepted for credit.

**College Level Examination Program (CLEP)**

<table>
<thead>
<tr>
<th>CLEP Examination</th>
<th>Required Score</th>
<th>Number of Credits Granted</th>
<th>Credit Granted for District</th>
<th>Credit Granted for CSU</th>
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</thead>
<tbody>
<tr>
<td>Accounting, Principles of</td>
<td>50</td>
<td>4</td>
<td>Elective Credit</td>
<td></td>
</tr>
<tr>
<td>Algebra</td>
<td>50</td>
<td>5</td>
<td>Math Comp and Area A2</td>
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<tr>
<td>Algebra – Trigonometry</td>
<td>50</td>
<td>3</td>
<td>Math Comp and Area A2, Area B4</td>
<td></td>
</tr>
<tr>
<td>American Government</td>
<td>50</td>
<td>3</td>
<td>Area D</td>
<td></td>
</tr>
<tr>
<td>American Literature</td>
<td>50</td>
<td>6</td>
<td>Area C</td>
<td></td>
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<tr>
<td>Analyzing and Interpreting Literature</td>
<td>50</td>
<td>6</td>
<td>Area C</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>50</td>
<td>3</td>
<td>Area B</td>
<td></td>
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<tr>
<td>Business Law, Introductory</td>
<td>50</td>
<td>3</td>
<td>Elective Credit</td>
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<tr>
<td>Calculus with Elementary Functions</td>
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<td>5</td>
<td>Math Comp and Area A2, Area B4</td>
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<td>Chemistry</td>
<td>50</td>
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<td>Area B, Area B1</td>
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<td>College Mathematics</td>
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<td>Math Comp and Area A2, Area B4</td>
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<td>Composition, Freshman</td>
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<td>Educational Psychology, Introduction to</td>
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<td>3</td>
<td>Area D</td>
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<tr>
<td>English Composition (with or without Essay)</td>
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<td>3</td>
<td>Elective Credit</td>
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<tr>
<td>English Literature</td>
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<td>6</td>
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<tr>
<td>French – Level I</td>
<td>50</td>
<td>5</td>
<td>Area C</td>
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<tr>
<td>French – Level II</td>
<td>52</td>
<td>10</td>
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<tr>
<td>German – Level I</td>
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<td>Area C2</td>
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<td>German – Level II</td>
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<td>10</td>
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<tr>
<td>History of the U.S.: 1865 to the Present</td>
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<td>3</td>
<td>Area D</td>
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<tr>
<td>History of the U.S.: Early Colonizations to 1877</td>
<td>50</td>
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<td>Area D</td>
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<tr>
<td>Human Growth and Development</td>
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<td>Area D</td>
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<td>Humanities</td>
<td>50</td>
<td>3</td>
<td>Area C</td>
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<tr>
<td>Information Systems and Computer Applications</td>
<td>50</td>
<td>3</td>
<td>Area A2</td>
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<tr>
<td>Macroeconomics, Principles of</td>
<td>50</td>
<td>3</td>
<td>Area D</td>
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</tr>
<tr>
<td>Management, Principles of</td>
<td>50</td>
<td>3</td>
<td>Elective Credit</td>
<td></td>
</tr>
<tr>
<td>Marketing, Principles of</td>
<td>50</td>
<td>3</td>
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<td></td>
</tr>
<tr>
<td>Microeconomics, Principles of</td>
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<td>3</td>
<td>Area D</td>
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<tr>
<td>Natural Science</td>
<td>50</td>
<td>3</td>
<td>Area B</td>
<td></td>
</tr>
</tbody>
</table>
To request an official CLEP transcript, write to:
Educational Testing Service, P. O. Box 6604, Princeton, NJ 08541


CLEP Tests can **NOT** be used to clear IGETC certification nor some degree requirements. See a counselor.

### DANTES Subject Standardized Test (DANTES/DSST)

<table>
<thead>
<tr>
<th>DANTES Examination</th>
<th>Required Score</th>
<th>Number of Credits Granted</th>
<th>Credit Granted for District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamental College Algebra</td>
<td>50</td>
<td>3</td>
<td>Math Comp &amp; Area A2</td>
</tr>
<tr>
<td>Principles of Statistics</td>
<td>50</td>
<td>3</td>
<td>Math Comp &amp; Area A2</td>
</tr>
<tr>
<td>Art of the Western World</td>
<td>50</td>
<td>3</td>
<td>Area C</td>
</tr>
<tr>
<td>Contemporary Western Europe: 1946-1990</td>
<td>50</td>
<td>3</td>
<td>Area C</td>
</tr>
<tr>
<td>An Introduction to the Modern Middle East</td>
<td>50</td>
<td>3</td>
<td>Area D</td>
</tr>
<tr>
<td>Human / Cultural Geography</td>
<td>50</td>
<td>3</td>
<td>Elective</td>
</tr>
<tr>
<td>A History of the Vietnam War</td>
<td>50</td>
<td>3</td>
<td>Elective</td>
</tr>
<tr>
<td>Foundations of Education</td>
<td>50</td>
<td>3</td>
<td>Elective</td>
</tr>
<tr>
<td>Lifespan Developmental Psychology</td>
<td>50</td>
<td>3</td>
<td>Elective</td>
</tr>
<tr>
<td>General Anthropology</td>
<td>50</td>
<td>3</td>
<td>Elective</td>
</tr>
<tr>
<td>Introduction To Law Enforcement</td>
<td>50</td>
<td>3</td>
<td>Area D</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>50</td>
<td>3</td>
<td>Elective</td>
</tr>
<tr>
<td>Fundamentals of Counseling</td>
<td>50</td>
<td>3</td>
<td>Elective</td>
</tr>
<tr>
<td>Principles of Financial Accounting</td>
<td>50</td>
<td>3</td>
<td>Elective</td>
</tr>
<tr>
<td>Human Resource Management</td>
<td>50</td>
<td>3</td>
<td>Elective</td>
</tr>
<tr>
<td>Organizational Behavior</td>
<td>50</td>
<td>3</td>
<td>Elective</td>
</tr>
<tr>
<td>Principles of Supervision</td>
<td>50</td>
<td>3</td>
<td>Elective</td>
</tr>
<tr>
<td>Introduction to Computing</td>
<td>50</td>
<td>3</td>
<td>Elective</td>
</tr>
<tr>
<td>Introduction to Business</td>
<td>50</td>
<td>3</td>
<td>Area D</td>
</tr>
<tr>
<td>Personal Financial</td>
<td>50</td>
<td>3</td>
<td>Elective</td>
</tr>
<tr>
<td>Business Mathematics</td>
<td>50</td>
<td>3</td>
<td>Math Comp &amp; Area A2</td>
</tr>
<tr>
<td>Astronomy</td>
<td>50</td>
<td>3</td>
<td>Area B</td>
</tr>
<tr>
<td>Here’s to Your Health</td>
<td>50</td>
<td>3</td>
<td>Health Education</td>
</tr>
</tbody>
</table>
DANTES tests can not be used to clear IGETC certification nor some degree requirements. See a counselor.

International Baccalaureate (IB) Credit

<table>
<thead>
<tr>
<th>EXAMINATION</th>
<th>SCORE</th>
<th>UNITS</th>
<th>SDCCD EQUIVALENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>4-7</td>
<td>4</td>
<td>Area B</td>
</tr>
<tr>
<td>English A1</td>
<td>4-7</td>
<td>6</td>
<td>Area A1 and English competency 3 units and Area C - 3 units</td>
</tr>
<tr>
<td>French</td>
<td>4-7</td>
<td>5</td>
<td>Area C</td>
</tr>
<tr>
<td>Geography</td>
<td>4-7</td>
<td>6</td>
<td>Area B - 3 units and Area D - 3 units</td>
</tr>
<tr>
<td>History of the Americas</td>
<td>4-7</td>
<td>6</td>
<td>Area D</td>
</tr>
<tr>
<td>Mathematics</td>
<td>6-7</td>
<td>6</td>
<td>Area A2 &amp; Math Competency</td>
</tr>
<tr>
<td>Psychology</td>
<td>5-7</td>
<td>3</td>
<td>Area D</td>
</tr>
<tr>
<td>Spanish A2 or Spanish B</td>
<td>4-7</td>
<td>6</td>
<td>Area C - 3 units and Elective</td>
</tr>
</tbody>
</table>

*Credit may not be earned at SDCCD for courses which duplicate credit already allowed through other means such as AP or credit-by-exam.

*IB tests can not be used to clear CSU Breadth, IGETC certification, nor some degree requirements.

Credit by Examination designed and approved by individual disciplines
The term “examination” means any written, oral or performance standards determined by the individual departments. Forms are available in the Evaluations Office.

Credit for non-college credit vocational courses
Students who complete non-college credit articulated courses (SDUSD/SDCCD) that are equivalent in subject matter, content, educational objectives, length of course, and performance standards and pass a college faculty approved examination for the course offered by the college may have these courses converted to college credit. Additional information is available in the Evaluations Office.
Credit is also available for the following military experiences:

- **Credit for Military Service**
  A minimum of six months active U.S. military service is required. The student should submit Form DD-214 to obtain this credit. Four units of credit to fulfill the Health Education and Physical Education graduation requirements will be granted.

- **Credit for Military School(s)**
  The college is guided by the associate degree/baccalaureate credit recommendations of schools contained in “A Guide to the Evaluation of Educational Experiences in the Armed Services,” published by the American Council on Education. Units earned may be used for completion of graduation requirements. More specific information may be obtained in the Evaluations Office.

- **Service Members Opportunity College and SOCNAV/SOCMAR**
  The San Diego Community Colleges have been designated as members of the Service Members Opportunity College (SOC). As members, these colleges provide educational assistance to active duty service members and agree to accept credit for military service schools as recommended by the American Council on Education. In addition, these institutions recognize other non-traditional sources for credit such as DANTES and CLEP examinations. The San Diego Community Colleges are also committed to military personnel who may choose to participate in the SOCNAV/SOCMAR (Service Members Opportunity College/Navy/Marine Corp.) Program Network. SOCNAV/SOCMAR was established to better serve highly mobile service members and their families. The San Diego Community Colleges are members of the Interdisciplinary Studies and Criminal Justice SOCNAV/SOCMAR Networks. For more information on these programs, contact the Military Education counselors at the following locations:

<table>
<thead>
<tr>
<th>Location</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASW</td>
<td>(619) 230-2331</td>
</tr>
<tr>
<td>Naval Station 32nd St.</td>
<td>(619) 233-5617</td>
</tr>
<tr>
<td>MCAS</td>
<td>(858) 536-7805</td>
</tr>
<tr>
<td>Marine Corps Recruit Depot (MCRD)</td>
<td>(619) 295-9974</td>
</tr>
<tr>
<td>Sub Base</td>
<td>(619) 553-7195</td>
</tr>
</tbody>
</table>

- **Air Force and U.S. Army ROTC Programs**
  Under the provisions of a special agreement with the United States Army, the United States Air Force, San Diego State University (SDSU), and this institution, students may participate in the Army or Air Force Reserve Officers Training Program (ROTC). San Diego Community College District students may enroll and attend ROTC classes at SDSU by contacting the Air Force ROTC at the Aerospace Studies Department (619) 594-5545 or the Army ROTC at the Military Science Department (619) 594-4943. The credits earned in these classes may be transferred as electives to meet the degree requirements of Mesa College.

**Responsibility for Meeting Requirements**
Each student must assume responsibility for compliance with the regulations of the college set forth in this catalog, for satisfying prerequisites for any course, and for selecting courses which will facilitate attainment of educational objectives. The college does not assume responsibility for misinterpretation of policies and procedures as presented in this catalog. Counselors and advisors are available to assist in planning students’ programs. Any questions or doubts concerning this catalog material should be referred to the Office of the Vice President, Student Services.

**Petition for Exceptions**
Petitions for exceptions to graduation requirements, substitutions, or waiver of requirements are filed with the Evaluations Office (I3-201). All petitions are acted upon by the appropriate college committees/offices.

**Statement of Open Courses**
It is the policy of the San Diego Community College District that, unless specifically exempted by statute, every course, section, or class offered by the District and reported for state aid shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets course prerequisites.

**Academic Accommodation**
Students with verified disabilities who may require academic adjustments or auxiliary aids are strongly recommended to contact the Disabled Students Programs and Services (DSPS) Department, H-202, (619) 388-2780 (voice) and (619) 388-2974 (tty), and complete orientation procedures well before classes begin. Contact DSPS early to ensure timely provision of
services. Students are encouraged to identify themselves to the appropriate instructors to discuss the details and timelines necessary to provide appropriate accommodations. Students enrolled in on-line courses are encouraged to contact the college DSPS Office to request academic accommodation. Questions regarding academic accommodations may be directed to the college 504 Officer, Pamela Chapman at (619) 388-2254 (Room F-208A).

**Responsibility for Maintaining Accurate Registration**

It is the student's obligation to add, drop, or withdraw from classes before the deadlines stated in the class schedule. This applies even if the student has never attended class. Any student who anticipates difficulty in paying fees should check with the Financial Aid Office about eligibility and sources of assistance. Registration will be canceled for nonpayment of fees.

**Debt Owed to the College**

California Education Code Section 72237 and Title 5 Section 54640 state that grades, transcripts, diplomas, and registration privileges, or any combination thereof, shall be withheld from any student or former student who has been provided with written notice that he or she has failed to pay a proper financial obligation. Any item(s) withheld shall be released when the student satisfactorily meets the financial obligation. A service fee may be charged for all delinquent loans; any service fee would be determined by the total cost required to collect the delinquent loans.

**Audit Policy**

Auditing courses is not permitted under any circumstances. Students must be officially enrolled in all classes which they attend.

**Student Right to Know**

The Higher Education Act mandates that institutions of higher education disclose the completion of graduation rates of full-time degree-, certificate-, or transfer-seeking freshman students. The completion and transfer-out rates for full-time students seeking an Associate Degree, Certificate of Achievement, or transfer are:

<table>
<thead>
<tr>
<th></th>
<th>Completion Rates</th>
<th>Transfer-Out Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>13.1%</td>
<td>21.3%</td>
</tr>
<tr>
<td>Mesa</td>
<td>28.4%</td>
<td>30.5%</td>
</tr>
<tr>
<td>Miramar</td>
<td>17.1%</td>
<td>51.4%</td>
</tr>
</tbody>
</table>

**Nondiscrimination Policy**

The San Diego Community College District has a policy which prohibits discrimination in accordance with State and Federal laws. Students wishing to file complaints based upon discrimination should contact the campus Equal Employment Opportunity (EEO) Officer. Appeals may be made to the District EEO Manager at the District Administrative Office, 3375 Camino del Rio South, San Diego, CA 92108, (619) 388-6591. Students with disabilities who want to file a grievance under Section 504 of the 1973 Federal Rehabilitation Act should contact Pam Chapman, room F-208A, or call (619) 388-2254. Students who want to file a grievance under the Americans with Disabilities Act (ADA) should contact the EEO Officer, Sondra Frisch, (619) 388-2440, A-111A.

**Gender Equity**

The Gender Equity Coordinator facilitates the development or updating of the campus Gender Equity Plan in cooperation with committees that are responsible for equity concerns. The EEO Officer, Sondra Frisch can be reached at (619) 388-2440, A-111A.

**Additional Information on Policies**

Nondiscrimination A-111A (619) 388-2440
Sex Discrimination A-111A (619) 388-2440
Sexual Harassment A-111A (619) 388-2440
Academic Accommodation/504 Officer F-208A (619) 388-2254
Student Right to Know H-500 (619) 388-2699
Substance Abuse L-504 (619) 388-2774
Crime Awareness J-202 (619) 388-2749

**Title IX. Prohibiting Sex Discrimination in Education**

San Diego Mesa College is committed to support all regulations under Title IX. “No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.”

For further directions or inquiries, please contact the EEO Officer, Sondra Frisch, at (619) 388-2440, A-111A.

**Policy Prohibiting Sexual Harassment**

It is the policy of the San Diego Community College District to provide an educational environment that is free of sexual advances, requests for sexual favors, and other verbal or physical conduct or communications...
that constitute sexual harassment as defined and prohibited by federal and state statutes. Anyone with questions about this policy or anyone who wishes to file a complaint should contact the Dean of Student Affairs, the College EEO Officer, or the District EEO Officer. The Vice President, Student Services is also available to provide assistance in matters of alleged sexual harassment.

Procedures for filing a formal complaint of sexual harassment are described in District Procedure 4105.2. Copies of this procedure may be obtained from the EEO Officer, Sondra Frisch, at (619) 388-2440, A-111A.

**Drug and Alcohol Use**

The San Diego Community College District is committed to providing a drug free environment. Any type of drug use, including alcohol, is dangerous and potentially life threatening. Drugs and alcohol adversely affect the body, mind and behavior. The effects vary from person to person and from usage to usage. Even low doses of drugs and alcohol can impair judgment and coordination. If you use drugs or alcohol, you risk overdose, accidents, dependence, ill health, as well as legal, financial and personal problems. The federal laws against drugs are divided into two categories: possession and distribution. The penalties are severe depending upon the type of drug, quantity of the drug, and any prior offenses. Possession will earn up to one year in prison and a $5,000 fine. Distribution will earn up to life in prison and an $8 million fine. State laws vary and may be more severe. District Policy 3100-Code of Conduct-states that use, possession, or distribution of narcotics or other controlled substances is prohibited while on the college premises or at college sponsored events. A student may be suspended or expelled for violation of this policy. A complete list of legal sanctions is available in the Vice President, Student Services Office. The colleges provide information on drug and alcohol treatment and prevention through seminars, courses, and the Student Health Services. Contact Student Health Services at (619) 388-2774 or the Vice President, Student Services Office at (619) 388-2678 for additional information.

**Smoking Regulation**

This procedure is applicable to all District facilities. It implements the Board policy of consonance with the City of San Diego’s ordinance regulating smoking in public facilities. The success of this program is dependent upon the voluntary cooperation of the smoking and nonsmoking public. The District recognized the fact that individual health can be impaired both by the direct and by the secondary effects of smoking. The District, therefore, discourages the practices of smoking, but provides for opportunities for those who smoke as long as there is no impact upon the rights and health of non-smokers. It is not the intent that the program be a prohibition of smoking, rather it is intended to recognize the individual rights of the smoking/nonsmoking public.

- The posting of no smoking signs without the corresponding designation of smoking permitted areas is not in consonance with the intent of the procedure.
- Smoking is not permitted in District facilities which are open to the public and used as: Classrooms, Meetings Rooms, Theatres, Restrooms, Libraries, Cafeterias, Bookstores, Service Lines, Elevators, Faculty Offices.
- Smoking is not permitted in vehicles used for transportation of students.
- Site presidents/provost/facility managers may designate facilities or areas in addition to those listed above as NO SMOKING facilities or areas.
- Each site determines areas for smoking and areas for nonsmoking in accordance with the SDCCD procedure and San Diego Municipal Code.
- Signs indicating SMOKING PERMITTED and NO SMOKING should be posted conspicuously in each area.
- Site presidents/provost/facility managers may designate areas within NO SMOKING areas where smoking is permitted, under the general guidance of San Diego Municipal Code.

For complete Smoking Policy, please reference SDCCD Procedure 0505.2.

**Crime Awareness and Campus Security**

J-202 (619) 388-2749

The San Diego Community College District Annual Security Report, titled "Safe and Sound, a guide to safety and security in the San Diego Community College District", includes statistics for the previous three years concerning reported crimes that occurred on campus; in certain off-campus buildings or property owned or controlled by the San Diego Community College District; and on public property within, or immediately adjacent to and accessible from, the campus. The report also includes institutional policies concerning campus
security, such as policies on drug use, crime prevention, the reporting of crimes, sexual assault and other matters. You can obtain a copy of this report by contacting any campus admissions office, Vice President of Student Services (1-422) office or college police business office. At anytime you may view a full copy by accessing the following website: http://www.sdccd.net/police/statistics.html

Elder and Dependent Adult Abuse
An elder is defined as a resident of the State of California which is 65 years of age or older; or a dependent adult, defined as a resident of the State of California between the ages of 18 and 64 years, who has a physical or mental limitation that restrict his or her ability to carry out normal activities or to protect his/her rights.

Secondary educational institutions serving dependent adults are designated as mandated reporters with an individual, personal responsibility to comply with the reporting requirements.

Any mandated reporter, who, in his or her professional capacity, or within the scope of his or her employment, has observed or had knowledge of an incident that reasonably appears to be physical abuse, abandonment, isolation, financial abuse, or neglect, or is told by an elder or dependent adult that he or she has experienced behavior constituting physical abuse, abandonment, isolation, financial abuse, or neglect, or reasonably suspects abuse shall report the known or suspected instance of abuse immediately to the EEO Officer, Sondra Frisch, at (619) 388-2440, A-111A.

The Site Compliance Officer will be responsible for notifying Health and Human Services and completing the Department’s report form, “Suspected Dependent Adult/Elder Abuse, SOC 33341” within two working days.

Copyright Responsibility
Any duplication request of copyrighted materials for use in the college’s instructional programs must be accompanied by written permission from the copyright owner. Any duplication of copyrighted materials by student, staff, or faculty is to be for the sole purpose of private scholarly study. Since the liability for infringement of statutory or common-law copyright occurs during misuse of duplicated materials, the duplicated copies cannot be sold or distributed. A designated portion of the duplicated copy cannot be included in another's work without the written permission of the copyright owner. All copyright responsibility is assumed by the individual requesting the duplication. San Diego Mesa College, its agents, representatives, and employees are held harmless against all claims, suits, damage costs, and expenses of charges of statutory or common-law infringement resulting from the college's efforts to provide services, materials, and equipment to the requester.

Student Rights, Responsibilities, and Privacy of Student Records

Student Rights and Responsibilities
District policy 3100 enumerates the rights and responsibilities of all San Diego Community College District students.

1.0 Student Rights
All students shall have the right to a campus learning environment free from interference or disruption. The District shall ensure to the best of their ability to afford students the rights contained herein.

1.1 Students shall have the right to impartial objective evaluation of their academic performance. Students shall receive in writing, at the beginning of each course, information outlining the method of evaluating student progress including the method by which the final grade is determined.

1.2 Students shall have the right to exercise free expression including, but not limited to, the use of bulletin boards, the distribution of printed materials or petitions, and wearing of buttons, badges, or other insignia, so long as the expression is not obscene, libelous or slanderous according to current legal standards, and so long as the expression does not incite students so as to create a clear and present danger of (a) the commission of unlawful acts on community college premises, (b) the violation of lawful community college regulations, or (c) the substantial disruption of the orderly operation of the community college. The District reserves the right to regulate the time, place and manner of all student activities. (Education Code Section 76120).
1.3 Students shall have the right to be free from acts or threats of intimidation, harassment, or physical aggression.

1.4 Students shall have the right to be free from the imposition of disciplinary sanctions without proper regard for due process.

1.5 Students shall have the right to take reasoned exception to the data or views offered in any course of study without disrupting the instructional environment and to reserve judgment about matters of opinion. However, this does not preclude learning the content of any course for which they are enrolled.

1.6 Students shall have the right to participate in the formation of policy affecting them in accordance with established procedures for Shared Governance.

1.7 Students shall have the right to petition to organize interest groups and/or join student associations pursuant to Manual 3200.

1.8 Students shall have the right to invite guest speakers to make presentations on campus in accordance with campus guidelines and District policies and procedures.

1.9 Students shall have the right to develop student publications in accordance with standards established by current District policies and procedures.

1.10 Students with verified disabilities shall have the right to receive appropriate academic adjustments and auxiliary aids as specified in the Americans with Disabilities Act and Section 504 of the Federal Rehabilitation Act of 1973.

2.0 Student Responsibilities

Student behavior must remain in accordance with specific academic and behavior requirements as specified in District policy and which may be outlined by the course syllabus.

2.1 Students shall be responsible for defining and making progress toward their educational goal.

2.2 Students are responsible for reading and adhering to the policies and procedures as outlined in catalogs, schedules, course syllabi and other official printed materials.

2.3 Students with verified disabilities who believe they need academic adjustments or auxiliary aids are encouraged to identify themselves to their instructors to discuss the details and timelines necessary to provide appropriate accommodation. Students are responsible for providing written verification of their disability to the instructor upon request.

2.4 Students may elect to consult directly with a Disabled Students Programs and Services (DSP&S) Counselor Specialist regarding any accommodation. These students will be required to meet timelines and procedural requirements established by the DSP&S office.

3.0 Code of Conduct

Students are subject to adhering to the policies and procedures of the San Diego Community College District, as well as all federal, state, and local laws. Students are subject to charges of misconduct concerning, but not limited to, the following acts when committed on District-owned or controlled property or at District-sponsored activities.

3.1 The taking of and passing off as one's own the work or ideas of another: plagiarism and academic cheating.

3.2 Falsification, alteration or misuse of campus/District documents, and records.

3.3 Act or threat of damage to or theft of property belonging to or located on District-controlled property or facilities.

3.4 The physical or verbal disruption of instructional or student services activities, administrative procedures, public service functions, authorized curricular or co-curricular activities or prevention of authorized guests from carrying out the purpose for which they are on campus.

3.5 The physical or verbal intimidation or harassment of such severity or perverseness as to have the purpose or effect of unreasonably interfering with a student's academic performance, or a District employee's work performance, or of creating an intimidating, hostile, or offensive educational or work environment.

3.6 Disorderly, lewd, indecent or obscene conduct or expression or habitual profanity or
vulgarity; any expression which is obscene, libelous or slanderous according to current legal standards or which so incites students as to create a clear and present danger of the commission of unlawful acts, or the substantial disruption of the orderly operation of the community college. (Ed. Code 76120)

3.7 Assault, or battery upon a student or district personnel on district premises or at any time or place while under the authority of District personnel.

3.8 Possession of weapons, explosives, unlicensed dangerous chemicals or objects which may be used as weapons or to threaten bodily harm, as specified in the California Penal Code or other applicable laws.

3.9 Participation in hazing (California Education Code Sections 32050 through 32052).

3.10 Possession of weapons, explosives, unlicensed dangerous chemicals or objects which may be used as weapons or to threaten bodily harm, as specified in the California Penal Code or other applicable laws.

3.11 Failure to comply with directions of staff members of the district who are acting within the scope of their employment. Continued and willful disobedience or open and persistent defiance of the authority of district personnel providing, such conduct is related to district activities or college/center attendance.

3.12 Smoking on District premises, or in vehicles provided by the district used for transporting students, except as permitted by applicable ordinances, laws, college guidelines and District procedure 0505.2.

3.13 Use, possession, distribution, or sale of alcoholic beverages on campus except as permitted by law.

3.14 Use, possession, distribution, manufacture or sale of narcotics or other hallucinogenic drugs or substances or inhaling or breathing the fumes of, or ingesting, any poison classified as such by the California Business and Professions Code Section 4160, Schedule “D,” except as provided by law, is prohibited when on district premises.

3.15 Violation of Policies & Procedures for Student Organizations as enumerated in Manual 3200.

Review of Student Records

Pursuant to the “Family Rights and Privacy Act of 1974” (Public Law 93-380) and the California Education Code, a student may request to inspect all his/her official school records, files, and related data that are classified as Student Records. The records will be available for review at a mutually convenient time during regular working hours. Contact the Vice President, Student Services. If information in the file is inaccurate, misleading, or inappropriate, a student may request removal of the information or include a statement disputing the material that is challenged.

The law provides that no individual, agency or organization shall have access to a student’s records without the written consent of the student, with the exception of the following:

1) School officials within the district with “legitimate educational interest” such as the following:
   a. Instructional staff, when such information will assist in determining or improving the academic competence of students under their jurisdiction.
   b. Counseling staff, when such information will assist the student in achieving his/her personal, academic, or vocational goals.
   c. Classified staff who are involved in the creation, analysis, distribution, correction, compilation, or processing of student records.
   d. Management or supervisory staff, when such information is directly related to the successful completion of management or supervisory duties, as prescribed by the Board of Trustees.
   e. The Board of Trustees, in appropriate disciplinary cases.

2) Specified federal and state educational officials such as officials in the State Chancellor’s Office.

3) State and local officials to the extent that such information is required to be reported pursuant to state law adopted prior to November 19, 1974.
4) Schools or colleges of intended enrollment provided that the student has been notified and given the opportunity to challenge the content.

5) Organizations conducting studies for the district.

6) Persons in connection with an emergency.

7) Agencies in connection with financial aid.

8) Court officials pursuant to a court order or subpoena provided the college makes a reasonable effort to notify the student in advance of such compliance.

Student records will normally include documents filed for admission to the college, grade reports, permanent records of academic work completed, transcripts received from other schools and colleges attended, test scores, counseling information, correspondence, and petitions. These documents will normally include but not be limited to a student’s name, address, telephone number, birth date, residence classification, sex, past and current enrollment, academic and attendance status, educational benefits, ethnic background, high school graduation, college major, and identification number.

Information which cannot be classified as a student record, is as follows: (a) information provided by the students parents in connection with financial aid, (b) confidential letters of recommendation on file prior to January 1, 1975, (c) information maintained by a district official or employee which remains in his/her sole possession, (d) information about the student maintained by a physician, psychiatrist, psychologist, or other professional acting in his/her professional capacity for the college, (e) information about the student maintained by the college law enforcement unit, (f) information about the student maintained in the normal course of business pertaining to the student’s employment, if the student is employed by the college.

The information listed below is considered “Directory Information” and may be released as specified unless the student notifies the official responsible for student records within two weeks after the beginning of the semester or session that such personally identifiable information is not to be released.

1) Information related to officially recognized activities and sports which appears in programs, campus/district newspapers, or is released to the news media.

2) Information pertaining to graduation which appears on commencement programs, campus/district newspapers or is released to the news media.

3) Information pertaining to the receipt of awards which appears in campus/district newspapers or is released to the news media.

When releasing the above categories of information, the following items of information may be included: student’s name, date and place of birth, address, phone number, major field of study, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and most recent public or private school attended by the student. No other categories of information may be released nor may the information be released to other recipients without the written authorization of the student concerned. The college will maintain a log which lists all persons, agencies or organizations requesting or receiving information from a student’s record at the college Admissions/Records Office. Such log will also indicate why such information is requested.

Information about students may be requested by officials in charge of recruitment for the National Guard and each active reserve component of the armed forces. Such information shall be released subject to the following conditions:

- The requesting agency shall reimburse the District for the cost of developing and furnishing the information.

- The agreement shall acknowledge the confidentiality of the information and prohibit its release to a third party.

- After public notice, the student named has informed the district in writing that the information may be released.

In the event you feel that Mesa College has not complied with the provisions of the privacy act as specified herein or in the statutes, you may file a complaint with the United States Department of Education.

The official responsible for student records at Mesa College is the Admissions and Records Director.
The Associate Degree

On the recommendation of the faculty, the college awards the Associate in Arts degree, the Associate in Science degree, or the Certificate of Achievement to students who complete the requirements specified.

### Associate Degree Requirements

The Associate in Science degree is awarded in engineering, physical and biological sciences, and occupational curricula. The Associate in Arts degree is awarded in the social sciences, humanities, the arts, and similar disciplines.

An associate degree is awarded by the San Diego Community College District colleges in recognition of completion of a minimum of 60 units which include completion of:

- **Major Requirements**
- **District Requirements**
- **General Education Requirements**

Students should plan programs with long range goals in mind. Students who plan to transfer to a four-year institution should review the Transfer Requirements section of this catalog.

60 Units Required For The Associate Degree

A minimum of 12 semester units must be completed in residence as an officially enrolled student in the San Diego Community College District.

### Grade Point Average (GPA) and Minimum Grade Requirements

Students must obtain a grade point average of at least 2.0 (a “C” average) in all courses completed upon which the degree is based.

Students enrolled in occupational and health occupation programs must earn a grade of “C” or better in courses required for the major.

### Major Requirements

Eighteen semester units or more are required for a major. Refer to the Degree Curricula and Certificate Programs section of this catalog for specific requirements for each major. Only one course in a student’s major discipline may be used to meet the San Diego Community College District general education requirements.

### District Requirements

1. **Competence in Reading and Written Expression**

   Complete one course with a grade of “C” or better from General Education Requirements Area A.1 Language and Rationality, English Composition.

   *Note: The course selected to meet this requirement may also be used to meet the general education requirement for English Composition.*

2. **Competence in Mathematics**

   Competence is demonstrated by:

   a. Obtaining a skill level of M40 on the mathematics assessment test
   b. Completing one of the following courses with a grade of “C” or better:

   - BIOL 200 Biological Statistics (City, Mesa)
   - BUSE 101 Business Mathematics
   - MATH 91 Algebra for Math Placement (City)
   - MATH 95 Elementary Algebra and Geometry
   - MATH 181 Mecomtronics College Algebra and Trigonometry I (City)
   - MATH 182 Mecomtronics College Algebra and Trigonometry II (City)
   - MATH 183 Mecomtronics Calculus I (City)
c. Completing, with a grade of “C” or better, any other Mathematics course for which one of the above listed courses is a prerequisite

*Note: The course selected to meet these requirements may also be used to meet the general education requirement for Communications and Analytical Thinking.*

3. American Institutions/California Government

Students must complete three to six units in American Institutions/California Government. This requirement is met by completing one of the following six-unit sequences, six-unit combinations, or three-unit course:

**Three-Unit Course:**

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLI 102</td>
</tr>
<tr>
<td>The American Political System</td>
</tr>
</tbody>
</table>

**Six-Unit Sequences:**

<table>
<thead>
<tr>
<th>Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLAS 140A and History of the U.S., Black Perspective</td>
</tr>
<tr>
<td>BLAS 140B and History of the U.S., Black Perspective</td>
</tr>
<tr>
<td>CHIC 141A U.S. History from a Chicano Perspective (City, Mesa) and CHIC 141B U.S. History from a Chicano Perspective (City, Mesa)</td>
</tr>
<tr>
<td>HIST 109 History of the United States I and HIST 110 History of the United States II OR HIST 115A History of the Americas I (City, Mesa) and HIST 115B History of the Americas II (City, Mesa) OR HIST 141 Women in United States History I (Mesa) and HIST 142 Women in United States History II (Mesa) OR HIST 150 Native Americans in U.S. History (Mesa, Miramar) and HIST 151 Native Americans in U.S. History (Mesa, Miramar)</td>
</tr>
</tbody>
</table>

**Six-Unit Combinations:**

<table>
<thead>
<tr>
<th>Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLAS 140A History of the United States I and HIST 110 History of the United States II</td>
</tr>
<tr>
<td>BLAS 140B History of the U.S., Black Perspective and HIST 109 History of the United States I or HIST 109 History of the United States I and HIST 123 U. S. History from the Asian Pacific American Perspective (Mesa) or HIST 151 Native Americans in U.S. History (Mesa, Miramar)</td>
</tr>
</tbody>
</table>

*Note: The course or courses selected to meet this requirement may also be used to meet the general education requirement for Social and Behavioral Sciences. If a Black Studies or Chicano Studies course is selected, it may also be used to fulfill the multicultural studies requirement. Students who select POLI 102 to satisfy the American Institutions requirement may not use this course for general education credit. If a six-unit sequence or combo is selected to fulfill the American Institutions requirement, only three units may be used for general education credit.*

Students who have completed the American Institutions requirement except for the California government portion must complete one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLAS 140B History of the United States I and HIST 110 History of the United States II</td>
</tr>
<tr>
<td>HIST 175 California History (Mesa)</td>
</tr>
<tr>
<td>POLI 102 The American Political System</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 123 U. S. History from the Asian Pacific American Perspective (Mesa)</td>
</tr>
<tr>
<td>HIST 123 U. S. History from the Asian Pacific American Perspective (Mesa)</td>
</tr>
<tr>
<td>HIST 175 California History (Mesa)</td>
</tr>
<tr>
<td>POLI 102 The American Political System</td>
</tr>
</tbody>
</table>
4. Health Education

This requirement is met by completing Health Education 101: Health and Lifestyle, three units.

Note: This requirement is waived for students who earn degrees in Nursing Education. U.S. Veterans and active duty U.S. military personnel may be granted two units of college credit to fulfill the Health Education Requirement if service has been continuous for at least six months. Copies of form DD-214 or DD-295 covering all periods of military service must be on file in the Veterans Office.

5. Physical Education

Students must complete two activity courses in Physical Education. Physical Education courses numbered below 240 are acceptable, except for Physical Education 150. Students with physical conditions which prevent participation in regular physical education activity classes must file a physician’s statement with the Evaluations Office, room I3-201. Adapted Physical Education classes are available. A Physician’s medical release form is required.

Note: U.S. Veterans and active duty U.S. military personnel may be granted two units of college credit to fulfill the Physical Education requirement if service has been continuous for at least six months. Copies of form DD-214 or DD-295 covering all periods of military service must be on file in the Veterans Office.

6. Multicultural Studies

Students may satisfy the District multicultural studies graduation requirement by satisfactorily completing a course related to the culture of one or more of the ethnic groups which are represented in American society. The course shall include a focus on the role of men and women in the origin, development, and current status of these cultures.

Note: Each student seeking the Associate Degree must complete a three-unit multicultural studies course selected from the general education courses marked with a caret (^) indicating that they meet the Multicultural Requirement. The three units may be applied to the 18 units required in general education.

This requirement is met by completing one of the following courses (these courses are also on the District General Education list):

- ^ADJU 106 Diversity and Community Relations (Miramar)
- ^ANTH 103 Introduction to Cultural Anthropology
- ^ANTH 200 Introduction to North American Indians (Mesa)
- ^ANTH 210 Introduction to California Indians (City, Mesa)
- ^ARTF 113 African, Oceanic, Native American Art (Mesa)
- ^ARTF 115 African Art (City, Mesa)
- ^ARTF 120 North American Indian Art (Mesa)
- ^ARTF 125 Art History: Survey in Far Eastern Art (Miramar)
- ^ARTF 130 Survey of Pre-Columbian Art (Mesa)
- ^BLAS 104 Black Psychology (City, Mesa)
- ^BLAS 110 Afro-American Art (City, Mesa)
- ^BLAS 115 Sociology from a Black Perspective (City)
- ^BLAS 116 Contemporary Social Problems from a Black Perspective (City, Mesa)
- ^BLAS 120 Black Music (City, Mesa)
- ^BLAS 125 Dynamics of the Black Community (Mesa)
- ^BLAS 130 The Black Family (City, Mesa)
- ^BLAS 135 Introduction to Black Politics (City)
- ^BLAS 140A History of the U.S., Black Perspective (City)
- ^BLAS 140B History of the U.S., Black Perspective (Mesa)
- ^BLAS 145A Introduction to African History (City, Mesa)
- ^BLAS 145B Introduction to African History (City)
- ^BLAS 150 Black Women in Literature and the Media (City, Mesa)
- ^BLAS 155 Afro-American Literature (City, Mesa)
- ^CHIC 110A Introduction to Chicano Studies (City, Mesa)
- ^CHIC 110B Introduction to Chicano Studies (City, Mesa)
- ^CHIC 135 Chicano Literature (City, Mesa)
- ^CHIC 141A U.S. History from a Chicano Perspective (City, Mesa)
- ^CHIC 141B U.S. History from a Chicano Perspective (City, Mesa)
- ^CHIC 190 Chicano Images in Film (Mesa)
- ^CHIC 210 Chicano Culture (City, Mesa)
- ^CHIL 141 The Child, Family and Community
- ^ENGL 202 Introduction to Linguistics (City, Mesa)
- ^FILI 100 Filipino American Experience (Mesa, Miramar)
- ^GEOG 102 Cultural Geography
- ^HIST 113 Race in the United States (Mesa)
General Education Outcomes Defined

General Education courses should contribute to the broad education of career technical and transfer students in the areas of critical thinking, writing, and oral communication skills, understanding of and the ability to use quantitative analysis, and awareness of the arts and humanities; and of the physical, social and behavioral sciences as they affect one’s interaction with the diverse local and global communities. General Education Requirements Title 5: Section 55806

a. **Natural Sciences.** Courses in the natural sciences are those that examine the physical universe, its life forms, and its natural phenomena. To satisfy the General Education Requirement in natural sciences, a course shall be designed to help the student develop an appreciation and understanding of the scientific method, and encourage an understanding of the relationships between science and other human activities. This category would include introductory or integrative courses in astronomy, biology, chemistry, general physical science, geology, meteorology, oceanography, physical geography, physical anthropology, physics and other scientific disciplines.

b. **Social and Behavioral Sciences.** Courses in the social and behavioral sciences are those which focus on people as members of society. To satisfy the general education requirement in social and behavioral sciences, a course shall be designed to develop an awareness of the method of inquiry used by the social and behavioral sciences. It shall be designed to stimulate critical thinking about the ways people act and have acted in response to their societies and should promote appreciation of how societies and social subgroups operate. This category would include introductory or integrative survey courses in cultural anthropology, cultural geography, economics, history, political science, psychology, sociology and related disciplines.

c. **Humanities.** Courses in the humanities are those which study the cultural activities and artistic expressions of human beings. To satisfy the general education requirement in the humanities, a course shall be designed to help the student develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves help the student develop aesthetic understanding and an ability to make value judgments. Such courses could include introductory or integrative courses in the arts, foreign languages, literature, philosophy, and religion.

d. **Language and Rationality.** Courses in language and rationality are those which develop for the student the principles and applications of language toward logical thought, clear and precise expression and critical evaluation of communication in whatever symbol system the student uses.

1) **English Composition.** Courses fulfilling the written composition requirement shall be designed to include both expository and argumentative writing.

2) **Communication and Analytical Thinking.** Courses fulfilling the communication and analytical thinking requirement include oral communication, mathematics, logic, statistics, computer languages and programming, and related disciplines.

Ethnic Studies will be offered in at least one of the required areas.

**General Education Requirements**

The State of California requires the completion of a minimum of 18 units of general education. One course must be selected from each of the following areas:
English Composition; Communication/Analytical Thinking; The Sciences (Life or Physical, not both); Humanities; Social Sciences; and a sixth course chosen from any area.

Note: Courses designated with caret (^) may also be used to fulfill the District multicultural studies requirement. Courses designated with asterisk (*) fulfill more than one general education requirement, but may not be counted more than once for this purpose.

Only one course in a student's major discipline may be used to meet the San Diego Community College District General Education requirements.

A. Language and Rationality:
A minimum of three semester units, or four quarter units, must be completed. Choose one course from the following:

1. English Composition

   BUSE 119 Business Communications
   ENGL 101 Reading and Composition
   ENGL 105 Composition and Literature
   ENGL 205 Critical Thinking and Intermediate Composition

   A minimum of three semester units, or four quarter units, must be completed. Choose one course from the following.

2. Communication and Analytical Thinking

   BIOL 200 Biological Statistics (City, Mesa)
   BLAS 106 Black Oral Expression and Interpretation (Mesa)
   BUSE 101 Business Mathematics
   CISC 150 Introduction to Computer and Information Sciences (City, Mesa)
   CISC 181 Principles of Information Systems
   MATH 91 Algebra for Math Placement (City, Miramar)
   MATH 95 Elementary Algebra and Geometry
   MATH 96 Intermediate Algebra with Geometry
   MATH 104 Trigonometry
   MATH 107 Introduction to Scientific Programming
   MATH 107L Introduction to Scientific Programming Lab
   MATH 116 College and Matrix Algebra
   MATH 118 A Survey of Modern Mathematics (City, Mesa)
   MATH 119 Elementary Statistics
   MATH 121 Basic Techniques of Applied Calculus I
   MATH 122 Basic Techniques of Calculus II
   MATH 141 Precalculus
   MATH 150 Calculus with Analytic Geometry I
   MATH 151 Calculus with Analytic Geometry II
   MATH 181 Mecomtronics College Algebra and Trigonometry I (City)
   MATH 182 Mecomtronics College Algebra and Trigonometry II (City)
   MATH 183 Mecomtronics Calculus I (City)
   MATH 184 Mecomtronics Calculus II (City)
   MATH 210A Concepts of Elementary School Mathematics I
   MATH 210B Concepts of Elementary School Mathematics II
   MATH 237 Machine and Assembly Language (City, Mesa)
   MATH 245 Discrete Mathematics
   MATH 252 Calculus with Analytic Geometry III
   MATH 254 Introduction to Linear Algebra
   MATH 255 Differential Equations
   PHIL 100 Logic and Critical Thinking
   PHIL 101 Symbolic Logic
   * PHIL 205 Critical Thinking and Writing in Philosophy
   PSYC 258 Behavioral Science Statistics (City, Mesa)
   SPEE 99 Voice and Diction for Non-Native Speakers of English
   SPEE 101 Voice and Articulation
   SPEE 103 Oral Communication
   SPEE 135 Interpersonal Communication
   SPEE 160 Argumentation
   SPEE 170 Small Group Communication
   ^ SPEE 180 Intercultural Communication

B. Natural Sciences
A minimum of three semester units, or four quarter units, must be completed. Choose one course from the following:
<table>
<thead>
<tr>
<th>1. Life Sciences</th>
<th>2. Physical Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 102</td>
<td>ASTR 101 Descriptive Astronomy</td>
</tr>
<tr>
<td>ANTH 104</td>
<td>ASTR 109 Practice in Observing (Laboratory) (City, Mesa)</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>ASTR 111 Astronomy Laboratory (Laboratory) (Mesa, Miramar)</td>
</tr>
<tr>
<td>BIOL 101</td>
<td>CHEM 100 Fundamentals of Chemistry</td>
</tr>
<tr>
<td>BIOL 105</td>
<td>CHEM 100L Fundamentals of Chemistry (Laboratory)</td>
</tr>
<tr>
<td>BIOL 106</td>
<td>CHEM 130 Introduction to Organic &amp; Biological Chemistry</td>
</tr>
<tr>
<td>BIOL 107</td>
<td>CHEM 130L Introduction to Organic &amp; Biological Chemistry (Laboratory)</td>
</tr>
<tr>
<td>BIOL 110</td>
<td>CHEM 151 Introduction to General Chemistry (Lecture/Laboratory) (Mesa, Miramar)</td>
</tr>
<tr>
<td>BIOL 115</td>
<td>CHEM 152 Introduction to General Chemistry (City, Mesa)</td>
</tr>
<tr>
<td>BIOL 120</td>
<td>CHEM 152L Introduction to General Chemistry Laboratory (City, Mesa)</td>
</tr>
<tr>
<td>BIOL 130</td>
<td>CHEM 200 General Chemistry I (Lecture)</td>
</tr>
<tr>
<td>BIOL 131</td>
<td>CHEM 200L General Chemistry I (Laboratory)</td>
</tr>
<tr>
<td>BIOL 160</td>
<td>CHEM 201 General Chemistry II (Lecture)</td>
</tr>
<tr>
<td>BIOL 180</td>
<td>CHEM 201L General Chemistry II (Laboratory)</td>
</tr>
<tr>
<td>BIOL 205</td>
<td>GEOG 101 Physical Geography</td>
</tr>
<tr>
<td>BIOL 210A</td>
<td>GEOG 101L Physical Geography (Laboratory)</td>
</tr>
<tr>
<td>BIOL 215</td>
<td>GEOG 103 Introduction to Meteorology (Mesa)</td>
</tr>
<tr>
<td>BIOL 230</td>
<td>GEOL 100 General Geology</td>
</tr>
<tr>
<td>BIOL 235</td>
<td>GEOL 101 General Geology (Laboratory)</td>
</tr>
<tr>
<td>BIOL 250</td>
<td>PHYYN 100 Survey of Physical Science (Lecture)</td>
</tr>
<tr>
<td>BIOL 285</td>
<td>PHYYN 101 Survey of Physical Science (Laboratory)</td>
</tr>
<tr>
<td>CHEM 105</td>
<td>PHYYN 120 Physical Oceanography (Miramar)</td>
</tr>
<tr>
<td>MEDA 105</td>
<td>PHYS 100 Introductory Physics (Lecture/Laboratory) (Mesa)</td>
</tr>
<tr>
<td>NLTE 105</td>
<td>PHYS 120A General Physics I (City)</td>
</tr>
<tr>
<td>NUTR 150</td>
<td>PHYS 120B General Physics II (City)</td>
</tr>
<tr>
<td>PSYC 260</td>
<td>PHYS 121A General Physics Lab-A (City)</td>
</tr>
<tr>
<td></td>
<td>PHYS 121B General Physics Lab-B (City)</td>
</tr>
<tr>
<td></td>
<td>PHYS 124A General Physics</td>
</tr>
<tr>
<td></td>
<td>PHYS 124B General Physics</td>
</tr>
<tr>
<td></td>
<td>PHYS 195A Mechanics (City, Mesa)</td>
</tr>
<tr>
<td></td>
<td>PHYS 195B Electricity &amp; Magnetism (City, Mesa)</td>
</tr>
<tr>
<td></td>
<td>PHYS 195C Waves, Light and Modern Physics (City, Mesa)</td>
</tr>
</tbody>
</table>
C. Humanities:
A minimum of three semester units, or four quarter units, must be completed. Choose one course from the following:

Note: Courses designated with a caret (^) may also be used to fulfill the District multicultural studies requirement. Courses designated with an asterisk (*) fulfill more than one general education requirement, but may not be counted more than once for this purpose.

- AMSL 100 American Sign Language I (City, Mesa)
- AMSL 101 American Sign Language II (City, Mesa)
- ARAB 101 First Course in Arabic (City)
- ARAB 102 Second Course in Arabic (City)
- ARTF 100 Art Orientation
- ARTF 109 Nineteenth and Twentieth Century Art
- ARTF 110 Art History: Prehistoric to Gothic
- ARTF 111 Art: Renaissance to Modern
  - ARTF 113 African, Oceanic, Native American Art (Mesa)
  - ARTF 115 African Art (City, Mesa)
  - ARTF 120 North American Indian Art (Mesa)
  - ARTF 125 Art History: Survey in Far Eastern Art (Miramar)
  - ARTF 130 Survey of Pre-Columbian Art (Mesa)
- BLAS 110 Afro-American Art (City, Mesa)
- BLAS 111 African Art History (Mesa)
- BLAS 120 Black Music (City, Mesa)
- BLAS 150 Black Women in Literature and the Media (City, Mesa)
- BLAS 155 Afro-American Literature (City, Mesa)
- CHIC 130 Mexican Literature in Translation (City)
  - CHIC 135 Chicano Literature (City, Mesa)
  - CHIC 138 Literature of La Raza in Latin America in Translation (City, Mesa)
  - CHIC 190 Chicano Images in Film (Mesa)
- CHIC 203 Introductory Spanish for Spanish Speakers (City)
- CHIC 204 Intermediate Spanish for Spanish Speakers (City)
  - CHIC 210 Chicano Culture (City, Mesa)
- CHIN 101 First Course in Mandarin Chinese (Mesa)
- CHIN 102 Second Course in Mandarin Chinese (Mesa)
- CHIN 201 Third Course in Mandarin Chinese (Mesa)
- DRAM 105 Introduction to Dramatic Arts
- DRAM 136 History of Canonized Theater - Ancient Greece to the Restoration (City)
- DRAM 137 History of Canonized Western Theater - Restoration to the Present (City)
- DRAM 150 Cinema as Art and Communication I (Mesa)
- DRAM 151 Cinema as Art and Communication II (Mesa)
- ENGL 207 The Art of the Sentence (Mesa)
- ENGL 208 Introduction to Literature
- ENGL 209 Literary Approaches to Film
- ENGL 210 American Literature I
- ENGL 211 American Literature II
- ENGL 215 English Literature I: 800-1799
- ENGL 216 English Literature II: 1800-Present
- ENGL 220 Masterpieces of World Literature I: 1500 BCE - 1600 CE
- ENGL 221 Masterpieces of World Literature II: 1600 - Present
- ENGL 237 Women in Literature (City, Miramar)
- ENGL 238 Evaluating Children's Literature (City, Mesa)
- FREN 101 First Course in French (City, Mesa)
- FREN 102 Second Course in French (City, Mesa)
- FREN 201 Third Course in French (City, Mesa)
- FREN 202 Fourth Course in French (City, Mesa)
- GERM 101 First Course in German (City, Mesa)
- GERM 102 Second Course in German (City, Mesa)
- GERM 201 Third Course in German (City, Mesa)
- HIST 100 World History I (City, Mesa)
- HIST 101 World History II (City, Mesa)
- HIST 105 Introduction to Western Civilization I
- HIST 106 Introduction to Western Civilization II
  - HIST 120 Introduction to Asian Civilizations
  - HIST 121 Asian Civilizations in Modern Times
  - HIST 123 U. S. History from the Asian Pacific American Perspective (Mesa)
- HIST 125 History/England and the Commonwealth I (Mesa)
- HIST 126 History/England and the Commonwealth II (Mesa)
- HUMA 101 Introduction of Humanities I
- HUMA 102 Introduction to Humanities II
- HUMA 106 World Religions (City, Mesa)
- HUMA 201 Mythology
- HUMA 202 Mythology: Hero’s Journey (City, Mesa)
- ITAL 101 First Course in Italian (City, Mesa)
- ITAL 102 Second Course in Italian (City, Mesa)
- ITAL 201 Third Course in Italian (City, Mesa)
- JAPN 101 First Course in Japanese (Mesa, Miramar)
- JAPN 102 Second Course in Japanese (Mesa, Miramar)
- JAPN 201 Third Course in Japanese (Mesa)
- JAPN 202 Fourth Course in Japanese (Mesa)
- LATI 101 First Course in Latin (Mesa)
- LATI 102 Second Course in Latin (Mesa)
- LATI 201 Third Course in Latin (Mesa)
### Social and Behavioral Sciences:

A minimum of three semester units, or four quarter units, must be completed. Choose one course from the following:

*Note: Courses designated with a caret (^) may also be used to fulfill the District multicultural studies requirement. Courses designated with an asterisk (*) satisfy more than one general education requirement, but may not be counted more than once for this purpose.*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 100</td>
<td>Introduction to Music</td>
</tr>
<tr>
<td>MUSI 101</td>
<td>Music History I (Mesa, Miramar)</td>
</tr>
<tr>
<td>MUSI 102</td>
<td>Music History II (Mesa, Miramar)</td>
</tr>
<tr>
<td>MUSI 105</td>
<td>Music of Our Time (Mesa)</td>
</tr>
<tr>
<td>MUSI 109</td>
<td>World Music</td>
</tr>
<tr>
<td>MUSI 111</td>
<td>Jazz-History and Development</td>
</tr>
<tr>
<td>MUSI 125</td>
<td>Music, the Arts and Humanity (Mesa, Miramar)</td>
</tr>
<tr>
<td>PHIL 102A</td>
<td>Introduction to Philosophy: Reality and Knowledge</td>
</tr>
<tr>
<td>PHIL 102B</td>
<td>Introduction to Philosophy: Values</td>
</tr>
<tr>
<td>PHIL 103</td>
<td>Historical Introduction to Philosophy (Mesa)</td>
</tr>
<tr>
<td>PHIL 104A</td>
<td>History of Western Philosophy (City, Mesa)</td>
</tr>
<tr>
<td>PHIL 104B</td>
<td>History of Western Philosophy (City, Mesa)</td>
</tr>
<tr>
<td>PHIL 105</td>
<td>Contemporary Philosophy (Mesa)</td>
</tr>
<tr>
<td>PHIL 106</td>
<td>Asian Philosophy (City, Mesa)</td>
</tr>
<tr>
<td>PHIL 107</td>
<td>Reflections on Human Nature</td>
</tr>
<tr>
<td>PHIL 108</td>
<td>Perspectives on Human Nature and Society (City, Mesa)</td>
</tr>
<tr>
<td>PHIL 110</td>
<td>Philosophy of Religion (Mesa)</td>
</tr>
<tr>
<td>PHIL 111</td>
<td>Philosophy in Literature (City, Mesa)</td>
</tr>
<tr>
<td>PHIL 112</td>
<td>Philosophy of Science (Mesa)</td>
</tr>
<tr>
<td>PHIL 125</td>
<td>Philosophy of Women in World Cultures (City, Mesa)</td>
</tr>
<tr>
<td>PHIL 130</td>
<td>Philosophy of Art and Music (Mesa)</td>
</tr>
<tr>
<td>PHIL 205</td>
<td>Critical Thinking and Writing in Philosophy</td>
</tr>
<tr>
<td>PSYC 207</td>
<td>Psychology of Religion (Mesa)</td>
</tr>
<tr>
<td>RTVC 160</td>
<td>Introduction to Cinematography (City)</td>
</tr>
<tr>
<td>RUSS 101</td>
<td>First Course in Russian (Mesa)</td>
</tr>
<tr>
<td>RUSS 102</td>
<td>Second Course in Russian (Mesa)</td>
</tr>
<tr>
<td>RUSS 201</td>
<td>Third Course in Russian (Mesa)</td>
</tr>
<tr>
<td>SPAN 100</td>
<td>First/Second Course in Spanish (Accelerated) (Mesa)</td>
</tr>
<tr>
<td>SPAN 101</td>
<td>First Course in Spanish</td>
</tr>
<tr>
<td>SPAN 102</td>
<td>Second Course in Spanish</td>
</tr>
<tr>
<td>SPAN 201</td>
<td>Third Course in Spanish</td>
</tr>
<tr>
<td>SPAN 202</td>
<td>Fourth Course in Spanish</td>
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<tr>
<td>TAGA 101</td>
<td>First Course in Tagalog (Mesa, Miramar)</td>
</tr>
<tr>
<td>TAGA 102</td>
<td>Second Course in Tagalog (Mesa, Miramar)</td>
</tr>
<tr>
<td>TAGA 201</td>
<td>Third Course in Tagalog (Mesa)</td>
</tr>
<tr>
<td>VIET 101</td>
<td>First Course in Vietnamese (Mesa)</td>
</tr>
<tr>
<td>VIET 102</td>
<td>Second Course in Vietnamese (Mesa)</td>
</tr>
<tr>
<td>VIET 201</td>
<td>Third Course in Vietnamese (Mesa)</td>
</tr>
<tr>
<td>ADJU 101</td>
<td>Introduction to Administration of Justice (Miramar)</td>
</tr>
<tr>
<td>ADJU 106</td>
<td>Diversity and Community Relations (Miramar)</td>
</tr>
<tr>
<td>AMSL 104</td>
<td>Introduction to Deaf Culture (Mesa)</td>
</tr>
<tr>
<td>ANTH 103</td>
<td>Introduction to Cultural Anthropology</td>
</tr>
<tr>
<td>ANTH 107</td>
<td>Introduction to Archaeology</td>
</tr>
<tr>
<td>ANTH 200</td>
<td>Introduction to North American Indians (Mesa)</td>
</tr>
<tr>
<td>ANTH 210</td>
<td>Introduction to California Indians (City, Mesa)</td>
</tr>
<tr>
<td>ANTH 215</td>
<td>Cultures of Latin America (City, Mesa)</td>
</tr>
<tr>
<td>BLAS 104</td>
<td>Black Psychology (City, Mesa)</td>
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<tr>
<td>BLAS 115</td>
<td>Sociology from a Black Perspective (City)</td>
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<tr>
<td>BLAS 116</td>
<td>Contemporary Social Problems from a Black Perspective (City, Mesa)</td>
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<tr>
<td>BLAS 125</td>
<td>Dynamics of the Black Community (Mesa)</td>
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<tr>
<td>BLAS 130</td>
<td>The Black Family (City, Mesa)</td>
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<tr>
<td>BLAS 135</td>
<td>Introduction to Black Politics (City)</td>
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<tr>
<td>BLAS 140A</td>
<td>History of the U.S., Black Perspectives</td>
</tr>
<tr>
<td>BLAS 140B</td>
<td>History of the U.S., Black Perspectives</td>
</tr>
<tr>
<td>BLAS 145A</td>
<td>Introduction to African History (City, Mesa)</td>
</tr>
<tr>
<td>BLAS 145B</td>
<td>Introduction to African History (City)</td>
</tr>
<tr>
<td>BUSE 100</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>BUSE 140</td>
<td>Business Law and the Legal Environment</td>
</tr>
<tr>
<td>CHIC 110A</td>
<td>Introduction to Chicano Studies (City, Mesa)</td>
</tr>
<tr>
<td>CHIC 110B</td>
<td>Introduction to Chicano Studies (City, Mesa)</td>
</tr>
<tr>
<td>CHIC 141A</td>
<td>U.S. History from a Chicano Perspective (City, Mesa)</td>
</tr>
<tr>
<td>CHIC 141B</td>
<td>U.S. History from a Chicano Perspective (City, Mesa)</td>
</tr>
<tr>
<td>CHIC 150</td>
<td>History of Mexico (City, Mesa)</td>
</tr>
<tr>
<td>CHIC 170</td>
<td>La Chica (Mesa)</td>
</tr>
<tr>
<td>CHIC 201</td>
<td>Pre-Columbian Cultures of Mesoamerica (City, Mesa)</td>
</tr>
<tr>
<td>CHIL 101</td>
<td>Principles of Child Development &amp; Development Observation</td>
</tr>
</tbody>
</table>
Certificate of Achievement

Programs in which a Certificate of Achievement may be awarded are described in the Degree Curricula and Certificate Programs section of this catalog. Certificate programs are designed for students with specific personal or occupational goals. To qualify for the Certificate of Achievement, students must satisfy the following requirements:

1) meet all standards for admission to the desired certificate program;
2) obtain a grade point average of at least 2.0 (“C”) in all courses listed in the certificate program;
3) earn a grade of “C” or better in each course required for the certificate in occupational health occupation programs;
4) complete a minimum of three courses in residence.

Certificate of Completion

Programs in which a Certificate of Completion may be awarded are described in the Degree Curricula and Certificate Programs section of this catalog. A Certificate of Completion recognizes the attainment of knowledge and/or skill through the successful completion of two or more courses as specified by a department. Certificates of Completion are designed to prepare students for employment, job enhancement and/or job advancement. To qualify for the Certificate of Completion, students must satisfy the following requirements:

1) Achieve a grade of "C" or better in each of the required courses.
2) Complete all required course work in the San Diego Community College District.
3) Course substitutions or course equivalencies from other colleges may not be used to satisfy Certificate of Completion requirements.

For additional information, contact the campus Evaluations Office or subject-area department.

Note: Students who select POLI 102 to satisfy the American Institutions requirement may not use this course for General Education Credit.

^ CHIL 141 The Child, Family and Community Development
ECON 120 Principles of Economics I
ECON 121 Principles of Economics II
^ ENGL 202 Introduction to Linguistics (City, Mesa)
^ FILI 100 Filipino American Experience (Mesa, Miramar)
^ GEOG 102 Cultural Geography
GEOG 104 World Regional Geography (City, Mesa)
GEOG 154 Introduction to Urban Geography (Mesa)
HIST 109 History of the United States I
HIST 110 History of the United States II
^ HIST 113 Race in the United States (Mesa)
^ HIST 115A History of the Americas I (City, Mesa)
^ HIST 115B History of the Americas II (City, Mesa)
^* HIST 123 U. S. History from the Asian Pacific American Perspective (Mesa)
^ HIST 130 The Middle East Today (Mesa)
HIST 141 Women in United States History I (Mesa)
HIST 142 Women in United States History II (Mesa)
^ HIST 150 Native Americans in U.S. History (Mesa, Miramar)
^ HIST 151 Native Americans in U.S. History (Mesa, Miramar)
HIST 154 Ancient Egypt (Mesa)
HIST 175 California History (Mesa)
^ PHIL 108 Perspectives on Human Nature and Society (City, Mesa)
PHIL 109 Issues in Social Philosophy (Mesa)
POLI 101 Introduction to Political Science
POLI 102 American Political System
^ POLI 103 Comparative Politics
^ POLI 140 Contemporary International Politics
PSYC 101 General Psychology
PSYC 111 Psychological Aspects of Aging, Death and Dying (Mesa)
PSYC 121 Introduction to Child Psychology (Mesa, Miramar)
PSYC 123 Adolescent Psychology (Mesa, Miramar)
PSYC 132 Psychology of Gender Roles (Miramar)
PSYC 133 Psychology of Women (Mesa, Miramar)
PSYC 135 Marriage and Family Relationships
PSYC 155 Introduction to Personality (City, Mesa)
PSYC 211 Learning
PSYC 230 Psychology of Lifespan Development (Mesa, Miramar)
RTVC 200 Introduction to Mass Communications (City, Miramar)
^ SOCO 101 Principles of Sociology
^ SOCO 110 Contemporary Social Problems
^ SOCO 125 Sociology of the Family (Mesa)
Graduation

Petition for Graduation
Graduation is not automatic upon completion of requirements. A student who expects to receive the Associate Degree or the Certificate of Achievement must file a Petition for Graduation in the Evaluations Office. See class schedule for important deadline dates for filing a Petition for Graduation.

Official college transcripts from all colleges attended must be on file before submitting the petition.

A petition for an associate degree evaluation should be submitted one year before the student plans to graduate.

An evaluation is a summary of college work completed and of requirements to be completed for the associate degree or the certificate of achievement. Only evaluations completed by one of the College Evaluators are official.

Students who have petitioned for graduation should notify the evaluator immediately of any name or address change.

Students who are working toward a certificate of achievement should file the Petition for Graduation prior to the beginning of the semester in which they plan to complete the requirements of their certificate program.

Catalog Rights
Students who maintain continuous enrollment may choose to graduate under the (City College, Mesa College, and Miramar College) catalog in effect at the time they began their studies in a California Community College, California State University, or University of California campus, or under the catalog in effect at the time of graduation.

Certification of a student’s completion of CSU general education requirements is not a graduation requirement. Therefore, students do not have catalog rights to a certification pattern used by a certifying institution or a CSU campus.

Continuous Enrollment
Continuous enrollment is defined as attendance in one semester or two quarters (excluding summer) within a calendar year in either the CSU, UC, or California Community College System.

Awarding of Degrees or Certificates
The graduation ceremony is held once a year at the end of the spring semester. Students who complete requirements for the Associate Degree or the Certificate of Achievement in the fall or spring semesters and petition by March will be granted the degree in Spring.

Students who complete the requirements during the summer session or petition after the March deadline will be granted the degree in August. Summer candidates for graduation may participate in the graduation ceremony in Spring if the Petition for Graduation is filed by the March deadline.

Graduation with Distinction
Graduation with honors is granted to students who have achieved the following overall Grade Point Average (GPA) in lower division work attempted upon completion of the Fall semester of the academic year in which the student graduates. Graduation with Honors is granted to students who achieve an overall 3.5 GPA; graduation with high honors is granted to students who achieve an overall 3.75 GPA; highest honor is granted to students who achieve an overall 4.0 GPA.

Graduation with Honors distinction will be based upon all coursework that the degree is based on.

Students will be notified that this distinction is pending at the time of graduation contingent upon completion of all requirements for the degree.

Additional College Degree
A student having received an associate or baccalaureate degree may qualify for an additional Associate in Arts or Associate in Science degree in a new major or concentration.

An additional degree:
1) Permits upgrading or preparation for upgrading current employment.
2) Prepares for employment in an area different from that provided by previous training.
3) Provides general knowledge leading to fulfillment of personal goals.

The following requirements are applicable:
1) The degree to be earned must represent a change in major or concentration from the degree or degrees previously earned.
2) A student must earn a minimum of 18 required semester units in the new major or concentration beyond the minimum 60 units required for the
Associate Degree, bringing the total units required for the second degree to a minimum of 78 units, a minimum of 96 units for the third degree, and so on. Twelve (12) semester units of the new major or concentration must be completed in residence.

3) A student must fulfill current catalog associate degree requirements.

4) In order to receive an additional college degree, the student must file a Petition for Graduation in the Evaluations Office. The college evaluator will review all previous college work to determine the student’s eligibility for a second degree.

Transfer Programs

In addition to the Associate Degree and Certificate Programs listed, many courses completed at San Diego City College, San Diego Mesa College, and San Diego Miramar College may be applied for transfer credit to four-year colleges and universities. College and university catalogs for transfer planning are available in the library and Transfer Center. The Transfer Center provides assistance with transfer information such as articulation agreements for lower division general education, major preparation, transferable electives; workshops on transferring to colleges and universities, and assistance with completing college applications. The Transfer Center is located on the second floor of the Student Services Building in room B-202, for information call (619) 388-2473. Additional transfer information is available in the Counseling Department, room I-430.

Articulation is the process whereby a course (or set of courses) offered at one institution is accepted as equivalent to or in lieu of a comparable course (or set of courses) at another institution.

Students who plan to transfer may establish “catalog rights” in the University of California system and the California State University system by remaining in attendance at least one semester or two quarters in a calendar year. UC and CSU will not accept summer session as satisfying continuous enrollment requirements.

Certification of a student’s completion of CSU general education requirements is not a graduation requirement. Therefore, students do not have catalog rights to a certification pattern used by a certifying institution or a CSU campus.

Requirement for Preparation for the University Major

Refer to each program to identify lower division courses required as preparation for the university major. Students who intend to transfer are advised to consult with a counselor for information regarding requirements for specific majors and transfer institutions.

Requirements for Transfer Studies

Degree and Lower Division General Education for University Transfer

Students preparing to transfer to a university may complete one of four lower division general education patterns:

- Intersegmental General Education Transfer Curriculum (IGETC)
- Certification of General Education Breadth Requirements (CSUGEB) for any California State University
- Transfer Admission Guarantee to the University of California at San Diego ONLY (UCSD-TAG)
- Other Institutions Transfer Pattern

Completion of the CSUGEB or IGETC requirements assures that transfer institutions, with some exceptions, will accept that pattern of general education in lieu of their lower division general education requirements. Students gaining certification from San Diego City, Mesa, or Miramar College will generally need no further lower division general education upon transfer. TAG students may be held to additional lower division general education coursework requirements depending upon which of the five colleges they select at UCSD. Students will not be required to complete additional graduation requirements. See page 175 for requirements.

Transfer to California State University (CSU)

California State University Campuses

California Maritime Academy
California Polytechnic State University, San Luis Obispo
California State Polytechnic University, Pomona
California State University, Bakersfield
California State University, Chico
Certification of CSU General Education Breadth Requirements

Certification is a legal agreement between CSU and community colleges in California to assure that CSU lower division general education requirements have been satisfied.

It is the policy of the San Diego Community College District to provide certification of general education breadth requirements when such service is specifically requested by the student. The certification form is available in the Evaluations Office, room I3-201.

Certification is based on coursework which is completed in the San Diego Community College District or from institutions which have filed a list of certifiable courses with the Chancellor's Office, California State University.

Official transcripts from other colleges and universities must be on file before submitting the petition, and will be reviewed for inclusion in the certification process.

Please Note: Coursework completed at a foreign college or university, that is not accredited by one of the U.S. regional accrediting agencies, cannot be used to satisfy requirements for certification.

Certification of General Education courses is generally requested when the CSU GE pattern has been completed. Prior to GE certification, students must complete a minimum of 12 units in residence at the San Diego Community College District colleges, or 3 units of general education transferable course work from the CSU Certification Pattern prior to a review of courses for certification. A minimum of 39 semester units is required for certification.

Students may report any problems encountered with certification of general education for transfer to a counselor. Students will be assisted by the Counseling Department and Evaluations Office to resolve any transfer problems related to certification.

Courses which can be certified as general education for transfer to California State Universities are listed below. These courses are transferable to most four-year institutions and are considered baccalaureate level. There are five major areas of general education.

* Course is listed in more than one area but shall not be certified in more than one area.

Certification of a student's completion of CSU general education requirements is not a graduation requirement. Therefore, students do not have catalog rights to a certification pattern used by a certifying institution or a CSU campus.
Area A. Communication in the English Language and Critical Thinking:
No fewer than nine semester units (12-15 quarter units) including one course in A1, one course in A2, and one course in A3.

A1: Oral Communication
- BLAS 106 Black Oral Expression and Interpretation (Mesa)
- SPEE 103 Oral Communication

A2: Written Communication
- ENGL 101 Reading and Composition
- ENGL 105 Composition and Literature

A3: Critical Thinking
- ENGL 205 Critical Thinking and Intermediate Composition
- PHIL 100 Logic and Critical Thinking
- PHIL 103 Historical Introduction to Philosophy (Mesa)
- PHIL 205 Critical Thinking and Writing in Philosophy
- SPEE 160 Argumentation

AREA B. Physical Universe and Its Life Forms; Mathematics/Quantitative Reasoning:
No fewer than nine semester units (12-15 quarter units) including one course in B1, one course in B2, and one course in B4. One of the courses selected to fulfill the requirement for B1 or B2 must include a laboratory component or a separate course must be taken from B3. If a separate laboratory course is taken from B3, it must match one of the two lecture courses taken from B1 or B2.

B1: Physical Science
- ASTR 101 Descriptive Astronomy
- CHEM 100 Fundamentals of Chemistry
- CHEM 130 Introduction to Organic & Biological Chemistry
- CHEM 151 Introduction to General Chemistry (Lecture and Laboratory) (Miramar)
- CHEM 152 Introduction to General Chemistry (City, Mesa)
- CHEM 200 General Chemistry I (Lecture)
- CHEM 201 General Chemistry II (Lecture)
- GEOG 101 Physical Geography
- GEOG 103 Introduction to Meteorology (Mesa)
- GEOL 100 General Geology
- PHYN 100 Survey of Physical Science
- PHYN 120 Physical Oceanography (Miramar)
  - PHYS 100 Introductory Physics (Lecture/Laboratory) (Mesa)
- PHYS 120A General Physics I (City)
- PHYS 120B General Physics II (City)
  - PHYS 124A General Physics
  - PHYS 124B General Physics
  - PHYS 195A Mechanics (Lecture & Laboratory) (City, Mesa)
  - PHYS 195B Electricity & Magnetism (Lecture/Laboratory) (City, Mesa)
  - PHYS 195C Waves, Light and Modern Physics (Lecture/Laboratory) (City, Mesa)

B2: Life Science
- ANTH 102 Introduction to Physical Anthropology
  - BIOL 100 Natural History-Environmental Biology (Lecture/Laboratory) (Mesa, Miramar)
  - BIOL 101 Issues in Environmental Biology (Lecture/Laboratory) (City)
  - BIOL 105 Principles of Biology (Miramar)
  - BIOL 107 General Biology (Lecture/Laboratory) (City, Mesa)
- BIOL 110 Introduction to Oceanography (City, Mesa)
- BIOL 115 Marine Biology (Lecture/Laboratory)
- BIOL 130 Human Heredity
- BIOL 131 Introduction to Biotechnology (Miramar)
  - BIOL 160 Elements of Human Anatomy & Physiology (Lecture/Laboratory) (Mesa, Miramar)
- BIOL 180 Plants and People (City)
  - BIOL 205 General Microbiology (Lecture/Laboratory)
  - BIOL 210A Introduction to the Biological Sciences I (Lecture/Laboratory)
  - BIOL 210B Introduction to the Biological Sciences II (Lecture/Laboratory)
  - BIOL 215 Introduction to Zoology (Lecture/Laboratory)
  - BIOL 230 Human Anatomy (Lecture/Laboratory)
### B3: Laboratory Activity

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 104</td>
<td>Laboratory in Physical Anthropology (Mesa)</td>
</tr>
<tr>
<td>ASTR 109</td>
<td>Practice in Observing (Laboratory) (City, Mesa)</td>
</tr>
<tr>
<td>ASTR 111</td>
<td>Astronomy Laboratory (Laboratory) (Mesa, Miramar)</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Natural History-Environmental Biology (Lecture/Laboratory) (Mesa, Miramar)</td>
</tr>
<tr>
<td>BIOL 101</td>
<td>Issues in Environmental Biology (Lecture/Laboratory) (City)</td>
</tr>
<tr>
<td>BIOL 106</td>
<td>Principles of Biology (Laboratory) (Miramar)</td>
</tr>
<tr>
<td>BIOL 107</td>
<td>General Biology (Lecture/Laboratory) (City, Mesa)</td>
</tr>
<tr>
<td>BIOL 115</td>
<td>Marine Biology (Lecture/Laboratory)</td>
</tr>
<tr>
<td>BIOL 131</td>
<td>Introduction to Biotechnology (Miramar)</td>
</tr>
<tr>
<td>BIOL 160</td>
<td>Elements of Human Anatomy &amp; Physiology (Lecture/Laboratory) (Mesa, Miramar)</td>
</tr>
<tr>
<td>BIOL 205</td>
<td>General Microbiology (Lecture/Laboratory)</td>
</tr>
<tr>
<td>BIOL 210A</td>
<td>Introduction to the Biological Sciences I (Lecture/Laboratory)</td>
</tr>
<tr>
<td>BIOL 210B</td>
<td>Introduction to the Biological Sciences II (Lecture/Laboratory)</td>
</tr>
<tr>
<td>BIOL 215</td>
<td>Introduction to Zoology (Lecture/Laboratory)</td>
</tr>
<tr>
<td>BIOL 230</td>
<td>Human Anatomy (Lecture/Laboratory)</td>
</tr>
<tr>
<td>BIOL 235</td>
<td>Human Physiology (Lecture/Laboratory)</td>
</tr>
<tr>
<td>BIOL 250</td>
<td>Introduction to Botany (Lecture/Laboratory) (Mesa, Miramar)</td>
</tr>
<tr>
<td>CHEM 100L</td>
<td>Fundamentals of Chemistry (Laboratory)</td>
</tr>
<tr>
<td>CHEM 130L</td>
<td>Introduction to Organic &amp; Biological Chemistry (Laboratory)</td>
</tr>
<tr>
<td>CHEM 151</td>
<td>Introduction to General Chemistry (Lecture/Laboratory) (Miramar)</td>
</tr>
<tr>
<td>CHEM 152L</td>
<td>Introduction to General Chemistry (Laboratory) (City, Mesa)</td>
</tr>
<tr>
<td>CHEM 200L</td>
<td>General Chemistry I (Laboratory)</td>
</tr>
<tr>
<td>CHEM 201L</td>
<td>General Chemistry II (Laboratory)</td>
</tr>
<tr>
<td>GEOG 101L</td>
<td>Physical Geography (Laboratory)</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>General Geology (Laboratory)</td>
</tr>
<tr>
<td>PHYN 101</td>
<td>Survey of Physical Science (Laboratory)</td>
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<tr>
<td>PHYS 100</td>
<td>Introductory Physics (Lecture/Laboratory) (Mesa)</td>
</tr>
<tr>
<td>PHYS 121A</td>
<td>General Physics Lab-A (City)</td>
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<tr>
<td>PHYS 121B</td>
<td>General Physics Lab-B (City)</td>
</tr>
<tr>
<td>PHYS 124A</td>
<td>General Physics</td>
</tr>
<tr>
<td>PHYS 124B</td>
<td>General Physics</td>
</tr>
<tr>
<td>PHYS 195A</td>
<td>Mechanics (Lecture/Laboratory) (City, Mesa)</td>
</tr>
<tr>
<td>PHYS 195B</td>
<td>Electricity &amp; Magnetism (Lecture/Laboratory) (City, Mesa)</td>
</tr>
<tr>
<td>PHYS 195C</td>
<td>Waves, Light and Modern Physics (Lecture/Laboratory) (City, Mesa)</td>
</tr>
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### B4: Mathematics/Quantitative Reasoning

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Biological Statistics (City, Mesa)</td>
</tr>
<tr>
<td>MATH 104</td>
<td>Trigonometry</td>
</tr>
<tr>
<td>MATH 107</td>
<td>Introduction to Scientific Programming</td>
</tr>
<tr>
<td>MATH 107L</td>
<td>Intro. to Scientific Programming Lab</td>
</tr>
<tr>
<td>MATH 116</td>
<td>College &amp; Matrix Algebra</td>
</tr>
<tr>
<td>MATH 118</td>
<td>A Survey of Modern Mathematics (City, Mesa)</td>
</tr>
<tr>
<td>MATH 119</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>MATH 121</td>
<td>Basic Techniques of Applied Calculus I</td>
</tr>
<tr>
<td>MATH 122</td>
<td>Basic Techniques of Calculus II</td>
</tr>
<tr>
<td>MATH 141</td>
<td>Precalculus</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Calculus with Analytic Geometry I</td>
</tr>
<tr>
<td>MATH 151</td>
<td>Calculus with Analytic Geometry II</td>
</tr>
<tr>
<td>MATH 181</td>
<td>Mecomtronics College Algebra and Trigonometry I (City)</td>
</tr>
<tr>
<td>MATH 182</td>
<td>Mecomtronics College Algebra and Trigonometry II (City)</td>
</tr>
<tr>
<td>MATH 183</td>
<td>Mecomtronics Calculus I (City)</td>
</tr>
<tr>
<td>MATH 184</td>
<td>Mecomtronics Calculus II (City)</td>
</tr>
<tr>
<td>MATH 210A</td>
<td>Concepts of Elementary School Mathematics I</td>
</tr>
<tr>
<td>MATH 210B</td>
<td>Concepts of Elementary School Mathematics II</td>
</tr>
<tr>
<td>MATH 245</td>
<td>Discrete Mathematics</td>
</tr>
<tr>
<td>MATH 252</td>
<td>Calculus with Analytic Geometry III</td>
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<td>MATH 254</td>
<td>Introduction to Linear Algebra</td>
</tr>
<tr>
<td>MATH 255</td>
<td>Differential Equations</td>
</tr>
<tr>
<td>PHIL 101</td>
<td>Symbolic Logic</td>
</tr>
<tr>
<td>PSYC 258</td>
<td>Behavioral Science Statistics (City, Mesa)</td>
</tr>
</tbody>
</table>
AREA C. Arts, Literature, Philosophy, and Foreign Languages:
No fewer than nine semester units (12-15 quarter units), including one course in C1, one course in C2, and a third course from either C1 or C2.

<table>
<thead>
<tr>
<th>C1: Arts (Art, Dance, Music, Theatre)</th>
<th>C2: Humanities (Literature, Philosophy, Foreign Languages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 100 Art Orientation</td>
<td>BLAS 150 Black Women in Literature and the Media (City, Mesa)</td>
</tr>
<tr>
<td>ARTF 109 Nineteenth and Twentieth Century Art</td>
<td>BLAS 155 Afro-American Literature (City, Mesa)</td>
</tr>
<tr>
<td>ARTF 110 Art History: Prehistoric to Gothic</td>
<td>CHIC 130 Mexican Literature in Translation (City)</td>
</tr>
<tr>
<td>ARTF 111 Art History: Renaissance to Modern</td>
<td>CHIC 135 Chicano Literature (City, Mesa)</td>
</tr>
<tr>
<td>ARTF 113 African, Oceanic, Native American Art</td>
<td>CHIC 138 Literature of La Raza in Latin America in Translation (City, Mesa)</td>
</tr>
<tr>
<td>(Mesa)</td>
<td>CHIC 203 Introductory Spanish for Spanish Speakers (City)</td>
</tr>
<tr>
<td>ARTF 115 African Art (City, Mesa)</td>
<td>CHIC 204 Intermediate Spanish for Spanish Speakers (City)</td>
</tr>
<tr>
<td>ARTF 120 North American Indian Art (Mesa)</td>
<td>CHIC 210 Chicano Culture (City, Mesa)</td>
</tr>
<tr>
<td>ARTF 125 Art History: Survey Far Eastern Art</td>
<td>CHIN 101 First Course in Mandarin Chinese (Mesa)</td>
</tr>
<tr>
<td>(Miramar)</td>
<td>CHIN 102 Second Course in Mandarin Chinese (Mesa)</td>
</tr>
<tr>
<td>BLAS 110 Afro-American Art (City, Mesa)</td>
<td>CHIN 201 Third Course in Mandarin Chinese (Mesa)</td>
</tr>
<tr>
<td>BLAS 111 African Art History (Mesa)</td>
<td>ENGL 208 Introduction to Literature</td>
</tr>
<tr>
<td>BLAS 120 Black Music (City, Mesa)</td>
<td>ENGL 209 Literary Approaches to Film</td>
</tr>
<tr>
<td>DANC 181 Introduction to Dance (City, Mesa)</td>
<td>ENGL 210 American Literature I</td>
</tr>
<tr>
<td>DRAM 105 Introduction to Dramatic Arts</td>
<td>ENGL 211 American Literature II</td>
</tr>
<tr>
<td>DRAM 120 Dramatic Heritage (Miramar)</td>
<td>ENGL 215 English Literature I: 800-1799</td>
</tr>
<tr>
<td>DRAM 136 History of Canonized Theater - Ancient Greece to the Restoration (City)</td>
<td>ENGL 216 English Literature II: 1800-Present</td>
</tr>
<tr>
<td>DRAM 137 History of Canonized Western Theater - Restoration to the Present (City)</td>
<td>ENGL 220 Masterpieces of World Literature I: 1500 BCE - 1600 CE</td>
</tr>
<tr>
<td>DRAM 151 Cinema as Art and Communication II</td>
<td>ENGL 221 Masterpieces of World Literature II: 1600 - Present</td>
</tr>
<tr>
<td>(Mesa)</td>
<td>ENGL 230 Asian American Literature (Mesa)</td>
</tr>
<tr>
<td>MUSI 100 Introduction to Music</td>
<td>ENGL 237 Women in Literature (City, Miramar)</td>
</tr>
<tr>
<td>MUSI 101 Music History I (Mesa, Miramar)</td>
<td>ENGL 238 Evaluating Children’s Literature (City, Mesa)</td>
</tr>
<tr>
<td>MUSI 102 Music History II (Mesa, Miramar)</td>
<td>FREN 101 First Course in French (City, Mesa)</td>
</tr>
<tr>
<td>MUSI 105 Music of Our Time (Mesa)</td>
<td>FREN 102 Second Course in French (City, Mesa)</td>
</tr>
<tr>
<td>MUSI 109 World Music</td>
<td>FREN 201 Third Course in French (City, Mesa)</td>
</tr>
<tr>
<td>MUSI 111 Jazz-History and Development</td>
<td>FREN 202 Fourth Course in French (City, Mesa)</td>
</tr>
<tr>
<td>MUSI 125 Music, the Arts and Humanity (Mesa, Miramar)</td>
<td>GERM 101 First Course in German (City, Mesa)</td>
</tr>
<tr>
<td>RTVC 160 Introduction to Cinematography (City)</td>
<td>GERM 102 Second Course in German (City, Mesa)</td>
</tr>
</tbody>
</table>

Note: AMSL 100 and AMSL 101 are not certifiable if taken with a foreign language.

| ARAB 101 First Course in Arabic (City) |
| ARAB 102 Second Course in Arabic (City) |
### AREA D. Social, Political, and Economic Institutions and Behavior; Historical Background:

No fewer than nine semester units (12-15 quarter units) including three courses from at least two different disciplines. D1 through D0 each represent different disciplines.

### D1: Anthropology and Archaeology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 103</td>
<td>Introduction to Cultural Anthropology</td>
<td>Mesa</td>
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<tr>
<td>ANTH 107</td>
<td>Introduction to Archaeology</td>
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<tr>
<td>ANTH 200</td>
<td>Introduction to North American Indians</td>
<td>Mesa</td>
</tr>
<tr>
<td>ANTH 210</td>
<td>Introduction to California Indians</td>
<td>City, Mesa</td>
</tr>
<tr>
<td>ANTH 215</td>
<td>Cultures of Latin America</td>
<td>City, Mesa</td>
</tr>
</tbody>
</table>

### D2: Economics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ECON 120</td>
<td>Principles of Economics I</td>
<td></td>
</tr>
<tr>
<td>ECON 121</td>
<td>Principles of Economics II</td>
<td></td>
</tr>
</tbody>
</table>

### D3: Ethnic Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>ANTH 200</td>
<td>Introduction to North American Indians</td>
<td>Mesa</td>
</tr>
<tr>
<td>ANTH 210</td>
<td>Introduction to California Indians</td>
<td>City, Mesa</td>
</tr>
<tr>
<td>ANTH 215</td>
<td>Cultures of Latin America</td>
<td>City, Mesa</td>
</tr>
<tr>
<td>BLAS 104</td>
<td>Black Psychology</td>
<td>City, Mesa</td>
</tr>
<tr>
<td>BLAS 115</td>
<td>Sociology from a Black Perspective</td>
<td>City</td>
</tr>
<tr>
<td>BLAS 116</td>
<td>Contemporary Social Problems from a Black Perspective</td>
<td>City, Mesa</td>
</tr>
<tr>
<td>BLAS 125</td>
<td>Dynamics of the Black Community</td>
<td>Mesa</td>
</tr>
<tr>
<td>BLAS 130</td>
<td>The Black Family</td>
<td>City, Mesa</td>
</tr>
<tr>
<td>BLAS 135</td>
<td>Introduction to Black Politics</td>
<td>City</td>
</tr>
<tr>
<td>BLAS 140A</td>
<td>History of the U.S., Black Perspective</td>
<td>City</td>
</tr>
<tr>
<td>BLAS 140B</td>
<td>History of the U.S., Black Perspective</td>
<td>City</td>
</tr>
<tr>
<td>CHIC 110A</td>
<td>Introduction to Chicano Studies</td>
<td>City, Mesa</td>
</tr>
<tr>
<td>CHIC 110B</td>
<td>Introduction to Chicano Studies</td>
<td>City, Mesa</td>
</tr>
<tr>
<td>CHIC 141A</td>
<td>U.S. History from a Chicano Perspective</td>
<td>City, Mesa</td>
</tr>
</tbody>
</table>

- HUMA 104  Introduction to the Old Testament(Mesa)
- HUMA 106  World Religions (City, Mesa)
- HUMA 201  Mythology
- HUMA 202  Mythology: Hero’s Journey (City, Mesa)
- ITAL 101  First Course in Italian (City, Mesa)
- ITAL 102  Second Course in Italian (City, Mesa)
- ITAL 201  Third Course in Italian (City, Mesa)
- JAPN 101  First Course in Japanese (Mesa, Miramar)
- JAPN 102  Second Course in Japanese (Mesa, Miramar)
- JAPN 201  Third Course in Japanese (Mesa)
- JAPN 202  Fourth Course in Japanese (Mesa)
- LATT 101  First Course in Latin (Mesa)
- LATT 102  Second Course in Latin (Mesa)
- LATT 201  Third Course in Latin (Mesa)
- PHIL 102A Introduction to Philosophy
- PHIL 102B Introduction to Philosophy
- PHIL 103  Historical Introduction to Philosophy (Mesa)
- PHIL 104A History of Western Philosophy (City, Mesa)
- PHIL 104B History of Western Philosophy (City, Mesa)
- PHIL 105  Contemporary Philosophy (Mesa)
- PHIL 106  Asian Philosophy (City, Mesa)
- PHIL 107  Reflections on Human Nature
- PHIL 108  Perspectives on Human Nature and Society (City, Mesa)
- PHIL 110  Philosophy of Religion (Mesa)
- PHIL 111  Philosophy in Literature (City, Mesa)
- PHIL 112  Philosophy of Science (Mesa)
- PHIL 125  Philosophy of Women in World Cultures (City, Mesa)
- PHIL 130  Philosophy of Art and Music (Mesa)
- PSYC 207  Psychology of Religion (Mesa)
- RUSS 101  First Course in Russian (Mesa)
- RUSS 102  Second Course in Russian (Mesa)
- RUSS 201  Third Course in Russian (Mesa)
- SPAN 100  First/Second Course in Spanish (Accelerated) (Mesa)
- SPAN 101  First Course in Spanish
- SPAN 102  Second Course in Spanish
- SPAN 199  Second/Third/Course in Spanish (Accelerated) (Mesa)
- SPAN 201  Third Course in Spanish
- SPAN 202  Fourth Course in Spanish
- TAGA 101  First Course in Tagalog (Mesa, Miramar)
- TAGA 102  Second Course in Tagalog (Mesa, Miramar)
- TAGA 201  Third Course in Tagalog (Mesa)
- VIET 101  First Course in Vietnamese (Mesa)
- VIET 102  Second Course in Vietnamese (Mesa)
- VIET 201  Third Course in Vietnamese (Mesa)
### D4: Gender Studies

- CHIC 141B U.S. History from a Chicano Perspective (City, Mesa)
- CHIC 170 La Chicana (Mesa)
- CHIC 201 Pre-Columbian Cultures of MesoAmerica (City, Mesa)
- FILI 100 Filipino American Experience (Mesa, Miramar)
- HIST 113 Race in United States History (Mesa)
- HIST 123 U. S. History from the Asian Pacific American Perspective (Mesa)

### D5: Geography

- GEOG 102 Cultural Geography
- GEOG 104 World Regional Geography (City, Mesa)
- GEOG 154 Introduction to Urban Geography (Mesa)

### D6: History

- BLAS 140A History of the U.S., Black Perspective
- BLAS 140B History of the U.S., Black Perspective
- BLAS 145A Introduction to African History (City, Mesa)
- BLAS 145B Introduction to African History (City)
- CHIC 141A U.S. History from a Chicano Perspective (City, Mesa)
- CHIC 141B U.S. History from a Chicano Perspective (City, Mesa)
- CHIC 141C U.S. History from a Chicano Perspective (Mesa)
- CHIC 141D U.S. History from a Chicano Perspective (City)
- HIST 100 World History I (City, Mesa)
- HIST 101 World History II (City, Mesa)
- HIST 109 History of the United States I
- HIST 110 History of the United States II
- HIST 115A History of the Americas I (City, Mesa)
- HIST 115B History of the Americas II (City, Mesa)
- HIST 123 U. S. History from the Asian Pacific American Perspective (Mesa)
- HIST 125 History of England and the Commonwealth I (Mesa)
- HIST 126 History of England and the Commonwealth II (Mesa)
- HIST 130 The Middle East Today (Mesa)

### D7: Interdisciplinary Social or Behavioral Science

- * HIST 150 Native Americans in U.S. History (Mesa, Miramar)
- * HIST 151 Native Americans in U.S. History (Mesa, Miramar)
- * HIST 154 Ancient Egypt (Mesa)

### D8: Political Science, Government, and Legal Institutions

- * CHIL 101 Human Growth and Development
- CHIL 141 The Child, Family and Community
- ENGL 202 Introduction to Linguistics (City, Mesa)
- PHIL 108 Perspectives on Human Nature and Society (City, Mesa)
- PHIL 109 Issues in Social Philosophy (Mesa)

### D9: Psychology

- * BLAS 135 Introduction to Black Politics (City)
- POLI 101 Introduction to Politics
- POLI 102 American Political System
- POLI 103 Comparative Politics
- POLI 140 Contemporary International Politics

### D0: Sociology and Criminology

- * BLAS 115 Sociology from a Black Perspective (City)
- * BLAS 116 Contemporary Social Problems from a Black Perspective (City, Mesa)
- * BLAS 125 Dynamics of the Black Community (Mesa)
- * BLAS 130 The Black Family (City, Mesa)
- * HIST 113 Race in United States History (Mesa)
- SOCO 101 Principles Sociology
- SOCO 110 Contemporary Social Problems
- SOCO 125 Sociology of the Family (Mesa)
AREA E. Lifelong Understanding and Self-Development:
No fewer than three semester units (4-5 quarter units).

Note: A DD-214 will not clear this requirement.

BIOL 120 The Environment of Man (Mesa)
BIOL 135 Biology of Human Nutrition (Miramar)
HEAL 101 Health and Life Style
NUTR 150 Nutrition (Mesa, Miramar)
PERG 140 Life Skills and Personal Adjustment
PHYE 103 Aerobic Dance
PHYE 123 Fitness Activities
PHYE 132 Individual Conditioning
PHYE 182 Adapted Weight Training/Education Physically Limited (City, Mesa)
PSYC 111 Psychological/Social Aspects of Aging (Mesa)
PSYC 112 Interpersonal Relations (Mesa)
PSYC 128 Biofeedback and Stress Management (Mesa)
PSYC 132 Psychology of Gender Roles (Miramar)
PSYC 135 Marriage and Family Relationship
PSYC 137 Human Sexual Behavior
* PSYC 155 Introduction to Personality (City, Mesa)
* PSYC 230 Psychology of Lifespan Development (Mesa, Miramar)
SPEE 180 Intercultural Communication

Additional Requirements for CSU Graduation
Note: Not required for Certification.

American Institutions/California Government
Students who intend to transfer may complete the American Institutions/California Government requirement with one three-unit course or a six-unit course sequence as follows:

Three-Unit Course:

POLI 102 The American Political System

Six-Unit Sequences:

^ BLAS 140A History of the U.S., Black Perspective and
^ BLAS 140B History of the U.S., Black Perspective OR
^ CHIC 141A U.S. History from a Chicano Perspective (City, Mesa) and
^ CHIC 141B U.S. History from a Chicano Perspective (City, Mesa)

Six-Unit Combinations:

BLAS 140A History of the U.S., Black Perspective and
HIST 110 History of the United States II or
BLAS 140B History of the U.S., Black Perspective and
HIST 109 History of the United States I or
HIST 109 History of the United States I and
HIST 123 U. S. History from the Asian Pacific American Perspective (Mesa)

Note: Students who have completed equivalent courses outside the State of California must complete one of the following courses to satisfy the California government requirement.

BLAS 140B History of the U.S., Black Perspective
Upon completion of this pattern of general education requirements students must petition for CSU General Education Certification in the Evaluations Office.

Students who are eligible for CSU Certification may also qualify for an Associate Degree in Liberal Arts if they have completed the San Diego Community College District requirements of: American Institutions, Multicultural Studies, Health Education 101, and two Physical Education activity courses.

Transfer to University of California

University of California Campuses

University of California, Berkeley
University of California, Davis
University of California, Irvine
University of California, Los Angeles
University of California, Riverside
University of California, San Diego
University of California, San Francisco
University of California, Santa Barbara
University of California, Santa Cruz

Students who plan to earn a university degree may find it advantageous to complete freshman and sophomore work at a California community college. A student may apply 70 transferable semester units (or 105 quarter units) from the community colleges toward a university degree.

The University of California is made up of eight campuses and a Health Sciences Center in San Francisco. Students who meet undergraduate admission requirements may apply for admission to a University of California campus.

Transfer students will be eligible for admission if they meet the following requirements:
1. Complete a minimum of 60 UC-transferable units;
2. Earn a minimum 2.4 grade point average;
3. Clear all Area “A-F” subject requirement omissions/deficiencies from high school.

Subject requirement deficiencies may be cleared with the three-course pattern from one college course in mathematics, one in English, and one selected from U.S. History, laboratory sciences, or foreign language, all with grades of “C” or better. Details related to the “A-F” subject requirements are available in the Counseling Department and in each University of California catalog.

Note: Specific admission criteria vary among University of California campuses. Please see a counselor.

The UC system limits the credit that will be accepted for transfer for Art, Music, Drama, (Theater Arts), Computer Science, Engineering, and Independent Study courses. It is expected that students will plan their transfer program carefully and enroll in general education as well as courses preparatory for their intended major at UC. If you have questions, please see a counselor.

University of California, San Diego
Transfer Admission Guarantee (UCSD-TAG)

Students are encouraged to attend a TAG workshop and consult a counselor for specific transfer requirements.

The TAG program guarantees admission to the student’s choice of college, i.e., John Muir, Thurgood Marshall, Earl Warren, Revelle, Eleanor Roosevelt, and sixth colleges and to the term of transfer. Under the terms of the agreement, students are required to plan their programs with a counselor at City, Mesa, or Miramar College and comply with all TAG provisions. The following requirements must be satisfied:

1. Earn 60 UC-transferable semester units (or 90 UC-transferable quarter units). At least 28 of the last 36 transferable semester units must be taken at a TAG participating community college.
2. Achieve a UC transferable GPA of 2.8 or better.
3. Satisfy the UCSD core requirements for general education: with a minimum of a “C” grade. Requirements include one year (two-semesters) of a transferable sequence in (a) writing, (b) the humanities, (c) the social sciences, (d) a foreign language, and (e) calculus or a natural science. A list of course sequences for each of the five areas that will satisfy the UCSD general education core requirements follows.
TAG Core Requirements
Select a one-year (two-course) sequence from one department in each of the following areas:

The following information is based on 2001-2002 articulation agreements and/or course offerings and is subject to change. Please contact the Counseling Department for updates.

A. Writing: ENGL 101 and 205 OR 105 and 205

B. Humanities: Choose a two-course sequence from one subject:
   1. Art-Fine Art 109 and 111, OR 110 and 111, OR 113 (Mesa) and 115 (City, Mesa)
   2. Black Studies 145A (City, Mesa) and 145B (City)
   3. Chicano Studies 135 (City, Mesa) and 138 (City, Mesa)
   4. Dramatic Arts 136 (City) and 137 (City), OR 150 (Mesa) and 151 (Mesa)
   5. English 210 and 211, OR 215 and 216, OR 220 and 221
   6. History 100 (City, Mesa) and 101 (City, Mesa), OR 105 and 106, OR 115A (City, Mesa) and 115B (City, Mesa), OR 120 and 121, OR 125 (Mesa) and 126 (Mesa)
   7. Humanities 101 and 102
   8. Music 100 and one of the following: 105 (Mesa), 109, or 111
   9. Philosophy 102A and 102B, OR 104A (City, Mesa) and 104B (City, Mesa), OR 103 (Mesa) and 106 (City, Mesa)

C. Foreign Language: Complete two-semesters in the same language:
   1. AMSL 100 (City, Mesa), 101 (City, Mesa), 200 (City, Mesa), 201 (City, Mesa)
   2. ARAB 101 (City), 102 (City)
   3. CHIN 101 (Mesa), 102 (Mesa), 201 (Mesa)
   4. FREN 101 (City, Mesa), 102 (City, Mesa), 201 (City, Mesa), 202 (City, Mesa)
   5. GERM 101 (City, Mesa), 102 (City, Mesa), 201 (City, Mesa)
   6. ITAL 101 (City, Mesa), 102 (City, Mesa), 201 (City, Mesa)
   7. JAPN 101 (Mesa, Miramar), 102 (Mesa, Miramar), 201 (Mesa), 202 (Mesa)
   8. LATI 101 (Mesa), 102 (Mesa), 201 (Mesa)
   9. RUSS 101 (Mesa), 102 (Mesa), 201 (Mesa)
   10. SPAN 100 (Mesa), 101, 102, 199 (Mesa), 201, 202
   11. TAGA 101 (Mesa), 102 (Mesa)
   12. VIET 101 (Mesa), 102 (Mesa)

Note: If your national language of instruction is anything other than English, please contact the Admissions Office at UCSD.

D. Social Science: Complete a two-course sequence from one subject:
   1. ANTH 102 and 103, OR 102 or 103 and one of the following: 107, 200 (Mesa), 210 (City, Mesa), or 215 (City, Mesa)
   2. BLAS 140A and 140B
   3. CHIC 110A (City, Mesa) and CHIC 110B (City, Mesa), OR 141A (City, Mesa) and 141B (City, Mesa)
   4. ECON 120 and 121
   5. HIST 109 and 110, OR 109 and 123 (Mesa), OR 150 (Mesa, Miramar) and 151 (Mesa, Miramar)
   6. POLI 101, 102, 103, or 140 (any two)
   7. PSYC 101 and one of the following: 121 (Mesa, Miramar), 123 (Mesa, Miramar), 155 (City, Mesa), 211, 245 (Mesa, Miramar), or 260
   8. SOCO 101, 110, or 201 (Mesa) (any two)

E. Calculus or Natural Science: Complete a two-course sequence from one subject:
   1. BIOL 105 (Miramar) and 106 (Miramar), (see Note) OR 107, (City, Mesa) OR 210A, and one of the following: 205, 210B, 215, 230, 235, or 250 (Mesa, Miramar)
   2. CHEM 200 and 201
   3. MATH 121 and 122, OR 150 and 151, OR 151 and 252

Note: Biology 106 laboratory is required by the San Diego Community College District as a prerequisite to selected 200 level biology courses.

Note: Students who elect to take the Calculus course sequence in Area E must complete an approved Natural Science course within their program to meet district general education graduation requirements for the Transfer Studies AA degree.
4. PHYS 120A (City) and 120B (City), OR 124A and 124B, OR 195A (City, Mesa) and 195B, (City, Mesa) OR 195C (City, Mesa)

*Note: Students who select options 1, 2, or 4 above must satisfy the UC transfer math requirement.*

Students who complete TAG core requirements may also qualify for an Associate Degree in Liberal Arts if they have completed the San Diego Community College District requirements of: American Institutions, Multicultural Studies, Health Education 101, and two Physical Education activity courses.

**University of California, Davis Transfer Admission Agreement (TAA)**

Under the Transfer Admission Agreement (TAA), students who earn 60 UC-transferable units at City, Mesa, or Miramar College and meet certain other requirements will be guaranteed admission to the University of California, Davis (UCD) and to the major of their choice. Admission to certain majors may be competitive. Under the terms of the TAA, students must plan their programs with a counselor at City, Mesa, or Miramar College. Further information is available in the Counseling Department.

**University of California, Berkeley Cooperative Admissions Program (CAP)**

Students must apply to UC, Berkeley CAP Program while still in high school.

The Cooperative Admissions Program (CAP) gives students the opportunity to combine lower division study at a community college with a guarantee of admission to the University of California, Berkeley (UCB) upon completion of 60 UC-transferable units and a minimum GPA of 3.0 (specific majors may require a higher GPA). The program is specifically for students who apply in high school to UCB for freshman admission, and are UC eligible (meet the minimum admission requirements for freshmen), but were not admitted as freshmen. Each participating college at UCB has specific academic requirements. Additional information about the Cooperative Admissions Program is available in the Counseling Department.

**University of California and California State University**

**Intersegmental General Education Transfer Curriculum (IGETC)**

The Intersegmental General Education Transfer Curriculum (IGETC) is a general education program which community college transfer students may use to fulfill lower-division general education requirements in either the California State University or University of California system. Completion of the IGETC is not a requirement for admission to CSU or UC, nor is it the only way to fulfill lower-division GE requirements. The IGETC is recommended for students who have not made a final decision about transferring to a particular CSU or UC campus. Students may be better served by following the CSU GE requirements or those of the UC campus to which they plan to transfer.

Students pursuing majors which require extensive lower-division major preparation may not find the IGETC option to be advantageous. There are other limitations. All courses used for IGETC must be passed with a minimum grade C (C minus is not acceptable.) A credit or pass is acceptable providing either is equivalent to a grade C or better.

Please make a counseling appointment to determine the most appropriate general education program for you.

**Certification:** All GE requirements must be completed before IGETC can be certified. Certification must take place prior to transfer to UC and/or CSU (note exception below). The Evaluations Office will complete the certification. Petitions are available in the Evaluations Department. As a general rule, the IGETC can be certified for California community college transfers who have also completed transfer units at a CSU, UC, or independent college provided that the student has completed most of the transfer units at one or more California community colleges.

*Please Note: Coursework completed at a foreign college or university, that is not accredited by one of the U.S.*
Regional accrediting agencies, cannot be used to satisfy requirements for certification

IGETC Certification after Transfer: Students who are approaching readiness for transfer, and for "good cause", are unable to obtain a maximum of two IGETC courses, may be eligible to complete IGETC after transferring. Students must complete a petition from the Counseling Office, explicitly describe the "good cause" on the form and provide supporting documentation. The petition should be submitted with supporting documentation to the Evaluations Office. Typical situations that constitute "good cause" for not completing a maximum of two IGETC courses are: illness, unavailable or canceled courses, military service and unexpected hardships, such as family or employment problems. Partial certification is allowed only in the student's final term before transfer. See the Counseling Office on campus for detailed information.

Restrictions: A student who has been registered at a UC campus and wishes to return to the same UC campus is NOT eligible for IGETC. This restriction does not apply to students who have taken UC summer session or Extension classes only.

The IGETC may NOT be used for transfer to the following schools:

- University of California, San Diego - Revelle and Eleanor Roosevelt Colleges.

The IGETC may NOT be the appropriate option for transfer to the following schools:

- University of California, Berkeley - Colleges of Business, Chemistry, Environmental Design (Architecture), Engineering, Natural Resources.
- University of California, Davis - College of Engineering
- University of California, Irvine - Schools of Engineering, Biological Sciences, or Physical Sciences
- University of California, Riverside - College of Engineering
- University of California, Santa Barbara - College of Engineering

The IGETC is NOT recommended for students planning to attend the following schools:

- University of California, Berkeley - College of Optometry
- University of California, Los Angeles - School of Engineering and Applied Science and School of Nursing
- University of California, Riverside - College of Natural and Agricultural Sciences
- University of California, Santa Barbara - College of Creative Studies

Advanced Placement Exams - Acceptable scores of 3, 4, or 5 may be used to satisfy any of the courses in IGETC subject areas. An acceptable score on an English exam may be used to meet the English Composition requirement but may NOT be used to meet the Critical Thinking-English Composition and Oral Communication requirements.

Only one Advanced Placement course per area may be used to fulfill IGETC requirements.

@Students transferring to UC do not have to meet the Oral Communications requirement.

+ Transfer credit may be limited by either UC or CSU, or both. Please consult a counselor for additional information.

* Course is listed in more than one area but shall not be certified in more than one area.
AREA 1 - English Communication
(2-3 courses, 6-9 semester/8-12 quarter units)

Group A: English Composition (1 course, 3 semester/4-5 quarter units)

<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tr>
<td>ENGL 101</td>
<td>Reading and Composition OR</td>
</tr>
<tr>
<td>ENGL 105</td>
<td>Composition and Literature</td>
</tr>
</tbody>
</table>

Group B: Critical Thinking - English Composition (1 course, 3 semester/4-5 quarter units). Courses must have English Composition as a prerequisite.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>ENGL 205</td>
<td>Critical Thinking and Intermediate Composition</td>
</tr>
<tr>
<td>PHIL 205</td>
<td>Critical Thinking and Writing in Philosophy</td>
</tr>
</tbody>
</table>

Group C: Oral Communication (1 course, 3 semester/4-5 quarter units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>® SPEE 103</td>
<td>Oral Communication</td>
</tr>
<tr>
<td>® SPEE 160</td>
<td>Argumentation</td>
</tr>
</tbody>
</table>

AREA 2 - Mathematical Concepts and Quantitative Reasoning
(1 course, 3 semester/4-5 quarter units) Courses must have Intermediate Algebra as a prerequisite.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Biological Statistics (City/Mesa)</td>
</tr>
<tr>
<td>+ MATH 116</td>
<td>College and Matrix Algebra</td>
</tr>
<tr>
<td>+ MATH 119</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>+ MATH 121</td>
<td>Basic Techniques of Applied Calculus I</td>
</tr>
<tr>
<td>+ MATH 122</td>
<td>Basic Techniques of Calculus II</td>
</tr>
<tr>
<td>+ MATH 141</td>
<td>Precalculus</td>
</tr>
<tr>
<td>+ MATH 150</td>
<td>Calculus with Analytic Geometry I</td>
</tr>
<tr>
<td>+ MATH 151</td>
<td>Calculus with Analytic Geometry II</td>
</tr>
<tr>
<td>MATH 245</td>
<td>Discrete Mathematics</td>
</tr>
<tr>
<td>MATH 252</td>
<td>Calculus with Analytic Geometry III</td>
</tr>
<tr>
<td>+ MATH 254</td>
<td>Introduction to Linear Algebra</td>
</tr>
<tr>
<td>+ MATH 255</td>
<td>Differential Equations</td>
</tr>
<tr>
<td>PSYC 258</td>
<td>Behavioral Science Statistics</td>
</tr>
</tbody>
</table>

AREA 3 - Arts and Humanities
(3 courses, 9 semester/12-15 quarter units). At least one course from the Arts and one from the Humanities.

3A: Arts Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 100</td>
<td>Art Orientation</td>
</tr>
<tr>
<td>+ ARTF 109</td>
<td>Nineteenth and Twentieth Century Art</td>
</tr>
<tr>
<td>ARTF 110</td>
<td>Art History: Prehistoric to Gothic</td>
</tr>
<tr>
<td>ARTF 111</td>
<td>Art History: Renaissance to Modern</td>
</tr>
<tr>
<td>+ ARTF 115</td>
<td>African Art (City, Mesa)</td>
</tr>
<tr>
<td>+ ARTF 120</td>
<td>North American Indian Art (Mesa)</td>
</tr>
<tr>
<td>+ ARTF 125</td>
<td>History of Art: Survey in Far Eastern Art (Miramar)</td>
</tr>
<tr>
<td>BLAS 110</td>
<td>Afro-American Art (City, Mesa)</td>
</tr>
<tr>
<td>+ BLAS 111</td>
<td>African Art History (Mesa)</td>
</tr>
<tr>
<td>BLAS 120</td>
<td>Black Music (City, Mesa)</td>
</tr>
<tr>
<td>DRAM 105</td>
<td>Introduction to Dramatic Arts</td>
</tr>
<tr>
<td>DRAM 120</td>
<td>Dramatic Heritage (Miramar)</td>
</tr>
<tr>
<td>+ DRAM 136</td>
<td>History of Canonized Theater - Ancient Greece to Restoration (City)</td>
</tr>
<tr>
<td>+ DRAM 137</td>
<td>History of Canonized Western Theatre - Restoration to the Present (City)</td>
</tr>
<tr>
<td>DRAM 150</td>
<td>Cinema as Art &amp; Communication I (Mesa)</td>
</tr>
<tr>
<td>DRAM 151</td>
<td>Cinema as Art &amp; Communication II (Mesa)</td>
</tr>
<tr>
<td>MUSI 100</td>
<td>Introduction to Music</td>
</tr>
<tr>
<td>MUSI 105</td>
<td>Music of Our Time (Mesa)</td>
</tr>
<tr>
<td>MUSI 109</td>
<td>World Music</td>
</tr>
<tr>
<td>MUSI 111</td>
<td>Jazz - History &amp; Development</td>
</tr>
<tr>
<td>MUSI 125</td>
<td>Music, The Arts, and Humanity (Mesa, Miramar)</td>
</tr>
</tbody>
</table>

3B: Humanities Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>* BLAS 145A</td>
<td>Introduction to African History (City, Mesa)</td>
</tr>
<tr>
<td>* BLAS 145B</td>
<td>Introduction to African History (City)</td>
</tr>
<tr>
<td>BLAS 150</td>
<td>Black Women in Literature &amp; the Media (City, Mesa)</td>
</tr>
<tr>
<td>BLAS 155</td>
<td>Afro-American Literature (City, Mesa)</td>
</tr>
<tr>
<td>CHIC 130</td>
<td>Mexican Literature in Translation (City)</td>
</tr>
<tr>
<td>CHIC 135</td>
<td>Chicano Literature (City, Mesa)</td>
</tr>
<tr>
<td>CHIC 138</td>
<td>Literature of La Raza in Latin America in Translation (City, Mesa)</td>
</tr>
<tr>
<td>* CHIC 210</td>
<td>Chicano Culture (City, Mesa)</td>
</tr>
<tr>
<td>CHIN 102</td>
<td>Second Course in Mandarin Chinese (Mesa)</td>
</tr>
<tr>
<td>ENGL 208</td>
<td>Introduction to Literature</td>
</tr>
<tr>
<td>ENGL 209</td>
<td>Literary Approaches to Literature</td>
</tr>
</tbody>
</table>
AREA 4 - Social and Behavioral Sciences
(3 courses, 9 semester/12-15 quarter units)
Courses from at least two disciplines or an interdisciplinary sequence.

4A: Anthropology and Archaeology Courses:
- ANTH 103 Introduction to Cultural Anthropology
- ANTH 107 Introduction to Archaeology
- ANTH 200 Introduction to North American Indians (Mesa)
- ANTH 210 Introduction to California Indians (City, Mesa)
- ANTH 215 Cultures of Latin America (City, Mesa)

4B: Economics Courses:
- ECON 120 Principles of Economics I
- ECON 121 Principles of Economics II

4C: Ethnic Studies Courses:
+ BLAS 104 Black Psychology (City, Mesa)
+ BLAS 116 Contemporary Social Problems From a Black Perspective (City, Mesa)
+ BLAS 130 The Black Family (City, Mesa)
+ BLAS 135 Introduction to Black Politics (City)
+ BLAS 140A History of the U.S., Black Perspectives (City)
+ BLAS 140B History of the U.S., Black Perspectives (City)
+ BLAS 145A Introduction to African History (City, Mesa)
+ BLAS 145B Introduction to African History (City)
+ CHIC 110A Introduction to Chicano Studies (City, Mesa)
+ CHIC 110B Introduction to Chicano Studies (City, Mesa)
+ CHIC 141A United States History From a Chicano Perspective (City, Mesa)
+ CHIC 141B United States History From a Chicano Perspective (City, Mesa)
+ CHIC 150 History of Mexico (City, Mesa)
+ CHIC 170 La Chicana (Mesa)
+ CHIC 201 Pre-Columbian Cultures of Mesoamerica (City, Mesa)
+ CHIC 210 Chicano Culture (City, Mesa)

4D: Gender Studies: (no courses)
### 4E: Geography Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 102</td>
<td>Cultural Geography</td>
</tr>
<tr>
<td>GEOG 104</td>
<td>World Regional Geography (City, Mesa)</td>
</tr>
<tr>
<td>GEOG 154</td>
<td>Introduction to Urban Geography (Mesa)</td>
</tr>
</tbody>
</table>

### 4F: History Courses:

- HIST 109  History of the United States I
- HIST 110  History of the United States II
- HIST 113  Race in United States History (Mesa)
- HIST 115A History of the Americas I (City, Mesa)
- HIST 115B History of the Americas II (City, Mesa)
- HIST 120  Introduction to Asian Civilizations
- HIST 121  Asian Civilizations in Modern Times
- HIST 123  U.S. History from the Asian Pacific American Perspective (Mesa)
- HIST 130  The Middle East Today (Mesa)
- HIST 150  Native Americans in United States History (Mesa, Miramar)
- HIST 151  Native Americans in United States History (Mesa, Miramar)
- HIST 154  Ancient Egypt (Mesa)

### 4G: Interdisciplinary, Social & Behavioral Sciences:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 202</td>
<td>Introduction to Linguistics (City, Mesa)</td>
</tr>
</tbody>
</table>

### 4H: Political Science, Government & Legal Institutions Courses:

- POLI 101 Introduction to Political Science
- POLI 102 The American Political System
- POLI 103 Comparative Politics
- POLI 140 Contemporary International Politics (City, Mesa)

### 4I: Psychology Courses:

- PSYC 101 General Psychology
- PSYC 121 Introduction to Child Psychology (Mesa, Miramar)
- PSYC 123 Adolescent Psychology (Mesa, Miramar)
- PSYC 132 Psychology of Gender Roles (Miramar)
- PSYC 155 Introduction to Personality (City, Mesa)
- PSYC 211 Learning
- PSYC 230 Psychology of Lifespan Development (Mesa, Miramar)
- PSYC 245 Abnormal Psychology (Mesa, Miramar)

### 4J: Sociology & Criminology Courses:

- PHIL 108 Perspectives on Human Nature & Society (City, Mesa)
- PHIL 109 Issues in Social Philosophy (Mesa)
- SOCO 101 Principles of Sociology
- SOCO 110 Contemporary Social Problems
- SOCO 201 Advanced Principles of Sociology (Mesa)

### AREA 5 - Physical and Biological Sciences

(At least 2 courses required, 7-9 semester/9-12 quarter units). One Physical Science course and one Biological Science course; at least one must include a laboratory.

### 5A: Physical Science Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 101</td>
<td>Descriptive Astronomy</td>
</tr>
<tr>
<td>ASTR 109</td>
<td>(Lab) Practice in Observing (City, Mesa)</td>
</tr>
</tbody>
</table>
- ASTR 111 Astronomy Laboratory (Mesa, Miramar)
- CHEM 100 Fundamentals of Chemistry
- CHEM 100L Fundamentals of Chemistry Laboratory
- CHEM 130 Introduction to Organic & Biological Chemistry
- CHEM 130L Introduction to Organic & Biological Chemistry Laboratory
- CHEM 151 (W/Lab) Introduction to General Chemistry (Miramar)
- CHEM 152 Introduction to General Chemistry (City, Mesa)
- CHEM 152L Introduction to General Chemistry Laboratory (City, Mesa)
- CHEM 200 General Chemistry I - Lecture
- CHEM 200L General Chemistry I - Laboratory
- CHEM 201 General Chemistry II - Lecture
- CHEM 201L General Chemistry II - Laboratory
- CHEM 231 Organic Chemistry I - Lecture (City, Mesa)
- CHEM 231L Organic Chemistry I - Laboratory (City, Mesa)
- CHEM 232L Organic Chemistry I - Lab Continued (City, Mesa)
- CHEM 233 Organic Chemistry II (City, Mesa)
- CHEM 233L Organic Chemistry II - Laboratory (City, Mesa)
- CHEM 234L Organic Chemistry II Lab continued (City, Mesa)
- GEOG 101 Physical Geography
- GEOG 101L Physical Geography Laboratory
5B: Biological Science Courses:

- GEOL 100 General Geology
- GEOL 101 General Geology Laboratory
- PHYN 100 Survey of Physical Science
- PHYN 101 Survey of Physical Science Laboratory
- PHYN 120 Physical Oceanography (Miramar)
- PHYS 100 (W/Lab) Introductory Physics (Mesa)
- PHYS 120A General Physics I (City)
- PHYS 120B General Physics II (City)
- PHYS 121A General Physics Lab (City)
- PHYS 121B General Physics Lab (City)
- PHYS 124A (W/Lab) General Physics
- PHYS 124B (W/Lab) General Physics
- PHYS 195A (W/Lab) Mechanics (City, Mesa)
- PHYS 195B (W/Lab) Electricity and Magnetism (City, Mesa)
- PHYS 195C (W/Lab) Waves, Light, and Modern Physics (City, Mesa)

Languages other than English (UC Requirement Only). Students transferring to the University of California are required to demonstrate competence (proficiency) in a language other than English equal to two years of high school study.

Competence may be demonstrated through the following mechanisms:

1. Completion of two years of the same foreign language of high school level work with grades of “C” or better;
2. Completion of a course (or courses) at a college or university, with a grade of “C” or better in each course. Usually, one semester of college work in a language other than English is equivalent to two years of high school work;

Any one of the following course(s) completed with a grade of “C” or better, will fulfill the requirement:

- ARAB 101 First Course in Arabic (City)
- CHIN 101 First Course in Mandarin Chinese (Mesa)
- FREN 101 First Course in French (City, Mesa)
- GERM 101 First Course in German (City, Mesa)
- ITAL 101 First Course in Italian (City, Mesa)
- JAPN 101 First Course in Japanese (Mesa, Miramar)
- LATI 101 First Course in Latin (Mesa)
- RUSS 101 First Course in Russian (Mesa)
- SPAN 100 First/Second Course in Spanish (Accelerated) (Mesa)
- SPAN 101 First Course in Spanish
- TAGA 101 First Course in Tagalog (Mesa)
- VIET 101 First Course in Vietnamese (Mesa, Miramar)

3. Completion, with grades “C” or better, of two years formal schooling at the sixth grade level or higher at an institution where the language of instruction is not English. Documentation must be presented to substantiate required coursework was completed;

4. 500 or higher in the College Board Achievement tests in languages other than English;

5. 3 or higher in the College Board Advanced Placement Examinations in languages other than English;

6. 5 or higher in the International Baccalaureate Higher Level Examinations in languages other than English;
7. Completion of an achievement test administered by a community college (the San Diego Community College District does not administer this test), university or other college in a language other than English. The test will have to assess the student proficiency at the level equivalent to 2 years of high school language.

Completion of courses above proficiency level, with grades of “C” or better, may also be used to meet the requirement. Special Topics and Civilization courses DO NOT meet this requirement. See a counselor.

Additional Requirements for CSU Graduation

Note: Not required for Certification.

American Institutions/California Government

Students who intend to transfer may complete the American Institutions/California Government requirement as follows:

<table>
<thead>
<tr>
<th>Three-Unit Course</th>
<th>Six-Unit Combinations:</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLI 102 The American Political System</td>
<td>BLAS 140A History of the U.S., Black Perspective and</td>
</tr>
<tr>
<td></td>
<td>BLAS 140B History of the U.S., Black Perspective OR</td>
</tr>
<tr>
<td>CHIC 141A U.S. History from a Chicano</td>
<td>CHIC 141B U.S. History from a Chicano Perspective (City, Mesa) and</td>
</tr>
<tr>
<td>Perspective (City, Mesa) and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>^ HIST 109 History of the United States I and</td>
</tr>
<tr>
<td></td>
<td>^ HIST 110 History of the United States II OR</td>
</tr>
<tr>
<td></td>
<td>^ HIST 115A History of the Americas I (City, Mesa) and</td>
</tr>
<tr>
<td></td>
<td>^ HIST 115B History of the Americas II (City, Mesa) OR</td>
</tr>
<tr>
<td></td>
<td>BLAS 140B History of the U.S., Black Perspective</td>
</tr>
<tr>
<td></td>
<td>HIST 110 History of the United States II</td>
</tr>
<tr>
<td></td>
<td>or</td>
</tr>
<tr>
<td></td>
<td>HIST 109 History of the United States I</td>
</tr>
<tr>
<td></td>
<td>or</td>
</tr>
<tr>
<td></td>
<td>HIST 123 U. S. History from the Asian Pacific American Perspective (Mesa)</td>
</tr>
<tr>
<td></td>
<td>Note: Students who have completed equivalent courses outside the State of California must complete one of the following courses to satisfy the California government requirement.</td>
</tr>
</tbody>
</table>

SAN DIEGO MESA COLLEGE • 2003-2004
American Institutions Courses:
Courses used to satisfy the CSU United States History, Constitution and the UC American History and Institutions requirement may not be counted in the Social and Behavioral Sciences Area 4.

Students who are eligible for IGETC Certification may also be awarded an Associate Degree in Liberal Arts if they have completed the San Diego Community College District requirements of American Institutions, Multicultural Studies, two Physical Education activity courses and Health Education 101.

California Articulation Number (CAN) System
The California Articulation Number (CAN) identifies some of the transferable, lower division, introductory, preparatory courses and sequences commonly taught within each academic discipline on college campuses. The system assures students that CAN courses and sequences on one participating campus will be acceptable “in lieu of” the comparable CAN course and sequence on another participating campus. For example: CAN ECON 4 on one campus will be acceptable for CAN ECON 4 on another participating campus. Each campus also maintains its own course numbering system.

California Articulation Numbers are listed after each course description in this catalog. Lists of courses and sequences from campuses participating in the CAN system are available in the Counseling Department. See a counselor for assistance. These courses are by no means the only transferable courses offered; other courses which transfer are listed in campus articulation agreements and elsewhere in this catalog.

Other Independent Colleges and Universities
Please check with the Counseling Department for the latest information regarding transfer to the following local independent colleges and universities.

Alliant International University
San Diego Campus
10455 Pomerado Road
San Diego, California 92131
(858) 635-4772

Point Loma Nazarene University
3900 Lomaland Drive
San Diego, California 92106
(619) 221-2273

National University
4141 Camino del Rio South
San Diego, California 92108
(619) 563-7146

University of San Diego
Alcala Park
San Diego, California 92110
(619) 260-4600

Woodbury University
2291 Truxtun Road
Building 37, Box 279
San Diego, California 92106
(619) 758-7777

For transfer to other institutions of higher education contact the Counseling Department for information.

Recognition of High School Courses for College Credit
Students who successfully complete the articulated course/program and demonstrate acquisition of the knowledge, skills, and abilities via an examination administered at end of the course/program may earn college credit equivalent to the course(s) identified in the Articulation Table below. Successful completion is defined as the completion of the course(s)/program and a grade of “B” or better on the final examination administered upon completion. In order to receive the credit for an articulated college course/program, the student must complete a Tech Prep Articulation packet, which includes the college application and the Tech Prep Articulation Certification form, and submit it to the high school instructor. Forms will be processed annually each July. Seniors earning college credit may request a copy of their SDCCD transcript after July 31st. Other high school students earning Tech Prep articulated credit may request a copy of their SDCCD transcript the following Fall semester. If you have any questions, please contact the Associate Dean of Tech Prep at (619) 388-6572
## TECH PREP ARTICULATED COURSES

<table>
<thead>
<tr>
<th>HIGH SCHOOL COURSE(S)/PROGRAM</th>
<th>HIGH SCHOOL SITE(S)</th>
<th>MESA COURSE(S)</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 3-4 (1 year)</td>
<td>Crawford, Kearny, Lincoln, Morse, San Diego, Scripps Ranch and Serra</td>
<td>ACCT 150</td>
<td>3</td>
</tr>
<tr>
<td>Computerized Accounting (1 year)</td>
<td>Crawford, Kearny and Mira Mesa</td>
<td>ACCT 150, CBTE 140</td>
<td>up to 5</td>
</tr>
<tr>
<td>Sign Language Interpreting (2 years)</td>
<td>Madison</td>
<td>AMSL 100, AMSL 101, AMSL 200, AMSL 201</td>
<td>up to 12</td>
</tr>
<tr>
<td>Veterinarian Assistant 1-2 (1 year)</td>
<td>San Diego Humane Society, Grossmont Health Occupation Center and the Career Awareness Center</td>
<td>ANHL 105</td>
<td>3</td>
</tr>
<tr>
<td>Drafting, Computer Aided (2 years) OR Architectural Drafting 1-2, 3-4 (2 years)</td>
<td>Madison, Mission Bay, Kearny, Morse, Patrick Henry and Scripps Ranch</td>
<td>ARCH 100, ARCH 105</td>
<td>up to 4</td>
</tr>
<tr>
<td>Business &amp; Computer Applications Program (2 years)</td>
<td>Clairemont, Crawford, Gompers Secondary, Hoover, Kearny, Madison, Mira Mesa, Mission Bay, Morse, Patrick Henry, Point Loma, San Diego, Scripps Ranch, Serra and University City</td>
<td>CBTE 103, CBTE 120, CBTE 122, CBTE 126, CBTE 140, CBTE 151, CBTE 180, CBTE 210, CBTE 211, CISC 128</td>
<td>up to 23</td>
</tr>
<tr>
<td>Computer Applications in Business (1 year)</td>
<td>Clairemont, Crawford, Garfield, Kearny, Lincoln, Madison, Mira Mesa, Mission Bay, Patrick Henry, Point Loma, Morse, San Diego, San Diego S.C.P.A., Scripps Ranch, Serra and University City</td>
<td>CBTE 103</td>
<td>3</td>
</tr>
<tr>
<td>Computerized Graphic Design (1 year)</td>
<td>Crawford, Morse, Patrick Henry, San Diego S.C.P.A and Scripps Ranch</td>
<td>CBTE 162, CBTE 170, CISC 114, MULT 101</td>
<td>up to 9</td>
</tr>
<tr>
<td>Child Development Careers Program (2 years)</td>
<td>Clairemont, Hoover, Mira Mesa, Morse, Patrick Henry, San Diego, Scripps Ranch and University City</td>
<td>CHIL 160, CHIL 161, CHIL 270</td>
<td>up to 6</td>
</tr>
</tbody>
</table>
### TECH PREP ARTICULATED COURSES

<table>
<thead>
<tr>
<th>HIGH SCHOOL COURSE(S)/PROGRAM</th>
<th>HIGH SCHOOL SITE(S)</th>
<th>MESA COURSE(S)</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Careers ROP (1 year)</td>
<td>Clairemont, Hoover, Lincoln, Mira Mesa, Morse, Patrick Henry, Point Loma, San Diego, Scripps and University City</td>
<td>CHIL 270</td>
<td>up to 4</td>
</tr>
<tr>
<td>Fashion Design (1 year)</td>
<td>Crawford</td>
<td>FASH 105</td>
<td>3</td>
</tr>
<tr>
<td>Fashion Production (1 year)</td>
<td>Crawford</td>
<td>FASH 130</td>
<td>3</td>
</tr>
<tr>
<td>Teaching Academy (2 years)</td>
<td>Mira Mesa</td>
<td>EDUC 200</td>
<td>3</td>
</tr>
<tr>
<td>Teaching Academy (2 years)</td>
<td>Patrick Henry</td>
<td>EDUC 200</td>
<td>up to 10</td>
</tr>
<tr>
<td>Food Preparation &amp; Nutrition 1-2, Gourmet &amp; International Foods (1 year), AND Nutrition Today (1 year)</td>
<td>Clairemont, Garfield, Mira Mesa, Morse, San Diego and Scripps Ranch</td>
<td>FOOD 105, FOOD 110</td>
<td>up to 8</td>
</tr>
<tr>
<td>Hotel/Motel Occupations (1 year)</td>
<td>Morse</td>
<td>HOTL 105</td>
<td>3</td>
</tr>
<tr>
<td>Marketing, Meeting &amp; Special Events (1 year)</td>
<td>Garfield, Lincoln and San Diego</td>
<td>TRAV 132</td>
<td>3</td>
</tr>
<tr>
<td>Hospitality &amp; Tourism (2 years)</td>
<td>Clairemont and Scripps Ranch</td>
<td>TRAV 105, TRAV 130</td>
<td>up to 6</td>
</tr>
<tr>
<td>Technology Support Services 1-2 (2 years)</td>
<td>Hoover, Madison, Patrick Henry, Serra and San Diego</td>
<td>CISC 121, CISC 122, CISC 123, CISC 125A, CISC 125B, CISC 130, CISC 132</td>
<td>up to 7</td>
</tr>
<tr>
<td>Information Technology &amp; Networking Program (2 years)</td>
<td>University City</td>
<td>MSFT 051, MSFT 052, MSFT 053, MSFT 054</td>
<td>up to 10</td>
</tr>
<tr>
<td>Multimedia Production Program (2 years)</td>
<td>Clairemont, Kearny, Patrick Henry, Point Loma, San Diego S.C.P.A. and Scripps Ranch</td>
<td>MULT 101</td>
<td>3</td>
</tr>
<tr>
<td>Multimedia Production Program, Video/Media Production, AND Video Production/Scientific Visualization (3.5 years)</td>
<td>Kearny</td>
<td>MULT 101, MULT 118, MULT 123, MULT 137</td>
<td>up to 12</td>
</tr>
<tr>
<td>Website Design (1 year)</td>
<td>Mission Bay</td>
<td>CBTE 162</td>
<td>2</td>
</tr>
</tbody>
</table>
Degree Curricula and Certificate Programs
Accounting

Certificate of Completion:
Governmental/Nonprofit Accounting 13-14

Certificate of Achievement:
Accounting 22

Associate in Science Degree:
Accounting 39*

*and electives as needed to meet minimum 60 units required for the degree.

Qualifies the graduate as a bookkeeper, account clerk, accounting technician, audit or tax aide, or accountant trainee. Subjects of immediate practical value enable the student to work part-time in the field while completing the curriculum. The certificate program is for students desiring early employment. Students planning to transfer to a four-year college or university as an accounting major should major in Business Administration.

Certificate of Completion:
Governmental/Nonprofit Accounting*

Courses:
ACCT 116A, Principles of Accounting-Financial........ 4
ACCT 116B, Principles of Accounting-Managerial ...... 4
ACCT 125, Governmental Accounting ................... 3

Select one course from:
CBTE 180, Microsoft Office
ACCT 150, Computer Accounting Applications .......... 3

Total Units = 14

Associate in Science Degree:
Accounting

Courses Required for the Major:
ACCT 116A, Principles of Accounting-Financial........ 4
ACCT 116B, Principles of Accounting-Managerial ...... 4
ACCT 150, Computer Accounting Applications .......... 3
ACCT 201A, Intermediate Accounting I ................... 3
ACCT 201B, Intermediate Accounting II ................. 3
BUSE 100, Introduction to Business
(recommended as a first semester course) .............. 3
BUSE 119, Business Communications..................... 3
BUSE 140, Business Law and the
Legal Environment ......................................... 3
CISC 181, Principles of Information Systems .......... 4
ECON 120, Principles of Economics I .................... 3
ECON 121, Principles of Economics II ................... 3

Select one course from the following:
ACCT 120, Federal Income Tax
ACCT 125, Governmental Accounting
ACCT 135, Auditing ....................................... 3

Total Units = 23

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

Recommended Electives: Accounting 120, 121, 125, 135, 186, 199, 270 (if not taken above); Business 150, 155, 201; Computer and Information Sciences 181; Computer Business Technology 140, 140A; Psychology 101; Speech Communications 135.

Transfer Information

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language.
Consult the current catalog of the transfer institution and consult with a counselor.

- **San Diego State University**

  **Business Administration, Accounting, B.S.:**
  Accounting 116A, 116B; Business 140; Computer & Information Systems 181; Economics 120, 121; Mathematics 119 or Psychology 258; Mathematics 116 and 121 or 150.

  **Economics, B.A.:** Economics 120, 121; Computer & Information Sciences 181; Mathematics 119 or Psychology 258; Mathematics 116 and 121 or 150; Accounting 116A.

  **Information and Decision Systems, B.S.:** Accounting 116A, 116B; Business 119, 140; Computer & Information Sciences 181; Economics 120, 121; Mathematics 116 and 121 or 150; Mathematics 119.

  **International Business, Latin American Emphasis, B.A.:** Accounting 116A, 116B; Economics 120, 121; Business 140; Computer & Information Sciences 181; History 115A, 115B; Mathematics 119 or Psychology 258; Spanish 202, 210, 211.

  **Business Administration, Management or Marketing, B.S.:** Accounting 116A, 116B; Business 119, 140; Computer & Information Sciences 181; Economics 120, 121; Mathematics 116 and 121 or 150.

- **California State University, San Marcos**

  **Business Administration, B.S.:** Accounting 116A, 116B; Business 140; Economics 120, 121; Mathematics 121; Psychology 101 or Sociology 101; and computer competency.

- **University of California, Berkeley**

  **Business Administration, B.A.:** Accounting 116A, 116B; Computer Information Science 181; Economics 120, 121; Mathematics 119 or Psychology 258; Mathematics 150, 151. Note: Additional English and foreign language courses are required. Consult a counselor.

- **University of California, San Diego**

  **Economics B.A.:** Economics 120 and 121; Mathematics 121 and 122 or 150, 151 and 252.

  **Management Science, B.S.:** Accounting 116A or 116B; Mathematics 150, 151, 252 and 254; Economics 120 or 121.

- **University of San Diego**

  **Economics, B.A.:** Business 140; Accounting 116A or 116B; Computer and Information Sciences 110 and 150 or 181; Economics 120, 121; Mathematics 150 or 121.

### American Indian Studies

Courses relating to the American Indians are offered through an interdisciplinary approach in the following areas:

**Anthropology**
- Introduction to North American Indians
- Introduction to California Indians

**Art**
- North American Indian Arts

**History**
- Native Americans in United States History
American Sign Language/Interpreting

Certificate of Achievement:
American Sign Language/Interpreting 32

Associate in Arts Degree:
American Sign Language/Interpreting 32*

*and electives as needed to meet minimum of 60 units required for the degree.

The Interpreter Training Program will prepare the student for a career in the field of sign language interpretation/transliteration. Provides theoretical and practical knowledge in all aspects of community and academic interpreting. This program provides instruction in the various aspects of interpretation/transliteration skills to students who possess intermediate skills in American Sign Language. Prepares the student for certification by the Registry of Interpreters for the Deaf and/or National Association of the Deaf and/or San Diego County Educational Interpreter Evaluation.

Certificate of Achievement:
American Sign Language Interpreting

Courses Required for the Major: Units
AMSL 104, Introduction to Deaf Culture ..................3
AMSL 105, Implications of Deafness ......................3
AMSL 107, American Sign Language: Fingerspelling...2
AMSL 201, American Sign Language IV..................3
AMSL 205, Interpreting Skills I ............................3
AMSL 206, Interpreting Skills II............................3
AMSL 207, Sign-to-Voice Interpreting I...................3
AMSL 208, Sign-to-Voice Interpreting II..................3
AMSL 209, Professional Aspects of Interpreting........3
AMSL 210, Intro to Specialized Settings................3
AMSL 276, Field Work in Interpreting......................3
Total Units = 32

Note: Only one American Sign Language (AMSL) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

Recommended Electives: American Sign Language/Interpreting 108; Anthropology 103; English 101, 202; Speech Communications 101. See American Sign Language course descriptions for additional courses.
Animal Health Technology

Prepares students for employment as an assistant to graduate veterinarians in private veterinary facilities, biomedical research institutions, regulatory agencies, and zoological parks.

The program is approved by the California Board of Examiners in Veterinary Medicine. Graduates may become Registered Veterinary Technicians (RVT) upon passing an examination offered by the California Department of Consumer Affairs.

Eligibility for enrollment in this program is determined by a special admission procedure. Interested persons should call the Special Programs Admissions Clerk in the Admissions Office (619) 388-2684. Course repetition in this program is not permitted.

**Associate in Science Degree: Animal Health Technology**

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANHL 100A, Animal Care and Management</td>
<td>1.5</td>
</tr>
<tr>
<td>ANHL 100B, Advanced Animal Care and Management</td>
<td>1.5</td>
</tr>
<tr>
<td>ANHL 105, Fundamentals of Animal Health Technology</td>
<td>3</td>
</tr>
<tr>
<td>ANHL 105L, Fundamentals of Animal Health Technology</td>
<td>2</td>
</tr>
<tr>
<td>ANHL 115, Veterinary Office Procedures</td>
<td>2</td>
</tr>
<tr>
<td>ANHL 120, Comparative Physiological Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>ANHL 125, Veterinary Clinical Lab Techniques</td>
<td>3</td>
</tr>
<tr>
<td>ANHL 125L, Clinical Techniques Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>ANHL 135, Veterinary Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>ANHL 205, Diseases of Domestic Animals</td>
<td>3</td>
</tr>
<tr>
<td>ANHL 215, Veterinary Radiography</td>
<td>3</td>
</tr>
<tr>
<td>ANHL 215L, Veterinary Radiography Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ANHL 225, Animal Nursing Techniques and Anesthesiology</td>
<td>3</td>
</tr>
<tr>
<td>ANHL 226A, Surgical Nursing Procedures Lab I</td>
<td>1</td>
</tr>
<tr>
<td>ANHL 226B, Surgical Nursing Procedures Lab II</td>
<td>1</td>
</tr>
<tr>
<td>ANHL 235A, Directed Clinical Practice</td>
<td>2</td>
</tr>
<tr>
<td>ANHL 235B, Advanced Directed Clinical Practice</td>
<td>2</td>
</tr>
<tr>
<td>ANHL 250, Introduction to Laboratory Animals</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 107, General Biology-Lecture and Lab or BIOL 105, Principals of Biology and BIOL 106, Principals of Biology-Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 205, General Microbiology</td>
<td>5</td>
</tr>
</tbody>
</table>

*Total Units = 49*

For graduation requirements see Requirements for the Associate Degree on page 60.

**Electives as needed to meet minimum of 60 units required for the degree:**

**Recommended Elective:** Animal Health Technology 290.

**Transfer Information**

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

- **California Polytechnic Pomona**

**Animal Science Pre-Veterinary Science, B.S.:**

- Chemistry 200, 200L, 201, 201L; Biology 210A and 210B or 250; Physics 124A; Mathematics 141;
- Biology 205, 215; Animal Health 130, 110.
Students planning a major in anthropology should prepare themselves with undergraduate courses which complement that major. An undergraduate major in anthropology is not intended to be a training program, since professional anthropologists draw their experiences from a variety of academic backgrounds and personal experiences. It is recommended that a student who plans an anthropology major consult one of the anthropologists on the faculty for advice on courses that will be most valuable. For the non-major, anthropology will provide a unique cross-cultural understanding of other peoples.

### Associate in Arts Degree: Anthropology

<table>
<thead>
<tr>
<th>Units</th>
<th>Courses Required for the Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>ANTH 102, Intro to Physical Anthropology 3</td>
</tr>
<tr>
<td></td>
<td>ANTH 103, Intro to Cultural Anthropology 3</td>
</tr>
<tr>
<td></td>
<td>ANTH 107, Intro to Archaeology 3</td>
</tr>
<tr>
<td></td>
<td>ANTH 200, Intro to North American Indians 3</td>
</tr>
<tr>
<td></td>
<td>ANTH 210, Intro to California Indians 3</td>
</tr>
<tr>
<td></td>
<td>ANTH 215, Cultures of Latin American 3</td>
</tr>
<tr>
<td><strong>Total Units = 18</strong></td>
<td></td>
</tr>
</tbody>
</table>

Note: Only one Anthropology (ANTH) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see **Requirements for the Associate Degree** on page 60.

**Electives as needed to meet minimum of 60 units required for the degree:**

**Recommended Electives:** Anthropology 104, 115, 120; Biology 100, 110, 215, 230, 250, 255; Computer and Information Sciences 150; English 211, 215, 220; Foreign Languages*; Geography 101, 102; Geology 100, 101; History 105, 106, 150, 151; Philosophy 102A; Psychology 101, 112, 258 (or Math 119), 260; Sociology 101, 110; Speech Communications 103 or 135; Political Science 140.

*Although no course in a foreign language is specified in the above course sequence, a minimal familiarity with one foreign language is desirable. The particular language should be selected in consultation with the Behavioral Science Department anthropologists.

### Transfer Information

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog **TRANSFER INFORMATION** section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

- **San Diego State University**

- **University of California, San Diego**
  - Anthropology, B.A.: Anthropology 102 and 103; Mathematics 119 or Psychology 258 or Psychology 255 (Mesa).
  - Archaeology, B.A.: Mathematics 119 or Psychology 258 (Mesa) or Psychology 258.
  - Biological Anthropology, B.A.: Anthropology 102; Mathematics 119 or Psychology 255 (Mesa) or Psychology 258; Biology 210A and 210B.
Architecture

Certificate of Completion:

Architecture Technician ........................................ 17
Architecture Transfer ............................................. 17
Computer Aided Drafting ....................................... 11
Garden Design .................................................... 16
Landscape Architecture Technician ......................... 9

Certificate of Achievement:

Architecture Survey ............................................. 31
Architecture Technician ......................................... 28
Architecture Transfer ........................................... 34
Woodbury Transfer Track ....................................... 40
Construction Management .................................... 29
Landscape Architecture Technician ......................... 26
Landscape Architecture Transfer ............................ 30

Associate in Science Degree:

Architecture Survey ............................................. 31*
Architecture Technician ......................................... 28*
Architecture Transfer ........................................... 34*
Woodbury Transfer Track ....................................... 40*
Construction Management .................................... 29*
Landscape Architecture Technician ......................... 26*
Landscape Architecture Transfer ............................ 30*

*and electives as needed to meet minimum of 60 units required for the degree.

Certificate of Completion:

Architecture Technician*

Courses:
ARCH 105, Computer Aided Drafting ......................... 2
ARCH 106, Advanced Computer Aided Drafting .......... 3
ARCH 111, Architecture Production Detailing .......... 4
ARCH 200, Architecture Detailing ......................... 4
ARCH 250, Site Engineering ................................. 4
Total Units = 17

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:

Architecture Transfer*

Courses:
ARCH 126, History of the Ancient World Architecture or
ARCH 127, History of World Architecture: Romanesque through Contemporary .......... 3
ARCH 170, Architectural Design ......................... 4
ARCH 175, Advanced Architectural Design I .......... 5
ARCH 220, Architectural Delineation I ................. 2
ARCH 226, Architectural Theory ......................... 3
Total Units = 17

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.
Certificate of Completion:
Computer Aided Drafting*

Courses: Units
ARCH 105, Computer Aided Drafting .................. 2
ARCH 106, Advanced Computer Aided Drafting ...... 3
ARCH 107, Advanced Computer Aided Drawing I ...... 3
ARCH 101, Computer Aided Drawing and 3D Imaging ........................................ 3
Total Units = 11

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:
Garden Design*

Courses: Units
ARCH 135, Tree Identification .......................... 3
ARCH 136, Shrubs, Vines, Groundcover Identification ........................................ 3
ARCH 155, Environmental Design I: Creating Exterior Spaces .................................. 5
ARCH 190, Environmental Design II: Urban and Community Design .......................... 5
Total Units = 16

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:
Landscape Architecture Technician*

Courses: Units
ARCH 105, Computer Aided Drafting .................. 2
ARCH 106, Advanced Computer Aided Drafting ...... 3
ARCH 250, Site Engineering .................................. 4
Total Units = 9

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Achievement:
Architecture
Architecture Technician

Courses Required for the Major: Units
ARCH 100, Beginning Architectural Drafting ............ 2
ARCH 105, Computer Aided Drafting .................. 2
ARCH 106, Advanced Computer Aided Drafting ...... 3
ARCH 111, Architecture Production Detailing ........... 4
ARCH 127, History of World Architecture:
  Romanke through Contemporary ....................... 3
ARCH 130, Materials of Construction ................... 3
ARCH 200, Architecture Detailing ....................... 4
ARCH 205, Estimating ..................................... 3
ARCH 250, Site Engineering ................................ 4
Total Units = 28

Certificate of Achievement:
Architecture
Architecture Transfer

Courses Required for the Major: Units
ARCH 100, Beginning Architectural Drafting ............ 2
ARCH 101, Computer Aided Drawing and 3D Imaging ........................................ 3
ARCH 105, Computer Aided Drafting .................. 2
ARCH 126, History of the Ancient World Architecture:
  Romanke through Contemporary ....................... 3
ARCH 170, Architectural Design ......................... 4
ARCH 175, Advanced Architectural Design I ............ 5
ARCH 180, Advanced Architectural Design II .......... 5
ARCH 215, Strength of Materials ........................ 3
ARCH 221, Architectural Delineation II ................. 2
ARCH 220, Architectural Delineation I .................. 2
ARCH 221, Architectural Delineation II ................. 2

ARCH 111, Architecture Production Detailing ............ 4
ARCH 127, History of World Architecture:
  Romanke through Contemporary ....................... 3
ARCH 130, Materials of Construction ................... 3
ARCH 135, Tree Identification .......................... 3
ARCH 170, Architectural Design ......................... 4
ARCH 190, Environmental Design II: Urban and Community Design .......................... 5
ARCH 220, Architectural Delineation I .................. 2
ARCH 221, Architectural Delineation II ................. 2
Certificate of Achievement: Architecture

Woodbury Transfer Track

Courses Required for the Major: Units
ARCH 101, Computer Aided Drawing and 3D Imaging .............................................. 3
ARCH 111, Architecture Production Detailing ....... 4
ARCH 126, History of the Ancient World Architecture ......................................................... 3
ARCH 127, History of World Architecture: Romanesque through Contemporary .................. 3
ARCH 130, Materials of Construction ...................... 3
ARCH 155, Environmental Design I: Creating Exterior Spaces ............................................. 5
ARCH 170, Architectural Design ............................................. 5
ARCH 175, Advanced Architectural Design I ........... 4
ARCH 180, Advanced Architectural Design II ........... 5
ARCH 220, Architectural Delineation I .................... 2
ARCH 226, Architectural Theory ...................... ....... 3

Total Units = 40

Certificate of Achievement: Architecture

Construction Management

Courses Required for the Major: Units
ARCH 100, Beginning Architectural Drafting .......... 2
ARCH 105, Computer Aided Drafting ...................... 2
ARCH 111, Architecture Production Detailing ............ 4
ARCH 130, Materials of Construction ...................... 3
ARCH 205, Estimating ........................................... 3
BLDC 250, Construction Trades Management I ........... 3
BLDC 255, Construction Trades Management II ........... 3
BLDC 260, Building Codes and Zoning .................. 3
BLDC 268, Electrical, Plumbing, and Mechanical Codes ......................................................... 3
BLDC 295, Building Contractor's License Law .......... 3

Total Units = 29

Certificate of Achievement: Architecture

Landscape Architecture Technician

Courses Required for the Major: Units
ARCH 100, Beginning Architectural Drafting .......... 2
ARCH 105, Computer Aided Drafting ...................... 2
ARCH 135, Tree Identification ................................... 3
ARCH 136, Shrubs, Vines, Groundcover Identification ......................................................... 3
ARCH 155, Environmental Design I: Creating Exterior Spaces ............................................. 5
ARCH 190, Environmental Design II: Urban and Community Design ..................................... 5
ARCH 220, Architectural Delineation I .................... 2
ARCH 250, Site Engineering ................................... 4
ARCH 170, Architectural Design ..................................... 5
ARCH 175, Advanced Architectural Design I ........... 4
ARCH 180, Advanced Architectural Design II ........... 5
ARCH 221, Architectural Delineation II ........... 2
ARCH 250, Site Engineering ................................... 4

Total Units = 30

Certificate of Achievement: Architecture

Landscape Architecture Transfer

Courses Required for the Major: Units
ARCH 100, Beginning Architectural Drafting .......... 2
ARCH 135, Tree Identification ................................... 3
ARCH 136, Shrubs, Vines, Groundcover Identification ......................................................... 3
ARCH 155, Environmental Design I: Creating Exterior Spaces ............................................. 5
ARCH 190, Environmental Design II: Urban and Community Design ..................................... 5
ARCH 220, Architectural Delineation I .................... 2
ARCH 221, Architectural Delineation II ........... 2
ARCH 250, Site Engineering ................................... 4

Total Units = 26

Certificate of Achievement: Architecture

Associate in Science Degree: Architecture

Architecture Survey

Courses Required for the Major: Units
ARCH 100, Beginning Architectural Drafting .......... 2
ARCH 105, Computer Aided Drafting ...................... 2
ARCH 111, Architecture Production Detailing ............ 4
ARCH 126, History of the Ancient World Architecture or
ARCH 127, History of World Architecture: Romanesque through Contemporary .................. 3
ARCH 130, Materials of Construction ...................... 3
ARCH 135, Tree Identification ................................... 3
ARCH 170, Architectural Design ..................................... 4
ARCH 190, Environmental Design II: Urban and Community Design ..................................... 5
ARCH 220, Architectural Delineation I .................... 2
ARCH 221, Architectural Delineation II ........... 2
ARCH 250, Site Engineering ................................... 4

Total Units = 31

San Diego Mesa College • 2003-2004
### Associate in Science Degree: Architecture
#### Architecture Technician

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100, Beginning Architectural Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 105, Computer Aided Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 106, Advanced Computer Aided Drafting</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 111, Architecture Production Detailing</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 126, History of the Ancient World Architecture or ARCH 127, History of World Architecture: Romanesque through Contemporary</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 130, Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 200, Architecture Detailing</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 205, Estimating</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 250, Site Engineering</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Units = 28**

### Associate in Science Degree: Architecture
#### Architecture Transfer

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100, Beginning Architectural Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 105, Computer Aided Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 111, Architecture Production Detailing</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 130, Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 205, Estimating</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 250, Construction Trades Management I</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 255, Construction Trades Management II</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 260, Building Codes and Zoning</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 268, Electrical, Plumbing, &amp; Mechanical Codes</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 295, Building Contractor’s License Law</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units = 34**

### Associate in Science Degree: Architecture
#### Woodbury University Transfer Track

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100, Beginning Architectural Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 105, Computer Aided Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 111, Architecture Production Detailing</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 126, History of the Ancient World Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 127, History of World Architecture: Romanesque through Contemporary</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 130, Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 205, Estimating</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 220, Architectural Delineation I</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 221, Architectural Delineation II</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 226, Architectural Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units = 26**

### Associate in Science Degree: Architecture
#### Construction Management

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100, Beginning Architectural Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 105, Computer Aided Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 111, Architecture Production Detailing</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 130, Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 205, Estimating</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 250, Construction Trades Management I</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 255, Construction Trades Management II</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 260, Building Codes and Zoning</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 268, Electrical, Plumbing, &amp; Mechanical Codes</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 295, Building Contractor’s License Law</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units = 29**

### Associate in Science Degree: Architecture
#### Landscape Architecture Technician

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100, Beginning Architectural Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 105, Computer Aided Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 135, Tree Identification</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 136, Shrubs, Vines, Groundcover</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 155, Environmental Design I: Creating Exterior Spaces</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 190, Environmental Design II: Urban and Community Design</td>
<td>5</td>
</tr>
<tr>
<td>ARCH 220, Architectural Delineation I</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 250, Site Engineering</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Units = 26**
Associate in Science Degree:
Architecture

Landscape Architecture Transfer

Courses Required for the Major: Units
ARCH 100, Beginning Architectural Drafting .......... 2
ARCH 135, Tree Identification ............................ 3
ARCH 136, Shrubs, Vines, Groundcover Identification ............................................... 3
ARCH 155, Environmental Design I: Creating Exterior Spaces ............................................. 5
ARCH 170, Architectural Design .............................. 4
ARCH 190, Environmental Design II:
Urban and Community Design ............................ 5
ARCH 220, Architectural Delineation I ..................... 2
ARCH 221, Architectural Delineation II .................... 2
ARCH 250, Site Engineering .................................. 4
Total Units = 30

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

Architecture Option

Recommended Electives: Fine Arts 155A; Architecture 101, 155, 190, 270, 290, 296; Physics 124A, 125A or higher; Mathematics 104 or higher.

Landscape Architecture Option

Recommended Electives: Fine Arts 150A, 155A; Architecture 126, 127, 221, 226; Biology 100, 105, 120, 255; Business 119, 150, 155; Economics 120.

Transfer Information

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

University of California, Berkeley

Architecture, B.A.: Architecture 170, 175, and 220, 180 and 221; English 101 and 205 and 105 or 208; Mathematics 150 and 151; Physics 195A and 196A; one Natural Science course; two Social Science courses; and two Humanities courses.

California Polytechnic State University, San Luis Obispo

Bachelor of Landscape Architecture, B.S.:
Architecture 170, or 185, 220 or 221, 190; recommended courses: Architecture 136; Biology 250; Mathematics 104, 116, 119 or Psychology 258.

Environmental Horticulture, B.S.:
Architecture 135 and 136; Biology 250. Support courses required are: Accounting 116A; Business 140; Chemistry 130, 130L, 200, 200L; Mathematics 116, 118; Psychology 258.

Woodbury University

Architecture, B.A.: Architecture 220, 185, 170, 101, 130, 121, 126, 127, 175, 180; Speech 103; Art 107; Mathematics 104; History 100 or 101; Physics 124A, 124B.
Art-Fine Art

Description
The major in fine art consists of five "core" courses, plus five courses which define an "area of emphasis." Successful completion of the core courses indicates that a student has achieved an operational understanding of certain essential visual skills -- an accomplishment which the department recognizes by awarding a certificate of completion. Successful completion of area-of-emphasis courses indicates that a student has demonstrated the ability to apply and expand these understandings to specific problems of media and context. Students planning to transfer to four-year schools should consult catalogs for those schools. Some courses listed below as electives will transfer only as electives, rather than as lower division requirements.

Statement of Goals
This program is designed to provide students with a foundation for the study of fine art and enables students to obtain an Associate in Arts degree, complete preparation for the major in fine art, and transfer to a four-year school. The program also prepares students to do advanced work in art on their own or pursue a career in fields requiring visual literacy and design expertise.

Certificate of Completion:

<table>
<thead>
<tr>
<th>Certificate of Completion</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Art</td>
<td>15</td>
</tr>
<tr>
<td>Museum Studies</td>
<td>10</td>
</tr>
</tbody>
</table>

Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Area of Emphasis</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History Emphasis</td>
<td>30</td>
</tr>
<tr>
<td>Ceramics Emphasis</td>
<td>30</td>
</tr>
<tr>
<td>Design Emphasis</td>
<td>30</td>
</tr>
<tr>
<td>Museum Studies Emphasis</td>
<td>31</td>
</tr>
<tr>
<td>Three-Dimensional Emphasis</td>
<td>30</td>
</tr>
<tr>
<td>Two-Dimensional Emphasis</td>
<td>30</td>
</tr>
</tbody>
</table>

*and electives as needed to meet minimum of 60 units required for the degree.

Program Emphasis
There are six areas of emphasis in the fine art major: two-dimensional, design, three-dimensional, art history, ceramics, and museum studies.

Career Options
The study of fine art will prepare students to pursue careers in fields requiring visual literacy and design expertise such as commercial graphics, animation, business communications, journalism, architecture, industrial design, interior and landscape design, stage design, curatorial design, art conservation, and gallery management.

Certificate of Completion:

Fine Art*
The Certificate of Completion in Fine Art certifies that the student has completed the core course work in Fine Art and has demonstrated an operational understanding of critical visual skills.

Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 110, Art History: Prehistoric to Gothic or</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 111, Art History: Renaissance to Modern</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 150A, Design I</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 150B, Beginning Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 151, Three-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 155A, Freehand Drawing I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units = 15

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:

Museum Studies*
The Certificate of Completion in Museum Studies certifies that a student has completed all our museum studies courses, including an off-campus internship at a gallery or museum.

Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTF 161A, Gallery Exhibition Skills I</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 161B, Gallery Exhibition Skills II</td>
<td>3</td>
</tr>
<tr>
<td>ARTF 163, Art Museum/Gallery Internship</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Units = 10

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.
Associate in Arts Degrees:  
Art - Fine Art

Art History Emphasis  
The Associate Degree in Fine Art with an art history emphasis certifies that a student has explored a particular interest in art in a disciplined manner and has produced a range of work indicative of a thorough understanding of the visual arts as a discipline.

Courses Required for the Major:

Complete the Art Major Core Course Requirements:
ARTF 110, Art History: Prehistoric to Gothic or ARTF 111, Art History: Renaissance to Modern ............. 3
ARTF 150A, Design I............................................ 3
ARTF 150B, Beginning Graphic Design ..................... 3
ARTF 151, Three-Dimensional Design ....................... 3
ARTF 155A, Freehand Drawing I............................ 3

Complete the Requirements for the Art History Emphasis:
ARTF 110, Art History: Prehistoric to Gothic or ARTF 111, Art History: Renaissance to Modern ............. 3
ARTF 113, African, Oceanic, and Native American Art ................................................. 3

Select three courses from:
ARTF 107, Art Since 1960
ARTF 109, Nineteenth and Twentieth Century Art
ARTF 115, African Art
ARTF 120, North American Indian Art
ARTF 165A, Composition in Painting I
ARTF 175A, Sculpture I
ARTF 195A, Ceramics I
ARTF 210A, Life Drawing I ................................... 9

Total Units = 30

For graduation requirements see Requirements for the Associate Degree on page 60.
Electives as needed to meet minimum of 60 units required for the degree:

Note: Only one Fine Arts (ARTF) course from the above list may be used to satisfy SDCCD general education requirements.

Associate in Arts Degrees:  
Art - Fine Art

Ceramics Emphasis  
The Associate Degree in Fine Art with a ceramics emphasis certifies that a student has explored a particular interest in art in a disciplined manner and has produced a range of work indicative of a thorough understanding of the visual arts as a discipline.

Courses Required for the Major:

Complete the Art Major Core Course Requirements:
ARTF 110, Art History: Prehistoric to Gothic or ARTF 111, Art History: Renaissance to Modern ............. 3
ARTF 150A, Design I............................................ 3
ARTF 150B, Beginning Graphic Design ..................... 3
ARTF 151, Three-Dimensional Design ....................... 3
ARTF 155A, Freehand Drawing I............................ 3

Complete the Requirements for the Ceramics Emphasis:
ARTF 195A, Ceramics I ......................................... 3
ARTF 197A, Handbuilding Ceramics ........................ 3

Select three courses from:
ARTF 110, Art History: Prehistoric to Gothic or ARTF 111, Art History: Renaissance to Modern
ARTF 195B, Ceramics II
ARTF 196, Clay and Glaze Technology
ARTF 197B, Handbuilding Ceramics II
ARTF 220A, Life Sculpture I ................................. 9

Total Units = 30

For graduation requirements see Requirements for the Associate Degree on page 60.
Electives as needed to meet minimum of 60 units required for the degree:

Note: Only one Fine Art (ARTF) course from the above list may be used to satisfy SDCCD general education requirements. The department offers advanced studio courses for students who are building portfolios and/or extending their skills: ARTF 175B, 175C, 197C, and 220C. Students who have completed an entire sequence of studio art course work may also elect to take ARTF 260, 280, 281, or 290.

Associate in Arts Degrees:  
Art - Fine Art

Design Emphasis  
The Associate Degree in Fine Art with a design emphasis certifies that a student has explored a particular interest in art in a disciplined manner and
has produced a range of work indicative of a thorough understanding of the visual arts as a discipline.

Courses Required for the Major: Units

Complete the Art Major Core Course Requirements:

ARTF 110, Art History: Prehistoric to Gothic or

ARTF 111, Art History: Renaissance to Modern ......... 3
ARTF 150A, Design I .................. 3
ARTF 150B, Beginning Graphic Design .................. 3
ARTF 151, Three-Dimensional Design ..................... 3
ARTF 155A, Freehand Drawing I ...................... 3

Complete the requirements for the Design emphasis:

ARTF 152, Color Theory ........................................ 3
ARTF 155B, Freehand Drawing II .......................... 3
ARTF 198A, Introduction to Printmaking I .............. 3

Select two courses from:

ARTF 110, Art History: Prehistoric to Gothic
ARTF 111, Art History: Renaissance to Modern
ARTF 174A, Book Arts I
ARTF 177A, Contemporary Wood Furniture I ........... 6
Total Units = 30

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

Note: Only one Fine Art (ARTF) course from the above list may be used to satisfy SDCCD general education requirements. The department offers advanced studio courses for students who are building portfolios and/or extending their skills: ARTF 161B, 165B, 177C, and 198C. Students who have completed an entire sequence of studio art course work may also elect to take ARTF 260, 280, 281, or 290.

Associate in Arts Degrees:
Art - Fine Art

Museum Studies Emphasis
The Associate Degree in Fine Art with a museum studies emphasis certifies that a student has explored a particular interest in art in a disciplined manner and has produced a range of work indicative of a thorough understanding of the visual arts as a discipline.

Courses Required for the Major: Units

Complete the Art Major Core Course Requirements:

ARTF 110, Art History: Prehistoric to Gothic or
ARTF 111, Art History: Renaissance to Modern ......... 3
ARTF 150A, Design I .................. 3
ARTF 150B, Beginning Graphic Design .................. 3
ARTF 151, Three-Dimensional Design ..................... 3
ARTF 155A, Freehand Drawing I ...................... 3

Complete the requirements for the Museum Studies emphasis:

ARTF 161A, Gallery Exhibition Skills I ...................... 3
ARTF 161B, Gallery Exhibition Skills II ................. 3
ARTF 163, Art Museum/Gallery Internship ............... 4
Select two courses from:

ARTF 107, Art Since 1960
ARTF 109, Nineteenth and Twentieth Century Art
ARTF 110, Art History: Prehistoric to Gothic
ARTF 111, Art History: Renaissance to Modern
ARTF 115, African Art
ARTF 120, North American Indian Art
ARTF 165A, Composition in Painting I
ARTF 175A, Sculpture I
ARTF 195A, Ceramics I
ARTF 210A, Life Drawing I ....................... 6
Total Units = 31

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:
Recommended electives: Fine Art 152, 155B, 174A, 190A, 198A.

Note: Only one Fine Art (ARTF) course from the above list may be used to satisfy SDCCD general education requirements.

Associate in Arts Degrees:
Art - Fine Art

Three-Dimensional Emphasis
The Associate Degree in Fine Art with a three-dimensional emphasis certifies that a student has explored a particular interest in art in a disciplined manner and has produced a range of work indicative of a thorough understanding of the visual arts as a discipline.

Courses Required for the Major: Units

Complete the Art Major Core Course Requirements:

ARTF 110, Art History: Prehistoric to Gothic or
ARTF 111, Art History: Renaissance to Modern ......... 3
ARTF 150A, Design I .................. 3
ARTF 150B, Beginning Graphic Design .................. 3
ARTF 151, Three-Dimensional Design ..................... 3
ARTF 155A, Freehand Drawing I ...................... 3
Complete the requirements for the Three-Dimensional emphasis:
ARTF 175A, Sculpture I ....................................... 3
ARTF 195A, Ceramics I ........................................ 3
Select three courses from:
ARTF 110, Art History: Prehistoric to Gothic
ARTF 111, Art History: Renaissance to Modern
ARTF 161A, Gallery Exhibition Skills I
ARTF 174A, Book Arts I
ARTF 177A, Contemporary Wood Furniture I
ARTF 197A, Handbuilding Ceramics
ARTF 220A, Life Sculpture I .................................. 9
Total Units = 30

For graduation requirements see Requirements for the Associate Degree on page 60.
Electives as needed to meet minimum of 60 units required for the degree:
Recommended electives: Fine Art 107, 109, 115, 155B, 161B, 177B, 195B, 220B.

Note: Only one Fine Art (ARTF) course from the above list may be used to satisfy SDCCD general education requirements. The department offers advanced studio courses for students who are building portfolios and/or extending their skills: ARTF 165C, 165D, 198C, 210C. Students who have completed an entire sequence of studio art course work may also elect to take ARTF 260, 280, 281, or 290.

Associate in Arts Degrees: Art - Fine Art

Two-Dimensional Emphasis
The Associate Degree in Fine Art with a two-dimensional emphasis certifies that a student has explored a particular interest in art in a disciplined manner and has produced a range of work indicative of a thorough understanding of the visual arts as a discipline.

Courses Required for the Major: Units

Complete the Art Major Core Course Requirements:
ARTF 110, Art History: Prehistoric to Gothic or ARTF 111, Art History: Renaissance to Modern ........... 3
ARTF 150A, Design I......................................... 3
ARTF 151, Three-Dimensional Design ..................... 3
ARTF 150B, Beginning Graphic Design .................... 3
ARTF 155A, Freehand Drawing I.............................. 3
Complete the requirements for the Two-Dimensional Emphasis:
ARTF 210A, Life Drawing I ................................... 3
ARTF 165A, Composition in Painting I ..................... 3
Select three courses from:
ARTF 110, Art History: Prehistoric to Gothic
ARTF 111, Art History: Renaissance to Modern
ARTF 155B, Freehand Drawing II
ARTF 152, Color Theory
ARTF 190A, Black and White Art Photography
ARTF 198A, Introduction to Printmaking I ............... 9
Total Units = 30

For graduation requirements see Requirements for the Associate Degree on page 60.
Electives as needed to meet minimum of 60 units required for the degree:

Note: Only one Fine Art (ARTF) course from the above list may be used to satisfy SDCCD general education requirements. The department offers advanced studio courses for students who are building portfolios and/or extending their skills: ARTF 165C, 165D, 198C, 210C. Students who have completed an entire sequence of studio art course work may also elect to take ARTF 260, 280, 281, or 290.

Transfer Information
Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

San Diego State University
Art, Art History, B.A.: Fine Arts 110, 111, 113 (Mesa), 125 (Mesa, Miramar) and 150A, 155A.
University of California, San Diego


Visual Arts, Computing and the Arts, B.A.: Music 100; Fine Arts 109; Mathematics 121, 122, 150, 151; Computer Information Science 190.

Asian Studies
Courses relating to Asian cultures and civilizations are offered through an interdisciplinary approach in the following areas:

**English**
- Introduction to Asian Literature

**History**
- Introduction to Asian Civilizations
- Asian Civilizations in Modern Times

**Humanities**
- World Music

**Language Arts**
- Chinese, Japanese, Tagalog, Vietnamese

**Music**
- World Music

**Philosophy**
- Oriental Philosophy

Asian Pacific American Studies
Courses relating to Asian Pacific American Studies are offered through an interdisciplinary approach in the following areas:

**Filipino Studies**
- Filipino Studies

**History**
- U.S. History from the Asian Pacific American Perspective

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**Biology**

### Certificate of Completion:
- Applied Biotechnology: 6-8 units

### Associate in Science Degree:
- **Transfer Track**: 23-24 units
- **Applied Biology Track**: 27-31 units
- **Applied Health Track**: 21 units

*and electives as needed to meet minimum of 60 units required for the degree.

Biology is a natural science that focuses on physical and chemical processes of living organisms. This discipline explores how organisms acquire and use energy to maintain homeostasis, how they reproduce, and how they interact with each other and their environment. Scientific processes are emphasized as a means of answering these biological questions.

Biologists rely heavily on a chemistry foundation since living organisms are chemical systems.

The Biology program serves three areas of study. Biology provides a broad background of studies for the biology major preparing for transfer to a four-year institution. The biology program offers support courses in human anatomy, human physiology, and general microbiology which may be used to satisfy prerequisites for nursing programs and other allied health fields. The biology program provides courses in natural science to fulfill general education requirements.

The following list is a sample of the many career options available for the biology major. A few of these require an associate degree; most require a baccalaureate degree and some require a graduate level degree: agricultural consultant, animal health technician, biotechnology technician, dentist, environmental consultant, field biologist, forester, horticulturist, high school or college teacher, marine biologist, microbiologist, public health technician, physician, pharmaceutical researcher, research biologist, and veterinarian. In addition, a background in biology may be required for the following: registered nurse, physical therapist, respiratory therapist, dental...
assistant, health information technician, medical technician, physician’s assistant and optometrist.

The three associate degrees in biology require completion of the courses listed below. Additional general education and graduation requirements for the associate degree are listed in the catalog. The Associate Degree requires a minimum of 60 units.

Certificate of Completion: Applied Biotechnology*

Students may take the specific biotechnology courses (Biology 132 and 133 at Miramar College, or Biology 206 at City College) and receive a Certificate of Completion authorized and issued by the academic department. It is not intended to nor will it be recognized as an official state approved program. It is intended to provide students with intensive laboratory skills development experience to meet entry-level employment requirements in the biotechnology industry.

Courses: Units
BIOL 132, Applied Biotechnology I and
BIOL 133, Applied Biotechnology II (Miramar) ... 6-8
or
BIOL 206, Biotechnology Instrumentation (City) ... 6-8
Total Units = 6-8

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Associate in Science Degree: Biology

Transfer Track

Courses Required for the Major: Units
BIOL 107, General Biology-Lecture/Lab (City and Mesa) ................. 4
BIOL 205, General Microbiology .................................. 5
BIOL 206, Biotechnology Instrumentation (City) or
BIOL 132, Applied Biotechnology I and
BIOL 133, Applied Biotechnology II (Miramar) .... 6-8
CHEM 200, General Chemistry I Lecture and
CHEM 200L, General Chemistry I Lab ......................... 5
CHEM 201, General Chemistry II Lecture and
CHEM 201L, General Chemistry II Lab ....................... 5
**CISC 110, Microcomputer Applications or
CISC 181, Principles of Information Systems .......... 2-4
Total Units = 27-31

**Students may complete this course requirement by challenge exam or other equivalent proof of computer/software proficiency certified by the CISC department.

Note: Only one Biology (BIOL) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:
Recommended Electives: Biology 100, 101 (City), 110, 115, 120 (Mesa, Miramar), 130 (Mesa), 180, 200, 205, 215, 230, 235, 250, 290, 296.

Associate in Science Degree: Biology

Applied Biology Track

Courses Required for the Major: Units
BIOL 107, General Biology-Lecture/Lab (City and Mesa) ................. 4
BIOL 205, General Microbiology .................................. 5
BIOL 206, Biotechnology Instrumentation (City) or
BIOL 132, Applied Biotechnology I and
BIOL 133, Applied Biotechnology II (Miramar) .... 6-8
CHEM 200, General Chemistry I Lecture and
CHEM 200L, General Chemistry I Lab ......................... 5
CHEM 201, General Chemistry II Lecture and
CHEM 201L, General Chemistry II Lab ....................... 5
**CISC 110, Microcomputer Applications or
CISC 181, Principles of Information Systems .......... 2-4
Total Units = 27-31

**Students may complete this course requirement by challenge exam or other equivalent proof of computer/software proficiency certified by the CISC department.

Note: Only one Biology (BIOL) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:
Recommended Electives: Biology 100; Physics 120A, 120B, 121A, 121B.

Associate in Science Degree: Biology

Allied Health Track

Consult the Nursing Education faculty (City College) or a counselor to verify current course requirements for associate degree and baccalaureate nursing program preparation.

Courses Required for the Major: Units
BIOL 107, General Biology-Lecture/Lab (City and Mesa) ................. 4
BIOL 205, General Microbiology ......................... 5
BIOL 230, Human Anatomy ................................ 4
BIOL 235, Human Physiology ............................. 4
CHEM 100, & 100L, Fundamentals of Chemistry & lab ............................................................................ 4

Total Units = 21

Note: Only one Biology (BIOL) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:
Recommended Electives: Biology 100, 101 (City), 115, 120 (Mesa, Miramar), 130 (Mesa), 180, 215, 250; Chemistry 130, 130L.

Transfer Information
Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

California State University, San Marcos
Biological Sciences, B.S.: Complete the associate degree in Biology, Transfer Track, and add Chemistry 231, 231L, 233, 233L; and Mathematics 150 and 151.

San Diego State University
Biology, B.S., Applied Arts & Sciences, General: Biology 200, 210A, 210B or 215 and 250; Chemistry 200, 200L, 201, 201L, 231, 231L or 232L; Mathematics 121, 122; Physics 120A, 120B, 121A, 121B or Physics 124A, 124B.
Biology, Single Subject Teaching Credential, B.S.: Biology 200, 210A, 210B, 215; Chemistry 200, 200L, 201, 201L, 231, 231L or 232L; Mathematics 121, 122 or 150; Physics 120A, 120B, 121A, 121B, 124A, 124B; Astronomy 101; Geology 100, 101.

University of California, San Diego
Biology, General Biology, B.S.: Select three courses from the following: Biology 210A, 210A and 210B, Chemistry 100 and 100L, 130 and 130L, 200 and 200L, 201 and 201L, Physics 195A, 195B, 195C; Select three courses (at least one from Calculus) from: Mathematics 121, 122, 150, 151, 252, Philosophy 101; Computer and Information Sciences 192; Mathematics 119.

Bioengineering, B.S. Biotechnology: Mathematics 150, 151, 252, 254, 255; Physics 195A,B,C; Computer Information Sciences 192 or Engineering 115 (Mesa); Biology 210A; Chemistry 200, 200L, 201, 201L; Chemistry 231 and 233. *Admission by department approval only.

San Diego State University
For preparation for transfer into the Generic Nursing Program:
Nursing, B.S.: Must earn a “C” or better in each course except where otherwise specified. English 101 or 105, 205; Biology 105 and 106 (Miramar) or 107 (Mesa, City); Biology 205 and 230 (must earn a grade of “B” or higher); Chemistry 130, 130L; Mathematics 119 or Psychology 258 or Biology 200; Psychology 101, Psychology 230 (Mesa) or Child Development 101; Sociology 101, Speech 103; Humanities 12 units. This does not require completion of an associate degree in nursing. Pre-nursing students and registered nurses with an Associate Degree in Nursing who wish to transfer to San Diego State University’s School of Nursing, must earn a grade of “B” or higher in Biology 230 and 235. National League for Nursing examination scores, transfer credits, and demonstration of clinical competency are criteria used to individualize the baccalaureate curriculum for associate degree applicants. American Institutions 3 units.

Selected Studies, Pre-Baccalaureate Nursing, B.S.: For Registered Nurse graduates of diploma and associate degree programs: This program is specifically designed to foster articulation of courses for the diploma or associate degree graduate. Students must complete general education and graduation requirements for the associate degree. For further information, call San Diego State University School of Nursing at (619) 594-5357.

University of San Diego
Nursing, B.S.: Complete San Diego City College Associate in Science Degree in Nursing Education program. Select Sociology 101 and English 105 and
add Anthropology 103, Psychology 121 and Mathematics 119 or Psychology 258. **Note:** Additional nursing prerequisites may be met through transfer credit, challenging exams or by completing courses at the University of San Diego with a grade of "C" or better. Associate degree graduates may transfer 30 units of clinical nursing course work. For specific program information call: University of San Diego, Office of Undergraduate Admissions (619) 260-4506.

A multidisciplinary curriculum offering courses in American Institutions, Humanities, Social Sciences, and Learning Skills. The program builds a positive understanding and knowledge of the history, culture, and contributions of Africans and Afro-Americans. All students benefit from courses in Black Studies, especially those who pursue careers in social sciences, education, law, counseling, journalism, social work, health care professions, teaching, business, and public administration.

### Associate in Arts Degree: Black Studies

<table>
<thead>
<tr>
<th>Courses Required for the Major: Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Black Studies</strong> ........................: 27*</td>
</tr>
<tr>
<td>*and electives as needed to meet minimum of 60 units required for the degree.</td>
</tr>
</tbody>
</table>

Note: Only one Black Studies (BLAS) course from the above list may be used to satisfy SDCCD general education requirements.
Building Construction Technology

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:
Recommended Electives: Black Studies 106, 290, 296; Business 140; Chicano Studies 201, 210; Economics 120, 121; English 51; Geography 102; History 109, 110, 113; Mathematics 96 or higher; Philosophy 102A; Political Science 103; Psychology 135, 270.

Transfer Information
Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

- San Diego State University
  Africana Studies, B.A.: Black Studies 140A, 140B or Black Studies 104.
- University of California, San Diego
  Ethnic Studies, B.A.: History 113 (Mesa).

Consult a counselor for preparation for Third World Studies and other majors.

Certificate of Achievement:
Inspection

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
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Associate in Science Degree:
Inspection

<table>
<thead>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>28*</td>
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</tbody>
</table>

*and electives as needed to meet minimum of 60 units required for the degree.

This program is designed for the student who is interested in a construction-related career. This program is designed for the student who is interested in a Construction Inspection or Construction Management career. Program planning should occur with the assistance of a department member. All courses have been designed to be taken sequentially.

Certificate of Achievement:
Building Construction Technology Inspection

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDC 120, Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 130, Construction Practices I</td>
<td>4</td>
</tr>
<tr>
<td>BLDC 245, Building Inspection</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 250, Construction Trades Management I</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 255, Construction Trades Management II</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 260, Building Codes and Zoning</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 268, Electrical, Plumbing, and Mechanical Codes</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 130, Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 205, Estimating</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units 28

Associate in Science Degree:
Building Construction Technology Inspection

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDC 120, Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 130, Construction Practices I</td>
<td>4</td>
</tr>
<tr>
<td>BLDC 245, Building Inspection</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 250, Construction Trades Management I</td>
<td>3</td>
</tr>
<tr>
<td>BLDC 255, Construction Trades Management II</td>
<td>3</td>
</tr>
</tbody>
</table>
BLDC 260, Building Codes and Zoning .................3
BLDC 268, Electrical, Plumbing, and
    Mechanical Codes .....................................3
ARCH 130, Materials of Construction ..................3
ARCH 205, Estimating ..................................3

Total Units = 28

For graduation requirements see Requirements for the Associate Degree on page 60.
Electives as needed to meet minimum of 60 units required for the degree:
Recommended Electives: Building Construction Technology 290.

Construction Management
See “Architecture” on page 97.

Certificate of Achievement:
Business Administration

Units
Certificate of Achievement: Business Administration 30
Associate in Science Degree:
Business Administration 33*

*and electives as needed to meet minimum of 60 units required for the degree.

Prepares the student for transfer to a four-year college through maximum use of equivalent courses. It also provides a foundation for entry into business.

Certificate of Achievement:
Business Administration

Courses Required for the Major: Units
BUSE 100, Introduction to Business (recommended as a first semester course), or
MARK 100, Principles of Marketing .....................3
BUSE 119, Business Communications ..................3
BUSE 140, Business Law & the Legal Environment ....3
ACCT 116A, Principles of Accounting-Financial ......4
ACCT 116B, Principles of Accounting-Managerial ......4
CISC 181, Principles of Information Systems ..........4
ECON 120, Principles of Economics I ..................3
ECON 121, Principles of Economics II ..................3
MATH 119, Elementary Statistics ........................3

Total Units = 30

Associate in Science Degree:
Business Administration

Courses Required for the Major: Units
BUSE 100, Introduction to Business (recommended as a first semester course), or
MARK 100, Principles of Marketing .....................3
BUSE 119, Business Communications ..................3
BUSE 140, Business Law & the Legal Environment ....3
ACCT 116A, Principles of Accounting-Financial ......4
ACCT 116B, Principles of Accounting-Managerial ......4
CISC 181, Principles of Information Systems ..........4
ECON 120, Principles of Economics I ..................3
ECON 121, Principles of Economics II .................. 3  
ENGL 101, Reading and Composition ....................... 3  
MATH 119, Elementary Statistics ......................... 3  
**Total Units = 33**

Note: Only one Business (BUSE) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

**Recommended Electives:** Business 101, 143, 270; Marketing 100. Electives should be chosen after consultation with a counselor and with reference to programs at a four-year institution to which the student will transfer.

---

**Transfer Information**

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. **Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog.** Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

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**Alliant University (formerly United States International University)**

**2Plus 2 Program**

Under the 2Plus 2 Program, Mesa College students who complete any of the following A.S. degrees with a minimum 2.0 grade point average, may transfer to Alliant in any one of their School of Business undergraduate majors.

Associate of Science in Accounting; Business Administration; Business Management; Computer Business technology - Information Management Technology, Microcomputer Applications, Computer and Information Sciences; Escrow; Hotel-Motel Management; Real Estate; Travel and Tourism - Airline & Travel Agency, Meeting and Convention Planning.

Through the 2Plus 2 Program students will be guaranteed to have to take no more than 60 semester units to complete their Bachelors Degree at Alliant.

---

**San Diego State University**

**Business Administration, Accounting, B.S.:**

Accounting 116A, 116B; Business 140; Computer & Information Systems 181; Economics 120, 121; Mathematics 119; Mathematics 116 and 121 or 150.

**Economics, B.A.:** Economics 120, 121; Computer & Information Sciences 181; Mathematics 119; Mathematics 116 and 121 or 150; Accounting 116A.

**Information and Decision Systems, B.S.:** Accounting 116A, 116B; Business 119, 140; Computer & Information Sciences 181; Economics 120, 121; Mathematics 116 and 121 or 150; Mathematics 119.

**International Business, Latin American Emphasis, B.A.:** Accounting 116A, 116B; Economics 120, 121; Business 140; Computer & Information Sciences 181; History 115A, 115B; Mathematics 119; Spanish 202, 210, 211.

**Business Administration, Management or Marketing, B.S.:** Accounting 116A, 116B; Business 119, 140; Computer & Information Sciences 181; Economics 120, 121; Mathematics 119 or Psychology 258; Mathematics 116 and 121 or 150.

---

**California State University, San Marcos**

**Business Administration, B.S.:** Accounting 116A, 116B; Business 140; Economics 120, 121; Mathematics 121; Psychology 101 or Sociology 101; and computer competency. University of California, Berkeley

**Business Administration, B.A.:** Accounting 116A, 116B; Computer Information Science 181; Economics 120, 121; Mathematics 119 or Psychology 258; Mathematics 150, 151. Note: Additional English and foreign language courses are required. Consult a counselor.

---

**University of California, San Diego**

**Economics B.A.:** Economics 120 or 121; Mathematics 150, 151 and 252 or Mathematics 121 and 122.

**Economics Management Science, B.S.:** Accounting 116A or 116B; Mathematics 150, 151, 252 and 254; Economics 120 and 121.

---

**University of San Diego**

**Economics, B.A.:** Business 140; Accounting 116A and 116B; Computer and Information Sciences 181; Economics 120 and 121; Mathematics 150 or 121.
**Business Management**

**Certificate of Achievement:**

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Management</td>
<td>35</td>
</tr>
</tbody>
</table>

**Associate in Science Degree:**

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Management</td>
<td>47*</td>
</tr>
</tbody>
</table>

* and electives as needed to meet minimum of 60 units required for the degree.

Intended for the student who wishes to plan a program in preparation for a business occupational area of his/her own choice. Flexible course selection is emphasized to enable students to achieve their specific educational, vocational and personal goals. Students planning to transfer to a four-year college or university should select the Business Administration major.

**Certificate of Achievement: Business Management**

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSE 100, Introduction to Business (recommended as a first semester course)</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 101, Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 119, Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 140, Business Law and the Legal Environment</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 116A, Principles of Accounting - Financial</td>
<td>4</td>
</tr>
<tr>
<td>CISC 181, Principles of Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>ECON 120, Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 121, Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>MARK 100, Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>*Occupational Electives</td>
<td>12</td>
</tr>
</tbody>
</table>

**Total Units = 35**

**Associate in Science Degree: Business Management**

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSE 100, Introduction to Business (recommended as a first semester course)</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 101, Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 119, Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 140, Business Law and the Legal Environment</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 150, Human Relations in Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 201, Business Organizations and Management</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 116A, Principles of Accounting - Financial</td>
<td>4</td>
</tr>
<tr>
<td>CISC 181, Principles of Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>ECON 120, Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 121, Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>MARK 100, Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>*Occupational Electives</td>
<td>12</td>
</tr>
</tbody>
</table>

**Total Units = 47**

Note: Only one Business (BUSE) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see **Requirements for the Associate Degree** on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

**Recommended Electives:** Accounting 116B; Business 143, 155, 270; Computer Business Technology 180; Marketing 105.

*These courses should be planned with the assistance of a counselor and must be approved by a department member. Approval forms may be obtained in the counseling office.
Chicano Studies

The Chicano Studies program provides an interdisciplinary approach, examines the interaction of the Chicano with the majority culture in a bilingual, bicultural setting. Chicano Studies courses are taught in English. The Chicano Studies curriculum is designed to meet general education requirements for all students. It also prepares students for upper division work toward a B.A. in Chicano Studies and professional fields, e.g., social sciences, humanities, law, teaching, social work, and public administration. Chicano Studies courses transfer to four-year colleges and universities.

## Associate in Arts Degree: Chicano Studies

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIC 110A, Introduction to Chicano Studies</td>
<td>3</td>
</tr>
<tr>
<td>CHIC 110B, Introduction to Chicano Studies</td>
<td>3</td>
</tr>
<tr>
<td>CHIC 130, Mexican Literature in Translation (City)</td>
<td>3</td>
</tr>
<tr>
<td>CHIC 135, Chicano Literature</td>
<td>3</td>
</tr>
<tr>
<td>CHIC 203</td>
<td>5</td>
</tr>
<tr>
<td>CHIC 204</td>
<td>5</td>
</tr>
<tr>
<td>CHIC 210, Chicano Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

Select six units from the following:

- Chicano Studies 170, 201; English 101;
- Speech Communications 103

Total Units = 28

Note: Only one Chicano Studies (CHIC) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

Recommended Electives: Anthropology 200, 210, 215; Fine Arts 130; Black Studies 100, 120; Chicano Studies 138, 141A, 141B, 150, 190, 201, 290, 296; History 115A, 115B, 150, 151; Sociology 101, 110; English 51, 105.

## Transfer Information

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

- **San Diego State University**

- **University of California, San Diego**
  - Consult a counselor for preparation for Third World Studies and other related majors.

- **San Diego State University**
  - Liberal Studies Major with Emphasis in Education, B.A.: Complete the associate degree in bilingual studies and see a counselor for additional lower division general education and major preparation requirements.

- **University of California, San Diego**
  - UCSD does offer a Chicano Studies major. See the UCSD catalog, Literature and Teacher Education major.

### Chemistry

See “Physical Sciences” on page 158.
Description
Child Development offers programs for Career and transfer students. Certificates of Completion, Certificates of Achievement and Associate Degree programs are available to students interested in a range of child development opportunities and in meeting the requirements for the State of California Child Development permits and the California State Department of Social Services, Title 22, Community Care Licensing.

Program Emphasis
The Child Development program offers course work, training and supervised practicum experiences to meet state licensing requirements for working in centers, schools, child care homes and service related agencies. This skills and knowledge gained in beginning courses provide the framework and foundation for more specialized courses.

Career Options
The San Diego Community College District offers certificates, degrees and transfer options in the field of Child Development/Early Childhood Education. The Family Child Care Certificate offered at City, Mesa, and Miramar and the Home Day Care Certificate offered at Mesa provides skills and knowledge for child care in family settings. The Infant/Toddler Care Certificate of Completion offers skills for working with children aged birth to three years. The School Age Child Care Certificate of Completion offered at City and Mesa provides training for working with school age children. The Assistant Teacher Certificate of Completion prepares an individual to work in public and private child care settings. The Certificate of Achievement options, Associate Teacher, Teacher, and Master Teacher, prepare individuals for higher level instructional positions. The Assistant Teacher, Associate Teacher, Teacher, and Master Teacher certificates meet the requirements for the State of California Child Development Permits. The Child Development Associate in Science Degrees prepare for teacher, master teacher, director, and site supervisory positions.

*Certificates of Completion
These are department awards in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:
- **Assistant Teacher**
  - Units: 10-13

Certificate of Achievement:
- **Associate Teacher**
  - Units: 18-19
- **Master Teacher**
  - Units: 32-35
- **Teacher**
  - Units: 26-29

Associate in Science Degree:
- **Child Development**
  - Units: 26-29*
- **Site Supervisor**
  - Units: 35-38*
  *and electives as needed to meet minimum

Courses:
- **CHIL 101, Human Growth and Development** .............. 3
- **CHIL 180, Nutrition, Health & Safety for Children** ...... 3
- **Select one course from:**
  - **CHIL 111, Curriculum: Music/Motor Skills**
  - **CHIL 121, Curriculum: Art**
  - **CHIL 131, Curriculum: Language/Science**
  - **CHIL 141, Child, Family and Community** ................. 3
- **Select one course from:**
  - **CHIL 160, Observing and Understanding Children**
  - **CHIL 161, Observations and Issues in Child Development**
  - **CHIL 270, Work Experience**
  - **CHIL 291, or 291A, or 291B, or 291C, or 291D, Child Development Center Practicum** ...................... 1-4

**Total Units = 10-13**
Certificate of Completion:  
**Family Child Care***
This certificate prepares students with basic training to care for children in a licensed home/family settings. Child Development courses must be completed with a grade of "C" or better.

**Courses:**
- CHIL 100, Introduction to Child Development or CHIL 101, Human Growth and Development .......... 3
- CHIL 180, Nutrition, Health & Safety for Children ........ 3

**Select one course from:**
- CHIL 111, Curriculum: Music/Motor Skills  
- CHIL 121, Curriculum: Art  
- CHIL 131, Curriculum: Language/Science  
- CHIL 175, The Infant Toddler ................................ 3

**Total Units = 9**

Certificate of Completion:  
**Home Day Care***
This certificate prepares students for entry level positions as home day care providers. Child Development courses must be completed with a grade of "C" or better.

**Courses:**
- CHIL 100, Intro to Child Development or CHIL 101, Human Growth and Development ............. 3
- CHIL 175, The Infant Toddler ................................ 3
- CHIL 180, Nutrition, Health and Safety for Children ............................................... 3

**Select one course from:**
- BUSE 119, Business Communications  
- CONF 110, Personal Financial Management ............. 3

**Total Units = 12**

Certificate of Completion:  
**Infant/Toddler Care***
This certificate prepares students with basic training to work with children aged birth to three years in licensed home/family care and center programs. Child Development courses must be completed with a grade of "C" or better.

**Courses:**
- CHIL 100, Introduction to Child development or CHIL 101, Human Growth and Development .......... 3
- CHIL 175, The Infant/Toddler Caregiving ................. 3

**Total Units = 9**

Certificate of Completion:  
**School Age Child Care***
This certificate prepares students for entry level positions as before- and after-school care providers, recreation leaders, and camp counselors. Child Development courses must be completed with a grade of "C" or better.

**Courses:**
- CHIL 100, Intro to Child Development or CHIL 101, Human Growth and Development ............. 3
- CHIL 152, School Age Program Planning .................. 3

**Select two courses from:**
- CHIL 185, Computer Usage with Young Children  
- MATH 210A, Concepts of Elem School Mathematics I  
- MUSI 110, Music for Elementary School Teachers  
- PHYE 240, Physical Education in the Elementary Schools .................................. 3,3

**Total Units = 12**

Certificate of Achievement:  
**Child Development Associate Teacher***
This certificate prepares students to provide instruction to children and supervise Assistant Teachers. Child Development courses must be completed with a grade of "C" or better.

**Courses Required for the Major:**
- CHIL 101, Human Growth and Development .......... 3
CHIL 141, Child, Family and Community ............... 3
CHIL 180, Nutrition, Health & Safety for Children .... 3

Select two courses from:
CHIL 111, Curriculum: Music/Motor Skills
CHIL 121, Curriculum: Art
CHIL 131, Curriculum: Language/Science ............... 3,3

Select three or more units from:
CHIL 160, Observing and Understanding Children
CHIL 161, Observations & Issues in Child Development
CHIL 270, Work Experience
CHIL 291, or 291A, or 291B, or 291C, or 291D, Child Development Center Practicum ............... 3-4

Total Units = 18-19

Certificate of Achievement:
Child Development
Teacher
This certificate prepares students to provide instruction to children and supervise Assistant and Associate Teachers. Child Development courses must be completed with a grade of "C" or better.

Courses Required for the Major: Units
CHIL 101, Human Growth and Development ............ 3
CHIL 111, Curriculum: Music/Motor Skills ............. 3
CHIL 121, Curriculum: Art .................................. 3
CHIL 131, Curriculum: Language/Science ............. 3
CHIL 141, Child, Family and Community ............... 3
CHIL 180, Nutrition, Health & Safety for Children .... 3
CHIL 151, Program Planning ............................... 3

and concurrent enrollment in:
CHIL 270, Work Experience, or
CHIL 275, Supervised Field Study ........................ 2-4

Select one of the following three options:
CHIL 160, Observing & Understanding Children and
CHIL 161, Observation & Issues in Child Development

or
CHIL 165, Children with Special Needs or
CHIL 175, Infant/Toddler ................................. 3-4

Total Units = 26-29

Certificate of Achievement:
Child Development
Master Teacher
This certificate prepares students to provide instruction to children and supervised Assistant/Associate Teachers and Teachers. It further prepares the Master Teacher to coordinate curriculum and staff development. Child Development courses must be completed with a grade of "C" or better.

Courses Required for the Major: Units
CHIL 101, Human Growth and Development ............ 3
CHIL 111, Curriculum: Music/Motor Skills ............. 3
CHIL 121, Curriculum: Art .................................. 3
CHIL 131, Curriculum: Language/Science ............. 3
CHIL 141, Child, Family and Community ............... 3
CHIL 151, Program Planning ............................... 3
CHIL 180, Nutrition, Health & Safety for Children .... 3

AND
Select one of the following three options that is NOT part of your Specialization (see Specializations listed below) to complete the minimum 24 unit core requirement:
CHIL 160, Observing & Understanding Children
CHIL 161, Observation & Issues in Child Development

or
CHIL 165, Children with Special Needs or
CHIL 175, Infant/Toddler .................................. 3-4

AND
CHIL 215, Adult Supervision & Mentoring in Early Childhood Settings ................................. 3

AND
CHIL 270, Work Experience, or
CHIL 275, Supervised Field Study (with concurrent enrollment in CHIL 151, Program Planning) .................................................. 2-4

AND
Select one of the following Specializations for a total of 6 - 7 units:
Guiding Young Children
CHIL 160, Observing & Understanding Children
CHIL 161, Observation & Issues in Child Development
CHIL 162, Observing and Guiding Child Behavior or
Family Life
CHIL 160, Observing & Understanding Children
CHIL 161, Observation & Issues in Child Development

CHIL 188, Child Abuse or
Special Needs
CHIL 165, Children with Special Needs
CHIL 166, Special Needs Curriculum or
Infant/Toddler
CHIL 175, The Infant/Toddler
CHIL 176, Principles of Infant/Toddler Caregiving or
School Age
CHIL 152, School-Age Program Planning and
Select one course from:
CHIL 185, computer usage with young children or
MATH 210A, Concepts of Elementary School Mathematics or
MUSI 110, Music for the Elementary School Teachers or
PHYE 240, Physical Education in the Elementary Schools ....................................................... 3

Total Units = 35-39

Associate in Science Degree: Child Development

This degree prepares students to provide instruction to children and supervise Assistant and Associate Teachers. Child Development courses must be completed with a grade of "C" or better. Additional general education and graduation requirements are listed in the Academic Requirements section of this catalog. The Associate Degree requires a minimum of 60 units.

Courses Required for the Major Units
CHIL 101, Human Growth and Development .......... 3
CHIL 111, Curriculum: Music/Motor Skills .......... 3
CHIL 121, Curriculum: Art .............................. 3
CHIL 131, Curriculum: Language/Science .......... 3
CHIL 141, Child, Family and Community .......... 3
CHIL 180, Nutrition, Health & Safety for Children .... 3
CHIL 151, Program Planning ................................. 3
and concurrent enrollment in:
CHIL 270, Work Experience, or
CHIL 275, Supervised Field Study ................... 2-4
Select one of the following three options:
CHIL 160, Observing & Understanding Children and
CHIL 161, Observation & Issues in Child Development or
CHIL 165, Children with Special Needs or
CHIL 175, Infant/Toddler .............................. 3-4

Total Units = 26-29

Associate in Science Degree: Child Development

Site Supervisor

This degree prepares students to supervise single site programs, provide instruction to children and coordinate curriculum and staff development. Child Development courses must be completed with a grade of "C" or better. Additional general education and graduation requirements are listed in the Academic Requirements section of this catalog. The associate degree requires a minimum of 60 units.

Courses Required for the Major Units
CHIL 101, Human Growth and Development .......... 3
CHIL 111, Curriculum: Music/Motor Skills .......... 3
CHIL 121, Curriculum: Art .............................. 3
CHIL 131, Curriculum: Language/Science .......... 3

CHIL 141, Child, Family and Community .......... 3
CHIL 151, Program Planning ................................. 3
and concurrent enrollment in:
CHIL 270, Work Experience, or
CHIL 275, Supervised Field Study ................... 2-4
CHIL 180, Nutrition, Health & Safety for Children .... 3
CHIL 202, Administration of Early Childhood Programs ....................................................... 3
CHIL 210, Supervision of Early Childhood Programs .. 3
CHIL 215, Adult Supervision and Mentoring in Early Childhood Settings .................................. 3
Select one of the following three options:
CHIL 160, Observing & Understanding Children and
CHIL 161, Observation & Issues in Child Development or
CHIL 165, Children with Special Needs or
CHIL 175, Infant/Toddler .............................. 3-4

Total Units = 35-38


Courses offered by San Diego Community College District that meet experience requirements for Certificates and Degrees:

CHIL 160, Observing & Understanding Children, 2 units (16 days)
CHIL 161, Observation & Issues in Child Development, 2 units (16 days)
CHIL 270, Work Experience, 1 unit (16 days)
CHIL 270, Work Experience, 2 unit (32 days)
CHIL 270, Work Experience, 3 unit (48 days)
CHIL 270, Work Experience, 4 unit (64 days)
CHIL 275, Supervised Field Study, 2 units (32 days)
CHIL 291, Child Development Practicum, 1 unit (16 days)
CHIL 291, Child Development Practicum, 2 unit (32 days)
CHIL 291A, Child Development Practicum, 1 unit (16 days)
CHIL 291B, Child Development Practicum, 1 unit (16 days)
CHIL 291C, Child Development Practicum, 1 unit (16 days)
CHIL 291D, Child Development Practicum, 1 unit (16 days)

Transfer Information

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses
may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult with the current catalog of the transfer institution and consult with a counselor.

■ San Diego State University

Child and Family Development, B.S.: Biology 105, 106 (Miramar) or 107 (City, Mesa); Child Development 101*, 141; Psychology 135; Child Development 151, 160 and 6 units from 111, 121, 131; Psychology 101; Mathematics 119 or Psychology 258; Sociology 101.

* acceptable only if Psychology 101 or Sociology 101 taken prior to transfer.

Liberal Studies, Emphasis in Education, B.S.: Consult a counselor for specific course requirements.

Gerontology, B.A.: Human Services 101 (City), Biology 107 or 105 and 106 (Miramar); Health Education 101; Psychology 135; Psychology 101; Human Services 110 (City); Foreign Language competence and additional general education courses are required.

■ University of California, San Diego

Human Development, B.A.: Mathematics 119 or Psychology 258; Biology 210A, 210B; Mathematics 121, 122 or 150, 151 and 252; Philosophy 101; Computer and Information Sciences 192; Anthropology 102, 103; Sociology 101.

Computer Aided Design/Drafting

See “Architecture” on page 97.

<table>
<thead>
<tr>
<th>Certificate of Completion:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Assistant</td>
<td>10</td>
</tr>
<tr>
<td>E-Commerce</td>
<td>15</td>
</tr>
<tr>
<td>Insurance Technician</td>
<td>10</td>
</tr>
<tr>
<td>Legal Secretary</td>
<td>10</td>
</tr>
<tr>
<td>Medical Office Assistant</td>
<td>10</td>
</tr>
<tr>
<td>Office Records Management</td>
<td>10</td>
</tr>
<tr>
<td>Typist/Word Processor</td>
<td>10</td>
</tr>
<tr>
<td>Web Development</td>
<td>10</td>
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<tr>
<td>Website Designer</td>
<td>8.5</td>
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<table>
<thead>
<tr>
<th>Certificate of Achievement:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Assistant</td>
<td>23-25</td>
</tr>
<tr>
<td>Information Management Technology</td>
<td>20</td>
</tr>
<tr>
<td>Legal Administrative Assistant</td>
<td>27-29</td>
</tr>
<tr>
<td>Medical Business Assistant</td>
<td>28-31</td>
</tr>
<tr>
<td>Medical Transcription Specialist</td>
<td>23-26</td>
</tr>
<tr>
<td>Microcomputer Applications</td>
<td>24-26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associate in Science Degree:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Assistant</td>
<td>25-27.5*</td>
</tr>
<tr>
<td>Information Management Technology</td>
<td>20*</td>
</tr>
<tr>
<td>Legal Administrative Assistant</td>
<td>29-31*</td>
</tr>
<tr>
<td>Medical Business Assistant</td>
<td>28-31*</td>
</tr>
<tr>
<td>Medical Transcription Specialist</td>
<td>23-26*</td>
</tr>
<tr>
<td>Microcomputer Applications</td>
<td>33.5-35.5*</td>
</tr>
</tbody>
</table>

*and electives as needed to meet minimum of 60

Administrative Assistant

Certificate of Completion:

Administrative Assistant*

This certificate prepares students for entry-level positions as administrative assistants.

<table>
<thead>
<tr>
<th>Courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBTE 101, Keyboarding for Computers</td>
<td>1</td>
</tr>
<tr>
<td>CBTE 111, Windows 95 or CBTE 112 Windows 98</td>
<td>1</td>
</tr>
<tr>
<td>CBTE 120, Microsoft Word or CBTE 130, Beginning Corel WordPerfect</td>
<td>2</td>
</tr>
</tbody>
</table>
Certificate of Completion:

E-Commerce*

This certificate prepares students for employment in a variety of Web Based Occupations that utilize the leading edge technologies of E-Commerce.

Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBTE 173, Introduction to E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>CBTE 151, Introduction to Microsoft Access</td>
<td>1</td>
</tr>
<tr>
<td>CBTE 161, Learning the Internet</td>
<td>1</td>
</tr>
<tr>
<td>CBTE 162, Web Page Creation</td>
<td>2</td>
</tr>
<tr>
<td>CBTE 200, Office Telecommunications</td>
<td>2</td>
</tr>
<tr>
<td>CBTE 210, Computers in Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 119, Business Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units = 15

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:

Insurance Technician*

This certificate prepares students for entry-level positions as insurance technicians.

Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBTE 102, Keyboarding</td>
<td>2</td>
</tr>
<tr>
<td>CBTE 120, Microsoft Word or CBTE 130, Beginning Corel WordPerfect</td>
<td>2</td>
</tr>
<tr>
<td>CBTE 140A, Intro to Microsoft Excel</td>
<td>1</td>
</tr>
<tr>
<td>CBTE 151, Intro to Microsoft Access</td>
<td>1</td>
</tr>
<tr>
<td>CBTE 161, Learning the Internet</td>
<td>1</td>
</tr>
<tr>
<td>CBTE 164, Intro to Microsoft Outlook</td>
<td>1</td>
</tr>
<tr>
<td>CBTE 190, Intro to Quicken</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Units = 10

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:

Medical Office Assistant*

This certificate prepares students for entry-level positions as medical office assistants.

Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBTE 164, Intro to Microsoft Outlook</td>
<td>1</td>
</tr>
<tr>
<td>CBTE 230, Medical Transcription</td>
<td>3</td>
</tr>
<tr>
<td>CBTE 237, Medical Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>CBTE 238, Health Insurance Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units = 10

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:

Office Records Management*

This certificate prepares students for entry-level positions as office record managers in a variety of occupations.

Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBTE 120, Microsoft Word or CBTE 130, Beginning Corel WordPerfect</td>
<td>2</td>
</tr>
<tr>
<td>CBTE 151, Intro to Microsoft Access</td>
<td>2</td>
</tr>
<tr>
<td>CBTE 164, Intro to Microsoft Outlook</td>
<td>1</td>
</tr>
<tr>
<td>CBTE 190, Intro to Quicken</td>
<td>2</td>
</tr>
<tr>
<td>CBTE 200, Office Telecommunications</td>
<td>3</td>
</tr>
<tr>
<td>CBTE 205, Records Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units = 10

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.
Certificate of Completion:
Typist/Word Processor*

This certificate prepares students for entry-level positions as typists and word processors in a variety of occupations.

Courses:          Units
CBTE 101, Keyboarding for Computers .................. 1
CBTE 102, Keyboarding .................................... 2
CBTE 111, Windows 95 or CBTE 112, Windows 98 ...... 1
CBTE 120, Microsoft Word or CBTE 130,
   Beginning Corel WordPerfect .......................... 2
CBTE 122, Microsoft Word or CBTE 132 Corel Word
   Perfect .................................................... 3
CBTE 164, Intro to Microsoft Outlook .................. 1

Total Units = 10

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:
Web Development*

This certificate introduces students to web authoring tools.

Courses:          Units
CBTE 112, Intro to Windows 98 .......................... 1
CBTE 126, Document Processing .......................... 3
CBTE 161, Learning the Internet .......................... 1
CBTE 162, Web Page Creation .............................. 2
MULT 101, Intro to Multimedia ............................ 3

Total Units = 10

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:
Website Designer*

This certificate prepares students for entry-level positions as web page designers.

Courses:          Units
CBTE 126, Document Processing .......................... 3
CBTE 151, Intro to Microsoft Access .................... 1
CBTE 161, Learning the Internet .......................... 1
CBTE 162, Web Page Creation .............................. 2
CBTE 198A or CBTE 198B, Project Lab .......................... 0.5

Total Units = 8.5

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Administrative Assistant

Prepares the student for employment in business or civil service as a general office clerk, clerk-typist, file clerk, receptionist, cashier, word processor, machine transcriptionist, or other positions not requiring stenography.

Certificate of Achievement:
Computer Business Technology

Administrative Assistant

Courses Required for the Major:          Units
CBTE 101, or 102, or 103, Keyboarding .......... 1-3
CBTE 111, Windows 95 or CBTE 112, Windows 98 ...... 1
CBTE 120 or 120A/B, Microsoft Word, or
   CBTE 130 or 130A/B Corel WordPerfect ............. 2
CBTE 122, Microsoft Word or
   CBTE 132 Corel WordPerfect .......................... 3
CBTE 140A, Intro to Microsoft Excel .................. 1
CBTE 151, Intro to Microsoft Access .................. 1
CBTE 170, Desktop Publishing .......................... 2
CBTE 205, Records Management .......................... 3
CBTE 210, Computers in Business, or
   CBTE 211, Automated Office Procedures ............ 3
BUSE 101, Business Mathematics .......................... 3
BUSE 119, Business Communications .......................... 3

Total Units = 23-25

Associate in Science Degree:
Computer Business Technology

Administrative Assistant

Courses Required for the Major:          Units
CBTE 101, or 102, or 103, Keyboarding .......... 1-3
CBTE 111, Windows 95 or CBTE 112, Windows 98 ...... 1
CBTE 120 or 120A/B, Microsoft Word, or
   CBTE 130 or 130A/B Corel WordPerfect ............. 2
CBTE 122, Microsoft Word or
   CBTE 132 Corel WordPerfect .......................... 3
CBTE 140A, Intro to Microsoft Excel .................. 1
CBTE 151, Intro to Microsoft Access .................. 1
CBTE 170, Desktop Publishing .......................... 2
CBTE 198A or CBTE 198B, Project Lab .......................... 0.5
CBTE 200, Office Telecommunications .......................... 2
Information Management Technology

The role of the information and records manager in information technology is selection and design of systems, equipment, control, and maintenance of a records center.

Certificate of Achievement: Computer Business Technology

Information Management Technology

Courses Required for the Major: Units
CBTE 111, Windows 95 or CBTE 112, Windows 98...... 1
CBTE 151, Intro to Microsoft Access .......................... 1
CBTE 161, Learning the Internet.............................. 1
CBTE 180, Microsoft Office..................................... 3
CBTE 200, Office Telecommunications....................... 2
CBTE 205, Records Management............................ 3
CBTE 210, Computers in Business or
CBTE 211, Automated Office Procedures............... 3
BUSE 119, Business Communications...................... 3
CISC 130, Intro to Local Area Networks................... 1
SPEE 103, Oral Communication.............................. 3

Total Units = 21

Legal Administrative Assistant

Provides training for specialized secretarial work in law offices, in legal departments of banks, insurance companies, real estate firms, or other business organizations, or civil service.

Certificate of Achievement: Computer Business Technology

Legal Administrative Assistant

Courses Required for the Major: Units
CBTE 101, or 102, or 103, Keyboarding ................... 1-3
CBTE 111, Windows 95 or CBTE 112, Windows 98...... 1
CBTE 120 or 120A/B, Microsoft Word, or
CBTE 130 or 130A/B Corel WordPerfect................... 2
CBTE 122, Microsoft Word or
CBTE 132 Corel WordPerfect............................... 3
CBTE 140A, Intro to Microsoft Excel......................... 1
CBTE 164, Intro to Microsoft Outlook....................... 1
CBTE 205, Records Management............................ 3
CBTE 221, Legal Office Procedures I ....................... 3
CBTE 222, Legal Office Procedures II...................... 3
BUSE 119, Business Communications...................... 3
LEGL 100 (City, Miramar) Legal Procedures.............. 3
LEGL 110, (City, Miramar) Legal Communications...... 3

Total Units = 27-29
Medical Business Assistant
Prepares the student for employment in a hospital, clinic, physician's office, insurance company, and insurance service bureau.

Certificate of Achievement:
Computer Business Technology
Medical Business Assistant

Courses Required for the Major: Units
CBTE 120 or 120A/B, Microsoft Word, or
   CBTE 130 or 130A/B Corel WordPerfect ............ 2
CBTE 164, Intro to Microsoft Outlook .................... 1
CBTE 237, Medical Office Procedures ....................... 3
CBTE 238, Health Insurance Procedures .................... 3
CBTE 270, Work Experience ................................ 1-4
ACCT 186, Accounting for Professional Offices .......... 3
BUSE 119, Business Communications ........................ 3
MEDA 105, Human Anatomy and Physiology ................ 3
MEDA 110, Medical Terminology ............................ 3
MEDA 115, Pathophysiology .................................. 3
MEDA 120, Basic Clinical Assisting .......................... 3
Total Units = 28-31

Associate in Science Degree:
Computer Business Technology
Medical Business Assistant

Courses Required for the Major: Units
CBTE 120 or 120A/B, Microsoft Word, or
   CBTE 130 or 130A/B Corel WordPerfect ............ 2
CBTE 164, Intro to Microsoft Outlook .................... 1
CBTE 237, Medical Office Procedures ....................... 3
CBTE 238, Health Insurance Procedures .................... 3
CBTE 270, Work Experience ................................ 1-4
ACCT 186, Accounting for Professional Offices .......... 3
BUSE 119, Business Communications ........................ 3
MEDA 105, Human Anatomy and Physiology ................ 3
MEDA 110, Medical Terminology ............................ 3
MEDA 115, Pathophysiology .................................. 3
MEDA 120, Basic Clinical Assisting .......................... 3
BUSE 119, Business Communications ........................ 3
Total Units = 28-31

For graduation requirements see Requirements for the Associate Degree on page 60.
Electives as needed to meet minimum of 60 units required for the degree:
Recommended Electives: BUSE 101, 140; CBTE 111, 112, 161, 200, 205; SPEE 104, 135.

Medical Transcription Specialist
Prepares the student for self-employment in a hospital, clinic, physician's office, or other facility requiring transcription of medical information. Student must type 35 wpm to enter program and type 65 wpm to exit program.

Certificate of Achievement:
Computer Business Technology
Medical Transcription Specialist

Courses Required for the Major: Units
CBTE 101, Keyboarding for Computers .................. 1
CBTE 120 or 120A/B, Microsoft Word, or
   CBTE 130 or 130A/B Corel WordPerfect ............ 2
CBTE 164, Intro to Microsoft Outlook .................... 1
CBTE 230, Medical Transcription ............................ 3
CBTE 231, Advanced Medical Transcription .............. 3
CBTE 270, Work Experience ................................ 1-4
BUSE 119, Business Communications ........................ 3
MEDA 105, Human Anatomy and Physiology ................ 3
MEDA 110, Medical Terminology ............................ 3
MEDA 115, Pathophysiology .................................. 3
MEDA 120, Basic Clinical Assisting .......................... 3
Total Units = 23-26

Associate in Science Degree:
Computer Business Technology
Medical Transcription Specialist

Courses Required for the Major: Units
CBTE 101, Keyboarding for Computers .................. 1
CBTE 120 or 120A/B, Microsoft Word, or
   CBTE 130 or 130A/B Corel WordPerfect ............ 2
CBTE 164, Intro to Microsoft Outlook .................... 1
CBTE 230, Medical Transcription ............................ 3
CBTE 231, Advanced Medical Transcription .............. 3
CBTE 270, Work Experience ................................ 1-4
BUSE 119, Business Communications ........................ 3
MEDA 105, Human Anatomy and Physiology .......... 3
MEDA 110, Medical Terminology .......................... 3
MEDA 115, Pathophysiology .................................. 3

Total Units = 23-26

For graduation requirements see Requirements for the Associate Degree on page 60.
Electives as needed to meet minimum of 60 units required for the degree:
Recommended Electives: CBTE 111 or 112, 161; SPEE 135.

Microcomputer Applications
Provides training in major office systems and Technology used to enhance productivity and communications.

Certificate of Achievement:
Computer Business Technology
Microcomputer Applications

Courses Required for the Major: Units
CBTE 101, or 102, or 103, Keyboarding .............. 1-3
CBTE 111, Windows 95 or CBTE 112, Windows 98 ...... 1
CBTE 120 or 120A/B, Microsoft Word, or
CBTE 130 or 130A/B Corel WordPerfect .......... 2
CBTE 122, Microsoft Word or
CBTE 132 Corel WordPerfect .......................... 3
CBTE 126, Document Processing ........................ 3
CBTE 140A, Intro to Microsoft Excel ..................... 1
CBTE 151, Intro to Microsoft Access ..................... 1
CBTE 161, Learning the Internet ........................ 1
CBTE 163, Intro to Microsoft FrontPage ................. 2
CBTE 164, Intro to Microsoft Outlook .................... 1
CBTE 170, Desktop Publishing ............................ 2
CBTE 198A or CBTE 198B, Project Lab ............. 0.5
CBTE 200, Office Telecommunications ................. 2
CBTE 205, Records Management ........................ 3
CBTE 210, Computers in Business or
CBTE 211, Automated Office Procedures .......... 3
BUSE 101, Business Mathematics ..................... 3
BUSE 119, Business Communications ................... 3
CISC 130, Intro to Local Area Networks ............. 1

Total Units = 24-26

Associate in Science Degree:
Computer Business Technology
Microcomputer Applications

Courses Required for the Major: Units
CBTE 101, or 102, or 103, Keyboarding .............. 1-3
CBTE 111, Windows 95 or CBTE 112, Windows 98 ...... 1
CBTE 120 or 120A/B, Microsoft Word, or
CBTE 130 or 130A/B Corel WordPerfect .......... 2
CBTE 122, Microsoft Word or
CBTE 132 Corel WordPerfect .......................... 3
CBTE 126, Document Processing ........................ 3
CBTE 140A, Intro to Microsoft Excel ..................... 1
CBTE 151, Intro to Microsoft Access ..................... 1
CBTE 161, Learning the Internet ........................ 1
CBTE 163, Intro to Microsoft FrontPage ................. 2
CBTE 164, Intro to Microsoft Outlook .................... 1
CBTE 170, Desktop Publishing ............................ 2
CBTE 198A or CBTE 198B, Project Lab ............. 0.5
CBTE 200, Office Telecommunications ................. 2
CBTE 205, Records Management ........................ 3
CBTE 210, Computers in Business or
CBTE 211, Automated Office Procedures .......... 3
BUSE 101, Business Mathematics ..................... 3
BUSE 119, Business Communications ................... 3
CISC 130, Intro to Local Area Networks ............. 1

Total Units = 33.5-35.5

For graduation requirements see Requirements for the Associate Degree on page 60.
Electives as needed to meet minimum of 60 units required for the degree:
Recommended Electives: BUSE 150; CBTE 113, 126, 161, 162, 270; CISC 130, 150.
Computer and Information Sciences

Prepares students for employment in the rapidly expanding field of Computer and Information Sciences and offers the skills required to function effectively in various occupations and professions requiring the use of computers. Required courses focus upon the use and functioning of the computer and relate the general study of the computer with studies of specific languages, enabling the student to combine computer hardware and software to process data into information. Upon completion of this curriculum, the student should have the capability to apply computer technology to diverse business and professional environments and be qualified for employment as an entry-level programmer in the computer and information sciences industry or transfer to 4-year institution.

Certificate of Completion:
Computer Programming* 15
Microsoft Certified System Engineer 17

Certificate of Achievement:
Computer and Information Sciences 31*

*and electives as needed to meet minimum of 60 units required for the degree.

Certificate of Completion:  
Microsoft Certified System Engineer*

Upon successful completion of this certificate, students will be prepared to take Microsoft Certification exams and for becoming successful Microsoft Certified System Engineers.

Courses:
MSFT 051, Installing, Configuring, and Administering Windows 2000 Professional................................. 2.5
MSFT 052, Installing, Configuring, and Administering Microsoft Windows 2000 Server .......................... 2.5
MSFT 053, Implementing and Administering a Microsoft Windows 2000 Network Infrastructure ...................... 2.5
MSFT 054, Implementing and Administering a Microsoft Windows 2000 Directory Infrastructure ................... 2.5
MSFT 055, Designing a Microsoft Windows 2000 Directory Services Infrastructure ............................................ 2.5
MSFT 056, Designing a Microsoft Windows 2000 Network Infrastructure ...................................................... 2.5
MSFT 057, Designing Security for a Microsoft Windows 2000 Network .......................................................... 2.5

Total Units = 17

*This is a departmental award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Achievement:  
Computer and Information Sciences

The certificate of achievement in Computer Information Sciences requires completion of the courses listed below and is meant to prepare students who are planning and preparing for entry-level positions in the Computer Information Sciences Industry.

Courses Required for the Major:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 116A, Principles of Accounting-Financial</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 116B, Principles of Accounting-Managerial</td>
<td>4</td>
</tr>
<tr>
<td>BUSE 119, Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 140, Business Law &amp; the Legal Environment</td>
<td>3</td>
</tr>
<tr>
<td>CISC 181, Principles of Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>CISC 186, Visual Basic Programming</td>
<td>4</td>
</tr>
<tr>
<td>ECON 120, Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 119, Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>CISC Elective(s)*</td>
<td></td>
</tr>
</tbody>
</table>

Total Units = 31

CISC 210, System Analysis and Design.............. 3

Total Units = 15

*This is a departmental award in recognition of information on the transcript and does not imply that a graduation requirement has been met.
Computer and Information Sciences

*Choose a minimum of 3 units in CISC. Students should consult with their counselor prior to choosing electives to ensure electives meet program and/or transfer goals.

Note: Only one Computer and Information Sciences (CISC) course from the above list may be used to satisfy SDCCD general education requirements.

Associate in Science Degree: Computer and Information Sciences

The associate degree in Computer Information Sciences requires completion of the courses listed below and is meant to prepare students who are planning on transferring to Information Decision Systems programs at four-year institutions. Additional general education and graduation requirements for the associate degree are listed on page 60 of this catalog. The associate degree requires completion of a minimum of 60 units.

Courses required for the Major

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 116A, Principles of Accounting-Financial</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 116B, Principles of Accounting-Managerial</td>
<td>4</td>
</tr>
<tr>
<td>BUSE 119, Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 140, Business Law &amp; the Legal Environment</td>
<td>3</td>
</tr>
<tr>
<td>CISC 181, Principles of Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>CISC 186, Visual Basic Programming</td>
<td>4</td>
</tr>
<tr>
<td>ECON 120, Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 119, Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>CISC Elective(s)*</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units = 31

*Choose a minimum of 3 units in CISC. Students should consult with their counselor prior to choosing electives to ensure electives meet program and/or transfer goals.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

Recommended Electives: Computer and Information Sciences 130, 132, 133, 150, 151, 240, 270, 290; Economics 120, 121; Marketing 105.

Transfer Information

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language, Consult the current catalog of the transfer institution and consult with a counselor.

CSU, San Marcos

Computer Science, B.S.: Mathematics 107 and 107L; Mathematics 108, 108L; Mathematics 150, 151, 254; Physics 195A, 195B.

San Diego State University

Business Administration, Information Decision Systems, B.S.: Accounting 116A, 116B; Business 119, 140; Computer and Information Sciences 181; Economics 120, 121; Mathematics 116 and 121 or 150; Mathematics 119.


University of California, San Diego


CSE, Computer Science, B.S.: Biology 210A or Chemistry 200; Computer and Information Sciences 190; Mathematics 150, 151, 237, 237L, 245, 252, 254, and 255; Physics 195A,B,C and 196A,B,C.


Applied Mathematics, Scientific Programming, B.A.: Mathematics 150, 151, 245, 252, 254, 255; Computer Information Science 190 or 192 or Engineering 115; Physics 195A,B,C or Physics 120A, 121A, 120B, 121B.
Course work provides the concepts, skills and processes by which decisions about the use of resources are directed toward goal achievement. Financial and life management skills are emphasized. Nutrition offers courses for vocational use and transfer while educating individuals in scientific principles and healthful food preparation techniques that improve general health.

The Nutrition and Fitness Option would prepare students for impending state certificate exam as fitness instructors.

Students planning to transfer to a four-year college should consult the Counseling Department and a Nutrition Advisor for assistance in program planning.

Certificate of Completion: Consumer and Nutrition Studies

<table>
<thead>
<tr>
<th>Certificate of Completion: Consumer and Nutrition Studies</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills for Success</td>
<td>10-12</td>
</tr>
<tr>
<td>Dietetic Service Supervisor</td>
<td>17</td>
</tr>
</tbody>
</table>

Certificate of Achievement: Consumer Resource Management

<table>
<thead>
<tr>
<th>Certificate of Achievement: Consumer Resource Management</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Resource Management</td>
<td>25-28</td>
</tr>
<tr>
<td>Nutrition</td>
<td>24-27</td>
</tr>
</tbody>
</table>

Associate Degree in Science Degree:

<table>
<thead>
<tr>
<th>Certificate of Achievement: Consumer Resource Management</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Resource Management</td>
<td>25-28*</td>
</tr>
<tr>
<td>Nutrition</td>
<td>24-27*</td>
</tr>
</tbody>
</table>

* and electives as needed to meet minimum of 60

This curriculum is approved and certified by the California State Department of Health Services and prepares the student to function as a qualified dietetic service supervisor/manager in health care facilities.

Certificate of Completion: Consumer and Nutrition Studies

<table>
<thead>
<tr>
<th>Certificate of Completion: Consumer and Nutrition Studies</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietetic Service Supervisor</td>
<td>17</td>
</tr>
</tbody>
</table>

Certificate of Achievement: Consumer Resource Management

<table>
<thead>
<tr>
<th>Certificate of Achievement: Consumer Resource Management</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Resource Management</td>
<td>25-28</td>
</tr>
<tr>
<td>Nutrition</td>
<td>24-27</td>
</tr>
</tbody>
</table>

* and electives as needed to meet minimum of 60

This certificate prepares students for success in any job.

Courses:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSE 119, Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>CONF 101, Life Success Skills</td>
<td>3</td>
</tr>
<tr>
<td>CONF 110, Personal Financial Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one course from:

<table>
<thead>
<tr>
<th>Selected Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 43, English Review</td>
<td>1-3</td>
</tr>
<tr>
<td>PERG 30, Career Planning</td>
<td></td>
</tr>
<tr>
<td>PERG 127, College Success Seminar</td>
<td></td>
</tr>
</tbody>
</table>

Total Units = 10-12

* This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificates of Achievement: Consumer and Nutrition Studies

Consumer Resource Management

<table>
<thead>
<tr>
<th>Certificate of Achievement: Consumer Resource Management</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Resource Management</td>
<td>25-28</td>
</tr>
<tr>
<td>Nutrition</td>
<td>24-27</td>
</tr>
</tbody>
</table>

Total Units = 25-28

Nutrition

<table>
<thead>
<tr>
<th>Certificate of Achievement: Consumer Resource Management</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 150, Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 155, Advanced Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 160, Foods for a Healthful Lifestyle</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 170, Nutrition and Fitness</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 180, Nutrition and Diet Therapy</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 270, Work Experience</td>
<td>1-4</td>
</tr>
<tr>
<td>BIOL 105, Principles of Biology</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses Required for the Major: Consumers and Nutrition Studies</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 150, Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 155, Advanced Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 160, Foods for a Healthful Lifestyle</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 170, Nutrition and Fitness</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 180, Nutrition and Diet Therapy</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 270, Work Experience</td>
<td>1-4</td>
</tr>
<tr>
<td>BIOL 105, Principles of Biology and</td>
<td></td>
</tr>
</tbody>
</table>

Total Units = 24-27

* and electives as needed to meet minimum of 60

* This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion: Consumer and Nutrition Studies

Skills for Success

This certificate prepares students for success in any job.

Courses:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSE 119, Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>CONF 101, Life Success Skills</td>
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</tr>
<tr>
<td>CONF 110, Personal Financial Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one course from:

<table>
<thead>
<tr>
<th>Selected Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 43, English Review</td>
<td>1-3</td>
</tr>
<tr>
<td>PERG 30, Career Planning</td>
<td></td>
</tr>
<tr>
<td>PERG 127, College Success Seminar</td>
<td></td>
</tr>
</tbody>
</table>

Total Units = 10-12

* This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.
Nutrition and Fitness

Courses Required for the Major:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 150, Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 160, Foods for a Healthful Lifestyle</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 170, Nutrition and Fitness</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 270, Work Experience</td>
<td>1-4</td>
</tr>
<tr>
<td>BIOL 160, Elements of Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>PHYE 103, Aerobic Dance</td>
<td>0.5-1.5</td>
</tr>
<tr>
<td>PHYE 123, Fitness Activities</td>
<td>0.5-1</td>
</tr>
<tr>
<td>PHYE 166, Weight Training</td>
<td>0.5-1</td>
</tr>
<tr>
<td>PHYE 242, Care and Prevention of Injuries</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Units = 24-27

Nutrition

Courses Required for the Major:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 150, Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 155, Advanced Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 160, Foods for a Healthful Lifestyle</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 170, Nutrition and Diet Therapy</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 270, Work Experience</td>
<td>1-4</td>
</tr>
<tr>
<td>BIOL 105, Principles of Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 106, Principles of Biology-Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 107, General Biology-Lecture and Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 100, Fundamentals of Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 100L, Fundamentals of Chemistry Lab</td>
<td></td>
</tr>
</tbody>
</table>

Total Units = 24-27

Associate in Science Degrees: Consumer and Nutrition Studies

Consumer Resource Management

Courses Required for the Major:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF 110, Personal Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>CONF 101, Life Success Skills</td>
<td></td>
</tr>
<tr>
<td>CONF 140, Textiles</td>
<td></td>
</tr>
<tr>
<td>NUTR 150, Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 160, Foods for a Healthful Lifestyle</td>
<td>3</td>
</tr>
<tr>
<td>CHIL 101, Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>FASH 125, Fashion Selection</td>
<td></td>
</tr>
<tr>
<td>INTE 145, Contemporary Housing</td>
<td>3</td>
</tr>
<tr>
<td>CONF 270, Work Experience</td>
<td>1-4</td>
</tr>
</tbody>
</table>

Total Units = 25-28

Nutrition and Fitness

Courses Required for the Major:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 150, Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 160, Foods for a Healthful Lifestyle</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 170, Nutrition and Fitness</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 270, Work Experience</td>
<td>1-4</td>
</tr>
<tr>
<td>BIOL 160, Elements of Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>PHYE 103, Aerobic Dance</td>
<td>0.5-1.5</td>
</tr>
<tr>
<td>PHYE 123, Fitness Activities</td>
<td>0.5-1</td>
</tr>
<tr>
<td>PHYE 166, Weight Training</td>
<td>0.5-1</td>
</tr>
<tr>
<td>PHYE 242, Care and Prevention of Injuries</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Units = 17.5-22.5

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

Consumer Resource Management Option

Recommended Electives: Consumer Studies 270, 290, 296; Child Development 141; Computer Business Technology 120, Psychology 101; Sociology 101; Fashion 190; Computer and Information Sciences 110; Nutrition 152, 190.

Nutrition and Fitness Option

Recommended Electives: Nutrition 152, 190, 290, 296; Health Education 131; Computer Business Technology 120; Computer and Information Sciences 110; Fashion 190.

Nutrition Option

Recommended Electives: Nutrition 152, 190, 290, 296; Child Development 141; Computer and Information Sciences 110; Computer Business Technology 120; Psychology 101; Sociology 101; Fashion 190.

Transfer Information

Students planning to transfer to a four-year college or university should complete courses required for the university major and the degree general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements are subject to change at the transfer institution and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language, Consult the current catalog of the transfer institution and consult with a counselor.

San Diego State University

Nutrition, Foods and Nutrition, B.S.: Accounting 116A; Biology 105, 106 (Miramar) or 107 (City,
Dental Assisting (RDA, CDA)

Certificate of Achievement:
Dental Assisting (RDA, CDA) 27.5

Associate in Science Degree:
Dental Assisting (RDA, CDA) 27.5*

*and electives as needed to meet minimum 60 units required for the degree.

The program is a two-semester certificate program which prepares the student for certification as a Registered Dental Assistant and a Certified Dental Assistant. Training includes basic and advanced chairsde dental support procedures; sterilization of instruments and equipment; preparation of dental laboratory and restorative materials; working with the patient under the supervision of the dentist; operating dental x-ray equipment including exposing and processing radiographs. Students must complete four units of Directed Clinical Practice working in private dental offices or clinics under the supervision of the clinic and college staff.

The program is accredited by the Dental Board of California and the Commission on Dental Accreditation of the American Dental Association, and is sponsored by the San Diego County Dental Society and the San Diego County Dental Assistants Society. Upon completion of the program the student receives a certificate of completion from the program, and certification to operate dental x-ray equipment in the State of California. The student is eligible to take the California Registered Dental Assistant (RDA) Examination with Coronal Polish certification and the Certified Dental Assistant (CDA) National Examination.

Interested students should contact the admissions office at (619) 388-2684 or the program director at (619) 388-2697. Course repetition in this program is not permitted.
Certificate of Achievement: Dental Assisting (RDA, CDA)

Courses Required for the Major: Units
Fall
DENA 102, Dental Communications .......................... 3
DENA 104, Preventive Dental Care .......................... 1.5
DENA 106, Dental Anatomy/Physiology ..................... 3
DENA 116/116L, Dental Materials & Lab ................. 1, 0.5
DENA 122/122L, Basic Dental Assisting Lec & Lab ... 1, 1
DENA 127, Dental Radiology .................................. 2
DENA 127L, Dental Radiography Lab ....................... 1
DENA 185A, Directed Clinical Practice ...................... 1

Spring
DENA 131, Clinical Business Management ............... 1.5
DENA 136, Dental Radiography-II .......................... 1
DENA 161/161L, Intermediate Dental Assisting & Lab .................................................. 2, 1
DENA 181/181L, Advanced Dental Assisting & Lab . 2, 2
DENA 185B, Directed Clinical Practice .................... 1
DENA 185C, Directed Clinical Practice .................... 1
DENA 185D, Directed Clinical Practice .................... 1

Total Units = 27.5

Associate in Science Degree: Dental Assisting (RDA, CDA)

Courses Required for the Major: Units
Fall
DENA 102, Dental Communications .......................... 3
DENA 104, Preventive Dental Care .......................... 1.5
DENA 106, Dental Anatomy/Physiology ..................... 3
DENA 116/116L, Dental Materials & Lab ................. 1, 0.5
DENA 122/122L, Basic Dental Assisting Lec & Lab ... 1, 1
DENA 127, Dental Radiology .................................. 2
DENA 127L, Dental Radiography Lab ....................... 1
DENA 131, Clinical Business Management ............... 1.5
DENA 136, Dental Radiography-II .......................... 1
DENA 161/161L, Intermediate Dental Assisting & Lab .................................................. 2, 1
DENA 181/181L, Advanced Dental Assisting & Lab . 2, 2
DENA 185A, Directed Clinical Practice .................... 1
DENA 185B, Directed Clinical Practice .................... 1
DENA 185C, Directed Clinical Practice .................... 1
DENA 185D, Directed Clinical Practice .................... 1

Total Units = 27.5

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:
Recommended Electives: Dental Assisting 290.
A comprehensive program providing practical and theoretical experiences to equip the student to enter the performance and production aspects of the professional theatre. In addition, this program provides the lower division studies needed for transfer to a dramatic arts major at a four-year institution. A representative schedule of productions affords opportunities for participative study of concepts and skills necessary in the theatre.

While courses at City College are designed in the traditional single class format which appeals to students who work full time while attending college, the Mesa College emphasis is on a “stock company” approach designed for students who can devote 12 hours a week to the core program.

### Associate in Arts Degree: Dramatic Arts

<table>
<thead>
<tr>
<th>Courses Required for the Major</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAM 105, Introduction to Dramatic Arts</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 101, Fundamentals of Performance and Production</td>
<td></td>
</tr>
<tr>
<td>DRAM 102, Fundamentals of Production</td>
<td></td>
</tr>
<tr>
<td>DRAM 122, Makeup for the Stage, and Stage Movement</td>
<td>3</td>
</tr>
<tr>
<td>SPEE 101, Voice &amp; Articulation, and either</td>
<td></td>
</tr>
<tr>
<td>DRAM 130, Elementary Acting</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 132, Beginning Acting (City*)</td>
<td>8-9</td>
</tr>
<tr>
<td>DRAM 201, Intermediate Performance, and</td>
<td></td>
</tr>
<tr>
<td>DRAM 202, Intermediate Production; or</td>
<td></td>
</tr>
<tr>
<td>DRAM 126, Advanced Stagecraft (City*), and</td>
<td></td>
</tr>
<tr>
<td>SPEE 111, Oral Interpretation, and</td>
<td></td>
</tr>
<tr>
<td>DRAM 131A and DRAM 131B, Intermediate Acting or</td>
<td></td>
</tr>
<tr>
<td>DRAM 133, Intermediate Acting (City*) and</td>
<td></td>
</tr>
<tr>
<td>DRAM 134, Beginning Voice for Actors (City*)</td>
<td>8-9</td>
</tr>
</tbody>
</table>

Total Units 22-24

* Not offered at Mesa College.

Note: Only one Dramatic Arts (DRAM) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

**Recommended Electives:**
- DRAM 221, 230, 250, 251, 267, 290
- Speech Communications 101, 103
- Fine Arts 100
- Music 100
- Radio and Television 160

Note: Not all courses are offered at each campus.

### TRANSFER INFORMATION

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language, Consult the current catalog of the transfer institution and consult with a counselor.

- **California State University, San Marcos**

  See a counselor for specific course requirements for Visual and Performing Arts majors.

- **San Diego State University**

  **Dance, B.A.:** Dance 181, 271, 177, 253 (4 units), Anthropology 103; Biology 230; Psychology 101. Third semester foreign language competency.

  **Theatre, General, B.A.:** Dramatic Arts 134 (City) or Speech 101; Dramatic Arts 120 (Miramar) 132 (City), 133 (City) or 131A, B or 201 (Mesa), 123 (City), 101 or 130 (Mesa), or 132 (City).

  **Drama, Design for Television and Film, B.A.:** Dramatic Arts 132 (City) or 101 (Mesa) or 130 (Mesa); Dramatic Arts 123. See a counselor for more information.

- **University of California, San Diego**

  **Theater, B.A.:** Dramatic Arts 132 (City) or 130 (Mesa).

  See a counselor for more information.
Theatre, Dance, B.A.: Dramatic Arts 130 (Mesa) or 132 (City). See a counselor for more information.

English

For students seeking a broad appreciation of literature and increased skills in communication. Superior ability to understand and use English is necessary for success in such careers as education, writing, advertising, selling, journalism, law, business and government.

Students planning to transfer to a four-year institution should learn the requirements for English majors at that institution.

Certificate of Completion: Creative Writing*

This certificate is designed for students who want to hone their writing skills by participating in creative writing workshops and immersing themselves in literature and also for students preparing portfolios for 4-year colleges. Only two creative writing classes may be transferred to SDSU for the English major. However, the certificate also includes transfer general education courses, and other creative writing courses may transfer as electives.

Courses:

<table>
<thead>
<tr>
<th>Units</th>
<th>Creative Writing</th>
<th>15</th>
</tr>
</thead>
</table>

Associate in Arts Degree: English 18*

| ENGL 249, Introduction to Creative Writing | 6 |
| ENGL 245, Writing Creative Nonfiction | |
| ENGL 247, Writing Seminar-Poetry | |
| ENGL 253, Fundamentals of Fiction Writing | |
| ENGL 254, Intermediate Fiction Writing | 6 |

<table>
<thead>
<tr>
<th>Select two courses from:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BLAS 155, Afro-American Literature</td>
<td></td>
</tr>
<tr>
<td>CHIC 135, Chicano Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 208, Introduction to Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 210, American Literature I</td>
<td></td>
</tr>
<tr>
<td>ENGL 211, American Literature II</td>
<td></td>
</tr>
<tr>
<td>ENGL 215, English Literature I: 800 - 1799</td>
<td></td>
</tr>
</tbody>
</table>
ENGL 216, English Literature II: 1800 - Present
ENGL 220, Masterpieces of World Literature I:
  1500 BCE - 1600 CE
ENGL 221 Masterpieces of World Literature II:
  1600 - Present
ENGL 230, Asian American Literature
ENGL 237, Women in Literature
ENGL 238, Evaluating Children’s Literature
ENGL 240, Shakespeare ........................................ 6

Select one course from:
ENGL 249, Introduction to Creative Writing
ENGL 245, Writing Creative Nonfiction
ENGL 247, Writing Seminar - Poetry
ENGL 254, Intermediate Fiction Writing
ENLG 253, Fundamentals of Fiction Writing
BLAS 155, Afro-American Literature
CHIC 135, Chicano Literature
ENGL 208, Introduction to Literature
ENGL 210, American Literature I
ENGL 211, American Literature II
ENGL 215, English Literature I: 800 - 1799 ............. 3

Total Units = 15

*This is a departmental award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Associate in Arts Degree: English

Courses Required for the Major: Units
ENGL 101, Reading and Composition or
ENGL 105, Composition and Literature.................... 3
*ENGL 205, Critical Thinking and
  Intermediate Composition .................................... 3
ENGL 215, English Literature I: 800 - 1799 ............. 3
ENGL 216, English Literature II: 1800 - Present ....... 3

**Select three units from:
ENGL 208, Introduction to Literature
ENGL 220 Masterpieces of World Literature I:
  1500 BCE - 1600 CE
ENGL 221 Masterpieces of World Literature II:
  1600 - Present.............................................. 3

**Select three units from:
ENGL 210, American Literature I
ENGL 211, American Literature II
ENGL 245, Writing Creative Nonfiction
ENGL 247, Writing Seminar-Poetry
ENGL 249, Introduction to Creative Writing
ENGL 254, Intermediate Fiction Writing .................. 3

Total Units = 18

*Meets SDSU/CSU critical thinking requirement.
**Recommended sequence for UC transfer.

Not all courses are offered at each campus.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

Recommended Electives: English 202, 209, 238, 240, 245, 247, 249, 253, 254; Humanities 101, 102, 201, 202; Journalism 200, 210A/B/C/D.

Courses designed to support this and other majors:
ESOL 19, 20, 21, 22, 30, 31, 32, 40.

Transferable Units as Prep for the Major at SDSU
SDSU will accept a total of 12 units of literature and creative writing as preparation for the English Major. This includes any combination of lower division literature courses and up to six units of creative writing courses.

Transfer Information
Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language, Consult the current catalog of the transfer institution and consult with a counselor.

San Diego State University

Communication, Journalism Major, B.A.: Radio and Television 200 (City); Journalism 200 (Mesa); Economics 120; Political Science 101 and 102.

Comparative Literature, B.A.: English 101 or 105 and 220, 221.

Comparative Literature for the Single Subject Teaching Credential, B.A.: English 101 or 105, 202, 205, 220, 221 and 249 or 245 or 247 or 253 or 254 (Mesa); Dramatic Arts 120 (Miramar) or Humanities 201; one sequence from English 210, 211 or 215, 216 and Radio and Television 200 (City) or Journalism 200 (Mesa).

English, B.A.: English 101 or 105; English 215 and 216; three units from English 208, 220 and 221; three units from English 210, 211, 245, 249 or 247 or 253 or 254.

English, Single Subject Teaching Credential,
B.A.: English 101 or 105, 202 (Mesa); English 210 and 211 or 215 and 216; English 245 or 247 or 249 or 253 or 254; English 208, 220 or 221; Radio and
Television 200 (City); Journalism 200 (Mesa); Humanities 201 or Drama 120 (Mesa).

**Humanities, B.A.:** History 100, 101 (City, Mesa), Humanities 101; three units from: English 208, 220, 221, Humanities 201, Philosophy 103 (City, Mesa) or Humanities 106 (City, Mesa).

**University of California, San Diego**

All UCSD Literature majors must enroll in at least one upper division literature course in a secondary literature, e.g., French, German, Italian, Latin, Russian and Spanish. Proficiency in a second language is recommended prior to transfer. See a counselor for further information.

**Literature, Primary Concentration in Literatures in English, B.A.:** English 215 and 216; Black Studies 155; Chicano Studies 135; Third semester foreign language competency.

**Literature, Literature/Writing, B.A.:** English 215 and 216; 210 and 211; Black Studies 155; Chicano Studies 135; History 155 (Mesa). Third semester foreign language competency.

**Linguistics, B.A.:** See Languages and consult a counselor.

**Environmental Design Studies**

Studies in Environmental Design leading to degrees and/or certificates are found in the following areas:

- Architecture
- Computer Aided Design/Drafting
- Construction Management
- Garden Design
- Landscape Architecture

### Escrow

A study of the duties, responsibilities, capacities, problems, and limitations of the escrow holder. The program is designed to update and train, in more sophisticated methods, those already actively engaged in escrow and related fields, such as banking and real estate. In addition, the program offers training for those interested in entering the escrow profession. The following courses have been approved by the California Escrow Association (C.E.A.) and the San Diego County Escrow Association and are acceptable toward the requirements for the C.E.A. Educational Achievement award.

#### Certificate of Completion: Escrow

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESCR 101, Escrow Procedures-Beginning</td>
<td>3</td>
</tr>
<tr>
<td>ESCR 111, Escrow Procedures - Advanced</td>
<td>3</td>
</tr>
<tr>
<td>REAL 101, Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>REAL 105, Legal Aspects of Real Estate I</td>
<td>3</td>
</tr>
<tr>
<td>REAL 115, Real Estate Finance I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units = 15**

#### Associate in Science Degree: Escrow

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESCR 101, Escrow Procedures-Beginning</td>
<td>3</td>
</tr>
<tr>
<td>ESCR 111, Escrow Procedures - Advanced</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 119, Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 140, Business Law and the Legal Environment</td>
<td>3</td>
</tr>
<tr>
<td>ECON 120, Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>REAL 101, Real Estate Principles</td>
<td>3</td>
</tr>
</tbody>
</table>
REAL 105, Legal Aspects of Real Estate I ............... 3
REAL 115, Real Estate Finance I ........................ 3

**Total Units = 24**

For graduation requirements see [Requirements for the Associate Degree](#) on page 60.

**Electives as needed to meet minimum of 60 units required for the degree:**

**Recommended Electives:** Accounting 116A and 116B; Business 150; Marketing 105; Real Estate 110, 120; Speech Communications 103.

---

**Fashion**

**Certificate of Completion:**

- Fashion Design/Production 12

**Certificate of Achievement:**

- Fashion Design 32-35
- Fashion Merchandising 31-37

**Associate in Science Degree:**

- Fashion Design 47-50*
- Fashion Merchandising 46-52*

*and electives as needed to meet minimum of 60 units required for the degree.

---

Designed for the student who is interested in a fashion related career. Each student gains an understanding of opportunities and a working knowledge of the various phases of the constantly changing fashion industry.

The program provides the opportunity to specialize in one of two areas: Fashion Merchandising and Fashion Design.

Fashion Merchandising prepares for beginning positions in sales, management, buying, visual presentation, promotion, and wholesaling for both men and women. Fashion Design develops skills in the creation of imaginative finished garments. Technology skills that will be learned include sketching, sewing, draping, pattern making and presentation. These skills will prepare men and women for entry level positions in manufacturing, designing, and the home sewing industry.

Students planning to transfer to a four-year college should consult the Counseling Department and a Fashion advisor for assistance in program planning.

**Certificate of Completion:**

**Fashion**

**Fashion Design/Production**

This certificate prepares students for entry level positions as seamstress, sample maker, quality control,
and pre-production worker in the clothing/fashion industry.

Courses:  
FASH 130, Apparel Construction I .................. 3  
FASH 140, Clothing Design and Flat Pattern Making I 3  
FASH 171, Computer Flat Pattern Design .............. 3  

Select one course from:  
FASH 172, Computer Flat Pattern Design II  
BUSE 101, Business Mathematics ..................... 3  

Total Units = 12

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificates of Achievement:  
Fashion

Fashion Design

Courses Required for the Major:  
FASH 105, Introduction to Fashion .................... 3  
FASH 120, Fashion History and Trends ................. 3  
FASH 125, Fashion Selection ............................ 3  
FASH 130, Apparel Construction I or  
FASH 131, Apparel Construction II ...................... 3  
FASH 140, Clothing Design and Flat Pattern I .......... 3  
FASH 142, Fashion Sketching ............................ 3  
FASH 145, Clothing Design Through Draping .......... 3  
FASH 155, Fashion Field Studies ........................ 1  
FASH 175, Computer Fashion Design .................... 3  
FASH 199A, Fashion Laboratory A ...................... 1  
FASH 199B, Fashion Laboratory B ...................... 1  
FASH 199C, Fashion Laboratory C ...................... 1  
FASH 270, Work Experience .............................. 1-4  
ARTF 150A, Design I .................................... 3  
BUSE 100, Introduction to Business .................... 3  
BUSE 101, Business Mathematics ........................ 3  
ENGL 101, Reading and Composition, or  
BUSE 119, Business Communications .................. 3  
CONF 140, Textiles ....................................... 3  

Select one course from:  
SPEE 103, Oral Communication  
SPEE 135, Interpersonal Communication ............... 3  

Total Units = 32-35

Fashion Merchandising

Courses Required for the Major:  
FASH 105, Introduction to Fashion .................... 3  
FASH 108, Analysis, Evaluation, and  
Comparison of Ready-to-Wear ......................... 3  
FASH 110, Fashion Buying/Management ................ 3  
FASH 112, Fashion Promotion .......................... 3  
FASH 115, Visual Merchandising ........................ 3  
FASH 125, Fashion Selection ............................ 3  
FASH 155, Fashion Field Studies ....................... 1-4  
FASH 175, Computer Fashion Design .................... 3  
FASH 270, Work Experience .............................. 1-4  
ARTF 150A, Design I .................................... 3  
BUSE 100, Introduction to Business .................... 3  
BUSE 101, Business Mathematics ........................ 3  
ENGL 101, Reading and Composition, or  
BUSE 119, Business Communications .................. 3  
CISC 110, Microcomputer Applications ............... 2  
CONF 140, Textiles ....................................... 3  

Select one course from:  
MARK 105, Professional Selling  
MARK 110, Principles of Retailing  
MARK 130, Advertising Principles .................... 3  

Total Units = 31-37

Associate in Science Degrees:  
Fashion

Fashion Design

Courses Required for the Major:  
FASH 105, Introduction to Fashion .................... 3  
FASH 120, Fashion History and Trends ................. 3  
FASH 125, Fashion Selection ............................ 3  
FASH 130, Apparel Construction I or  
FASH 131, Apparel Construction II ...................... 3  
FASH 140, Clothing Design and Flat Pattern I .......... 3  
FASH 142, Fashion Sketching ............................ 3  
FASH 145, Clothing Design Through Draping .......... 3  
FASH 155, Fashion Field Studies ........................ 1  
FASH 175, Computer Fashion Design .................... 3  
FASH 199A, Fashion Laboratory A ...................... 1  
FASH 199B, Fashion Laboratory B ...................... 1  
FASH 199C, Fashion Laboratory C ...................... 1  
FASH 270, Work Experience .............................. 1-4  
ARTF 150A, Design I .................................... 3  
BUSE 100, Introduction to Business .................... 3  
BUSE 101, Business Mathematics ........................ 3  
CONF 140, Textiles ....................................... 3  

Select one course from:  
SPEE 103, Oral Communication  
SPEE 135, Interpersonal Communication ............... 3  

Total Units = 47-50

Fashion Merchandising

Courses Required for the Major:  
FASH 105, Introduction to Fashion .................... 3  
FASH 108, Analysis, Evaluation, and  
Comparison of Ready-to-Wear ......................... 3  
FASH 110, Fashion Buying/Management ................ 3  
FASH 112, Fashion Promotion .......................... 3  
FASH 115, Visual Merchandising ........................ 3  
FASH 125, Fashion Selection ............................ 3  
FASH 155, Fashion Field Studies ....................... 1-4  
FASH 175, Computer Fashion Design .................... 3  
FASH 270, Work Experience .............................. 1-4  
ARTF 150A, Design I .................................... 3  
BUSE 100, Introduction to Business .................... 3  
BUSE 101, Business Mathematics ........................ 3  
ENGL 101, Reading and Composition, or  
BUSE 119, Business Communications .................. 3  
CISC 110, Microcomputer Applications ............... 2  
CONF 140, Textiles ....................................... 3  

Select one course from:  
MARK 105, Professional Selling  
MARK 110, Principles of Retailing  
MARK 130, Advertising Principles .................... 3  

Total Units = 31-37
Select one course from:
MARK 105, Professional Selling
MARK 110, Principles of Retailing
MARK 130, Advertising Principles ......................... 3

Select one course from:
SPEE 103, Oral Communication
SPEE 135, Interpersonal Communication ................... 3

Total Units = 46-52

For graduation requirements see Requirements for the Associate Degree on page 60.
Electives as needed to meet minimum of 60 units required for the degree:

Fashion Merchandising Option
Recommended Electives: Accounting 116A; Economics 120; Fashion 120, 130, 173, 178, 190, 290.

Fashion Design Option

Fashion Consulting Option

Transfer Information
Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

- California Polytechnic Pomona
  Apparel Merchandising and Management Fashion Retailing, B.S.: Computer Information Systems 181; Fashion 105; Consumer Studies 140; Fashion 125, 112, 110.

- Woodbury University
  Fashion, B.A.: Speech 103; Fashion 142A, 105, 140 and 141, 160 and 161, 120, 142B, 130 and 131, 175, 172; Consumer Finance 140; Art 155A, 150A, 152; Fashion Design 176 and 178.

Fitness Specialist
See “Physical Education” on page 156.
# Food Service Occupations

**Certificate of Achievement:**
Food Service Occupations 29-32

**Associate in Science Degree:**
Food Service Occupations 44-56*

*and electives as needed to meet minimum of 60 units required for the degree.

Provides instruction in planning, selecting, purchasing, preserving, preparing and serving food. The curriculum emphasizes quantity food service activities in commercial establishments such as restaurants, cafeterias, fast-food operations, and other food preparation facilities operated independently or located in enterprises such as hotels, travel terminals, industrial plants, public buildings, hospitals, or clubs and special food services such as those associated with catering or with take-out food establishments. The program is endorsed by the Chefs de Cuisine.

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOOD 105, Fundamentals of Food Production</td>
<td>3</td>
</tr>
<tr>
<td>FOOD 107, Sanitation, Safety and Equipment</td>
<td>3</td>
</tr>
<tr>
<td>FOOD 110, Basic Food Preparation</td>
<td>5</td>
</tr>
<tr>
<td>FOOD 115, Food Service Operations and Management</td>
<td>3</td>
</tr>
<tr>
<td>FOOD 120, Food Service, Catering, and Advanced Menu Planning</td>
<td>3</td>
</tr>
<tr>
<td>FOOD 130, Quantity Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>*FOOD 131, Quantity Food Preparation - Laboratory</td>
<td>5</td>
</tr>
<tr>
<td>FOOD 140, Food and Beverage Purchasing and Control</td>
<td>3</td>
</tr>
<tr>
<td>FOOD 201, Gourmet Food Preparation Laboratory</td>
<td>1-5</td>
</tr>
<tr>
<td>FOOD 205, Decorative Techniques of Buffet Catering</td>
<td>1-5</td>
</tr>
<tr>
<td>FOOD 210, Baking and Pastry</td>
<td>2-5</td>
</tr>
<tr>
<td>FOOD 270, Work Experience</td>
<td>1-4</td>
</tr>
<tr>
<td>FOOD 291, Food Service Practicum</td>
<td>1-3</td>
</tr>
<tr>
<td>BUSE 101, Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 150, Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units = 44-56**

*Personnel employed in Food Service may substitute off-campus Food Service 132 concurrent with 4 units of Food Service 270.

For graduation requirements see **Requirements for the Associate Degree** on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

**Recommended Electives:** Speech Communications 135; Hotel-Motel Management 105, 110; French 101; Food Service Occupations 132, 290.

**Garden Design**
See “Architecture” on page 97.

**Geography**
See “Social Sciences” on page 169.
This is an interdisciplinary program that integrates the mapping sciences, geographic information systems technology, and spatial analysis in a core program related to computer supported data storage, management, and display functions. The program offers students the opportunity to develop the skills and abilities that are required of professionals in geographic information systems and related fields. The program is also relevant for professionals seeking to upgrade their computer mapping and spatial analysis skills.

Certificate of Completion: Geographic Information Systems Specialist

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GISG 110, Introduction to Mapping and GIS</td>
<td>3</td>
</tr>
<tr>
<td>GISG 111, GIS Intermediate Applications</td>
<td>3</td>
</tr>
<tr>
<td>GISG 112, Spatial Analysis with GIS</td>
<td>3</td>
</tr>
<tr>
<td>GISG 113, Advanced GIS Systems Applications</td>
<td>3</td>
</tr>
<tr>
<td>GISG 270, GIS Systems Work Experience</td>
<td>1-4</td>
</tr>
</tbody>
</table>

Select 3-4 units from:
- ANTH 103, Introduction to Cultural Anthropology
- ANTH 107, Introduction to Archaeology
- ANTH 115, Introduction to Archaeological Field Work
- ARCH 100, Beginning Architectural Drafting
- ARCH 101, Computer Aided Design and 3D Imaging
- ARCH 105, Computer Aided Drafting

Total Units = 16-20

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.
### Geographic Information Systems

**Associate in Science Degree: Geographic Information Systems**

<table>
<thead>
<tr>
<th>Courses Required for the Major</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GISG 110, Introduction to Mapping and Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>GISG 111, Geographic Information Systems Intermediate Applications</td>
<td>3</td>
</tr>
<tr>
<td>GISG 112, Spatial Analysis with Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>GISG 113, Advanced Geographic Information Systems Applications</td>
<td>3</td>
</tr>
<tr>
<td>GISG 270, Geographic Information Systems Work Experience</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**Select four units in a programming language:**
- CISC 186, Visual Basic Programming
- CISC 190, Java Programming
- CISC 192, C/C++ Programming

**Select twelve units from:**
- ANTH 103, Introduction to Cultural Anthropology
- ANTH 107, Introduction to Archaeology
- ANTH 115, Introduction to Archaeological Field Work
- ARCH 100, Beginning Architectural Drafting
- ARCH 101, Computer Aided Design and 3D Imaging
- ARCH 105, Computer Aided Drafting
- ARCH 106, Advanced Computer Aided Drafting
- ARCH 170, Advanced Computer Aided Drafting II
- ARCH 185, Environmental Design I: Creating Exterior Spaces
- ARCH 190, Environmental Design II: Urban and Community Design
- ARCH 250, Site Engineering
- BIOL 100, Natural History-Environmental Biology
- CISC 186, Visual Basic Programming
- CISC 190, Java Programming
- CISC 192, C/C++ Programming; or other CISC course with consent of department chair and dean
- CBTE 140, Microsoft Excel
- CBTE 140A, Introduction to Microsoft Excel
- CBTE 151, Introduction to Microsoft Access
- CBTE 161, Learning The Internet
- CBTE 162, Web Page Creation
- CBTE 170, Desktop Publishing
- GEOG 101, Physical Geography
- GEOG 102, Cultural Geography
- GEOG 103, Introduction to Meteorology
- GEOG 104, World Regional Geography
- GEOG 154, Introduction to Urban Geography
- GEOL 100, General Geology
- GEOL 290, Independent Study
- HEIT 105, Introduction to Health Information
- HEIT 156, Hospital and Health Statistics; or other HEIT course with consent of department chair and dean
- MARK 100, Principles of Marketing
- MARK 110, Principles of Retailing
- MARK 130, Advertising Principles
- NLTE 105, Principles of Plant Growth
- PHYN 100, Survey of Physical Science
- PHYN 290, Independent Study
- POLI 101, Introduction to Political Science
- POLI 102, The American Political System
- POLI 103, Comparative Politics
- POLI 290, Independent Study
- REAL 101, Real Estate Principles
- REAL 105, Legal Aspects of Real Estate I
- REAL 125 Real Estate Economics
- TRAV 105, Introduction to Travel Services
- TRAV 111, Travel to Asia and the Pacific
- TRAV 112, Travel to Western Hemisphere
- TRAV 120, Travel Agents Computer Technology
- TRAV 121, Cruises
- TRAV 130, Tourism and Visitor Services
- TRAV 145, Tours and Tour Guiding

**Total Units = 29-32**

For graduation requirements see **Requirements for the Associate Degree** on page 60.

**Electives as needed to help meet the minimum of 60 units required for the degree:**
- **Recommended electives:** Anthropology 103, 107, 115; Architecture 100, 105, 106, 170, 185; Biology 100; Computer and Information Sciences 186, 190, 192; Computer Business Technology 140, 140A, 151, 161, 162, 170; Geography 101, 102, 103, 104, 154; Geology 100; Health Information Technology 105, 156; Marketing 100, 110, 130; Nursery and Landscape Technology 105; Physics 100; Political Science 101, 102, 103; Real Estate 101, 105, 125; Travel and Tourism 105, 111, 120, 121, 130, 145.
Health Information Technology

Units

Associate in Science Degree: Health Information Technology 51*

*and electives as needed to meet minimum of 60 units required for the degree.

This program is designed to meet the increasing need for professionally trained Health Information Technicians in acute care hospitals, clinics, long term care, and other health care facilities as well as governmental and private agencies. The two-year A.S. degree program provides emphasis on record storage and retrieval, quantitative analysis, coding and abstracting, legal aspects of health records, health care statistics, supervision of department personnel, and an introduction to quality assessment, utilization review, and risk management.

The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), in cooperation with the American Health Information Management Association’s Council on Accreditation. Graduates of the program are eligible to write the national accreditation examination of the American Health Information Management Association, and upon passing this exam become designated as an RHIT (Registered Health Information Technician).

Interested persons should call the Special Programs Admissions Clerk in the Admission’s Office (619) 388-2684.

Course repetition in this program is not permitted.

Associate in Science Degree: Health Information Technology

Courses Required for the Major: Units
HEIT 105, Introduction to Health Information ........ 4
HEIT 125, Basic Pharmacology for Allied Health ...... 2
HEIT 155A, ICD-9-CM Coding I............................. 4
HEIT 155B, ICD-9-CM Coding II............................ 4
HEIT 155C, CPT Coding ........................................ 1
HEIT 156, Hospital and Health Statistics ................. 3
HEIT 205, Health Law, Accreditation and Licensing Standards ................................................. 3
HEIT 258, Quality Assessment, Utilization Review & Risk Management ........................................ 3
HEIT 260, Principles of Supervision and Administration ......................................................... 3
HEIT 261, Directed Clinical Practice A .................... 2
HEIT 262, Directed Clinical Practice B .................... 3
MEDA 105, Human Anatomy & Physiology ............. 3
MEDA 110, Medical Terminology ............................ 3
MEDA 115, Pathophysiology .................................... 3
CISC 150, Introduction to Computer and Information Sciences ................................................. 3
CBTE 120, Beginning Microsoft Word .................... 2
ENGL 101, Reading and Composition .................... 3
PSYC 101, General Psychology ............................... 3

Total Units = 52

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:
Recommended Electives: Chemistry 105; Speech Communications 99, 103, 135.

History
See “Social Sciences” on page 169.
Hotel-Motel Management

Certificate of Achievement: Hotel-Motel Management 32-33

Associate in Science Degree: Hotel-Motel Management 32-33*

*and electives as needed to meet minimum of 60 units required for the degree.

Provides training for entry-level positions in the hotel-motel industry. The curriculum includes instruction in hotel-motel front office procedures and other duties performed in establishments that provide lodging, meals, convention facilities, and other hospitality services to the general public or to an organization’s membership.

The program is recognized by the San Diego County Hotel and Motel Association.

Certificate of Achievement: Hotel-Motel Management

Courses Required for the Major: Units
HOTL 105, Hotel-Motel Front Office Procedures ........ 3
HOTL 110, Introduction to Hotel-Motel Management.................................................. 3
HOTL 115, Applied Hotel-Motel Law ....................... 3
HOTL 120, Hotel-Motel Law .................................. 3
HOTL 270, Work Experience or elective ................... 3
ACCT 186, Accounting for Professional Offices, or
ACCT 116A, Principles of Accounting-Financial...... 3-4
BUSE 119, Business Communications...................... 3
BUSE 150, Human Relations in Business .................. 3
CISC 110, Microcomputer Applications .................... 2
FOOD 115, Food Service Operations & Management... 3
FOOD 140, Food & Beverage Purchasing & Control.... 3

Total Units = 32-33

Associate in Science Degree: Hotel-Motel Management

Courses Required for the Major: Units
HOTL 105, Hotel-Motel Front Office Procedures ........ 3
HOTL 110, Introduction to Hotel-Motel Management .................................................. 3
HOTL 115, Applied Hotel-Motel Law ....................... 3
HOTL 120, Hotel-Motel Law .................................. 3
HOTL 270, Work Experience or elective ................... 3
ACCT 186, Accounting for Professional Offices, or
ACCT 116A, Principles of Accounting-Financial...... 3-4
BUSE 119, Business Communications...................... 3
BUSE 150, Human Relations in Business .................. 3
CISC 110, Microcomputer Applications .................... 2
FOOD 115, Food Service Operations & Management... 3
FOOD 140, Food & Beverage Purchasing & Control.... 3

Total Units = 32-33

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

Recommended Electives: Computer and Information Sciences; Food Service Occupations 107; Travel and Tourism 130; Hotel-Motel Management 270, 290.
Associate in Science degree is FIDER Accredited at the Pre-Professional Assistant Level.

This program provides the basic aesthetic and business concepts of interior design for students interested in an interior design career. The interior design program offers two educational options: option one is a Certificate of Achievement, option two is an Associate in Science Degree.

**Certificate of Achievement:**

**Interior Design**

The Certificate of Achievement option prepares the student for an entry-level position in business related areas of Interior Design.

**Recommended sequence for student success.**

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTE 101, Introduction to Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>INTE 112A, Drafting for Interiors</td>
<td>3</td>
</tr>
<tr>
<td>CONF 140, Textiles</td>
<td>3</td>
</tr>
<tr>
<td>INTE 105, Residential Design</td>
<td>3</td>
</tr>
<tr>
<td>INTE 115, Lighting and Color</td>
<td>3</td>
</tr>
<tr>
<td>INTE 125, Decorative Arts</td>
<td>3</td>
</tr>
<tr>
<td>INTE 145, Contemporary Housing</td>
<td>3</td>
</tr>
<tr>
<td>INTE 110, Materials and Resources</td>
<td>3</td>
</tr>
<tr>
<td>INTE 130, Interior Design Professional Practice</td>
<td>3</td>
</tr>
<tr>
<td>INTE 270, Work Experience</td>
<td></td>
</tr>
</tbody>
</table>

* Select one course from:
  * INTE 200, Advanced Residential Space Planning

**Total Units = 30-31**

*During semesters when none of these courses are offered, students may instead select one course from the **Recommended Electives** shown below the Associate in Science Degree: Interior Design.

**Associate in Science Degree:**

**Interior Design**

The Associate in Science Degree option provides the student with skills and knowledge for entry into the design area of interior design.

**Recommended sequence for student success.**

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTE 101, Introduction to Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>INTE 112A, Drafting for Interiors</td>
<td>3</td>
</tr>
<tr>
<td>CONF 140, Textiles</td>
<td>3</td>
</tr>
<tr>
<td>INTE 105, Residential Design</td>
<td>3</td>
</tr>
<tr>
<td>INTE 112B, Conceptual Drawings for Interiors II</td>
<td>3</td>
</tr>
<tr>
<td>INTE 115, Lighting and Color</td>
<td>3</td>
</tr>
<tr>
<td>INTE 125, Decorative Arts</td>
<td>3</td>
</tr>
<tr>
<td>INTE 145, Contemporary Housing</td>
<td>3</td>
</tr>
<tr>
<td>INTE 110, Materials and Resources</td>
<td>3</td>
</tr>
<tr>
<td>INTE 130, Interior Design Professional Practice</td>
<td>3</td>
</tr>
<tr>
<td>INTE 270, Work Experience</td>
<td></td>
</tr>
</tbody>
</table>

* Select one course from:
  * INTE 200, Advanced Residential Space Planning
  * INTE 205, Non-Residential Space Planning
  * INTE 210, Presentation & Color Rendering
  * INTE 215, Environmental Lighting Design

**Total Units = 33-34**

*During semesters when none of these courses are offered, students may instead select one course from the **Recommended Electives** shown below.

For graduation requirements see **Requirements for the Associate Degree** on page 60.

**Electives as needed to meet minimum of 60 units required for the degree:**

**Recommended Electives:**

Architecture 101, 105, 126, 127, 185; Art-Fine Art 150A, 150B, 152, 155A; Building Construction Technology 120, 260, 268, 295.

**Landscape Architecture**

See “Architecture” on page 97.
Program provides training in the fundamental skills of understanding, speaking, reading and writing the language, and increases one’s familiarity with the English language. From a vocational standpoint, the curriculum will provide a student with skills useful in translating, interpreting, teaching, linguistic or literary research, music, foreign trade, or missionary work. The major requires 26 units in the same language, unless the student has completed two years of a language in high school (with a “C” average or better) and takes 10 units of an intermediate course at the college. In this case, the department will determine the courses necessary to complete the requirements.

### Associate in Arts Degrees: Languages

#### French

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 101 and 102, First and Second Course in French, and</td>
<td>20</td>
</tr>
<tr>
<td>FREN 201 and 202, Third and Fourth Course in French</td>
<td>6</td>
</tr>
<tr>
<td>FREN 210 and 211, The Grammar of Spoken French I and II</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total Units = 26**

Note: Only one French (FREN) course from the above list may be used to satisfy SDCCD general education requirements.

#### Spanish

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 101 and 102, First and Second Course in Spanish, or</td>
<td>20</td>
</tr>
<tr>
<td>SPAN 100, First/Second Course in Spanish (Accelerated), or</td>
<td></td>
</tr>
<tr>
<td>SPAN 199, Second/Third Course in Spanish - (Accelerated); AND</td>
<td></td>
</tr>
<tr>
<td>SPAN 201 and 202, Third and Fourth Course in Spanish, or</td>
<td></td>
</tr>
<tr>
<td>SPAN 199, Second/Third Course in Spanish (Accelerated),</td>
<td>6</td>
</tr>
<tr>
<td>SPAN 210 and 211, Conversation and Composition Spanish I and II</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units = 26**

Note: Only one Spanish (SPAN) course from the above list may be used to satisfy SDCCD general education requirements.

#### Japanese

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAPN 101 and 102, First and Second Course in Japanese and</td>
<td>20</td>
</tr>
<tr>
<td>JAPN 201 and 202, Third and Fourth Course in Japanese</td>
<td></td>
</tr>
<tr>
<td>JAPN 210 and 211, the Grammar of Spoken Japanese I and II</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total Units = 26**

Note: Only one Japanese (JAPN) course from the above list may be used to satisfy SDCCD general education requirements.

Note: The “accelerated” foreign language courses are 100 (101-102) and 199 (102-201) listings. They are particularly well-suited for students who are specializing in foreign languages or who have the desire and ability to do intensive work in a language.

For graduation requirements see Requirements for the Associate Degree on page 60.

**Electives as needed to meet minimum of 60 units required for the degree:**

**Recommended Electives:** Anthropology 103, 107; Chicano Studies 135, 138; Fine Arts 109, 111, 130; English 220, 221; Geography 102, History 115A, 115B, 120; Music 109; Philosophy 106; Vietnamese 201.

**Transfer Information**

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog
TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. **Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.**

**San Diego State University**

French, B.A.: French 101, 102, 201, 202 (City, Mesa).
German, B.A.: German 101, 102, 201 (Mesa), 210 (City) or 211 (City).
Italian, B.A.: Italian 101, 102, 201 (City, Mesa).
Russian, B.A.: Russian 101, 102.
Spanish, B.A.: Spanish 101, 102, 201, 202, 210, 211.

**University of California, San Diego**

See a counselor for additional information.
Italian, B.A.: Italian 101, 102 and 201 (Mesa).
Japanese Studies, B.A.: Japanese 101, 102, 201 and 202. See a counselor for information on coordinated offerings in languages, history, culture and political economy of Japan (Mesa).
Linguistics, B.A.: See a counselor.
Linguistics, Language, B.A.: Select one from American Sign Language 100 (Mesa), 101, 200 (Mesa), 201; French 101, 102, 201 or 210 and 211 and 202; German 101, 102 and 201; Italian 101, 102, 201; Spanish 101, 102, 201 or 210 and 211 and 202. See a counselor for additional information.
See a counselor for information on additional Linguistics and Literature degrees.

Liberal Arts

Designed for students who wish a broad knowledge of liberal arts. This flexible major can be taken by students who wish to earn a general associate degree. It is also appropriate for transfer students. Those planning to transfer to a four-year institution should consult a counselor.

Caution: Because admission and major preparation requirements vary at each UC, CSU, and private institution, it is strongly advised that students meet with a counselor to determine the specific admissions and major preparation requirements of the selected transfer institution.

**Associate in Arts Degree:**

**Liberal Arts**

**Option I**

**Courses Required for the Major:** 39-40
The student will select courses that conform to the CSU General Education area requirements. Refer to page 71.

**Option II**

**Courses Required for the Major:** 34-38
The student will select the core general education courses that conform to the SDCCD-UCSD Transfer Admission Guarantee (TAG) agreement. Courses taken under this agreement are guaranteed to apply toward the completion of college general education requirements at UCSD.

The core requirements for general education are one year of a transferable sequence in the following areas: (a) writing, (b) the humanities, (c) the social sciences, (d) foreign language, and (e) mathematics or a natural science. For more information, see a counselor.

**Option III**

**Courses Required for the Major:** 37-40
The student will select courses that conform to the Intersegmental General Education Transfer Curriculum (IGETC) area requirements. For specific information, see a counselor.
Transfer Information
Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language, Consult the current catalog of the transfer institution and consult with a counselor.

Teacher Education Preparation

At the time of catalog print, these programs were in the process of being revised. Students should check with the Counseling Department or Transfer Center for current information.

Marketing

Certificate of Completion:
Retail Sales with Emphasis in
Building Products 12
Children’s Products 12
Fashion Sales 12
Food Products and Equipment 12
Home Interior Products 12

Certificate of Achievement:
Marketing 32

Associate in Science Degree:
Marketing 48*

*and electives as needed to meet minimum of 60 units required for the degree.

Designed for the student interested in marketing as a career and tailored to develop competency in merchandising, retailing, and wholesaling, in both large and small businesses. Students are encouraged to work part-time while attending college. The student can obtain credit for working by enrolling in Marketing 270. Successful completion should lead to a full-time position or serve as a foundation for further education. Students planning to transfer to a four-year college or university should select the Business Administration major.

Certificate of Completion:
Retail Sales with Emphasis in Building Products*

Successful completion of this certificate prepares students for entry-level sales positions in the building products industry.

Courses:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 130, Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 119, Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>MARK 105, Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>MARK 110, Principles of Retailing</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units = 12
Certificate of Completion:  
Retail Sales with Emphasis in Children's Products*  
Successful completion of this certificate prepares students for entry-level positions selling children's products.
Courses:  
BUSE 119, Business Communications .................. 3  
MARK 105, Professional Selling ............................. 3  
MARK 110, Principles of Retailing .......................... 3  
Select one course from:  
CHIL 111, Curriculum: Music/Motor Skills  
CHIL 121, Curriculum: Art  
CHIL 131, Curriculum: Language/Science  
CHIL 175, The Infant-Toddler ................................. 3  
Total Units = 12

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:  
Retail Sales with Emphasis in Fashion Sales*  
Successful completion of this certificate prepares students for entry-level positions in fashion sales.
Courses:  
BUSE 119, Business Communications .................. 3  
MARK 105, Professional Selling ............................. 3  
MARK 110, Principles of Retailing .......................... 3  
Select one course from:  
FASH 108, Analysis, Evaluation, and Comparison of Ready-to-Wear  
FASH 125, Fashion Selection ................................. 3  
Total Units = 12

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:  
Retail Sales with Emphasis in Food Products and Equipment*  
Successful completion of this certificate prepares students for entry-level positions in industries selling food and food preparation products.
Courses:  
BUSE 119, Business Communications .................. 3  
FOOD 105, Fundamentals of Food Preparation .......... 3  
MARK 105, Professional Selling ............................. 3  
MARK 110, Principles of Retailing .......................... 3  
Total Units = 12

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:  
Retail Sales with Emphasis in Home Interior Products*  
Successful completion of this certificate prepares students for entry-level sales positions in the home interior products industry.
Courses:  
BUSE 119, Business Communications .................. 3  
INTE 101, Introduction to Interior Design ............... 3  
MARK 105, Professional Selling ............................. 3  
MARK 110, Principles of Retailing .......................... 3  
Total Units = 12

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Achievement:  
Marketing  
Courses Required for the Major:  
MARK 100, Principles of Marketing .......................... 3  
MARK 105, Professional Selling ............................. 3  
MARK 110, Principles of Retailing .......................... 3  
MARK 130, Advertising Principles .......................... 3  
BUSE 100, Introduction to Business  
(recommended as a first semester course) .................. 3  
BUSE 101, Business Mathematics ........................... 3  
BUSE 119, Business Communications ...................... 3  
BUSE 140, Business Law and the Legal Environment ....... 3  
CISC 181, Principles of Information Systems .......... 4-6  
Total Units = 32
**Associate in Science Degree: Marketing**

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARK 100, Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MARK 105, Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>MARK 110, Principles of Retailing</td>
<td>3</td>
</tr>
<tr>
<td>MARK 130, Advertising Principles</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 116A, Principles of Accounting-Financial</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 116B, Principles of Accounting-Managerial</td>
<td>4</td>
</tr>
<tr>
<td>BUSE 100, Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 101, Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 119, Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 140, Business Law and the Legal Environment</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 150, Human Relations in Business</td>
<td>3</td>
</tr>
<tr>
<td>CISC 181, Principles of Information Systems</td>
<td>4-6</td>
</tr>
<tr>
<td>ECON 120, Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>SPEE 135, Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units = 45**

For graduation requirements see **Requirements for the Associate Degree** on page 60.

**Electives as needed to meet minimum of 60 units required for the degree:**

**Recommended Electives:** Business 201, 290; Fashion 115; Marketing 270; Psychology 101.

---

**Mathematics**

**Associate in Arts Degree:**

**Mathematics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 150, Calculus with Analytic Geometry I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 151, Calculus with Analytic Geometry II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 245, Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 252, Calculus with Analytic Geometry III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 254, Introduction to Linear Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

**Select three-four units from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 107, 107L, Introduction to Scientific Programming and Lab;</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 119, Elementary Statistics</td>
<td></td>
</tr>
<tr>
<td>MATH 255, Differential Equations, or</td>
<td></td>
</tr>
<tr>
<td>PHIL 101, Symbolic Logic</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units = 22-23**

Successful completion of this curriculum will develop competence in mathematics through differential and integral calculus, providing an adequate background for employment in many technological and scientific areas as well as providing a firm foundation for students planning advanced study.

**Associate in Arts Degree:**

**Mathematics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 107, 107L, Introduction to Scientific Programming and Lab;</td>
<td>3-1,1</td>
</tr>
<tr>
<td>MATH 108, 108L, Intermediate Scientific Programming and Lab</td>
<td>3,1</td>
</tr>
<tr>
<td>MATH 150, Calculus with Analytic Geometry I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 151, Calculus with Analytic Geometry II</td>
<td>4</td>
</tr>
</tbody>
</table>

**Applied Mathematics Option**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 150, Calculus with Analytic Geometry I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 151, Calculus with Analytic Geometry II</td>
<td>4</td>
</tr>
</tbody>
</table>
MATH 237, Machine & Assembly Language .............. 3
MATH 245, Discrete Mathematics .......................... 3
MATH 252, Calculus with Analytic Geometry III ...... 4
MATH 254, Introduction to Linear Algebra .............. 3

Total Units = 31

Note: Only one Mathematics (MATH) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

Recommended Electives: Computer and Information Sciences 150; English 101; Life Sciences (one course); Mathematics 95, 96, (courses supporting the major) 104, 108, 108L, 118, 119, 141, 237, 237L, 255; Physics 124A/B or 195A/B; Psychology 101.

Other courses offered in Mathematics to support other majors: Mathematics 32, 33, 35, 116, 121, 122, 210A, 210B, 290, 296.

Transfer Information

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

- **San Diego State University**

- **University of California, San Diego**
  Mathematics/Secondary Education B.A.: Mathematics 150, 151, 252, 254, 255; Engineering 115 (Mesa) or Computer Information Science 192 or Computer Information Science 190.
This two-semester certificate program provides the specialized clinical and administrative training needed for employment and national certification as a medical assistant.

This program is accredited by the Commission on Accreditation of Allied Health Education Programs of the American Medical Association in collaboration with the American Association of Medical Assistants. A grade of "C" or better must be maintained in all courses to continue in the program and retain a Medical Assisting major.

Interested students should contact the Special Admissions clerk at (619) 388-2684 or program director at (619) 388-2267. Course repetition in this program is not permitted.

**Certificate of Completion:**

**Phlebotomy**

This 9-12 unit certificate prepares students for entry-level positions as phlebotomy technicians. Upon successful completion of requirements, students will be awarded a Certificate in Phlebotomy. The certificate program is approved through the State of California, Department of Health Services, Laboratory Field Services. Completion of these courses can be applied to a Certificate of Achievement and/or Associate of Science Degree in Medical Assisting.

**Certifcate of Completion:**

**Phlebotomy**

This 9-12 unit certificate prepares students for entry-level positions as phlebotomy technicians. Upon successful completion of requirements, students will be awarded a Certificate in Phlebotomy. The certificate program is approved through the State of California, Department of Health Services, Laboratory Field Services. Completion of these courses can be applied to a Certificate of Achievement and/or Associate of Science Degree in Medical Assisting.

<table>
<thead>
<tr>
<th>Courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDA 105, Human Anatomy and Physiology</td>
<td>3</td>
</tr>
<tr>
<td>MEDA 110, Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>MEDA 150, Phlebotomy</td>
<td>2</td>
</tr>
<tr>
<td>MEDA 270, Work Experience</td>
<td>1-3</td>
</tr>
<tr>
<td><strong>Total Units = 9-12</strong></td>
<td></td>
</tr>
</tbody>
</table>

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

**Certificate of Achievement:**

**Medical Assisting**

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDA 105, Human Anatomy and Physiology</td>
</tr>
<tr>
<td>MEDA 110, Medical Terminology</td>
</tr>
<tr>
<td>MEDA 115, Pathophysiology</td>
</tr>
<tr>
<td>MEDA 120, Basic Clinical Assisting</td>
</tr>
<tr>
<td>MEDA 130, Advanced Clinical Assisting</td>
</tr>
<tr>
<td>MEDA 145, Directed Clinical Practice</td>
</tr>
<tr>
<td>ACCT 186, Accounting for Professional Offices</td>
</tr>
<tr>
<td>CBTE 230, Medical Transcription</td>
</tr>
<tr>
<td>CBTE 237, Medical Office Procedures</td>
</tr>
<tr>
<td>CBTE 238, Health Insurance Procedures</td>
</tr>
</tbody>
</table>

**Select one course from:**

- CBTE 103, Computer Keyboarding
- CBTE 095, Keyboarding/Typing Speed Development

| Total Units = 32-34 |

**Associate in Science Degree:**

**Medical Assisting**

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDA 105, Human Anatomy and Physiology</td>
</tr>
<tr>
<td>MEDA 110, Medical Terminology</td>
</tr>
<tr>
<td>MEDA 115, Pathophysiology</td>
</tr>
<tr>
<td>MEDA 120, Basic Clinical Assisting</td>
</tr>
<tr>
<td>MEDA 130, Advanced Clinical Assisting</td>
</tr>
<tr>
<td>MEDA 145, Directed Clinical Practice</td>
</tr>
<tr>
<td>ACCT 186, Accounting for Professional Offices</td>
</tr>
<tr>
<td>CBTE 230, Medical Transcription</td>
</tr>
<tr>
<td>CBTE 237, Medical Office Procedures</td>
</tr>
<tr>
<td>CBTE 238, Health Insurance Procedures</td>
</tr>
<tr>
<td>PSYC 101, General Psychology</td>
</tr>
</tbody>
</table>

**Select one course from:**

- BUSE 119, Business Communications
- ENGL 101, Reading and Composition

| Select one course from: |
|-------------------------|-------|
| CBTE 103, Computer Keyboarding | |
| CBTE 095, Keyboarding/Typing Speed Development | 1-3 |
| **Total Units = 38-40** |
For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

Recommended Electives: Business 119; Computer Business Technology 205; Psychology 101, 135; Speech Communications 103; Medical Assisting 150, 270, 290 and 296.

Multimedia

<table>
<thead>
<tr>
<th>Certificate of Completion:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Video</td>
<td>15</td>
</tr>
<tr>
<td>Multimedia Survey</td>
<td>15</td>
</tr>
<tr>
<td>New Media Publishing</td>
<td>10</td>
</tr>
<tr>
<td>Video Game Development</td>
<td>15</td>
</tr>
</tbody>
</table>

**Certificate of Achievement:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Animation and Modeling</td>
<td>39</td>
</tr>
<tr>
<td>Interactive Media Production</td>
<td>30</td>
</tr>
</tbody>
</table>

**Associate in Science Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimedia</td>
<td>30*</td>
</tr>
</tbody>
</table>

*and electives as needed to meet minimum of 60 units required for the degree.

This program is designed to provide students of multimedia the opportunity to develop necessary foundation skills, master the tools and processes, and undergo industry standards production experiences. The program provides students with a comprehensive approach to the field of multimedia. The program curriculum is structured so as to provide students with a balance between aesthetic and practical design application. Upon completion of this program, students will be qualified for entry-level employment in the multimedia industry.

**Certificate of Completion:**

**Digital Video***

Successful completion of this program qualifies individuals for entry-level employment as digital video producers in the multimedia industry.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MULT 101, Introduction to Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>MULT 112, Multimedia Authoring</td>
<td>3</td>
</tr>
<tr>
<td>MULT 123, Digital Video</td>
<td>3</td>
</tr>
</tbody>
</table>

**Select six units from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAM 150, Cinema as Art and Communication I</td>
<td></td>
</tr>
<tr>
<td>MULT 127, Writing for Multimedia</td>
<td></td>
</tr>
<tr>
<td>MULT 137, Introduction to 3D Animation I</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total Units = 15**
Certificate of Completion:
Multimedia Survey*
Successful completion of this program qualifies individuals for entry-level multimedia positions as authors, product designers, and web page designers.

Courses:  
- MULT 101, Introduction to Multimedia.......................... 3
- MULT 112, Multimedia Authoring ...................................... 3
- ARTF 150A, Design I.................................................. 3

Select six units from:
- ARTF 152, Color Theory
- ARTF 150B, Beginning Graphic Design
- ARTF 210A, Life Drawing
- DRAM 150, Cinema as Art and Communication I
- MULT 118, Multimedia Production
- MULT 121, Digital Image Editing
- MULT 122, Vector Image Editing
- MULT 123, Digital Video
- MULT 127, Writing for Multimedia
- MULT 137, Introduction to 3D Animation I
- MULT 139, 3D Character Animation II
- MULT 141, 3D Animation: Realism
- MULT 143, 3D Animation: Production Studio......................... 6

Total Units = 15

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:
Video Game Development*
Upon successful completion of this certificate, students will be prepared for entry-level design and development positions in the video game industry.

Courses:  
- MULT 120, Introduction to Video Game Development.................. 3
- MULT 121, Digital Image Editing........................................... 3
- MULT 137, Introduction to 3D Animation I.......................... 3
- MULT 139, 3D Character Animation II............................... 3
- MULT 141, 3D Animation: Realism......................................... 3

Total Units = 15

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Completion:
New Media Publishing*
Successful completion of this program qualifies individuals for entry-level employment in the multimedia industry in multimedia publishing.

Courses:  
- MULT 101, Introduction to Multimedia......................... 3
- MULT 112, Multimedia Authoring......................... 3
- MULT 121, Digital Image Editing.......................... 3
- CBTE 161, Learning the Internet............................. 1

Total Units = 10

*This is a department award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Certificate of Achievement:
Multimedia 3D Animation and Modeling
Upon successful completion of this certificate, students will be prepared for entry-level design and development positions in the video game industry.

Courses Required for the Major:  
- MULT 101, Introduction to Multimedia.......................... 3
- MULT 112, Multimedia Authoring.......................... 3
- MULT 121, Digital Image Editing.......................... 3
- MULT 123, Digital Video.......................... 3
- MULT 127, Writing for Multimedia.......................... 3
- MULT 137, Introduction to 3D Animation I.................. 3
- MULT 139, 3D Character Animation II.......................... 3
- MULT 141, 3D Animation: Realism.......................... 3
- MULT 143, 3D Animation: Production Studio.................. 3
- ARTF 150A, Design I.............................................. 3
- ARTF 152, Color Theory........................................... 3
- ARTF 155A, Freehand Drawing I................................. 3
- ARTF 210A, Life Drawing I....................................... 3

Total Units = 39

Certificate of Achievement:
Multimedia Interactive Media Production

Courses Required for the Major:  
- MULT 101, Introduction to Multimedia.......................... 3
- MULT 112, Multimedia Authoring.......................... 3
- MULT 118, Multimedia Production.......................... 3
- MULT 121, Digital Image Editing.......................... 3
- MULT 122, Vector Image Editing.......................... 3
- MULT 123, Digital Video.......................... 3
- MULT 127, Writing for Multimedia.......................... 3
- MULT 137, Introduction to 3D Animation I.................. 3
- ARTF 150A, Design I.............................................. 3
Select six units from:
ARTF 151, Three-Dimensional Design
ARTF 152, Color Theory
DRAM 150, Cinema as Art and Communication I
MULT 139, 3D Character Animation II
MULT 141, 3D Animation: Realism
MULT 143, 3D Animation: Production Studio ............ 6
Total Units = 33

Associate in Science Degree:
Multimedia

Courses Required for the Major: Units
MULT 101, Introduction to Multimedia .................... 3
MULT 112, Multimedia Authoring ....................... 3
MULT 121, Digital Image Editing ......................... 3
MULT 123, Digital Video ................................ 3

Select eighteen units from:
ARTF 150A, Design I
ARTF 151, Three-Dimensional Design
ARTF 152, Color Theory
ARTF 210A, Life Drawing I
CBTE 161, Learning the Internet
CBTE 126, Document Processing
DRAM 150, Cinema as Art and Communication I
MULT 118, Multimedia Production
MULT 122, Vector Image Editing
MULT 127, Writing for Multimedia
MULT 137, Introduction to 3D Animation I
MULT 139, 3D Character Animation II
MULT 141, 3D Animation: Realism
MULT 143, 3D Animation: Production Studio ........... 18
Total Units = 30

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to help meet minimum of 60 units required for the degree:

---

Music

<table>
<thead>
<tr>
<th>Certificate of Completion:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music Composition</td>
<td>17.5</td>
</tr>
<tr>
<td>Music Technology</td>
<td>17.5</td>
</tr>
<tr>
<td>Music Theory</td>
<td>17.5</td>
</tr>
</tbody>
</table>

Certificate of Completion: Music Composition*

Students may take the following selected courses considered necessary by the Music Department to pursuing music composition as a specialty within the discipline of music.

Courses:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 123, Recital Hour</td>
<td>0.5</td>
</tr>
<tr>
<td>MUSI 190, The Electronic Music Studio</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 202, Computer Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 206A, Projects in Composition</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 206B, Projects in Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one course from:
MUSI 158A, Music Theory I
MUSI 158B, Music Theory II
MUSI 258A, Music Theory III
MUSI 258B, Music Theory IV

Select one course from:
MUSI 268A, Beginning Ear Training Laboratory I
MUSI 268B, Beginning Ear Training Laboratory II

The academic program in Music has been designed to provide students with the basic skills for most musical pursuits, yet to be flexible so that students may determine which music classes would be most suitable to meet their goals and needs. It is recommended that students seek advice from a member of the Music faculty.

Certificate of Completion:
Music Composition

*and electives as needed to meet minimum of 60 units required for the degree.
Certification of Completion: Music Technology*

Students may take the following selected courses considered necessary by the Music Department to pursuing careers in the music recording industry or in music production as a specialty within the discipline of music.

<table>
<thead>
<tr>
<th>Courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 123, Recital Hour</td>
<td>0.5</td>
</tr>
<tr>
<td>MUSI 150A, Basic Musicianship</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 190, The Electronic Music Studio</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 201, Recording Arts</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 202, Computer Music</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one course from:
- MUSI 205A, Projects in Electronic Music
- MUSI 205B, Projects in Electronic Music
- MUSI 206A, Projects in Composition
- MUSI 206B, Projects in Composition

Select two courses from:
- MUSI 115A, Class Piano I
- MUSI 115B, Class Piano II
- MUSI 115C, Intermediate Piano
- MUSI 132A, Classical Guitar
- MUSI 132B, Classical Guitar
- MUSI 215A, Class Piano III
- MUSI 215B, Class Piano IV

Total Units = 17.5

Certificate of Completion: Music Theory*

Students may take the following selected courses considered necessary by the Music Department to pursuing music composition as a specialty within the discipline of music. Satisfactory completion of MUSI 150A or equivalent is required as a prerequisite to enter the sequence of Music Theory courses beginning with MUSI 158A.

<table>
<thead>
<tr>
<th>Courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 123, Recital Hour</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Select three courses in sequence from:
- MUSI 158A, Music Theory I
- MUSI 158B, Music Theory II
- MUSI 258A, Music Theory III
- MUSI 258B, Music Theory IV

Select two courses in sequence from:
- MUSI 115A, Class Piano I
- MUSI 115B, Class Piano II
- MUSI 115C, Intermediate Piano
- MUSI 215A, Class Piano III
- MUSI 215B, Class Piano IV

Total Units = 17.5

*These are department awards in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Associate in Arts Degree: Music

Basic Musicianship

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 150A, Basic Musicianship*</td>
<td>3</td>
</tr>
</tbody>
</table>

Music Theory - select eight units:
- MUSI 158A, 158B, Music Theory I & II
- MUSI 258A, 258B, Music Theory III & IV

Ear Training - select two units:
- MUSI 268A, 268B, Beginning Ear Training Lab I & II
- MUSI 269A, 269B, Advanced Ear Training Lab III & IV

Music History/Literature - select three units:
- MUSI 100, Introduction to Music
- MUSI 101, Music History I (Miramar, Mesa)
- MUSI 102, Music History II (Miramar, Mesa)
- MUSI 105, Music of Our Time
- MUSI 109, World Music
- MUSI 110, Music for Elementary School Teachers
- MUSI 111, Jazz-History and Development
- MUSI 125, Music, The Arts, and Humanity
- BLAS 120, Black Music

Electronic/Computer Music - select three units:
- MUSI 190, The Electronic Music Studio
- MUSI 201, Recording Arts
- MUSI 202, Computer Music
- MUSI 205A, 205B, Projects in Electronic Music
- MUSI 206A, 206B, Projects in Composition

Piano - select two units:
- MUSI 115A, 115B, Class Piano I and II
- MUSI 115C, Intermediate Piano
- MUSI 215A, 215B, Class Piano III and IV

Private Study - select two to four units:
- MUSI 275A, 275B, 275C, 275D, Applied Music
- MUSI 276A, 276B, 276C, 276D, Individual Study (2 semesters required)
Recital Hour (to be taken twice)
MUSI 123, Recital Hour* ................................. 1

Performance Groups - select 3-4 units:
MUSI 130A, 130B, 130C, 130D, College Chorus
MUSI 212A, 212B, 212C, 212D, Vocal Ensemble
MUSI 214A, 214B, 214C, 214D, Concert Choir
MUSI 250A, 250B, 250C, 250D, Concert Band
MUSI 252, Concert Jazz Band
MUSI 253A, 253B, 253C, 253D, Ensembles
MUSI 254, Instrumental Ensemble .............................. 3-4

Total Units = 27-30

Note: Only one Music (MUSI) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Recommended electives as needed to help meet minimum of 60 units required for the degree: any of the classes listed above as well as Voice classes - Music 120A 120B, 240A, 240B; Classical Guitar - Music 132A, 132B; foreign languages (Italian, German, French, or Spanish; maximum of 10 units).

*Music 150A, Basic Musicianship, is the prerequisite to Music Theory and Ear Training classes. Because the latter are sequential classes and offered only during specific semesters, it is recommended that students take Music 150A during the summer prior to the fall semester in which they will be entering Mesa College. Students also have the option of testing out of Music 150A. Contact the Music Theory instructor to exercise this option (619) 388-2809.

Transfer Information
Most four-year schools require that students' first two years of study include 1) music theory, 2) aural skills, 3) music history, 4) private study of voice or an instrument, 5) participation in a performance group, and 6) piano skills. Placement exams are given by these institutions to determine students' comprehension in these areas. The Music faculty's goal is to prepare students to transfer at the junior level following two years of attendance at Mesa College.

Computer skills have become an integral means by which to learn, teach, and create music. It is therefore strongly suggested that students first speak with a Mesa counselor. The following program of courses is recommended for transfer students. Students are urged, prior to transferring, to contact the school of their choice to verify required course work.

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

- San Diego State University

Music B.A.: Music 100, 115 A-B, 158 A (Mesa); four units from: Music 130 A-D (City, Mesa), 212 A-D (Mesa), 214 A-D (Mesa), 250 A-D (Mesa), 252, 253 A-D (Mesa). Third semester foreign language competency. See a counselor.

- University of California, San Diego

Music/Humanities, B.A.: Music 150A.


Music, Interdisciplinary Computing in the Arts, B.A.: Music 100, 150A, 268A, 268 B (Mesa); Computer Information Science 190; Mathematics 150, 151 or 121, 122.

Nursery and Landscape Technology
Effective the fall of 1996, the Nursery and Landscape Technology certificate and degree programs were deactivated at Mesa College. Students who are in this major are advised to contact the Architecture Department chairperson to explore options for completing the certificate or degree program.

Note: Students interested in learning to design landscapes should see listings under Architecture for a certificate or degree in Landscape Architecture Technology.
The Physical Education Department offers a diverse curriculum which includes lower division theory courses designed for those who want to complete their Associate in Arts degree in Physical Education and transfer to an institution of higher learning; a basic instruction program which provides students a wide variety of movement experiences for the development of physical activity skills, knowledge, and fitness necessary for lifetime wellness; an adapted activities curriculum for students with disabilities; and an intercollegiate athletic program, which offers performance-oriented students opportunities for competition.

Certificate of Completion:
Physical Education

Courses:
DANC 181, Introduction to Dance ......................... 3
DANC 183, Music for Dance ................................... 2
DANC 253, Choreography or
PHYE 116, Choreography ...................................... 2

Select ten units from the following:
DANC 110, Ballet or
PHYE 110, Ballet............................................0.5-1
DANC 111, Ethnic Dance Forms ............................. 2
DANC 120, American Street Dance .........................0.5-1
DANC 130, Dance Repertoire or
PHYE 130, Dance Repertoire .................................0.5-1
DANC 135, Jazz Dance or
PHYE 135, Jazz Dance........................................ 0.5-1
DANC 140, Modern Dance I or

Total Units = 17

Associate in Arts Degree:
Physical Education

Courses Required for the Major:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYE 240, Physical Education in the Elementary Schools</td>
<td>3</td>
</tr>
<tr>
<td>PHYE 241, Introduction to Exercise Science/Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>PHYE 242, Care &amp; Prevention of Injuries</td>
<td>2</td>
</tr>
</tbody>
</table>

Physical Education Activity:
Choose a minimum of six (6) different activities from the following:

Aquatic Activities, Dance Activities,
Individual and Dual Activities
(one course to be chosen from badminton, racquetball, or tennis),
Team Sports .............................................. 6-9

BIOL 230, Human Anatomy................................... 4
BIOL 235, Human Physiology ................................. 4

Total Units = 21-24

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:
**Transfer Information**

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. *Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language, Consult the current catalog of the transfer institution and consult with a counselor.*

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**San Diego State University**

**Health Science, Emphasis in Community Health Education, B.S.:** Biology 205, 230; Chemistry 100, 100L or 130, 130L; Health Education 101; Nutrition 150 (Mesa); Psychology 101, 258; Sociology 101; Speech 103.

**Kinesiology, Athletic Training, B.S.:** Physical Education 166, 241, 242; Biology 230; Chemistry 130, 200 and 200L; Physics 100 (Mesa); Psychology 101; and one of the following: Biology 200; Mathematics 119 or Psychology 258.

**Dance, B.A.:** Liberal Arts and Sciences; Dance 271, 181, 253, 177 (4 units); Anthropology 103; Biology 230; Psychology 101. Third semester foreign language competency.

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**Physical Education Fitness Specialist**

**Certificate Program**

Students in this program will be trained to be group exercise leaders and personal trainers. Students in this program will learn the principles of exercise and physical conditioning, techniques of leading exercise classes, appropriate methods of establishing healthy behavior and the designing of personalized exercise prescriptions. They will be able to develop safe, effective exercise plans for a variety of clients.

The Fitness Specialist certificate program trains students for positions, entry-level or higher, in the growing fitness industry.

Graduates will be qualified to be exercise testing technicians, fitness instructors, strength training instructors, aerobic instructors, and personal fitness trainers.

The fitness industry continued to experience growth and has an ongoing need for trained instructors and trainers in health clubs, fitness centers, and sports medicine clinics.

Please note that students enrolled in an occupational program must earn a grade of “C” or better in courses required for the major.

**Certificate of Achievement:**

**Physical Education**

**Fitness Specialist**

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYE 242, Care &amp; Prevention of Injuries</td>
<td>2</td>
</tr>
<tr>
<td>PHYE 280, Applied Exercise Physiology</td>
<td>2</td>
</tr>
<tr>
<td>PHYE 281, Applied Kinesiology</td>
<td></td>
</tr>
<tr>
<td>PHYE 282, Techniques of Weight Training</td>
<td>2</td>
</tr>
<tr>
<td>PHYE 283, Exercise &amp; Fitness Assessment</td>
<td>2</td>
</tr>
<tr>
<td>PHYE 284, Fitness &amp; Sports Nutrition</td>
<td>2</td>
</tr>
<tr>
<td>PHYE 285, Exercise for Special Populations</td>
<td>2</td>
</tr>
<tr>
<td>PHYE 286, Techniques of Exercise Leadership</td>
<td>2</td>
</tr>
<tr>
<td>PHYE 287, Fitness Specialist Internship</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Units = 18**

This program prepares candidates for American College of Sports Medicine (ACSM) or American Council of Exercise (ACE) certification exams.
Physical Sciences

Certificate of Completion: Preparation for Chemistry Laboratory Positions

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 200, General Chemistry I - Lecture</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 200L, General Chemistry I - Lab</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 201, General Chemistry II - Lecture</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 201L, General Chemistry II - Lab</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 231, Organic Chemistry I - Lecture</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 231L, Organic Chemistry I - Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 232L, Organic Chemistry I - Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 161, Techniques in Biochemistry</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Certificates of Achievement: Physical Sciences

A minimum of 35 units chosen from one of the following with the advice of the departmental advisor.

Courses Required According to Patterns for Specialization:

Chemistry

<table>
<thead>
<tr>
<th>Courses Required for the Major</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 200\200L, General Chemistry I and Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 201\201L, General Chemistry II and Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 231\231L\232L, Organic Chemistry and labs</td>
<td>20</td>
</tr>
<tr>
<td>CHEM 251, Analytical Chemistry</td>
<td></td>
</tr>
<tr>
<td><strong>Plus fifteen units selected from the following:</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 141, Precalculus</td>
<td></td>
</tr>
<tr>
<td>MATH 150\151\252, Calculus with Analytic Geometry</td>
<td></td>
</tr>
<tr>
<td>PHYS 195A, Mechanics</td>
<td></td>
</tr>
<tr>
<td>PHYS 195B, Electricity &amp; Magnetism</td>
<td></td>
</tr>
<tr>
<td>PHYS 195C, Waves, Light, &amp; Modern Physics</td>
<td></td>
</tr>
<tr>
<td>PHYS 196A, Problems in Mechanics</td>
<td></td>
</tr>
<tr>
<td>PHYS 196B, Problems in Electricity &amp; Magnetism</td>
<td></td>
</tr>
<tr>
<td>PHYS 196C, Problems in Waves, Light, &amp; Modern Physics</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

Chemistry Technician

<table>
<thead>
<tr>
<th>Courses Required for the Major</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 160, Introduction to Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 161, Techniques in Biochemistry</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 200\200L, General Chemistry I and Lab</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 201\201L, General Chemistry II and Lab</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 231\231L\232L, Organic Chemistry and Labs</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 233\233L\234L, Organic Chemistry and Labs</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 251, Analytical Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 255, Inside the Pharmaceutical Industry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 107, General Biology-Lec and Lab</td>
<td>4</td>
</tr>
</tbody>
</table>

* and electives as needed to meet minimum of 60 units required for the degree.

Offers the Associate in Science Degree in Physical Sciences with a designated major in Chemistry, Engineering, Physical Sciences (General), or Physics. The degree will be granted upon completion of a required pattern of specialization and other degree graduation requirements. A certificate program is also offered in Chemistry, Engineering, Physical Science (General), or Physics consisting of a required pattern of major courses. This permits the student to fulfill the lower division requirements for transfer programs to four-year colleges as well as to acquire the necessary skills for employment as a technician.

Courses required for the major according to patterns for specialization: All listed certificates of achievement and degrees require a minimum of 35 units chosen with the advice of the departmental advisor. The certificate of completion requires 17 specified units.
BIOL 205, General Microbiology ......................... 5

Total Units = 42

Engineering

Courses Required for the Major: Units
ENGE 151, Engineering Drawing 6
ENGE 200, Statics 4
ENGE 210, Properties of Materials 4
ENGE 250, Dynamics ...........................................11

Plus twenty-four units selected from the following:
CHEM 200\200L, General Chemistry I and Lab 4
CHEM 201\201L, General Chemistry II and Lab 4
ENGE 240, Digital Systems 4
ENGE 260, Electric Circuits 4
MATH 141, Precalculus 4
MATH 150, 151, 252, Calculus with Analytic Geometry I, II, and III 8

Total Units = 35

Physical Sciences (General)

Courses Required for the Major: Units
GEOG 100\101L, General Geology and Lab ............... 4

At least 4 units from the following:
ASTR 101, Descriptive Astronomy 4
ASTR 109, Practice in Observing 4
ASTR 111, Astronomy Laboratory .......................... 4

At least 8 units from the following:
CHEM 100, 100L, Fundamentals of Chemistry and lab 8
CHEM 130, 130L, Introduction to Organic & Biological Chemistry and lab 8
CHEM 152\152L, Introduction to General Chemistry and Lab 8
CHEM 200\200L, General Chemistry I and Lab 8
CHEM 201\201L, General Chemistry II and Lab .......... 8

At least 3 units from the following:
GEOG 101\101L, Physical Geography and Lab 3
GEOG 103, Introduction to Meteorology ................. 3

At least 8 units from the following:
PHYS 100, Introductory Physics 8
PHYS 120A\120B\121A\121B, General Physics I & II and Labs (City) 8
PHYS 124A\124B, General Physics 4
MATH 141, Precalculus 4
PHYS 150, 151, 252, Calculus with Analytic Geometry I, II, and III 8

Total Units = 35

Physical Sciences

Courses Required for the Major: Units
CHEM 200\200L, General Chemistry I and Lab 8
CHEM 201\201L, General Chemistry II and Lab 8
CHEM 231\1231L\232L, Organic Chemistry and labs 12
CHEM 251, Analytical Chemistry .......................... 8

Plus fifteen units selected from the following:
MATH 141, Precalculus 8
MATH 150\151\252, Calculus with Analytic Geometry I, II, or III 8

Total Units = 35

Associate in Science Degrees: Physical Sciences

Courses Required for the Major According to Patterns for Specialization:

A minimum of 35 units chosen from one of the following with the advice of the departmental advisor.

Chemistry

Courses Required for the Major: Units
CHEM 200\200L, General Chemistry I and Lab 8
CHEM 201\201L, General Chemistry II and Lab 8
CHEM 231\1231L\232L, Organic Chemistry and labs 12
CHEM 251, Analytical Chemistry .......................... 8

Plus fifteen units selected from the following:
MATH 141, Precalculus 8
MATH 150\151\252, Calculus with Analytic Geometry I, II, or III 8
PHYS 150, 151, 252, Calculus with Analytic Geometry I, II, and III 8

Total Units = 35
PHYS 196C, Problems in Waves, Light, &  
Modern Physics ........................................15  
Total Units = 35

Chemistry Technician

Courses Required for the Major:  
CHEM 160, Introduction to Biochemistry .......... 3  
CHEM 161, Techniques in Biochemistry ................. 2  
CHEM 200/200L, General Chemistry I and Lab .......... 5  
CHEM 201/201L, General Chemistry II and Lab ........ 5  
CHEM 231/231L/232L, Organic Chemistry and Labs ... 5  
CHEM 233/233L/234L, Organic Chemistry and Labs ... 5  
CHEM 251, Analytical Chemistry ......................... 5  
CHEM 255, Inside the Pharmaceutical Industry ....... 3  
BIOL 107, General Biology-Lec and Lab .............. 4  
BIOL 205, General Microbiology ....................... 5  
Total Units = 42

For graduation requirements see Requirements for the  
Associate Degree on page 60.

Electives as needed to meet minimum of 60 units  
required for the degree:  
Recommended Electives: MATH 141, 150, 151, 252;  
Physics 195A, 195B, 195C, 196A, 196B, 196C; Biology  
210A, 210B, 132 (Miramar), 133 (Miramar), 206 (Miramar).

Note: Only one Chemistry (CHEM) course from the  
above list may be used to satisfy SDCCD general  
education requirements.

San Diego State University

Chemistry, Certificate of the American  
Chemical Physics, Chemical Society,  
B.A., B.S.: Chemistry 200, 200L, 201, 201L, 231,  
231L, 251; Mathematics 150, 151, 252; Physics  
195A,B,C, and 196A,B,C.

Chemical Education, B.S.: Same as Chemistry/  
Biochemistry and add Biology 210A.

Engineering

Courses Required for the Major:  
ENGE 151, Engineering Drawing;  
ENGE 200, Statics;  
ENGE 210, Properties of Materials;  
ENGE 250, Dynamics ......................................11  
Plus twenty-four units selected from the following:  
CHEM 200/200L, General Chemistry I and Lab  
CHEM 201/201L, General Chemistry II and Lab  
ENGE 240, Digital Systems;  
ENGE 260, Electric Circuits;  
MATH 141, Precalculus;  
MATH 150, 151, 252, Calculus with Analytic  
Geometry I, II, and III;  
PHYS 195A, Mechanics;  
PHYS 195B, Electricity & Magnetism  
PHYS 195C, Waves, Light, & Modern Physics;  
PHYS 196A, Problems in Mechanics;  
PHYS 196B, Problems in Electricity & Magnetism;  
PHYS 196C, Problems in Waves, Light, &  
Modern Physics ...........................................24  
Total Units = 35

San Diego State University

Aerospace Engineering, B.S.: Chemistry 200, 200L;  
Engineering 200, 210, 250, 260; Mathematics 150,  
151, 252; Physics 195A,B,C and 196A,B,C;  
Mathematics 107 or Engineering 115 (Mesa).

Civil Engineering, B.S.: Chemistry 200, 200L;  
Engineering 200, 210, 250, 260; Mathematics 150,  
151, 252; Physics 195A,B,C, and 196A,B,C;  
Mathematics 107 or Engineering 115 (Mesa);  
Mathematics 119.

Electrical Engineering, B.S.: Chemistry 200, 200L;  
Computer & Information Systems 192; Engineering  
200, 240, 250, 260; Mathematics 150, 151, 252;  
Physics 195A,B and 196A,B.

Mechanical Engineering, B.S.: Chemistry 200, 200L;  
Engineering 200, 210, 250, 260; Mathematics 150,  
151, 252; Physics 195A,B,C, 196A,B,C;  
Mathematics 107 or Engineering 115 (Mesa);  
Mathematics 119.

University of California, San Diego

UCSD offers engineering degrees in three departments.  
MAE, Aerospace, B.S.: Engineering Science,  
B.S.; Mechanical Engineering, B.S.: Chemistry  
200, 200L, 201, 201L, 231, 231L, 251; Mathematics 150, 151, 252;  
Physics 195A,B,C and 196A,B,C; Computer Information  
Sciences 192 or Engineering 115 (Mesa).

CENG, Chemical Engineering, B.S.: Chemistry 200,  
200L, 201, 201L, 231, 231L, 232L, 251;  
Engineering 115 (Mesa) or Computer Information  
Sciences 192; Mathematics 150, 151, 252, 254 and 255;  
Physics 195A,B,C and 196A,B,C.

ECE, Computer Engineering, B.S.: Mathematics 150,  
151, 237, 237L, 245, 252, 254 and 255; Physics  
195A,B,C and 196A,B,C; Computer Information  
Sciences 190.

ECE, Electrical Engineering, B.S.: Chemistry 200,  
200L; Mathematics 150, 151, 252, 254 and 255;  
Physics 195A,B,C and 196A,B,C; Computer Information  
Sciences 190.
Physics 195A, B, C, 196A, B, C; Computer Information Sciences 190 or 192.

ECE, Engineering Physics, B.S.: Chemistry 200, 200L; Mathematics 150, 151, 252, 254 and 255; Physics 195A, B, C and 196A, B, C; Computer Information Sciences 190 or 192.

Structural Engineering, B.S.: Mathematics 150, 151, 252, 254 and 255; Physics 195A, B, C, 196A, B, C; Computer Information Sciences 190; Chemistry 200.

Physical Sciences (General)

Courses Required for the Major: Units
GEOL 100/101, General Geology and Lab .................. 4

At least 4 units from the following:
ASTR 101, Descriptive Astronomy;
ASTR 109, Practice in Observing;
ASTR 111, Astronomy Laboratory ............................ 4

At least 8 units from the following:
CHEM 100/100L, Fundamentals of Chemistry and lab;
CHEM 130/130L, Introduction to Organic & Biological Chemistry and lab;
CHEM 152/152L, Introduction to General Chemistry and Lab
CHEM 200/200L, General Chemistry I and Lab
CHEM 201/201L, General Chemistry II and Lab ............. 8

At least 3 units from the following:
GEOG 101/101L, Physical Geography and Lab;
GEOG 103, Introduction to Meteorology ..................... 3

At least 8 units from the following:
PHYS 100, Introductory Physics;
PHYS 120A/121B\121A/121B, General Physics I & II and Labs (City);
PHYS 124A/124B, General Physics;
PHYS 195A, Mechanics;
PHYS 195B, Electricity & Magnetism
PHYS 195C, Waves, Light, & Modern Physics; ............ 8

At least 8 units from the following:
MATH 96, Intermediate Algebra with Geometry
MATH 104, Trigonometry;
MATH 107, Introduction to Scientific Programming;
MATH 118, A Survey of Modern Mathematics;
MATH 119, Elementary Statistics;
MATH 141, Precalculus;
MATH 150/151/152, Calculus with Analytic Geometry I, II, and III .............................................. 8

Total Units = 35

Note: Only one Physics (PHYS) course from the above list may be used to satisfy SDCCD general education requirements.

For other graduation requirements see Requirements for the Associate Degree on page 60.

Electives (Mesa College) as needed to meet minimum of 60 units required for the degree:

Transfer Information
Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language, Consult the current catalog of the transfer institution and consult with a counselor.

San Diego State University

Physical Science, Single Subject Teaching Credential, B.S.: Astronomy 101, 109; Biology 210B or 215 and 250; Black Studies 106 or Speech 103; Chemistry 200, 200L and 201, 201L;
Engineering 115 (Mesa) or Computer Information Systems 192; English 101 or 105 and 205; Geology 100, 101; Mathematics 150, 151, 252; Physics 195A and 196A, 195B, 196B, 195C, 196C. Social and Behavioral Science - 6 units; Humanities - 9 units; American Institutions - 6 units. See a counselor.

**Physics, B.A., B.S.:** Chemistry 200, 200L, 201, 201L; Computer Science 192 or Engineering 115 (Mesa); Mathematics 150, 151, 252; Physics 195A,B,C, and 196A,B,C; Third semester foreign language competency for B.A.

**Geography, B.A.:** Geography 101, 101L, 102L. Third semester foreign language competency.

**Geological Sciences, Geology, B.S.:** Biology 105,106 (Miramar) or 107 (City, Mesa); Mathematics 150; Physics 120A, 120B, 121A, 121B (City) or 124A and 124B; Chemistry 200, 200L, 201, 201L; Mathematics 119 or Biology 200 or Psychology 258.

---

**University of California, San Diego**

**Physics, General, B.A.:** Two courses from: Biology 210A and 210B; Chemistry 200, 200L or, 201, 201L and 251; Engineering 115 (Mesa), 151; Mathematics 150, 151, 237 and 237L, 252, 254, 255; Physics 195A,B,C, and 196A,B,C.

**Physics, General Physics, Secondary Education, B.A.:** Chemistry 200, 200L, 201, 201L; Mathematics 150, 151, 252, 254 and 255; Physics 195A,B,C, and 196A,B,C.

**Physics, B.S.:** Physics 195A,B,C; Chemistry 200 and Computer Science 192 or Engineering 115 (Mesa); Mathematics 150, 151, 252, 254 and 255.

Pre-dental, pre-medical, and pre-health professional majors should seek specific counseling regarding program planning for courses to be transferred to other colleges and universities.

---

**Physical Therapist Assistant**

**Associate in Science Degree:**

- **Physical Therapist Assistant**
  - 50*
  *and electives as needed to meet minimum of 60 units required for the degree.

Prepares the student for employment as a physical therapist assistant. The physical therapist assistant, working under the supervision of a registered physical therapist, assists in the provision of physical therapy services prescribed by a physician, such as electrotherapy, hydrotherapy, thermotherapy, massage, therapeutic exercise and rehabilitation activities.

The program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association (1111 North Fairfax, Alexandria, VA., 1-800-999-APTA) and approved by the Physical Therapy Board of California, therefore graduates are eligible to take the examination for approval as a physical therapist assistant. See accreditation page in the General Information section of catalog.

Eligibility for enrollment in this program is determined by a special admission procedure. Interested persons should call the Special Programs Admissions Clerk in the Admissions Office, (619) 388-2684. Course repetition in this program is not permitted.

**Associate in Science Degree:**

**Physical Therapist Assistant**

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYR 110, Physical Therapy Introduction</td>
<td>2</td>
</tr>
<tr>
<td>PHYR 111, Physical Therapy Techniques I</td>
<td>4</td>
</tr>
<tr>
<td>PHYR 114, Introduction to Human Movement</td>
<td>3</td>
</tr>
<tr>
<td>PHYR 120, Physical Therapy Techniques II</td>
<td>4</td>
</tr>
<tr>
<td>PHYR 122, Introduction to Pathology</td>
<td>3</td>
</tr>
<tr>
<td>PHYR 123, Introduction to Therapeutic Exercise</td>
<td>1</td>
</tr>
<tr>
<td>PHYR 134, Orthopedic Exercise &amp; Rehab</td>
<td>4</td>
</tr>
<tr>
<td>PHYR 135, Topics in Neurology &amp; Rehab</td>
<td>3</td>
</tr>
<tr>
<td>PHYR 140A, Directed Clinical Studies</td>
<td>1</td>
</tr>
</tbody>
</table>
PHYR 140B, Directed Clinical Studies .......................... 1
PHYR 140C, Directed Clinical Studies .......................... 4
PHYR 141, Organization of Physical Therapy .............. 2
BIOL 230, Human Anatomy (completion prior to
entrance) ................................................................ 4
BIOL 235, Human Physiology (completion prior to
entrance) ................................................................ 4
ENGL 101, Reading & Composition ............................ 3
PHYS 100, Introductory Physics or equivalent
(completion prior to entrance) ............................... 4
Select three-units from:
PSYC 101, General Psychology,
PSYC 111, Psychological/Social Aspects of Aging,
Death and Dying
PSYC 121, Introduction to Child Psychology .......... 3
Total Units = 50

For graduation requirements see Requirements for the
Associate Degree on page 60.

Electives as needed to meet minimum of 60 units
required for the degree:
Recommended Electives: Nutrition 150; Physical
Therapist Assistant 290; Psychology 125, 128, 230,
260; Spanish 101, 102, 230; Computer Business
Technology applications coursework.

**Psychology**

**Associate in Arts Degree:**

Psychology .......................... 18*

*and electives as needed to meet minimum 60 units
required for the degree.

A program suited to the needs of both the two year
student and the transfer student who plan to major or
minor in Psychology or related fields. It will provide
the student with greater understanding of behavior. Upper
division and graduate studies can lead to vocations in
teaching, research, counseling, and other areas. An
upper division minor in Psychology may be an
important asset to majors in other fields.

**Associate in Arts Degree:**

Psychology

<table>
<thead>
<tr>
<th>Courses Required for the Major</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 101, General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>
| Psychology Electives (as selected from the
  transferable Psychology electives offered
  within the district as listed below) | 9     |
| Anthropology (one GE course)   | 3     |
| Sociology (one GE course)      | 3     |

Total Units = 18

Note: Only one Psychology (PSYC) course from the
above list may be used to satisfy SDCCD general
education requirements.

For graduation requirements see Requirements for the
Associate Degree on page 60.

Electives as needed to meet minimum of 60 units
required for the degree:
Recommended Psychology Electives: Psychology 111,
112, 121, 123, 125, 128, 135, 137, 155, 161, 165, 207,
211, 230, 245, 255, 258 (or Mathematics 119), 260,
262, 270, 276, 290, 296.

Other Recommended Electives: English 101, 105;
Speech Communications 103 or 135; Mathematics 104
through 252; Natural Sciences (Life Sciences: Biology;
Physical Sciences) – Laboratory courses from either of
the above; Philosophy 100 or 102A/B; Foreign
Language*; or Computer and Information Sciences 150.

**Physics**

See “Physical Sciences” on page 158.

**Political Science**

See “Social Sciences” on page 169.
Transfer students planning to major or minor in Psychology should select: Psychology 211, 258 (or Mathematics 119), and Psychology 260.

*Although no courses in a foreign language are specified in the above course sequence, a minimal familiarity with one foreign language is desirable. The particular language should be selected in consultation with the Behavioral Sciences Department.

**Transfer Information**

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

- **California State University, San Marcos**
  

- **San Diego State University**
  
  Psychology, B.A.: Psychology 101, 211, 230 (Mesa), 258, 260; Biology 107 (City and Mesa) or Biology 105, 106 (Miramar). Third semester foreign language competency.

  Gerontology, B.A.: Biology 107 (City and Mesa) or 105, 106 (Miramar); Health Education 101; Psychology 101; Psychology 135 or Child Development 141; Sociology 110; Human Services 101 (City).

- **University of California, San Diego**
  
  Psychology, B.A.: Three courses from: Biology 210A (or 210A and 210B), Psychology 260, Chemistry 100, 100L or 200, 200L or 201, 201L or 130, 130L or 160, Physics 120A, 121A, 120B, 121B or 195A, 195B, 195C. Three Formal Skills courses (at least one must be calculus) from: Mathematics 121 and 122 or 150, 151 and 252 or Philosophy 101; one computer programming course from: Computer Information Systems 190 or 192 or Engineering115 (Mesa); and Mathematics 119 or Psychology 255 (Mesa) or 258.

---

### Radiologic Technology

**Units**

- **Certificate of Achievement:**
  - Radiologic Technology: 62

- **Associate in Science Degree:**
  - Radiologic Technology: 62*

  *and electives as needed to meet minimum 60 units required for the degree.

The certificate program prepares the student for certification as a full diagnostic radiographer. Training includes operation of X-ray equipment, exposing and processing films, applying protective shields, positioning patients, ethics, patient care with the radiology department and optional exposure to either nuclear medicine or radiation therapy and ultrasound. The program will also include 23 units of directed clinical practice which satisfies the required hours of clinical practice. The length of the certificate program is four semesters and includes two summer sessions.

Upon completion of the program the student will be given a certificate of completion (AS degree optional) and may apply for registration by the American Registry of Radiologic Technologists and for certification by the State of California. The program is sponsored by the San Diego District of the California Society of Radiologic Technologists and the San Diego Radiological Society (See Accreditation, page 9).

Eligibility for enrollment in this program is determined by a special admission procedure. Interested persons should call the Special Programs Admissions Clerk in the Admissions Office (619) 388-2684.

Satisfactory completion of Biology 160, or equivalent and Computer Business Technology 180 and fulfillment of the special admissions procedure will be required before admission to the program. Course repetition in this program is not permitted.
### Certificate of Achievement: Radiologic Technology

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADT 105, Basic Radiologic Technology</td>
<td>3</td>
</tr>
<tr>
<td>RADT 110, Recording Media and Processing</td>
<td>2</td>
</tr>
<tr>
<td>RADT 120A, Radiographic Exposure</td>
<td>2</td>
</tr>
<tr>
<td>RADT 120B, Radiographic Exposure - Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>RADT 130, Radiologic Nursing Procedures</td>
<td>2</td>
</tr>
<tr>
<td>RADT 199, Radiographic Positioning I</td>
<td>2</td>
</tr>
<tr>
<td>RADT 200, Radiographic Positioning II</td>
<td>2</td>
</tr>
<tr>
<td>RADT 211, Radiographic Positioning III</td>
<td>2</td>
</tr>
<tr>
<td>RADT 220, Advanced Radiologic Technology</td>
<td>3</td>
</tr>
<tr>
<td>RADT 230, Science for Radiologic Technologist</td>
<td>2</td>
</tr>
<tr>
<td>RADT 240, Radiation Biology</td>
<td>1</td>
</tr>
<tr>
<td>RADT 241, Sectional Anatomy</td>
<td>1</td>
</tr>
<tr>
<td>RADT 242, Organization of Radiology</td>
<td>1</td>
</tr>
<tr>
<td>RADT 243, CT &amp; MRI Imaging</td>
<td>4</td>
</tr>
<tr>
<td>RADT 251A, Directed Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>RADT 251B, Directed Clinical Practice</td>
<td>4</td>
</tr>
<tr>
<td>RADT 252A, Directed Clinical Practice</td>
<td>5</td>
</tr>
<tr>
<td>RADT 252B, Directed Clinical Practice</td>
<td>5</td>
</tr>
<tr>
<td>RADT 253A, Directed Clinical Practice</td>
<td>5</td>
</tr>
<tr>
<td>RADT 253B, Directed Clinical Practice</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 160, Elements of Human Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>(completion prior to admission)</td>
<td></td>
</tr>
<tr>
<td>CBTE 180, Microsoft Office (completion prior to admission)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units = 62**

### Associate in Science Degree: Radiologic Technology

<table>
<thead>
<tr>
<th>Courses Required for the Major:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADT 105, Basic Radiologic Technology</td>
<td>3</td>
</tr>
<tr>
<td>RADT 110, Recording Media and Processing</td>
<td>2</td>
</tr>
<tr>
<td>RADT 120A, Radiographic Exposure</td>
<td>2</td>
</tr>
<tr>
<td>RADT 120B, Radiographic Exposure - Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>RADT 130, Radiologic Nursing Procedures</td>
<td>2</td>
</tr>
<tr>
<td>RADT 199, Radiographic Positioning I</td>
<td>2</td>
</tr>
<tr>
<td>RADT 200, Radiographic Positioning II</td>
<td>2</td>
</tr>
<tr>
<td>RADT 211, Radiographic Positioning III</td>
<td>2</td>
</tr>
<tr>
<td>RADT 220, Advanced Radiologic Technology</td>
<td>3</td>
</tr>
<tr>
<td>RADT 230, Science for Radiologic Technologist</td>
<td>2</td>
</tr>
<tr>
<td>RADT 240, Radiation Biology</td>
<td>1</td>
</tr>
<tr>
<td>RADT 241, Sectional Anatomy</td>
<td>1</td>
</tr>
<tr>
<td>RADT 242, Organization of Radiology</td>
<td>1</td>
</tr>
<tr>
<td>RADT 243, CT &amp; MRI Imaging</td>
<td>4</td>
</tr>
<tr>
<td>RADT 251A, Directed Clinical Practice</td>
<td>3</td>
</tr>
<tr>
<td>RADT 251B, Directed Clinical Practice</td>
<td>4</td>
</tr>
<tr>
<td>RADT 252A, Directed Clinical Practice</td>
<td>5</td>
</tr>
<tr>
<td>RADT 252B, Directed Clinical Practice</td>
<td>5</td>
</tr>
<tr>
<td>RADT 253A, Directed Clinical Practice</td>
<td>5</td>
</tr>
<tr>
<td>RADT 253B, Directed Clinical Practice</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 160, Elements of Human Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>(completion prior to admission)</td>
<td></td>
</tr>
<tr>
<td>CBTE 180, Microsoft Office (completion prior to admission)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units = 62**

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

**Recommended Electives:** Radiologic Technology 248.
Real Estate

The Real Estate Program offers students the following options: a Certificate of Completion for Real Estate Salesperson or Real Estate Appraisal; a Certificate of Achievement for Real Estate Broker; and an Associate in Science degree in Real Estate. Students planning to transfer to a four-year college or university should select the Business Administration major on page 111.

Real Estate Salesperson

This Certificate of Completion satisfies the educational requirements mandated by the Department of Real Estate (DRE) for individuals who wish to become licensed as a Real Estate Salesperson in California. For questions about the DRE requirements for the real estate salesperson license or exam, call the DRE licensing office in Sacramento at (916) 227-0931.

<table>
<thead>
<tr>
<th>Certificate of Completion:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Estate Salesperson</td>
<td>9-10</td>
</tr>
<tr>
<td>Real Estate Appraisal</td>
<td>9</td>
</tr>
</tbody>
</table>

Certificate of Achievement:

<table>
<thead>
<tr>
<th>Certificate of Achievement:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Estate Broker</td>
<td>24-25</td>
</tr>
</tbody>
</table>

Associate in Science Degree:

<table>
<thead>
<tr>
<th>Associate in Science Degree:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Estate</td>
<td>27-28</td>
</tr>
</tbody>
</table>

*and electives as needed to meet minimum 60 units required for the degree.

Real Estate Appraisal

All of the courses in this Certificate of Completion have been approved by the Office of Real Estate Appraisers (OREA) as applying toward completion of acceptable education for the following appraisal licenses: Trainee License (completion of 90 hours of acceptable education related to real estate appraisal, which must include 15 hours of instruction on the Uniform Standards of Professional Appraisal Practice (USPAP)); Residential License (completion of at least 90 hours of acceptable education relating to real estate appraisal, which must include 15 hours of instruction on USPAP); Certified Residential (completion of at least 120 hours of acceptable education relating to real estate appraisal, which must include 15 hours of instruction on USPAP); Certified General (completion of at least 180 hours of acceptable education relating to real estate appraisal, which must include 15 hours of USPAP). NOTE: OREA education requirements for various appraisal licenses are effective as of 1-1-98. For questions about OREA’s licensure requirements, call the OREA office in Sacramento at (916) 322-2500.

Certificate of Completion:

Real Estate Salesperson Option*

<table>
<thead>
<tr>
<th>Courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAL 101, Real Estate Principles</td>
<td>3</td>
</tr>
</tbody>
</table>

***Six to seven units to be selected from the following:

REAL 105, 110, 115, 120, 125, 130; BUSE 140; Escrow 101; Accounting 102 or 116A

Total Units = 6-7

Total Units = 9-10

*This is a department award in recognition of information on the transcript and does not imply meeting a graduation requirement.

**Required prior to taking exam for Real Estate Salesperson’s License.

*** Applicants must also, either prior to or within eighteen months after issuance of the salesperson’s license, complete two additional courses (6-7 units) selected from those listed above.
# Real Estate Broker

This Certificate of Achievement satisfies the educational requirements mandated by the Department of Real Estate (DRE) in order for an applicant to take the DRE examination for the Real Estate Broker’s License in California. On and after January 1, 1986, an applicant for broker licensure examination must have completed eight credit courses in addition to fulfilling the experience requirement of two years of full-time real estate sales work in the last five years or the equivalent outlined in the California DRE “Instructions to License Applicants.” For questions about DRE’s requirements for the broker’s license or exam, call the DRE licensing office in Sacramento at (916) 227-0931.

## Certificate of Achievement: Real Estate Broker Option

### Courses Required for the Major: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*REAL 101, Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>REAL 105, Legal Aspects of Real Estate I</td>
<td>3</td>
</tr>
<tr>
<td>REAL 110, Principles of Real Estate Appraisal I</td>
<td>3</td>
</tr>
<tr>
<td>REAL 115, Real Estate Finance I</td>
<td>3</td>
</tr>
<tr>
<td>REAL 120, Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>REAL 125, Real Estate Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

Six to seven units to be selected from the following:

- ACCT 102, Basic Accounting (City, Miramar) or ACCT 116A, Principles of Accounting - Financial;
- BUSE 140, Business Law & the Legal Environment;
- ESCR 101, Escrow Procedures - Beginning;
- ESCR 111, Escrow Procedures - Advanced;
- REAL 130, Real Property Management;
- REAL 140, Real Estate Appraisal II

**Total Units = 24-25**

*Required prior to taking DRE exam for Real Estate Salesperson’s License.

### Associate in Science Degree: Real Estate

### Courses Required for the Major: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*REAL 101, Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>REAL 105, Legal Aspects of Real Estate I</td>
<td>3</td>
</tr>
<tr>
<td>REAL 110, Principles of Real Estate Appraisal I</td>
<td>3</td>
</tr>
<tr>
<td>REAL 115, Real Estate Finance I</td>
<td>3</td>
</tr>
<tr>
<td>REAL 120, Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>REAL 125, Real Estate Economics</td>
<td>3</td>
</tr>
<tr>
<td>BUSE 119, Business Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

Six to seven units to be selected from the following:

- ACCT 102, Basic Accounting (City, Miramar) or ACCT 116A, Principles of Accounting - Financial;
- BUSE 140, Business Law & the Legal Environment;
- ESCR 101, Escrow Procedures - Beginning;
- ESCR 111, Escrow Procedures - Advanced;
- REAL 130, Real Property Management;
- REAL 140, Real Estate Appraisal II

**Total Units = 27-28**

*Required prior to taking DRE exam for Real Estate Salesperson’s License.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

**Recommended Electives:** Accounting 116A and 116B; Business 140, 201; Computer and Information Sciences 110; Economics 120, 121; Escrow 101, 111; Marketing 100, 105; Mathematics 119; Psychology 101; Real Estate 130, 270.
Selected Studies

<table>
<thead>
<tr>
<th>Associate in Arts Degree: Selected Studies</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>varies*</td>
</tr>
<tr>
<td>*and electives as needed to meet minimum 60 units required for the degree.</td>
<td></td>
</tr>
</tbody>
</table>

Designed for students who are interested in a program of studies that will allow them to attain educational or career goals that are not satisfied by associate degrees offered in Degree Curricula and Certificate Programs listed in this catalog.

**Associate in Arts Degree: Selected Studies**

**Courses Required for the Major:**
The student must earn a minimum of 18 required semester units in a single discipline or related disciplines. The approved course of study represents a cohesive and rigorous program of instruction related to a specific goal not met by other Programs of Instruction as found in this catalog. The student and a counselor will develop a Selected Studies program to be submitted to an academic standards committee for review and approval. The student is encouraged to meet with the counselor early in his or her educational career to review the student’s statement of justification for the Associate in Arts Degree: Selected Studies and to develop an education plan.

Only one course from the approved pattern for the Selected Studies major may be used to satisfy SDCCD general education requirements. Students must fulfill additional requirements for the Associate Degree as listed in this catalog.

For graduation requirements see **Requirements for the Associate Degree** on page 60.

**Electives as needed to meet minimum of 60 units required for the degree:**

**Recommended Electives:** Electives are particularly important in this program. They may be used by the student to strengthen the major, explore new fields of interest, and satisfy graduation requirements at a four-year institute.

The student who plans carefully may fulfill the requirements for the A.A. Degree and also complete most lower division requirements at the four-year institution of his/her choice in the major area and in general education. See generalized guide for transfer students located in this catalog.
Social Sciences

The general Social Sciences major is designed to provide the student with an introduction to the varied disciplines of the Social Sciences and Humanities. Students who intend to transfer to a four-year college or university are urged to plan their programs carefully in conjunction with the requirements of the target school. The general Social Sciences major is also an excellent choice for the undecided student who simply wants to complete lower-division General Education requirements with a solid Liberal Arts preparation. More specific Social Sciences and Humanities concentrations are provided in Geography, History, Philosophy, and Political Science majors.

It is easy to make the transition from the general Social Sciences major to one of the specific concentrations if the decision is made early in the student's academic career. The Social Sciences majors (general and specific) prepare the student for upper-division work in the various Social Sciences disciplines leading to advanced degrees and/or careers in public administration, business, teaching, research, etc.

Certificate of Completion:

Global Culture Studies*

This certificate is designed for students interested in global issues, including students seeking an understanding of mankind's cultural heritage, cultural geography, and an appreciation of intercultural communication processes. This certificate will complement courses taken in other multi-cultural academic areas and includes transfer general education courses.

Courses:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMA 101, Introduction to the Humanities I</td>
<td>3</td>
</tr>
<tr>
<td>HUMA 102, Introduction to the Humanities II</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 103, Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>SPEE 180, Intercultural Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 102, Cultural Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 104, World Geography</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units = 15

*This is a cross-departmental award in recognition of information on the transcript and does not imply that a graduation requirement has been met.

Associate in Arts Degree:

Social Sciences - General

Courses Required for the Major:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 100 and HIST 101, World History I &amp; II, or HIST 105 and HIST 106, Introduction to Western Civilization I &amp; II</td>
<td>6</td>
</tr>
</tbody>
</table>

Select a six-unit sequence from two of the following different fields:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 102, Cultural Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 104, World Regional Geography</td>
<td></td>
</tr>
<tr>
<td>HIST 109 and 110, History of the United States I &amp; II</td>
<td></td>
</tr>
<tr>
<td>HIST 115A and 115B, History of the Americas I &amp; II</td>
<td></td>
</tr>
<tr>
<td>HIST 125 and 126, History of English and the Commonwealth I and II</td>
<td></td>
</tr>
<tr>
<td>HIST 150 and 151, Native Americans in United States History</td>
<td></td>
</tr>
<tr>
<td>PHIL 102A, Introduction to Philosophy: Reality and Knowledge, and PHIL 102B, Introduction to Philosophy: Values</td>
<td></td>
</tr>
<tr>
<td>PHIL 104A and 104B, History of Western Philosophy</td>
<td></td>
</tr>
<tr>
<td>POLI 101, Introduction to Political Science, and POLI 102, The American Political System</td>
<td></td>
</tr>
<tr>
<td>POLI 103, Comparative Politics, and POLI 140, Contemporary International Politics</td>
<td></td>
</tr>
</tbody>
</table>

Total Units = 18

Note: Only one course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

Recommended Electives: Geography 102, 104, 290; History 109 and 110, 113, 115A and 115B, 125 and 126, 130, 150 and 151, 155, 168, 171, 175, 290;
Philosophy 101, 102A and 102B, 103, 104A and 104B, 105, 106, 107, 108, 109, 110, 111, 112, 125, 290; Political Science 101 and 102, 103, 140, 172, 290; Anthropology 103, 200, 210; Fine Arts 110, 111; Economics 120 and 121; English 215, 216, 220, 221; Humanities 101, 102; Psychology 155; Sociology 101, 110, 201.

Transfer Information
Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require a third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

San Diego State University

Social Science, B.A.: Select a six-unit sequence in each of three of the following departments:
Anthropology 102, 103; Economics 120, 121; Geography 101, 102; Sociology 101, 110; History 105, 106 or 109, 110 or 115A, 115B; Political Science 101, 102, 103; and Mathematics 119 or Psychology 258.

Social Science, Emphasis in Africa and the Middle East, B.A.: History 100 (Mesa), 101 (Mesa); six units from Anthropology 102, 103, Economics 120, 121; English 220, 221; Geography 101, 102.

Social Science, Emphasis in Environment, B.A.: Biology 105, 106 (Miramar) or 107 (City, Mesa); a six-unit sequence from three of the following departments: Anthropology 102, 103; Economics 120, 121; Geography 101, 102; History 100 and 101 (Mesa) or 105 and 106 or 109 and 110 or 115A and 115B; Political Science 101, 102; Sociology 101, 110.

Social Science, Single Subject Teaching Credential, B.A.: Economics 120, 121; Geography 101, 102; History 100 and 101 (Mesa); Political Science 101, 102.

Urban Studies, B.A.: Anthropology 103, Economics 120, 121; Geography 102; Political Science 101 or 102; Psychology 258 or Mathematics 119 or Biology 200; Sociology 101.

Social Sciences with Emphasis in Different Areas
A major in the Social Sciences not only provides the student with the option of pursuing a general Social Sciences major, but a major that provides a concentration in one of the following areas as well: Social Sciences - Geography; Social Sciences - History; Social Sciences - Philosophy; or Social Sciences - Political Science. Major requirements and recommended electives for each of these options are described below:

Social Sciences - Geography

Courses Required for the Major: Units
GEOG 101, Physical Geography ......................... 3
GEOG 102, Cultural Geography ......................... 3
HIST 100 and HIST 101, World History I & II; or HIST 105 and HIST 106, Introduction to Western Civilization I & II ........................................ 6
Select six units from the following:
GEOG 101L, Physical Geography Laboratory
GEOG 103, Introduction to Meterorology
GEOG 104, World Regional Geography
GEOG 154, Introduction to Urban Geography
GEOG 296, Individualized Instruction in Geography ........................................................................ 6

Total Units = 18

Note: Only one Geography (GEOG) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:

Recommended Electives: Anthropology 102, 103; Economics 120, 121; Geography 101L, 103, 104, 154, 290; Geology 100, 101; History 109, 110; Mathematics 119; Political Science 101, 102, 103, 140; Sociology 101, 110.

San Diego State University

Geography, B.A.: Geography 101, 101L, 102; Third semester foreign language competency.

Social Sciences - History

Courses Required for the Major: Units
HIST 100 and HIST 101, World History I & II, or HIST 105 and HIST 106, Introduction to Western Civilization I & II ........................................ 6
HIST 109, History of the United States I ............... 3
HIST 110, History of the United States II ............. 3
Select six units from the following:
HIST 113, Race in the United States
HIST 115A\115B, History of the Americas I & II
HIST 120, Introduction to Asian Civilization
HIST 121, Asian Civilization in Modern Times
HIST 125\126, History of English and the Commonwealth I & II
HIST 130, The Middle East Today
HIST 150\151 Native Americans in United States History
HIST 155, Introduction to Classical Civilization
HIST 155A, Introduction to the English Commonwealth I
HIST 155B, Introduction to the English Commonwealth II
HIST 165A, Introduction to American History I
HIST 165B, Introduction to American History II
HIST 171, Twentieth Century America on Film
HIST 175, California History
HIST 296, Individualized Instruction in History........ 6

**Total Units = 18**

Note: Only one History (HIST) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

**Recommended Electives for a transfer school where History is in the Humanities:** Anthropology 103, 200, 210; Fine Arts 110, 111; English 215, 216, 220, 221; Geography 102, 104, 154; History 120, 121, 290; Humanities 101, 102; Music 110, 125; Philosophy 103, or 104A, 104B; Political Science 101, 102, 103, 140.

**Recommended Electives for a transfer school where History is in the Social Sciences:** Anthropology 103, 200, 210; Economics 120, 121; English 210, 211; Geography 102; History 120, 121, 125, 290; Philosophy 103, or 104A, 104B; and Political Science 101, 102, 103, 140; Sociology 101, 110.

**California State University, San Marcos**

**History, B.A.:** Select one 6-unit sequence from: History 109 and 110 or 105 and 106 or 100 and 101 (City, Mesa). Select one course from: History 113, 165, 175 or 250. Select 6 units from Literature, Religion, Political Science, Economics, Philosophy, Sociology, Anthropology, Fine Arts. Select 6 units from one of the above-listed fields of study as a second field. Three units from English 101 or 105. Complete 3rd level course in a Foreign Language.

**San Diego State University**

**History, B.A.:** History 100 and 101, and six units from: 105 and 106, 109 and 110, 115A and 115B.

**University of California, San Diego**

**History, B.A.:** History 109 and 110 or History 113 (Mesa) or Black Studies 140A or Black Studies 140B and Chicano Studies 110B or Chicano Studies 141B.

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**Social Sciences - Philosophy**

**Courses Required for the Major:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 101, Symbolic Logic</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 102A, Introduction to Philosophy: Reality &amp; Knowledge, and</td>
<td></td>
</tr>
<tr>
<td>PHIL 102B, Introduction to Philosophy: Values, or</td>
<td></td>
</tr>
<tr>
<td>PHIL 104A &amp; 104B, History of Western Philosophy ...</td>
<td>6</td>
</tr>
<tr>
<td>HIST 100 and HIST 101, World History I &amp; II, or</td>
<td></td>
</tr>
<tr>
<td>HIST 105 and HIST 106, Introduction to Western Civilization I &amp; II</td>
<td>6</td>
</tr>
</tbody>
</table>

**Select six units from the following:**

- PHIL 100, Logic and Critical Thinking
- PHIL 103, Historical Introduction to Philosophy
- PHIL 105, Contemporary Philosophy
- PHIL 106, Asian Philosophy
- PHIL 107, Reflections on Human Nature
- PHIL 108, Perspectives on Human Nature and Society
- PHIL 109, Issues in Social Philosophy
- PHIL 110, Philosophy of Religion
- PHIL 111, Philosophy in Literature
- PHIL 112, Philosophy of Science
- PHIL 125, Philosophy of Women in World Cultures
- PHIL 296, Individualized Instruction in Philosophy

**Total Units = 21**

Note: Only one Philosophy (PHIL) course from the above list may be used to satisfy SDCCD general education requirements.

*Some campuses might not offer all courses.*

For graduation requirements see Requirements for the Associate Degree on page 60.

**Electives as needed to meet minimum of 60 units required for the degree:**

**Recommended Electives:** Fine Arts 100, 110, 111; Anthropology 103; Black Studies 116, 145A, 145B; Economics 120, 121; English 205 or higher; History 109, 110; Humanities 101, 102; Languages (an 8-unit sequence); Music 100, 105, 125; Political Science 101, 102, 103, 140; Philosophy 105 and above; Psychology 101, 121, 123, 207; Sociology 101, 110.

**San Diego State University**

**Philosophy, B.A.:** Philosophy 205 and one course from Philosophy 102A, 102B, 103 (Mesa), 104A, 104B. Foreign language competency.

**University of California, San Diego**

**Philosophy, B.A.:** Lower division preparation for the major is not available.
Social Sciences - Political Science

Courses Required for the Major: Units
POLI 101, Introduction to Political Science .......... 3
POLI 102, The American Political System ............... 3
POLI 103, Comparative Politics.......................... 3
HIST 100 and HIST 101, World History I & II, or
HIST 105 and HIST 106, Introduction to Western
Civilization I & II........................................ 6
MATH 119, Elementary Statistics........................ 3

Total Units = 18

Note: Only one Political Science (POLI) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:
Recommended Electives: Anthropology 102, 103; Economics 120, 121; Geography 102, 104, 154; Philosophy 103, or 104A and 104B; Political Science 140, 148, 172, 290, 296; Psychology 155; Sociology 101, 110.

California State University, San Marcos

Political Science, B.A.: Political Science 102 and Mathematics 119 or Psychology 258.

San Diego State University

Political Science, B.A.: Political Science 102, 103; Biology 200 or Mathematics 119 or Psychology 258. Third semester foreign language competency.

Political Science, Emphasis in Legal Studies, B.A.: See a counselor for SDCCD courses that prepare for this major.

University of California, San Diego

Political Science, B.A.: Political Science 102, 103, 140.

Associate in Arts Degree: Sociology

Courses Required for the Major: Units
SOCO 101, Principles of Sociology.......................... 3
SOCO 110, Contemporary Social Problems............... 3

*Select twelve units from the following:
SOCO 125, Sociology of the Family (Mesa)
SOCO 201, Advanced Principles of Sociology;
SOCO 270, Work Experience in Sociology;
ANTH 103, Introduction to Cultural Anthropology;
PSYC 101, General Psychology............................ 12

Total Units = 18

Note: Only one Sociology (SOCO) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:
Recommended Electives: Anthropology 103; English 101, 105; Filipino Studies 100; * *Foreign Language; History 105, 106; Mathematics 119; Natural Sciences (Life Sciences, Physical Sciences, laboratory courses from either of the above); Philosophy 102A, 102B; Psychology 101, 258; Sociology 201, 270, 290; Speech Communications 103 or 135.

*Some campuses might not offer all courses.
It is strongly recommended that students planning to transfer to a four-year institution complete a course in statistics, either Psychology 258, or Mathematics 119.

**Although no courses in a foreign language are specified in the above course sequence, a minimal familiarity with one foreign language is desirable. The particular language should be selected in consultation with the Behavioral Sciences Department.

Social Work

- San Diego State University

Social Work, B.A.: a six-unit sequence in each of three of the following departments:
  1) Anthropology 102, 103; 2) Economics 120, 121; 3) Geography 101, 102; 4) History 105 and 106, or 109 and 110, or 115A and 115B; 5) Political Science 101, 102, or 103; 6) Sociology 101, 110; and Mathematics 119 or Psychology 258.

- University of California, San Diego

The social work major is not offered by UCSD.

Sociology

- California State University, San Marcos

Sociology, B.A.: Sociology 101 and Psychology 258*.

- San Diego State University

Sociology, B.A.: Sociology 101 and 110; Psychology 258 or Mathematics 119.

- University of California, San Diego

Sociology, B.A.: Sociology 101 and 110 or 201 (Mesa); Psychology 255 (Mesa), Psychology 258 or Mathematics 119.

<table>
<thead>
<tr>
<th>Speech Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units</td>
</tr>
<tr>
<td>Certificate of Completion:</td>
</tr>
<tr>
<td>Speech Communications</td>
</tr>
<tr>
<td>Associate in Arts Degree:</td>
</tr>
<tr>
<td>Speech Communications</td>
</tr>
<tr>
<td>*and electives as needed to meet minimum 60 units required for the degree.</td>
</tr>
</tbody>
</table>

Description:

This program is designed to offer the Associate in Arts degree and Certificate of Completion as well as a broad spectrum of communication classes that will provide preparation for the major in communication, and training for occupations in which public contact and verbal skills are important. It can also serve as a core curriculum for the Selected Studies or the Transfer Studies degrees.

Statement of Goals:

The Communication program is designed to prepare students to meet lower division transfer requirements and to allow students to participate in several areas of oral communication, including public speaking, interpersonal communication, oral interpretation, and debate.

Program Emphasis:

The Communication program emphasizes preparation for the major in Communication and provides students the opportunity to develop skill in public speaking, interpersonal and group communication, oral interpretation, and debate. In addition, students are able to participate in Speech/Debate competitions.

Career Options:

Students in this program develop personal and professional communication skills that prepare them to enter careers in community service, sales, performing arts, teaching, and other communication professions. Most of these fields require an advanced degree.
Certificate of Completion: Speech Communications

A Certificate of Completion in Communication is valuable for students in vocational and technical fields as well as for those who wish to transfer to a four-year college or university. The communication skills include presentation skills as well as group and interpersonal skills, making the Certificate of Completion a valuable addition to any resume.

Courses:  
SPEE 103, Oral Communication .............................. 3  
Select six units from:  
SPEE 101, Voice and Articulation  
SPEE 104, Advanced Public Communication  
SPEE 111, Oral Interpretation  
SPEE 117A, Intercollegiate Forensics  
SPEE 117B, Intercollegiate Forensics  
SPEE 117C, Intercollegiate Forensics  
SPEE 117D, Intercollegiate Forensics  
SPEE 135, Interpersonal Communication  
SPEE 160, Argumentation  
SPEE 165, Service-Learning for Civic Leadership  
SPEE 170, Small Group Communication  
SPEE 180, Intercultural Communication  .................. 6  
Total Units = 9

*This is a department award recognizing information on the transcript and does not imply a graduation requirement.

Associate in Arts Degree: Speech Communications

The Associate in Arts in Speech Communications certifies that a student has emphasized the theory and practice of communication skills, has met the preparation for the major in Communication, and is prepared to begin upper division work at a four-year college or university.

Courses Required for the Major:  
SPEE 103, Oral Communication ............................. 3  
Select fifteen units from:  
SPEE 101, Voice and Articulation  
SPEE 104, Advanced Public Communication  
SPEE 111, Oral Interpretation  
SPEE 117A, Intercollegiate Forensics  
SPEE 117B, Intercollegiate Forensics  
SPEE 117C, Intercollegiate Forensics  
SPEE 117D, Intercollegiate Forensics  
SPEE 135, Interpersonal Communication  
SPEE 160, Argumentation  
SPEE 165, Service-Learning for Civic Leadership  
SPEE 170, Small Group Communication  
SPEE 180, Intercultural Communication  .................. 6  
Total Units = 18

Note: Only one Speech Communications (SPEE) course from the above list may be used to satisfy SDCCD general education requirements.

For graduation requirements see Requirements for the Associate Degree on page 60.

Electives as needed to meet minimum of 60 units required for the degree:  
Recommended Electives: Speech Communications 99, 117C, 117D, 165, and courses in Dramatic Arts; Theatre Arts; Radio and Television; Journalism; Sociology; and Psychology.

Transfer Information

Students planning to transfer to a four-year college or university should complete courses required for the university major and the general education pattern required by that transfer institution. See catalog TRANSFER INFORMATION section. Additional courses may be required to meet university lower-division requirements. Course requirements at the transfer institution are subject to change and may be verified by a counselor or by consulting the current university catalog. Many Baccalaureate in Arts degrees require third semester competency in a foreign language. Consult the current catalog of the transfer institution and consult with a counselor.

San Diego State University

Communications, Communicative Disorders, B.A.: Psychology 101, 260; Mathematics 119 or Psychology 258.


Communications, Television, Film and New Media Production, B.A.: Radio and Television 200, 107, 110, 118, 121 (City), 122, 123, 160, 167 and Photography 105.

Note: Some Courses are not currently offered at Mesa, but are offered at City and/or Miramar colleges. Please see a counselor.
Transfer Studies

The Transfer Studies Associate Degree is designed to enable students to complete the requirements for an Associate in Arts Degree and transfer to the University of California or to the California State University with lower-division general education requirements met. Determining lower-division major preparation for a given campus and major can be complex, and requirements change frequently.

Caution: Because admission and major preparation requirements vary at each UC, CSU, and private institution, it is strongly advised that students meet with a counselor to determine the specific admissions and major preparation requirements of the selected transfer institution. Some receiving institutions, such as San Diego State University, require that the student complete all courses offered in the preparation for the major, the general education pattern, and 60 transferable units before transferring. Completion of the Transfer Studies Degree does not guarantee acceptance into a four-year institution nor into a major.

CSU Transfer Pattern

The District accepts completion of a CSU General Education Pattern as fulfilling all college general education and graduation requirements.

To meet the requirements for this program, students must:

1. Complete a California State University (CSU) General Education pattern (a minimum of 39 units) (see “Certification of CSU General Education Breadth Requirements” on page 71 for course offerings meeting requirements in each of the following areas):
   - Area A: Communications in the English Language & Critical Thinking-minimum of 9 semester units
   - Area B: Physical Universe & Its Life Forms; Mathematics/Quantitative Reasoning-minimum of 9 semester units
   - Area C: Arts, Literature, Philosophy & Foreign Languages-minimum of 9 semester units
   - Area D: Social, Political & Economic Institutions and Behavior; Historical Background-minimum of 9 semester units
   - Area E: Lifelong Understanding & Self-Development-minimum of 3 semester units

2. Complete the required courses in the transfer major and other transferable courses necessary to fulfill the 60 semester units required for the Associate in Arts degree. (Sixty semester units must be transferable.)

3. Demonstrate competence in reading, written expression and mathematics.

4. Meet the SDCCD’s 12-unit residence requirement.

IGETC Transfer Curriculum

The District accepts completion of the Intersegmental General Education Transfer Curriculum as fulfilling all college general education and graduation requirements.

To meet the requirements for this program, the student must:

1. Complete the Intersegmental General Education Transfer Curriculum (IGETC) for transfer to the University of California or California State University system (37-40 semester units) (see page 80 for course offerings meeting requirements in each of the following areas):
   - Area 1: English Communication-6-9 semester units
   - Area 2: Mathematical Concepts & Quantitative Reasoning-3 semester units
   - Area 3: Arts & Humanities-9 semester units

Associate in Arts Degree

<table>
<thead>
<tr>
<th>Transfer Studies</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSU Transfer Pattern</td>
<td>39-40*</td>
</tr>
<tr>
<td>Intersegmental General Education</td>
<td></td>
</tr>
<tr>
<td>Transfer Curriculum (IGETC)</td>
<td>37-40*</td>
</tr>
<tr>
<td>UC Transfer Admission Guarantee (TAG)</td>
<td>34-38*</td>
</tr>
<tr>
<td>Other Institutions Transfer Pattern</td>
<td>36*</td>
</tr>
</tbody>
</table>

*and courses as needed to meet minimum of 60 semester units required for the degree.
Area 4: Social & Behavioral Sciences-9 semester units
Area 5: Physical & Biological Sciences-7-9 semester units and Languages Other Than English (UC requirement)

2. Complete the required courses in the transfer major and other transferable courses necessary to fulfill the 60 semester units required for the Associate in Arts degree. (Sixty semester units must be transferable.)

3. Demonstrate competence in reading, written expression and mathematics.

4. Meet the SDCCD’s 12-unit residence requirement.

UC Transfer Admission Guarantee (TAG)
(UCSD or Other UC TAG)

The District accepts completion of a UC Transfer or Admission Guarantee as fulfilling all college general education and graduation requirements.

To meet the requirements for this program, students must:

1. Complete the UC Transfer Admission Guarantee (TAG) core requirements (34-38 semester units) (see page 78 for course offerings meeting requirements in each area):
   A. Writing-2-course sequence
   B. Humanities-2-course sequence
   C. Foreign Language-2-course sequence
   D. Social Science-2-course sequence
   E. Calculus or Natural Science-2-course sequence

   Note: Students who elect to take the Calculus course sequence in Area E must complete an approved Natural Science course within their program to meet district general education graduation requirements for the Transfer Studies AA degree.

2. Complete all TAG contract requirements.

3. Complete the required courses in the transfer major and other transferable courses necessary to fulfill the 60 semester units required for the Associate in Arts degree. (Sixty semester units must be transferable.)

4. Demonstrate competence in reading, written expression and mathematics.

5. Meet the SDCCD’s 12-unit residence requirement.

Other Institutions Transfer Pattern

The District accepts completion of the Other Institutions Transfer Pattern for private, independent or out-of-state institutions, as fulfilling college general education and graduation requirements for the Associate degree provided that a student has completed a minimum of 18 semester units in General Education and a minimum of 18 semester units in a major or courses in a discipline or related disciplines. Students must also demonstrate competence in reading, written expression and mathematics.

To meet the requirements for this program, students must:

1. Declare a specific accredited transfer institution and a specific transfer major.

2. Complete an educational plan with a counselor to include all GE requirements (minimum of 18 semester units) and preparation for the major for the Associate degree. Educational plan must be on file in the Counseling Office.

Minimum general education requirements:

A. Natural Sciences - 3 semester units
B. Social and Behavioral Sciences - 3 semester units
C. Humanities - 3 semester units
D. Language and Rationality
   1. English Composition - 3 semester units
   2. Communication and Analytical Thinking - 3 semester units

Remaining 3 semester unit requirement must be selected from among the above four divisions of learning.

3. Complete the required courses in the transfer major and other transferable courses necessary to fulfill the 60 semester units required for the Associate in Arts degree. (Sixty semester units must be transferable.)

4. Demonstrate competence in reading, written expression and mathematics.

5. Meet the SDCCD’s 12-unit residence requirement.
Travel and Tourism

Prepares students for entry level employment with airlines, travel agencies, tour companies, convention organizations, visitor attractions, recreational and leisure services, and related occupations.

Careers include travel agent, airline ticket agent, reservation sales agent, passenger service representative, visitor host/hostess, tour guide, and convention coordinator. Work experience is available with approval of the instructor.

Certificate of Achievement: Travel and Tourism, Airline and Travel Agency

<table>
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Certificate of Achievement: Travel and Tourism, Meeting and Convention Planning

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Associate in Science Degree: Travel and Tourism, Airline and Travel Agency

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Associate in Science Degree: Travel and Tourism, Meeting and Convention Planning

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*and electives as needed to meet minimum 60 units required for the degree.
Meeting and Convention Planning courses
TRAV 130, Tourism & Visitor Services ............... 3
TRAV 132, Meeting & Convention Planning .......... 3
BUSE 100, Introduction to Business or
BUSE 119, Business Communications or
BUSE 155, Managing the Small Business ........... 3
HOTL 105, Hotel-Motel Front Office Procedures .... 3
HOTL 110, Introduction to Hotel-Motel
Management .................................................. 3

Total Units = 27

For graduation requirements see Requirements for the Associate Degree on page 60.
Electives as needed to meet minimum of 60 units required for the degree:
Recommended Electives: Travel & Tourism 111, 112, 113, 121, 130, 290; Hotel/Motel Management 105, 110.

Note: Effective with the Fall 2003 semester, San Diego Mesa College will no longer offer courses in Water and Wastewater Technology. The program will be offered at Cuyamaca College instead. Please contact Cuyamaca College for information on the program and courses.

Provides information in the principles of water/wastewater treatment and systems maintenance. Operational control equipment and common maintenance problems will be covered. Completion of the curriculum should enable the student to pass certification and civil service examinations. Employment opportunities are available in municipal, state, and federal facilities.

Certificates of Achievement:
Water/Wastewater Technology
Water Treatment Plant Option

Courses Required for the Major:
WATR 101, Fundamentals-Water/Wastewater .......... 3
WATR 102, Calculations in Water &
Wastewater Technology .................................... 3
WATR 104, Basic Hydraulics ............................. 3
WATR 106, Introduction to Electrical &
Instrumentation Processes ............................. 3
WATR 110, Laboratory Analysis for
Water/Wastewater Technology ........................ 3

Water Treatment Plant

Certificate of Achievement:
Water Treatment Plant
Wastewater Treatment Operations
Distribution/Collection Systems

Associate in Science Degree:
Water Treatment Plant
Wastewater Treatment Operators
Distribution/Collection Systems

*and electives as needed to meet minimum 60 units required for the degree.
WATR 112, Basic Plant Operations:
  Water Treatment ........................................... 3
WATR 117, Advanced Plant Operation:
  Water Treatment ........................................... 3
Total Units = 21

Wastewater Treatment Operators Option

Courses Required for the Major: Units
WATR 101, Fundamentals-Water/Wastewater ............ 3
WATR 102, Calculations in Water &
  Wastewater Technology .................................. 3
WATR 104, Basic Hydraulics .................................. 3
WATR 106, Introduction to Electrical &
  Instrumentation Processes ............................. 3
WATR 110, Laboratory Analysis for
  Water/Wastewater Technology ........................ 3
WATR 114, Basic Plant Operations:
  Wastewater Treatment.................................... 3
WATR 120, Advanced Plant Operation:
  Wastewater Treatment.................................... 3
Total Units = 21

Distribution/Collection Systems Option

Courses Required for the Major: Units
WATR 101, Fundamentals-Water/Wastewater ............ 3
WATR 102, Calculations in Water &
  Wastewater Technology .................................. 3
WATR 104, Basic Hydraulics .................................. 3
WATR 106, Introduction to Electrical &
  Instrumentation Processes ............................. 3
WATR 130, Water Distribution Systems ................. 3
WATR 132, Wastewater Collection Systems ............. 3
WATR 134, Mechanical Maintenance ....................... 3
Total Units = 21

Associate in Science Degrees:
Water/Wastewater Technology

Water Treatment Plant Option

Courses Required for the Major: Units
WATR 101, Fundamentals-Water/Wastewater ............ 3
WATR 102, Calculations in Water &
  Wastewater Technology .................................. 3
WATR 104, Basic Hydraulics .................................. 3
WATR 106, Introduction to Electrical &
  Instrumentation Processes ............................. 3
WATR 110, Laboratory Analysis for
  Water/Wastewater Technology ........................ 3
WATR 112, Basic Plant Operations:
  Water Treatment ........................................... 3
WATR 117, Advanced Plant Operation:
  Water Treatment ........................................... 3
Total Units = 21

Wastewater Treatment Operators Option

Courses Required for the Major: Units
WATR 101, Fundamentals-Water/Wastewater ............ 3
WATR 102, Calculations in Water &
  Wastewater Technology .................................. 3
WATR 104, Basic Hydraulics .................................. 3
WATR 106, Introduction to Electrical &
  Instrumentation Processes ............................. 3
WATR 110, Laboratory Analysis for
  Water/Wastewater Technology ........................ 3
WATR 114, Basic Plant Operations:
  Wastewater Treatment.................................... 3
WATR 120, Advanced Plant Operation:
  Wastewater Treatment.................................... 3
Total Units = 21

Distribution/Collection Systems Option

Courses Required for the Major: Units
WATR 101, Fundamentals-Water/Wastewater ............ 3
WATR 102, Calculations in Water &
  Wastewater Technology .................................. 3
WATR 104, Basic Hydraulics .................................. 3
WATR 106, Introduction to Electrical &
  Instrumentation Processes ............................. 3
WATR 130, Water Distribution Systems ................. 3
WATR 132, Wastewater Collection Systems ............. 3
WATR 134, Mechanical Maintenance ....................... 3
Total Units = 21

For graduation requirements see Requirements for the
Associate Degree on page 60.
Electives as needed to meet minimum of 60 units
required for the degree:
Recommended Electives: Biology 100; Chemistry 100,
100L; Mathematics 95.
Course Descriptions
General Course Information

Not all courses listed will be offered each semester, and San Diego Mesa College reserves the right to cancel any course if enrollment in such course is below a minimum number as set by the San Diego Community College District Board of Trustees. The hours indicated at the beginning of each course description, except where otherwise specified, denote the total number of clock hours the class meets each week.

Students enrolled in occupational and health occupation programs must earn a grade of “C” or better in courses required for the major.

Only one course in a student’s major discipline may be used to meet the San Diego Community College district general education requirement.

Course Numbering System

The course numbering system has meaning with regard to level and transfer. See the description below:

- **1-49** Basic Skills or college preparatory courses. Credit does not apply toward an associate degree or transfer to a four-year college or university.

- **50-99** Course credit applies toward the associate degree but does not transfer to a four-year college or university.

- **100-299** Course credit applies toward the associate degree and credit is intended for transfer to a four-year college or university. (Some courses may be identified as associate degree.) Final decision in regard to transferability rests with the receiving institution.

- **300-399** Apprenticeship and in-service courses that may also count toward the associate degree, but credit may transfer.

Apprenticeship 345, 349, 349-D, DSPS 065, Field Experience/Internship 275, Independent Study 290, Individualized Instruction 296, Special Topics 23, 63, 265, Tutoring 044, and Work Experience courses 270, 272, 274, have Districtwide designated numbers.

Prerequisites, Corequisites and Limitations on Enrollment

All prerequisites, corequisites, and limitations on enrollment stated in the course descriptions listed in this catalog will be strictly enforced by ClassTalk and Reg-e at the time of registration. Students who do not meet the prerequisite, corequisite, or other limitation according to the college’s records, will not be permitted to register for the course. Students are strongly advised to have all transcripts of prior college work and other documentation on file well in advance of registration. This will minimize registration delays.

Students should plan their schedule early and see a counselor for assistance.

Challenge Procedures

Students may challenge a prerequisite, corequisite or limitation on enrollment. Contact the Admissions Office to obtain a Petition to Challenge and a copy of Procedures 5500.2. The completed petition must be filed no later than ten working days prior to the published add deadline for the course being challenged.

Generic Course Information

Any discipline or department may offer the courses listed below which do not appear individually in the catalog. If applicable to a particular subject area, it will be listed under the appropriate departmental heading (subject indicator) in the college class schedule. For further information, please check with the instructor or department chair.

Supervised Tutoring (044)

Supervised tutoring courses are available in each discipline. To enroll in a supervised tutoring course, a student must be enrolled in a college or basic skills course in the respective discipline. The courses are designed to prepare the student to succeed in the corequisite or subsequent courses. Supervised tutoring may be taken four times, each time with a different corequisite. Credit does not apply to the associate degree.

Applied Application and Software Skills (045L)

This is an open entry/open exit supplemental course designed to assist students to succeed in completing computer assignments in a companion course. This course may be taken four times with different companion subject-matter courses as needed. Credit does not apply to the associate degree.

Special Topics Courses (265)

Special topics courses that examine current problems or issues of interest may be offered in some disciplines. See the class schedule for specific titles and course details.
**Work Experience (270)**
Program of on-the-job learning experiences for students employed in a job related to the major. The combined maximum credit for all work experience courses from all disciplines may not exceed 16 units. To receive credit, a student must complete a minimum of seven units during the semester, including work experience. Transfer Credit: CSU and/or private coll/univ.

**Service Learning**
Students gain hands-on experience in project planning, development, implementation and evaluation. Students meet weekly to receive support training and development opportunities regarding best practices in Service Learning. The service-learning options are as follows:

**Service Learning - High School Projects (277A)**
Students in this course develop and implement service-learning projects to help high school students under the supervision of college faculty and in cooperation with high school teachers, counselors and resource teachers. Projects may include collaboration with high school classes, educational projects for high school students, mentoring, and shadowing. This course is intended for students from any discipline who are interested in project development, development of teaching skills, or enhancement of communication and planning skills. Course segments may be taken in any order. The combined credit for all 277A discipline courses may not exceed three units. Transfer Credit: CSU and/or private coll/univ.

**Elementary and High School Projects (277B)**
Students in this course develop and implement service learning projects to help elementary and junior high school students under the supervision of college faculty and in cooperation with elementary and junior high school teachers, counselors and resource teachers. Projects may include collaboration with elementary and junior high school classes, educational projects for elementary and junior high school students, mentoring, and shadowing. This course is intended for students from any discipline who are interested in project development, development of teaching skills, or enhancement of communication and planning skills. Course segments may be taken in any order. The combined credit for all 277B discipline courses may not exceed three units. Transfer Credit: CSU and/or private coll/univ.

**Service Learning - Community (277C)**
Students in this course develop and implement service-learning projects to help the college’s community under the supervision of college faculty and in cooperation with the staff of community organizations and agencies. Projects may include collaboration with off-campus community organizations and educational service oriented projects for the college’s community. This course is intended for students from any discipline who are interested in project development, development of teaching skills, or enhancement of communication and planning skills. Course segments may be taken in any order. The combined credit for all 277C discipline courses may not exceed three units. Transfer Credit: CSU and/or private coll/univ.

**Service Learning - On Campus (277D)**
Students in this course develop and implement service-learning projects to help the college’s students under the supervision of college faculty and in cooperation with college counselors and staff. Projects may include collaboration with college classes, educational projects for college students, mentoring, and shadowing. This course is intended for students from any discipline who are interested in project development, development of teaching skills, or enhancement of communication and planning skills. Course segments may be taken in any order. The combined credit for all 277D discipline courses may not exceed three units. Transfer Credit: CSU and/or private coll/univ.

**Independent Study (290)**
This course is for students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals. This course may be taken four times with different content, for a maximum of six units. The credit may be used for the associate degree and the courses are transferable to four-year institutions.

**Individualized Instruction (296)**
This course provides supplemental instruction to reinforce achievement of the learning objectives of a course in the same discipline under the supervision of the instructor of the designated course. Learning activities may employ a variety of self-paced multimedia learning systems, language labs, print and electronic resources, laboratory, or field research arrangements, to assist student in reaching specific
learning objectives. This open entry/open exit course is offered concurrently with designated courses. The credit may be used for the associate degree and the courses are transferable to four-year institutions.

**Accelerated College Program**
Transferable community college courses in calculus and political science are provided for qualified high school students at local high schools. The Accelerated College Program, located at Mesa College, is a Districtwide program responsible for providing and administering all of these classes, following guidelines established by a joint agreement between SDCCD and SDUSD. When an ACP student becomes a first-year or transfer student, credits transfer and are widely applicable in fulfilling general education and pre-major requirements at most universities.

**Explanation of Terms**
Courses in the San Diego Community College District which transfer to public four-year universities in California are identified at the end of each course description with the following statements:

Transfer Credit: CSU and/or private coll/univ.; UC: Course is certified for transfer to the 22 campuses of the California State University and to the nine campuses of the University of California.

Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor: Course is certified for transfer to California State University campuses and will transfer to the University of California campuses with some restrictions. Students should see a counselor concerning these limitations.

The UC system limits the credit that will be accepted for Art, Music, Drama (Theater Arts), Computer Science, Engineering, and Independent Study courses. It is expected that students will plan their transfer program carefully and enroll in general education as well as courses preparatory for their intended major at UC. If you have questions, please see a counselor.

**Transfer Credit: CSU and/or private coll/univ. Course is certified for transfer to California State University campuses.**

**CAN:** The notation CAN stands for California Articulation Number. The course is accepted at other participating campuses (See page 87).

**(FT)** Field trip may be required.

**Physical Education Classes/Intercollegiate Sports Disclaimer**
Participation in all sports and physical education activities involves certain inherent risks.

Risks may include, but are not limited to, neck and spinal injuries that may result in paralysis or brain injury, injury to bones, joints, ligaments, muscles, tendons and other aspects of the muscular skeleton system; and serious injury, or impairment, to other aspects of the body and general health, including death. The San Diego Community College District, its officers, agents and employees are not responsible for the inherent risks associated with participation in physical education classes/intercollegiate sports.

**Students are strongly advised to consult a physician prior to participating in any physical education activity.**
116A Principles of Accounting - Financial
4 hours, 4 units
Grade Only
Advisory: Mathematics 35 with a grade of “C” or better, or equivalent, or Assessment Skill Level M30; and English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
This introductory financial accounting course provides instruction in the theory and practice of accounting applicable to recording, summarizing, and reporting of business transactions for external reporting and other external uses. Subject matter includes coverage of asset valuation, revenue and expense recognition, and appropriate accounting for various asset, liability, and capital accounts. This course is required for business majors preparing for, and planning to transfer to, a four-year college or university. (FT) Transfer Credit: CSU and/or private coll/univ. and/or private coll/univ.; UC. (CAN BUS 2) (CAN BUS SEQ A = ACCT 116A+116B)

116B Principles of Accounting - Managerial
4 hours, 4 units
Grade Only
Prerequisite: Accounting 116A with a grade of “C” or better, or equivalent.
This introductory managerial accounting course provides instruction in the selection and analysis of accounting information for internal use by managers. Emphasis is given to the use of information needed for managerial planning and control. This course is required for Business majors preparing for, and planning to transfer to, a four-year college or university. (FT) Transfer Credit: CSU and/or private coll/univ. and/or private coll/univ.; UC. (CAN BUS 4) (CAN BUS SEQ A = ACCT 116A+116B)

120 Federal Income Tax
3 hours, 3 units
Grade Only
Advisory: Concurrent enrollment in Accounting 120. This is a study of the structure of California personal income taxation, tax planning and underlying social economic issues. An emphasis will be placed on tax concepts rather than tax return preparation. The course contrasts and compares California requirements to Federal Income Tax. Transfer Credit: CSU and/or private coll/univ. and/or private coll/univ.

125 Governmental Accounting
3 hours, 3 units
Grade Only
Principles of fund accounting; study of budgetary accounting, including revenues, appropriations, encumbrances, internal checks. Transfer Credit: CSU and/or private coll/univ. and/or private coll/univ.

135 Auditing
3 hours, 3 units
Grade Only
An elementary auditing course designed to cover procedures, including statistical sampling techniques, necessary to conduct a simple audit in compliance with high auditing standards. (FT) Transfer Credit: CSU and/or private coll/univ. and/or private coll/univ.

150 Computer Accounting Applications
3 hours, 3 units
Grade Only
Advisory: Completion of or concurrent enrollment in Accounting 102 or 116A with a grade of “C” or better, or equivalent.
An introductory course of computerized accounting system functions utilizing an integrated general ledger software package (such as DacEasy) and spreadsheet software (such as Lotus 1-2-3). (FT) Transfer Credit: CSU and/or private coll/univ.

186 Accounting for Professional Offices
3 hours, 3 units
Grade Only
Advisory: Completion of or concurrent enrollment in Accounting 102 or 116A; and current enrollment in Accounting 121.
Structure of personal income taxation. Tax planning. Underlying social and economic issues. Emphasis on tax concepts rather than tax return preparation. (FT) Transfer Credit: CSU and/or private coll/univ. and/or private coll/univ.
199 Accounting Laboratory
3 hours lab, 1 unit
Grade Only
A supervised study and practice period to supplement accounting instruction or to improve procedural skill. It is strongly recommended that this course be taken concurrently with Accounting 116A. Transfer Credit: CSU and/or private coll/univ.

201A Intermediate Accounting I
3 hours, 3 units
Grade Only
Advanced theory with emphasis on general accounting. An intensive study of accounting statements and the items which comprise them. (FT) Transfer Credit: CSU and/or private coll/univ.

201B Intermediate Accounting II
3 hours, 3 units
Grade Only
Continuation of Accounting 201A with emphasis on application in business situations. (FT) Transfer Credit: CSU and/or private coll/univ.

American Indian Studies
An interdisciplinary approach
(See selected courses in Anthropology, Art, and History)

101 American Sign Language II
2.5 hours lecture, 1.5 hours lab, 3 units
Prerequisite: American Sign Language 100 with a grade of “C” or better, or equivalent.
A continuation of the study of the structure of American Sign Language and development of skills in its use. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

104 Introduction to Deaf Culture
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for Special Education 104.
An introduction to the community, history, and language of deaf people in the United States. In-depth discussion of the beliefs and customs of this ethnic group. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

105 Implications of Deafness
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for Special Education 105.
The audiological, educational, social, and communicative aspects of people who are deaf and hearing impaired. A look at historical perspectives and current trends, philosophies, and ideologies. (FT) Transfer Credit: CSU and/or private coll/univ.

107 American Sign Language: Fingerspelling
2 hours, 2 units
Prerequisite: American Sign Language 100 with a grade of “C” or better, or equivalent.
Introduction to the American manual alphabet (Fingerspelling) and its use. Extensive drills and practice in both expressive and receptive use of the language. Transfer Credit: CSU and/or private coll/univ.

108 Fingerspelling for Interpreters
2 hours lecture, 2 units
Grade Only
Prerequisite: American Sign Language 200 with a grade of “C” or better, or equivalent.
Advanced skill development of the American manual alphabet (fingerspelling) and its application within the interpreting process. Extensive drills and practice in both expressive and receptive skills, as well as practice
in the use of fingerspelling within the context of voice
to sign and sign to voice interpreting. Transfer
Credit: CSU and/or private coll/univ.

**200 American Sign Language III**

2.5 hours lecture, 1.5 hours lab, 3 units

Prerequisite: American Sign Language 101 with a grade of “C” or better, or equivalent.

Advisory: American Sign Language 107 with a grade of “C” or better, or equivalent.

Continuation of development of skill in American Sign Language with emphasis on intermediate comprehension and expression. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

**201 American Sign Language IV**

2.5 hours lecture, 1.5 hours lab, 3 units

Prerequisite: American Sign Language 200 with a grade of “C” or better, or equivalent. Be prepared to be tested for equivalent interpreting competency.

An advanced course in American Sign Language to increase fluency as well as to provide linguistic and cultural perspectives needed for application to the interpreting process. Transfer Credit: CSU and/or private coll/univ.; UC.

**205 Interpreting Skills I**

2.5 hours lecture, 1.5 hours lab, 3 units

Prerequisite: American Sign Language 201 with a grade of “C” or better, or equivalent.

This course is designed to introduce students to the interpretation process. Students will be applying their knowledge of American Sign Language from previous coursework to the task of English to American Sign Language interpretation. Primary emphasis is placed on developing basic interpreting and transliterating skills. Transfer Credit: CSU and/or private coll/univ.

**206 Interpreting Skills II**

2.5 hours lecture, 1.5 hours lab, 3 units

Prerequisite: American Sign Language 205 with a grade of “C” or better, or equivalent. Be prepared to be tested for equivalent interpreting competency.

A continuation of Interpreting Skills I with emphasis given to the principles and skill development of voice-to-sign interpretation/ transliteration. Transfer Credit: CSU and/or private coll/univ.

**207 Sign-to-Voice Interpreting I**

2.5 hours lecture, 1.5 hours lab, 3 units

Prerequisite: American Sign Language 205 with a grade of “C” or better, or equivalent.

Corequisite: American Sign Language 206.

This course is designed to provide development of skills in receiving signed messages and presenting an equivalent message using spoken English. Emphasis is placed on Sign Language receptivity, appropriate English word choices, vocal inflection, and English structure. Transfer Credit: CSU and/or private coll/univ.

**208 Sign-to-Voice Interpreting II**

2.5 hours lecture, 1.5 hours lab, 3 units

Prerequisite: American Sign Language 207 with a grade of “C” or better, or equivalent. Be prepared to be tested for equivalent interpreting competency.

A continuation of Sign-to-Voice Interpreting I, with emphasis on: advanced receptive skills, word choices, vocal inflection, and ability to interpret signed messages using appropriate English structure. Transfer Credit: CSU and/or private coll/univ.

**209 Professional Aspects of Interpreting**

3 hours, 3 units

Prerequisite: American Sign Language 205 with a grade of “C” or better, or equivalent.

This course is designed to provide the student with a perspective of interpreting as a profession. Topics include: national standards for evaluation and certification, the employment aspects of interpreting and the ethical implications of interpreting. Transfer Credit: CSU and/or private coll/univ.

**210 Introduction to Specialized Settings**

3 hours, 3 units

Prerequisite: American Sign Language 205 with a grade of “C” or better, or equivalent.

This course gives a basic introduction of interpreting within a number of settings and situations. Included in the course are principles and basic skill development for interpreting in the following: telephone and television interpreting, legal, oral, medical and mental health interpreting, interpreting for formal meetings, small group meetings, performing arts and platform interpreting. Transfer Credit: CSU and/or private coll/univ.
276 Field Work in Interpreting
2 hours lecture, 3 hours lab, 3 units
Grade Only
Prerequisite: American Sign Language 206 and 207 and 209 and 210, each with a grade of “C” or better, or equivalent. Be prepared to be tested for equivalent interpreting competency.
Supervised field experience providing students with interpreting/transliterating practicum in various interpreting settings/situations. In addition to the field experience, the student will be expected to attend an on-campus seminar each week which is designed to provide students with an opportunity to support one another and share information and skill development.
Transfer Credit: CSU and/or private coll/univ.
This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

100A Animal Care and Management
4.5 hours lab, 1.5 units
Grade Only
Prerequisite: Biology 107 or Biology 105 and 106, each with a grade of “C” or better, or equivalent.
Limitation on Enrollment: Admission to the Animal Health Technology Program. This course is not open to students with credit for Animal Health Technology 100. This course is for students enrolled in the fall semester of their first year in the Animal Health Technology Program. This introductory course provides the student with actual “hands on” experience in the basic husbandry of many animal species. Course work fulfills the student’s need to practice the “essential” requirements of the American Veterinary Medical Association’s and the Registered Veterinary Technician Exam Committee’s Skills, Knowledge and Abilities Tasks List. The tasks include housing and caging, nutrition and feeding, sanitation and hygiene, handling and restraint, and first aid and nursing care. The student is actively involved in the ongoing daily care and treatment of the program’s resident animals. Student teams are assigned to a rotation schedule so that every student works with every animal during the semester. (FT) Transfer Credit: CSU and/or private coll/univ.

100B Advanced Animal Care and Management
4.5 hours lab, 1.5 units
Grade Only
Prerequisite: Completion of ANHL 100A with a grade of “C” or better, or equivalent.
Limitation on Enrollment: Admission to the Animal Health Technology Program. This course is not open to students with credit for Animal Health Technology 100. This course is for students enrolled in the spring semester of their first year in the Animal Health Technology Program. This continuation course provides the student with both greater responsibility in resident animal care and more advanced techniques in the general husbandry of many animal species. This course further fulfills the student’s need to practice the “essential” requirements of the American Veterinary Medical Association’s and the Registered Veterinary Technician Exam Committee’s Skills, Knowledge and Abilities Tasks List. This course includes housing and caging, nutrition and feeding, sanitation and hygiene, handling and restraint, and first aid and nursing care. The student is actively involved in the ongoing daily care and treatment of the program’s resident animals. Student teams are assigned to a rotation schedule so that every student works with every animal during the semester. (FT) Transfer Credit: CSU and/or private coll/univ.

105 Fundamentals of Animal Health Technology
3 hours lecture, 3 units
Grade Only
Corequisite: Animal Health Technology 105L.
Limitation on Enrollment: Admission to the Animal Health Technology Program.
This course is for students enrolled in the fall semester of their first year in the Animal Health Technology Program. This introductory lecture course defines the role of the Animal Health Technician in private veterinary practice, research institutions, regulatory agencies and zoos. Topics covered include basic animal care and management, feeding, species identifications, behavior, handling skills, animal restraint, sanitation, personal hygiene, medicating, zoonotic disease risk factors, animal nursing skills, instruments and equipment, terminology, veterinary practice ethics and legal responsibilities. (FT) Transfer Credit: CSU and/or private coll/univ.

105L Fundamentals of Animal Health Technology Laboratory
6 hours lab, 2 units
Grade Only
Corequisite: Animal Health Technology 105.
**Limitation on Enrollment:** Admission to the Animal Health Technology program.
This course is for students enrolled in the fall semester of their first year in the Animal Health Technology program. This introductory course utilizes demonstrations, laboratory exercises, group activities, and lectures to illustrate the principles presented in Animal Health Technology 105. Course work fulfills the student's need to learn and practice "recommended" and "essential" tasks from the American Veterinary Medical Association's and the Registered Veterinary Technician Exam Committee's Skills, Knowledge and Abilities Task List. These tasks include animal restraint and handling skills, medicating techniques, breed and species identification, basic animal nursing skills, poisonous plant identification, surgical equipment and veterinary medical equipment identification, basic nutrition, terminology, sanitation/sterilization, and personal hygiene. (FT) Transfer Credit: CSU and/or private coll/univ.

**115 Veterinary Office Procedures**

2 hours, 2 units
Grade Only

**Limitation on Enrollment:** Student must be admitted to the Animal Health Technology Program. This course is not open to students with credit for Animal Health Technology 240. This course is for students enrolled in their first year of the Animal Health Technology program. This veterinary office procedures course is designed to introduce the student to the development and facilitation of client care, staff management, financial guidelines, patient management and record keeping in a veterinary setting. Topics include record keeping, client and staff communication, veterinary medical ethics, veterinary logs and legalities, computer usage, financial management, and purchasing and inventory management in relationship to a veterinary establishment. Resume writing and job interviewing skills are also covered. (FT) Transfer Credit: CSU and/or private coll/univ.

**120 Comparative Physiological Anatomy**

3 hours lecture, 3 hours lab, 4 units
Grade Only

**Prerequisite:** Biology 107 and Chemistry 100 and Chemistry 100L, each with a grade of "C" or better, or equivalent.

**Advisory:** English 51 and 56 and Mathematics 95, each with a grade of "C" or better, or equivalent, or W5/R5/M40.

**Limitation on Enrollment:** Special Admission - must be admitted to program.

This lecture and laboratory course is designed to introduce the first semester Animal Health Technology student to the comparative normal anatomy and physiology of selected domestic animal species. The eleven anatomical systems are covered and material presented ranges from the microscopic cellular level to the level of the full organism. Relevant application of structure and function to the clinical medical situations is addressed. Appropriate medical terminology is included with each system. Animal dissection is carried out by each student. (FT) Transfer Credit: CSU and/or private coll/univ.

**125 Veterinary Clinical Laboratory Techniques**

3 hours lecture, 3 units
Grade Only

**Prerequisite:** Animal Health Technology 105, 105L and 120, each with a grade of "C" or better, or equivalent.

**Corequisite:** Animal Health Technology 125L.
Includes lectures, demonstrations, and laboratory exercises covering routine clinical examinations of blood, urine and feces from several species. Significance of altered values commonly encountered in clinical medicine are presented. External and internal parasites, identification, life cycle and clinical importance will be discussed. (FT) Transfer Credit: CSU and/or private coll/univ.

**125L Clinical Techniques Laboratory**

6 hours lab, 2 units
Grade Only

**Prerequisite:** Animal Health Technology 105, 105L and 115 and 120, each with a grade of "C" or better, or equivalent.

**Corequisite:** Animal Health Technology 125.
A laboratory course designed to illustrate the principles presented in Animal Health Technology 125. Allows for practical application of theories and clinical laboratory techniques as taught in lecture. (FT) Transfer Credit: CSU and/or private coll/univ.

**135 Veterinary Pharmacology**

2 hours lecture, 2 units
Grade Only

**Prerequisite:** Animal Health Technology 120 with a grade of "C" or better, or equivalent.

**Advisory:** Completion of or current enrollment in Mathematics 95, or equivalent, or Assessment Skill Level M40.
This course is for students enrolled in the first year of the Animal Health Technology program. The course provides the student with an introduction to the actions and uses of pharmacological agents: drug
classifications, modes of action, indications and contraindications, routes of administration, and mechanisms of elimination. Dispensing and pharmacy management as well as the laws regulating controlled substances are covered. Students are expected to correctly solve medical math problems and calculate drug doses. (FT) Transfer Credit: CSU and/or private coll/univ.

205 Diseases of Domestic Animals

3 hours lecture, 3 units
Grade Only
Prerequisite: Animal Health Technology 120, 125, and 125L with a grade of “C” or better, or equivalent.
This course is for students enrolled in the second year of the Animal Health Technology program. The course provides the student with an introduction to infectious and non-infectious diseases and conditions of domestic animals. Material covered includes the etiology, pathogenesis, pathophysiology, and clinical signs of each disease. This course also details any disease- or condition-specific nursing care, treatments, or diagnostic test methods. (FT) Transfer Credit: CSU and/or private coll/univ.

215 Veterinary Radiography

3 hours, 3 units
Grade Only
Prerequisite: Animal Health Technology 120 with a grade of “C” or better, or equivalent.
Corequisite: Animal Health Technology 215L.
Acquaints the student with the use of radiography, including radiographic duties of the Animal Health Technician. Special emphasis on medical, veterinary and radiographic terminology; elementary radiation and electrical protection; technical principles, and equipment operation. Fundamentals of latent and visible image formation, x-ray film characteristics, intensifying screens and film holders; theory and application of darkroom chemistry and processing; use and maintenance of veterinary x-ray processing equipment. (FT) Transfer Credit: CSU and/or private coll/univ.

215L Veterinary Radiography Laboratory

3 hours lab, 1 unit
Grade Only
Prerequisite: Animal Health Technology 105, 105L and 115 and 120, each with a grade of “C” or better, or equivalent.
A laboratory course designed to illustrate the principles presented in Animal Health Technology 215. Allows for practical application of theories and radiographic positioning as taught in lecture. (FT) Transfer Credit: CSU and/or private coll/univ.

225 Animal Nursing Techniques and Anesthesiology

3 hours, 3 units
Grade Only
Prerequisite: Animal Health Technology 105, 105L and 120 and 125, each with a grade of “C” or better, or equivalent.
Corequisite: Animal Health Technology 226A.
Includes lectures covering animal surgical and medical nursing techniques, dental hygiene and emergency first aid. Procedures and techniques with intravenous and inhalation anesthetics, surgical asepsis, skin preparation, instrument sterilization techniques and monitoring patients for vital signs are presented. Drugs are discussed according to classification, mode of action, method of action, method of administration, dispensing procedures and pharmacy management. (FT) Transfer Credit: CSU and/or private coll/univ.

226A Surgical Nursing Procedures Lab I

3 hours lab, 1 unit
Grade Only
Prerequisite: Animal Health Technology 105, 105L and 120 and 125, each with a grade of “C” or better, or equivalent.
Corequisite: Animal Health Technology 225.
Limitation on Enrollment: This course is not open to students with credit for Animal Health Technology 225L.
This course is a laboratory course designed to illustrate the principles presented in Animal Health Technology 225. It allows for the beginning application of theories and laboratory procedures as taught in lecture. (FT) Transfer Credit: CSU and/or private coll/univ.

226B Surgical Nursing Procedures Lab II

3 hours lab, 1 unit
Grade Only
Prerequisite: Animal Health Technology 105, 105L and 120 and 125 and 225 and 226A, each with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is not open to students with credit for Animal Health Technology 225L.
This course is a continuation of Animal Health Technology 226A and is a laboratory course designed to continue the illustration of the principles presented in Animal Health Technology 225. It allows for an advanced application of theories and procedures as
taught in Animal Health Technology 225. (FT) Transfer Credit: CSU and/or private coll/univ.

**235A Directed Clinical Practice**

**150 hours, 2 units**

*Prerequisite:* Admission to the Animal Health Technology program and Animal Health Technology 105, 105L, 115, 120, 125, and 125L, each with a grade of “C” or better, or equivalent.

*Limitation on Enrollment:* This course is not open to students with credit for Animal Health Technology 235. This course is for students enrolled in the fall semester of their second year in the Animal Health Technology program and provides the student with actual workplace experience in either an affiliated veterinary or research institution. The student is assigned entry level and general duties such as caring for hospitalized patients, handling and restraint, assisting in the reception and exam rooms, conducting basic laboratory procedures, and administering medications. The student works with a supervisor toward mastering the appropriate “essential” and “recommended” skills from the American Veterinary Medical Association’s and the Registered Veterinary Technician Exam Committee’s Skills, Knowledge and Abilities Tasks List. The appropriate skills are listed on a separate Directed Clinical Practice Task List. Clinical work is coordinated by a member of the college staff. (FT) Transfer Credit: CSU and/or private coll/univ.

**235B Advanced Directed Clinical Practice**

**150 hours, 2 units**

*Prerequisite:* Admission to the Animal Health Technology program and ANHL 225, 226A, and 235A, each with a grade of “C” or better, or equivalent.

*Limitation on Enrollment:* This course is not open to students with credit for Animal Health Technology 235. This course is for students enrolled in the spring semester of their second year in the Animal Health Technology program. This continuation course provides the student with greater responsibility and additional work experience at a more advanced level in an affiliated veterinary or research institution. The student is assigned general and more advanced tasks such as assisting in surgery, monitoring anesthesia and recovery, cleaning wounds and ears, applying splints or bandages, dispensing prescriptions, performing dental prophylaxis, and conducting client education. The student works more independently while mastering the appropriate “essential” and “recommended” skills listed on the American Veterinary Medical Association’s and the California Board of Examiners in Veterinary Medicine’s Skills, Knowledge and Abilities Tasks List. The appropriate skills are listed on a separate Advanced Directed Clinical Practice Task List. The student is responsible to a supervisor in charge. Clinical work is coordinated by a member of the college staff. (FT) Transfer Credit: CSU and/or private coll/univ.

**250 Introduction to Laboratory Animals**

**2 hours lecture, 3 hours, lab, 3 units**

*Prerequisite:* Animal Health Technology 225 with a grade of “C” or better, or equivalent.

*Limitation on Enrollment:* This course is not open to students with credit for Animal Health Technology 235. This course is for students enrolled in the spring semester of their second year in the Animal Health Technology program. This course provides additional work experience at a more advanced level in an affiliated veterinary or research institution. The student is assigned entry level and general duties such as caring for hospitalized patients, handling and restraint, assisting in the reception and exam rooms, conducting basic laboratory procedures, and administering medications. The student works with a supervisor toward mastering the appropriate “essential” and “recommended” skills from the American Veterinary Medical Association’s and the California Board of Examiners in Veterinary Medicine’s Skills, Knowledge and Abilities Tasks List. The appropriate skills are listed on a separate Advanced Directed Clinical Practice Task List. The student is responsible to a supervisor in charge. Clinical work is coordinated by a member of the college staff. (FT) Transfer Credit: CSU and/or private coll/univ.

**290 Independent Study**

*Hours by Arrangement; 1-3 units**

*Limitation on Enrollment:* Must obtain an Add Code from instructor for registration.

This course consists of independent work in animal husbandry or other special projects which will provide the student with individual experiences in animal care and management. This course may be taken four times with different content for a maximum of six units. (FT) Transfer Credit: CSU and/or private coll/univ.

*This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.*

**102 Introduction to Physical Anthropology**

**3 hours, 3 units**

*Advisory:* English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

A survey of the human evolution and human variation through the study of primates, human heredity, variability of modern populations and fossil records of early human primates. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ANTH 2)
103 Introduction to Cultural Anthropology
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A survey of various designs for living in different parts of the world. A comparative cross-cultural approach to how societies develop behaviors to meet biological, social, psychological, environmental and economic needs. (FT) Transfer Credit: CSU and/or private coll/ univ.; UC. (CAN ANTH 4)

104 Laboratory in Physical Anthropology
3 hours lab, 1 unit
Prerequisite: Anthropology 102 with a grade of “C” or better, or equivalent.
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is intended for anthropology majors, as well as non-majors who have an interest in biological anthropology. Students perform field and laboratory studies in genetics, human variation, human osteology, anthropometry, hominid evolution, comparative primate anatomy, primate behavior, and forensic anthropology. Students practice the ability to think critically through data analysis, written reports, and classroom discussions. In addition, students develop an educational exhibit to teach fellow students about some aspect of biological anthropology. (FT) Transfer Credit: CSU and/or private coll/univ.; UC

107 Introduction to Archaeology
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Prehistoric cultures, archaeological techniques, basic inventions, cultural innovations, and the development of urban civilizations. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ANTH 6)

115 Introduction to Archaeological Field Work
2 hours lecture, 6 hours lab, 4 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for Anthropology 265: Introduction to Archaeological Field Work. This course provides an introduction to the basic techniques of archaeological field work, including site survey, site layout, excavation, laboratory analysis, and report writing. (FT) Transfer Credit: CSU and/or private coll/univ.

200 Introduction to North American Indians
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A comparative study of Native American cultures from the Arctic to Panama, utilizing ethnographical, ethnohistorical, ethnological and archaeological materials. Transfer Credit: CSU and/or private coll/univ.; UC.

210 Introduction to California Indians
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is a comparative study of numerous Native American cultures located in California and peripherally related cultural areas. Anthropological materials for ethnographic, ethnohistorical, ethnological and archaeological sources will be utilized. Transfer Credit: CSU and/or private coll/univ.; UC.

215 Cultures of Latin America
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A review of the non-industrialized people living in contemporary Latin America will include Native American Indian cultures in Mexico, Central America and South America in contrast with their peasant Mestizo neighbors, and in turn these cultures in contrast with their urban counterparts. Contemporary anthropological research, ethnohistoric, historic and archaeological data will be used to discover the diversity of cultures throughout Spanish and Portuguese America. Transfer Credit: CSU and/or private coll/univ.; UC.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.
ARCHITECTURE (ARCH)

100 Beginning Architectural Drafting
6 hours lab, 2 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 35 with a grade of “C” or better, or equivalent, or Assessment Skill Level M30.
This course is designed for students who wish to develop basic drafting skills for use in Architectural, Civil Engineering, Construction, Interior Design, and Landscape programs. The course includes lettering, line control, sketching, and use of drafting instruments. Credit for this course is possible by examination. (FT) Associate Degree Credit.

101 Computer Aided Design and 3D Imaging
2 hours lecture, 4 hours lab, 3 units
Grade Only
This course studies the use of computers in the design process emphasizing three dimensional and photorealistic illusion. The use of the computer to create and develop spatial concepts is a primary objective of this course. This course will benefit students pursuing degrees in the environmental design fields. (FT) Transfer Credit: CSU and/or private coll/univ.

105 Computer Aided Drafting
6 hours lab, 2 units
Grade Only
Advisory: Architecture 100 with a grade of “C” or better, or equivalent.
This course provides the basics of computer aided drafting (CAD). Instruction will include preparation of basic plans, sections, elevations, and details using CAD. (FT) Transfer Credit: CSU and/or private coll/univ.

106 Advanced Computer Aided Drafting I
2 hours lecture, 4 hours lab, 3 units
Grade Only
Prerequisite: Architecture 105 with a grade of “C” or better, or equivalent.
This course is a continuation of Architecture 105 designed for students who wish to develop advanced computer aided drafting (CAD) skills. This course expands the foundation developed in Architecture 105 and deals with more complex aspects of the CAD program and its use in the development of architectural construction documents. (FT) Transfer Credit: CSU and/or private coll/univ.

107 Advanced Computer Aided Drafting II
2 hours lecture, 4 hours lab, 3 units
Grade Only
Prerequisite: Architecture 106 with a grade of “C” or better, or equivalent.
This course is designed to develop advanced computer aided drafting skills in commercial and residential drafting beyond those covered in Architecture 106. This class will use computer aided drafting (CAD) to electronic assembly portions of previously completed drawings into coordinated architectural construction documents. Three-dimensional representation of architectural designs will also be covered. (FT) Transfer Credit: CSU and/or private coll/univ.

111 Architectural Production Detailing
1.5 hours lecture, 7.5 hours lab, 4 units
Grade Only
Prerequisite: Architecture 100 with a grade of “C” or better, or equivalent.
Advisory: English 51 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
Limitation on Enrollment: This course is not open to students with credit for both Architecture 110 and 150.
This course presents methods of construction and drafting practices as applied to architectural contract documents concerning foundation plans and details for light wood frame and masonry structures. The course involves use and application of building codes and reference material. (FT) Transfer Credit: CSU and/or private coll/univ.

121 Architectural Practice and Economics
3 hours, 3 units
Grade Only
Advisory: English 56 with a grade of “C” or better, or equivalent or Assessment Skill Level R5.
This course presents material relating to the professional fields of architecture, landscape architecture, and construction management. Familiarization with the scope and nature, education, qualifications for registration and responsibilities of those who enter and advance in these professions. Study of the methods of professional architectural business practices as applied to the office structure, office management, and business economics. (FT) Transfer Credit: CSU and/or private coll/univ.
126 History of Ancient World Architecture
3 hours lecture, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is an introductory survey of early stone and wood architecture in relation to cultural and aesthetic elements of world civilization. Students of architecture, landscape architecture, anthropology, archaeology, art, history, humanities, interior design, liberal arts, sociology, and travel and tourism as well as persons interested in travel will find this course relevant to their interests. This is a required course for architecture transfer students. Students with credit for Architecture 125 may only take Architecture 126 or 127. (FT) Transfer Credit: CSU and/or private coll/univ.; UC; and Woodbury University.

127 History of World Architecture: Romanesque through Contemporary
3 hours lecture, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is an introductory survey of Romanesque through contemporary architecture. Cultural and aesthetic elements of world civilization are emphasized. Students of architecture, landscape architecture, anthropology, archaeology, art, history, humanities, interior design, liberal arts, sociology, and travel and tourism as well as persons interested in travel will find this course relevant to their interests. This is a required course for architecture transfer students. Students with credit for Architecture 125 may only take Architecture 126 or 127. (FT) Transfer Credit: CSU and/or private coll/univ.; UC and Woodbury University.

130 Materials of Construction
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 95 with a grade of “C” or better, or equivalent, or Assessment Skill Level M40.
This class is designed for students who wish to develop a knowledge of methods in installation, uses, and application of building materials to given types of construction. (FT) Transfer Credit: CSU and/or private coll/univ.

135 Tree Identification
1.5 hours lecture, 4.5 hours lab, 3 units
Grade Only
Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
Limitation on Enrollment: This course is not open to students with credit for Nursery Landscape Technology 120.
This class is designed for design students who will make field observations, identify and discuss trees for landscape architectural design in southern California, with emphasis on landscape design as related to water conservation, ecological adaptation, and landscape management. (FT) Transfer Credit: CSU and/or private coll/univ.

136 Shrubs, Vines, Groundcover Identification
1.5 hours lecture, 4.5 hours lab, 3 units
Grade Only
Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
Limitation on Enrollment: This course is not open to students with credit for Nursery Landscape Technology 121.
This class is designed for design students who will make field observations, identify and discuss shrubs, vines, and ground covers for landscape architectural design in southern California, with emphasis on landscape design as related to water conservation, ecological adaptation, and landscape management. (FT) Transfer Credit: CSU and/or private coll/univ.

155 Environmental Design I: Creating Exterior Spaces
3 hours lecture, 6 hours lab, 5 units
Grade Only
Advisory: Architecture 100 with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is not open to students with credit for Architecture 185.
This course is an introduction to planting design issues based on aesthetic and functional design principles. It is designed for the student or professional interested in garden design, urban forestry, landscape architecture, architecture or related fields. Students prepare concept drawings, models, and planting plans. Instruction includes some plant identification with emphasis on design issues and uses. (FT) Transfer Credit: CSU and/or private coll/univ. and Woodbury University.
170 Architectural Design
3 hours lecture, 3 hours lab, 4 units
Grade Only

Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
This course is designed for any student interested in environmental design. Students study fundamental form and space concepts of architecture as applied to exercises and simple projects. The development and release of the creative capacities of the student are the primary objectives of this course. This course is part of the required curriculum for participation in the 2 + 3 year program with Woodbury University. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

175 Advanced Architectural Design I
3 hours lecture, 6 hours lab, 5 units
Grade Only

Prerequisite: Architecture 170 with a grade of “C” or better, or equivalent.
Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
This course is a continuation of Architecture 170 and is designed for students interested in environmental design. The student designs several architectural projects with emphasis placed on the plan, section and form of the building. Design projects may include various regional student architecture competitions. Contemporary architectural theory is introduced. Students are required to present their design projects to the class. This course is part of the required curriculum for participation in the 2 + 3 year program with Woodbury University. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

180 Advanced Architectural Design II
3 hours lecture, 6 hours lab, 5 units
Grade Only

Prerequisite: Architecture 175 with a grade of “C” or better, or equivalent.
Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
This course, designed for students interested in environmental design, is a continuation of Architecture 170 and 175 in which advanced and more complex design problems are given to students who have completed Architecture 175. The student designs several architectural projects with emphasis placed on the plan, section and form of the building. Design projects may include various regional student architectural competitions. Contemporary architectural theory is introduced. Students are required to present their design problems to the class. 3-D CAD technology is taught and used in this class. This course is part of the required curriculum for participation in the 2 + 3 year program with Woodbury University. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

190 Environmental Design II: Urban and Community Design
3 hours lecture, 6 hours lab, 5 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is designed for any student interested in environmental design. It applies knowledge of basic principles of design, composition and design process to the creation of urban and community spaces. Emphasis is placed on involving students in real design projects within the community and developing business communication skills. Participation in job shadowing with an industry professional is required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

200 Architectural Detailing
1.5 hours lecture, 7.5 hours lab, 4 units
Grade Only

Prerequisite: Architecture 100 with a grade of “C” or better, or equivalent.
Advisory: Architecture 111, with a grade of “C” or better, or equivalent; and Mathematics 35 with a grade of “C” or better, or equivalent, or Assessment Skill Level M30.
This course is designed for students who wish to develop a knowledge of methods of construction and architectural drafting practices as applied to working drawings of fireplace, doors, windows, cabinets and wood stair details; involves extensive use and application of building codes and reference materials. (FT) Transfer Credit: CSU and/or private coll/univ.

205 Estimating
3 hours, 3 units
Grade Only

This course examines methods and application in estimating quantities and costs of materials, labor and management. It includes unit and detailed cost estimates. (FT) Transfer Credit: CSU and/or private coll/univ.

215 Strength of Materials
2 hours lecture, 3 hours lab, 3 units
Grade Only

Advisory: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50; and
English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5. This course is a study of the action of forces on materials and the resulting stresses. Students apply basic principles of physics in calculating bending moments, shear and deflection in beams, columns and connections. (FT) Transfer Credit: CSU and/or private coll/univ.

220 Architectural Delineation I
6 hours lab, 2 units
Grade Only
Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
This course instructs students in the development of architectural presentation drawing in various media including pencil, pen and ink. It includes methods of freehand and mechanical perspective. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

221 Architectural Delineation II
6 hours lab, 2 units
Grade Only
Prerequisite: Architecture 220 with a grade of “C” or better, or equivalent.
Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
This course is a continuation of Architecture 200. It includes a series of major problems designed to develop the student's drawing model making, and CAD abilities. Various media including pencil, pen and ink, color, models, rendering techniques are covered. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

226 Architectural Theory
3 hours, 3 units
Grade Only
Advisory: English 101 or 105 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course examines the theory of contemporary architectural design. Students must interview a local architect and present a slide lecture documenting that architect's work comparing and contrasting his/her work with the background information presented. (FT) Transfer Credit: CSU and/or private coll/univ.

250 Site Engineering
1.5 hours lecture, 7.5 hours lab, 4 units
Grade Only
Prerequisite: Architecture 100 with a grade of “C” or better, or equivalent.

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 35 with a grade of “C” or better, or equivalent, or Assessment Skill Level M30. This course presents methods of construction and architectural drafting practices as applied to site plans. The course content involves legal descriptions, zoning, property line layout, grading, cut and fill, roadways, drainage, site details, and related calculations. (FT) Transfer Credit: CSU and/or private coll/univ.

290 Independent Study
Hours by Arrangement; 1-3 units
Grade Only
Limitation on Enrollment: Must obtain an Add Code from instructor for registration.
Designed to deal with current problems and topics of special interest in architecture. This course may be taken four times with different content for a maximum of six units. Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

100 Art Orientation
3 hours, 3 units
A survey of the field of visual arts, including aesthetic approaches, philosophies, media, professional fields, regional and cultural contributions. Recommended for general education and Fine Art majors. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

107 Art Since 1960
3 hours, 3 units
Survey of art of the last thirty years. Emphasis on the major movements, styles, artists and works of this period within its historical context. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

109 Nineteenth and Twentieth Century Art
3 hours lecture, 3 units
Advisory: Art-Fine Art 110 and Art-Fine Art 111, each with a grade of "C" or better, or equivalent.
This course is designed not only for art students but also for those who are interested in history, humanities, teaching, travel and cultural enrichment. It is an introductory survey of the visual arts that are most relevant to an understanding of western civilization in the 19th and 20th centuries. It includes major monuments and representative art works from Europe, Russia and the Americas. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

110 Art History: Prehistoric to Gothic
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent or Assessment Skill Levels W5 and R5.
This course is designed not only for art students, but also for those who are interested in history, humanities, teaching, travel, and cultural enrichment. It is an introductory survey of the visual arts that are most relevant to an understanding of western civilization, from prehistoric Africa and Europe through the Gothic period. It includes major monuments and representative artworks from Mesopotamia, Iran, Egypt, the Aegean and Greece. Also included are the Hellenistic, Roman, early Christian, Byzantine, and Islamic worlds and art work from early Medieval, Romanesque, and Gothic Europe. Material is presented in illustrated lectures. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ART 2) (CAN ARTF SEQ A = ARTF 110 + 111)

111 Art History: Renaissance to Modern
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent or Assessment Skill Levels W5 and R5.
This course is designed not only for art students, but also for those who are interested in history, humanities, travel, and cultural enrichment. It is an introductory survey of the visual arts that are recognized as salient in the development of western civilization from the Renaissance to the early twentieth century. The art styles covered in the course include Renaissance, Mannerism, Baroque, Rococo, Neo-Classicism, Romanticism, Impressionism, post-Impressionism, and early twentieth century Modern movements. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ART 4) (CAN ARTF SEQ A = ARTF 110 + 111)

113 African, Oceanic and Native American Art
3 hours, 3 units
An introduction to the art of selected peoples of Africa, Oceanic, and Native North America, stressing their cultural wealth and diversity. (FT) Transfer Credit: CSU and/or private coll/univ. UC transfer limitations: Fine Art (ARTF) 113, 115, 120 combined with Black Studies (BLAS) 111: maximum credit, 2 courses.

115 African Art
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent or Assessment Skill Levels W5 and R5.
This course is designed not only for art students, but also for those who are interested in history, religion, philosophy, humanities, and cultural enrichment. It is an introduction to the background, aesthetics, styles and iconography of African art. It covers a selected group of cultures throughout the continent, with an emphasis on sub-Saharan West and Central Africa. Classroom lectures are illustrated. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations: Fine Art (ARTF) 113, 115, 120 combined with Black Studies (BLAS) 111: maximum credit, 2 courses.

120 North American Indian Art
3 hours, 3 units
A study of Native American Indian art forms which embrace history, myth, and tribal cultures as found in pottery, textiles, wood, and stone carving, basket making and jewelry. Provides art majors with prototypes for their own work, and non-majors with appreciation and understanding of American contributions to art history. (FT) Transfer Credit: CSU and/or private coll/univ. UC transfer limitations: Fine Art (ARTF) 113, 115, 120 combined with Black Studies (BLAS) 111: maximum credit, 2 courses.

130 Survey of Pre-Columbian Art
3 hours, 3 units
Limitation on Enrollment: This course is not open to students with credit for Chicano Studies 231.
An introductory survey of the art of Mesoamerica and South America in the Pre-Columbian period. (FT) Transfer Credit: CSU and/or private coll/univ. UC transfer limitations: Fine Art (ARTF) 130 combined with Chicano Studies (CHIC) 231: maximum credit, one course.

150A Design I
1.5 hours lecture, 4.5 hours lab, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This is a course about visual form, and about ways of organizing two-dimensional visual forms into vivid and coherent images. As such, this course may serve as
both an introduction to art for those with a tentative
interest in art making, and as a foundation course for
all other studio courses offered by this department,
including courses such as ceramics and sculpture which
involve construction in three-dimensions. This course
does not require drawing expertise. (FT) Transfer Credit:
CSU and/or private coll/univ. UC. (CAN ART14)

150B Beginning Graphic Design
1.5 hours lecture, 4.5 hours lab, 3 units
Advisory: English 51 and English 56 and Fine Art 150A,
each with a grade of "C" or better, or equivalent, or
Assessment Skill Levels W5 and R5.
This is an introductory class in graphic communication
which uses the computer as a tool for building and
editing images. As in Art 150A, students address
problems of visual form and organization, but with an
emphasis in this course on visual constructions which
convey information, and on type and text as graphic
components of those constructions. This is a core
course for art majors and would be useful for anyone
interested in computer graphic applications. (FT)
Transfer Credit: CSU and/or private coll/univ.; UC.

151 Three-Dimensional Design
1.5 hours lecture, 4.5 hours lab, 3 units
Advisory: English 51 and 56, each with a grade of “C” or
better, or equivalent, or Assessment Skill Levels W5 and
R5; and Art-Fine Art 150A.
This introduction to design in three dimensions
continues the investigation of elements and principles
of visual organization begun in Art 150A. Students
learn to solve design problems using a variety of three-
dimensional materials, and a variety of approaches to
three-dimensional structure. This is a foundation course
for students planning to major in art, and a useful
course for all students interested in building visually
coherent three dimensional objects. (FT) Transfer
Credit: CSU and/or private coll/univ.; UC. (CAN ART 16)

152 Color Theory
1.5 hours lecture, 4.5 hours lab, 3 units
Advisory: English 51 and 56, each with a grade of “C” or
better, or equivalent, or Assessment Skill Levels W5 and
R5; and Art-Fine Art 150A.
This course is an introduction to color theory--the
systematic study of color differences, dimensions, and
relationships--to the study of color harmonies and
discords, and to the development of strategies for
achieving specific color effects. This is a course for
painters and designers, and for anyone interested in
making color choices. (FT) Transfer Credit: CSU and/or
private coll/univ. UC.

155A Freehand Drawing I
1.5 hours lecture, 4.5 hours lab, 3 units
Advisory: English 51 and 56, each with a grade of “C” or
better, or equivalent, or Assessment Skill Levels W5 and
R5.
This course introduces anyone with an interest in
drawing to the techniques and theory they need to
create naturalistic drawings in various media. It
provides students with the means to see and describe
the world three-dimensionally using lines and
differences in dark and light, and it provides students
with compositional strategies for making their
depictions more meaningful and effective. No previous
art experience is required. (FT) Transfer Credit: CSU
and/or private coll/univ. UC. (CAN ART 8)

155B Freehand Drawing II
1.5 hours lecture, 4.5 hours lab, 3 units
Advisory: English 51 and 56, each with a grade of “C” or
better, or equivalent, or Assessment Skill Levels W5 and
R5; and Art-Fine Art 155A.
This course builds upon the technical and
compositional means introduced in 155A. It differs
from 155A in its range of media and form, and in its
emphasis on helping students find individual solutions
to particular problems of graphic representation and
expression. (FT) Transfer Credit: CSU and/or private
coll/univ. UC.

161A Gallery Exhibition Skills I
1.5 hours lecture, 4.5 hours lab, 3 units
Provides theory, instruction, and practical experience in
all aspects of design and installation of art exhibitions.
Under the guidance of the instructor, students
participate in the installation of four exhibitions per
semester. (FT) Transfer Credit: CSU and/or private coll/
univ.

161B Gallery Exhibition Skills II
1.5 hours lecture, 4.5 hours lab, 3 units
A continuation of Fine Art 161A. Provides intermediate
instruction, theoretical background, and practical
experience in all aspects of design and installation of
art exhibitions. Students take increasing responsibility
for the installations of four exhibitions per semester.
(FT) Transfer Credit: CSU and/or private coll/univ.

163 Art Museum/Gallery Internship
16 hours lab, 4 units
Grade Only
This course includes directed professional experience in
an art museum or gallery in the San Diego area and
emphasizes the application of skills and knowledge
obtained in Fine Art 161A and Fine Art 161B. (FT) Transfer Credit: CSU and/or private coll/univ.

165A Composition in Painting I
1.5 hours lecture, 4.5 hours lab, 3 units
Advisory: Fine Art 150A and Fine Art 155A with a grade of "C" or better, or equivalent.
This course is an introduction to oil and acrylic painting methods and techniques with emphasis on composition, color, and application of general design principles. A variety of subject matter such as still-life, landscape, portrait and non-objective subjects, and a variety of stylistic approaches such as cubism, collage, realism and expressionism, are explored. This course is designed to develop students' creative abilities and critical thinking in visual terms. The course is designed for students who are preparing for a major in Art, as well as for those who wish to improve their artistic skills. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ART 10)

165B Composition in Painting II
1.5 hours lecture, 4.5 hours lab, 3 units
A continuation of Fine Art 165A. Advanced work. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

165C Composition in Painting III
1.5 hours lecture, 4.5 hours lab, 3 units
A continuation of Fine Art 165B. Enrollment based on space availability and previous high achievement/portfolio. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

165D Composition in Painting IV
1.5 hours lecture, 4.5 hours lab, 3 units
A continuation of Fine Art 165C. Enrollment based on space availability and previous high achievement/portfolio. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

174A Book Arts I
1.5 lecture hours, 4.5 lab hours, 3 units
Advisory: Fine Art 150A with a grade of "C" or better, or equivalent.
This is an interdisciplinary course for art students and others who are interested in book arts. The course offers an investigation of the visual form, physical structure, and expressive potential of the artist-made book, including essential elements, tools, and processes. Students construct books in Western and Asian traditions and use these concepts to create unique forms. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

175A Sculpture I
1.5 hours lecture, 4.5 hours lab, 3 units
Advisory: Fine Art 150A with a grade of "C" or better, or equivalent.
This course is an introduction to sculptural materials, processes and forms. The course helps students to appreciate the shapes and functions of sculpture (past and present) in the context of hands-on experience. This course is intended for transfer students planning to major in art and for all students interested in working in three-dimensional media. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ART 12)

175B Sculpture II
1.5 hours lecture, 4.5 hours lab, 3 units
Advisory: Fine Art 175A with a grade of "C" or better, or equivalent.
This course continues the introduction to sculptural materials, processes and forms begun in Art 175A. It differs from 175A in that it requires that students show more initiative in their selection and pursuit of sculptural goals, that they be more articulate in defining these goals, and that they extend their sculptural reach to include either new sculptural forms or new sculptural materials. This course is intended for transfer students planning to major in art and for all students interested in working in three-dimensional media. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

175C Sculpture III
1.5 hours lecture, 4.5 hours lab, 3 units
Advisory: Fine Art 175B with a grade of "C" or better, or equivalent.
This course continues the acquaintanceship with sculptural materials, processes and forms begun in Art 175A and 175B. It differs from 175B in that it requires that students show more self-reliance in their selection and pursuit of sculptural goals, and that the goals they select be more complex and ambitious. This course is intended for transfer students planning to major in art and for all students interested in working in three-dimensional media. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

177A Contemporary Wood Furniture I
1.5 hours lecture, 4.5 hours lab, 3 units
Advisory: Fine Art 150A and Fine Art 151 with a grade of "C" or better, or equivalent. This course provides an introduction to the study, design, and construction of contemporary wood furniture. It is designed for students who are preparing for the major in Art and is particularly useful for students whose concentration is
in three-dimensional work or design. Appropriate and safe use of hand and stationary woodworking tools is taught. Students are required to purchase their own materials. (FT) Transfer Credit: CSU and/or private coll/univ.

177B Contemporary Wood Furniture II
1.5 hours lecture, 4.5 hours lab, 3 units
Prerequisite: Fine Art 177A with a grade of "C" or better, or equivalent.
This course is a continuation of Fine Arts 177A and is designed for students who are preparing for the major in art, in particular those who are focusing on three-dimensional work or design. It includes intermediate levels of joinery and the study of methods used in the construction of contemporary wood casework and cabinet making. Bent lamination, vacuum forming and steam bending are introduced and incorporated in the final project. (FT) Transfer Credit: CSU and/or private coll/univ.

177C Contemporary Wood Furniture III
1.5 hours lecture, 4.5 hours lab, 3 units
Prerequisite: Fine Art 177B with a grade of "C" or better, or equivalent.
This course is a continuation of Fine Art 177B and is designed for students who are preparing for the major in art, in particular those who are focusing on three-dimensional work and design. The course provides advanced study of the design and construction of the contemporary wood chair. Basic ergonomics and engineering in relation to the chair and seating are taught. Advanced methods of joining wood, forming wood, and alternative methods of assembly are also addressed. (FT) Transfer Credit: CSU and/or private coll/univ.

190A Black and White Art Photography
1.5 hours lecture, 4.5 hours lab, 3 units
Photography is taught as a medium for self exploration and self expression. The course emphasizes the art making process, in which photographic images/concepts are discussed within social/historical, genre specific, aesthetic, and technical contexts. The course covers camera operation and exposure, darkroom procedures for film and print development, and print presentation. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ART 18)

195A Ceramics I
1.5 hours lecture, 4.5 hours lab, 3 units
Advisory: English 51 and English 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Level WS/R5.
This course is an introduction to the design and construction of ceramic objects. Students acquire techniques of hand-building and throwing on the potter’s wheel as they produce ceramic forms with visually interesting three dimensional shapes and varied surface treatment. This course is intended for transfer students planning to major in art and for all students interested in designing objects in three dimensions. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ART 6)

195B Ceramics II
1.5 hours lecture, 4.5 hours lab, 3 units
Continuation of Fine Art 195A with advanced ceramic problems using both wheel and hand building techniques applying traditional and contemporary approaches. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

195C Ceramics III
1.5 hours lecture, 4.5 hours lab, 3 units
Continuation of Fine Art 195A/B. Ceramic problems adjusted to students individual interest and expressive direction, with further development of knowledge, skills and philosophy through individual creative projects. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

195D Porcelain Ceramics
1.5 hours lecture, 4.5 hours lab, 3 units
Advance projects in both wheel and handbuilding techniques using porcelain (or white stoneware) and related porcelain glazes. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

196 Clay and Glaze Technology
1.5 hours lecture, 4.5 hours lab, 3 units
Advisory: Fine Art 195B or Art-Fine Art 197B with a grade of "C" or better, or equivalent.
This is a survey of technical processes in ceramics that introduces students to basic and advanced techniques of glaze formulation, mixing, and testing. The course also acquaints students with the composition of clays, stains, and engobes and how these respond to different kilns and firing conditions. This course is designed to help ceramics majors and other interested students understand the physical and chemical nature of ceramic materials. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

197A Handbuilding Ceramics I
1.5 hours lecture, 4.5 hours lab, 3 units
This course emphasizes the many aspects of handbuilding with clay for functional and non-
functional pieces. Low fire and high fire will be offered.  
(FT) Transfer Credit: CSU and/or private coll/univ.; UC.

197B Handbuilding Ceramics II  
1.5 hours lecture, 4.5 hours lab, 3 units  
This course emphasizes advanced aspects of handbuilding with clay for functional and non-functional pieces. Low fire and high fire will be offered.  
(FT) Transfer Credit: CSU and/or private coll/univ.; UC.

197C Handbuilding Ceramics III  
1.5 hours lecture, 4.5 hours lab, 3 units  
This course offers the student an opportunity to select one or two areas of special interest in handbuilding and then to concentrate on those areas for the whole semester.  
(FT) Transfer Credit: CSU and/or private coll/univ.; UC.

198A Introduction to Printmaking I  
1.5 hours lecture, 4.5 hours lab, 3 units  
Advisory: Fine Art 150A and Fine Art 155A, each with a grade of "C" or better, or equivalent.  
This course is an introduction to the basic printmaking media of intaglio, relief, and monoprinting and is designed for art students and anyone interested in printmaking. Students study techniques to create and print plates; investigate papers and select for properties; analyze, formulate and compare aesthetic strategies for image making; and practice principles of editioning and conservation of prints. This course satisfies requirements for the major in art with a two-dimensional or design emphasis.  
(FT) Transfer Credit: CSU and/or private coll/univ.; UC.

198B Introduction to Printmaking II  
1.5 hours lecture, 4.5 hours lab, 3 units  
Advisory: Fine Art 198A with a grade of "C" or better, or equivalent.  
This course builds on basic skills learned in Fine Arts 198A. More complex processes such as photo intaglio, collagraph, and reduction color relief will be introduced. Students apply aesthetic criteria in analyzing their creative choices and examine contemporary printmaking in world cultures. This course is a recommended elective for students preparing to major in fine art with an emphasis on two-dimensional and graphic design.  
(FT) Transfer Credit: CSU and/or private coll/univ.; UC.

198C Introduction to Printmaking III  
1.5 hours lecture, 4.5 hours lab, 3 units  
Advanced printmaking techniques.  
(FT) Transfer Credit: CSU and/or private coll/univ.; UC.

210A Life Drawing I  
1.5 hours lecture, 4.5 hours lab, 3 units  
Drawing from live models. Dynamic representation of human form and expressive use of figure in composition.  
(FT) Transfer Credit: CSU and/or private coll/univ.; UC.  
(CAN ART 24)

210B Life Drawing II  
1.5 hours lecture, 4.5 hours lab, 3 units  
Drawing from live models. Dynamic representation of the human form and expressive use of figure in composition.  
(FT) Transfer Credit: CSU and/or private coll/univ.; UC.

210C Advanced Life Drawing III  
1.5 hours lecture, 4.5 hours lab, 3 units  
Figure drawing and composing related to the individual interests of the student. Enrollment based upon space availability and previous high achievement/portfolio.  
(FT) Transfer Credit: CSU and/or private coll/univ.; UC.

220A Life Sculpture I  
1.5 hours lecture, 4.5 hours lab, 3 units  
Advisory: Fine Art 150A with a grade of "C" or better, or equivalent.  
This is an introduction to the naturalistic and dynamic representation of the human body. Students sculpt from observation of live, nude models in poses of extended duration. In the process, students come to understand seeing as a learned skill. This course is intended for transfer students planning to major in art and for all students interested in the problems inherent in representing what they see.  
(FT) Transfer Credit: CSU and/or private coll/univ.; UC.

220B Life Sculpture II  
1.5 hours lecture, 4.5 hours lab, 3 units  
Prerequisite: Fine Art 220A with a grade of "C" or better, or equivalent.  
This course continues the introduction to naturalistic and dynamic representation of the human body (done from observation of live models in poses of extended duration) begun in Art 220A. This course is intended for transfer students planning to major in art and for all students interested in developing skills of naturalistic representation.  
(FT) Transfer Credit: CSU and/or private coll/univ.; UC.

220C Life Sculpture III  
1.5 hours lecture, 4.5 hours lab, 3 units  
Prerequisite: Fine Art 220B with a grade of "C" or better, or equivalent.
In this course students learn to extend their skill in representing the human figure convincingly in three dimensions (developed in Art 220A and Art 220B) to naturalistic representation in more than one style. This course is intended for transfer students planning to major in art and for all students interested in developing sophisticated skills of naturalistic representation. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

260 Studio Art Studies
1.5 hours lecture, 4.5 hours lab, 3 units
Lecture/Lab presentation of selected studio arts that are of interest and/or importance in the arts. Specific areas for investigation will be announced in the schedule for each semester. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

280 Studio Lab
3 hours lab, 1 unit
An expansion of the lecture/lab course. Emphasis is given to reinforcement of technical skills and aesthetic understanding introduced in these courses. (FT) Transfer Credit: CSU and/or private coll/univ.

281 Issues in Visual Art (Lab)
3-6 hours lab, 1-2 units
The presentation of selected topics in the visual arts that are of student interest and/or importance in art. Specific areas for investigation will be announced in the class schedule for each semester. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

290 Independent Study
Hours by Arrangement; 1-3 units
Limitation on Enrollment: Must obtain an Add Code from instructor for registration. Requires consent of the department.
Open only to those students who have exhausted departmental offerings in their areas of emphasis. This course may be taken four times with different content for a maximum of six units. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

Asian Studies
An interdisciplinary approach
(See selected courses in English, History, Humanities, Language Arts, Music, and Philosophy)

Asian Pacific American Studies
An interdisciplinary approach
(See selected courses in Filipino Studies and History)

101 Descriptive Astronomy
3 hours lecture, 3 units
This course is an introductory survey of contemporary astronomy. Topics covered include the solar system, stars and stellar evolution, the Milky Way galaxy and cosmology. This course is designed for students planning to take advanced courses in the Physical and Earth Sciences and for transfer students planning to major in astronomy. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

109 Practice in Observing
3 hours lab, 1 unit
Corequisite: Completion of or concurrent enrollment in Astronomy 101. Includes constellation study, use of astronomical coordinates and descriptive observations of celestial objects with telescope. Field trips will be required. (FT) Transfer Credit: Astronomy (ASTR) 109 and 111 combined: maximum credit, one course.

111 Astronomy Laboratory
3 hours lab, 1 unit
Corequisite: Completion of or concurrent enrollment in Astronomy 101. Includes use of astronomical coordinates and use of celestial sphere. Familiarization with star charts. Experiments in spectroscopy. Some evening observing. (FT) Transfer Credit: Astronomy (ASTR) 109 and 111 combined: maximum credit, one course.

290 Independent Study
Hours by Arrangement; 1-3 units
Limitation on Enrollment: Must obtain an Add Code from instructor for registration.
This course provides for additional research and academic experiences for students with special interests. The course consists of individualized research problems, conferences with the instructor at prearranged intervals and a final written exam or report on the work completed. This course may be taken four times with different content for a maximum of six units. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

100 Natural History — Environmental Biology
3 hours lecture, 3 hours lab, 4 units
Advisory: Completion of or concurrent enrollment in English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5. Lecture topics include basic principles of ecology, the nature of the physical environment, the aquatic environments, the terrestrial environments and population dynamics. This is a community approach, fitting organisms into their proper role in nature. The laboratory is coordinated with lectures emphasizing the plant and animal communities of Southern California. Several field trips will be required, some on the weekend. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Biology (BIOL) 100, 101 and 120 combined: maximum credit, one course. No credit for Biology 101 if taken after 100.

107 General Biology - Lecture and Laboratory
3 hours lecture, 3 hours lab, 4 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 95 with a grade of “C” or better, or equivalent, or Assessment Skill Level M40.
Limitation on Enrollment: This course is not open to students with credit for Biology 103, 104, or 105, 106, or 210A and 210B.
This course is an examination of living organisms and their environment. The lecture and laboratory are intended for students planning on taking more advanced courses in the Life Sciences or students majoring in Education, Child Development, Physiological Psychology, or related areas. Topics that are emphasized in this course include the fundamental chemical and physical processes common to all living organisms, the interactions between organisms and their environment, classical and molecular genetics, metabolism, plant and animal anatomy and physiology, animal behavior, evolution, cellular and molecular biology, and the experimental and cognitive processes used to examine these fields. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: No credit for Biology (BIOL) 105, 106 or 107 if taken after 210AB. (CAN BIOL 2) (CAN BIOL SEQ A=BIOL 107+215+250)

110 Introduction to Oceanography
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This is an introductory course designed to acquaint the student with general oceanography. Topics include history of oceanography, sea floor properties, plate tectonics, properties of sea water, ocean currents, waves and tides, life in the sea, pollution, and the significance of the oceans to humans. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

115 Marine Biology
3 hours lecture, 3 hours lab, 4 units
Advisory: Completion of or concurrent enrollment in English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course in biology is designed to serve as an elective in the natural sciences. This is a survey of the marine organisms, emphasizing their natural history and special adaptations to the ocean environment. Topics include the marine environment, plankton, marine plants, marine invertebrates, fishes, marine birds, and marine mammals. Several field trips are required to local marine habitats, Sea World, Stephen Birch Aquarium and the Natural History Museum. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

120 The Environment of Man
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course in biology examines the immediate and long range causes and effects of air, water, and land pollution on the total environment, including the study of positive solutions to our ecological dilemma. (FT)
Transfer Credit: CSU and/or private coll/univ. UC

Transfer Credit: Biology (BIOL) 100, 101, and 120 combined: maximum credit, one course. No credit for Biology 101 if taken after 100.

130 Human Heredity

3 hours, 3 units

Advisory: English 51 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5.

A course studying mechanisms of human heredity, effects of inheritance on human processes and implications of recent genetic knowledge on the welfare of man. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

160 Elements of Human Anatomy and Physiology

3 hours lecture, 3 hours lab, 4 units

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

Limitation on Enrollment: This course is not open to students with credit for Biology 230 or 235.

An introductory course in human body structure and functions intended to meet the requirements of students preparing for health occupations such as radiologic technician, physical therapy assistant, medical records technician, and medical laboratory technician. This course does not qualify as a general education course transferable to the UC system.

Transfer Credit: CSU and/or private coll/univ.

200 Biological Statistics

2 hours lecture, 3 hours lab, 3 units

Grade Only

Prerequisite: Biology 105 and 106, or 107, or 210A, and Mathematics 116, each with a grade of “C” or better, or equivalent.

This is an introductory course in statistics using biological examples and experimental design. Students learn methods and gain experience in defining and solving quantitative problems in biology. Descriptive and inferential statistics, basic probability, binomial and normal distributions are introduced. Students learn to estimate population parameters, test hypotheses, linear regression and correlation using clinical and biological data and experiments. This course is applicable for biological science majors and required for preparation for San Diego State University biology majors. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Biology (BIOL) 200 combined with Mathematics 119 or Psychology 258: maximum credit, one course.

205 General Microbiology

3 hours lecture, 6 hours lab, 5 units

Prerequisite: Biology 105 and 106 or Biology 107 and Chemistry 100 and 100L, each with a grade of “C” or better, or equivalent.

This introductory course covers fundamental aspects of microbiology including taxonomy, anatomy, growth and reproduction, metabolism, genetics and applications, host-parasite relations, immunology, and control of microorganisms. Emphasis in the laboratory is upon basic methods for culturing, staining, enumerating, differentiating and identifying microorganisms. The course meets requirements to enter paramedical or medical fields. (FT) Transfer Credit: CSU and/or private coll/univ. UC. (CAN BIOL 14)

210A Introduction to the Biological Sciences I

3 hours lecture, 3 hours lab, 4 units

Grade Only

Prerequisite: Chemistry 151 or Chemistry 152 and Chemistry 152L, each with a grade of "C" or better, or equivalent.

Advisory: English 51 and English 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Level W5 and R5. Concurrent enrollment in CHEM 200 and 200L.

This course covers biological chemistry, cell structure and function, cellular metabolism, classical and molecular genetics, and evolutionary biology. This is the first semester of a two-semester sequence designed for biological science and pre-professional majors. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Biology (BIOL) 210A, B combined with 215 and 250: maximum credit, one series.

210B Introduction to the Biological Sciences II

3 hours lecture, 3 hours lab, 4 units

Grade Only

Prerequisite: Biology 210A with a grade of “C” or better, or equivalent.

This introductory course is a continuation of Biology 210A. This course emphasizes the developmental and physiological processes of the Five Kingdoms, the phylogenetic relationships of major evolutionary groups of organisms, behavior, and ecological principles including population and community ecology. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Biology (BIOL) 210A/B combined with 215 and 250: maximum credit, one series.
215 Introduction to Zoology

2 hours lecture, 6 hours lab, 4 units
Prerequisite: Biology 105 and 106 or 107, each with a grade of “C” or better, or equivalent.
The basic principles of animal biology, surveying the morphology and life processes, and evolutionary relationships of the invertebrate and vertebrate animals. Laboratories include identification of organisms, dissection and anatomy of various types, embryological development, histology, and field trips. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Biology (BIOL) 210A/B combined with 215 and 250: maximum credit, one series. (CAN BIOL 4) (CAN BIOL SEQ A = BIOL 107 + 215 + 250.)

230 Human Anatomy

2 hours lecture, 6 hours lab, 4 units
Grade Only
Prerequisite: Biology 105 and 106, or 107, each with a grade of “C” or better, or equivalent.
This course is a systems approach to the study of human body structure from the microscopic level of organization to the gross level. Structure is related to function from the study of histological slides, photomicrographs, anatomical models and charts, and mammalian (cat) dissection. This course is intended to meet the requirements of students in the fields of nursing, physical therapy, recreational therapy, occupational therapy, athletic training, chiropractic, psychology, physical education, and biology or those who wish to extend their knowledge of the human body beyond the scope of introductory biology. Transfer Credit: CSU and/or private coll/univ.; UC. (CAN BIOL 10) (CAN BIOL SEQ B = BIOL 230 + 235.)

231 Media Experiences in Human Anatomy

1 hour, 1 unit
Credit/No Credit Only
Corequisite: Biology 230.
Independent study of selected filmstrips, photomicrographs, tapes and graphics to further informational background in human anatomy. Transfer Credit: CSU and/or private coll/univ.

232 Experience in Human Dissection

3 hours lab, 1 units
Prerequisite: Biology 230 with a grade of "C" or better, or equivalent.
Advisory: Preregistration counseling with instructor is highly recommended.
This course provides a supervised study and actual experience in human dissection. Mastery of dissection techniques and human anatomy at this level assists students pursuing careers in nursing, medicine, and other allied health professions. (FT) Transfer Credit: CSU and/or private coll/univ.

235 Human Physiology

3 hours lecture, 3 hours lab, 4 units
Prerequisite: Biology 105 and 106 or 107, each with a grade of “C” or better, or equivalent.
Advisory: Biology 230 and Chemistry 100 and 100L, each with a grade of “C” or better, or equivalent.
This is an introductory course which investigates the functions of the human body with emphasis on the nervous, endocrine, muscular, cardiovascular, respiratory, digestive, excretory and reproductive systems. This course is intended to meet requirements for students in the fields of nursing, paramedical sciences, psychology, biology and physical education. Transfer Credit: CSU and/or private coll/univ.; UC. (CAN BIOL 12) (CAN BIOL SEQ B = BIOL 230 + 235)

250 Introduction to Botany

2 hours lecture, 6 hours lab, 4 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
An introduction to the fundamental principles of the structure, development, and physiology of the major plant groups, with emphasis on the flowering plants. Some field trips may be taken during laboratory periods. Some all-day Saturday field trips may be substituted for the regular laboratory periods. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Biology (BIOL) 210A/B combined with 215 and 250: maximum credit, one series. (CAN BIOL 6) (CAN BIOL SEQ A = BIOL 107 + 215 + 250.)

255 California Plants

3 hours lecture, 3 hours lab, 4 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A study of both native and ornamental plants of Southern California and the groups to which they belong. Techniques of identification, collection and preservation are emphasized in addition to discussion of habitat preferences and plant associations. Frequent field trips will be scheduled during laboratory periods. Some all-day Saturday field trips may be substituted for the regular laboratory periods. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.
290 Independent Study
Hours by Arrangement; 1-3 units
Limitation on Enrollment: Must obtain an Add Code from instructor for registration.
A student may sign up for 1 to 3 units each semester for a maximum of 6 units. For advanced students in biology who wish to continue with a special investigation. The course consists of individualized research problems, conferences with the instructor at prearranged intervals and a final report on the work completed. This course may be taken four times with different content for a maximum of six units. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

BLACK STUDIES (BLAS)

100 Introduction to Black Studies
3 hours lecture, 3 units
Advisory: English 51 or English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 or R5.
This course is a survey of the Black Studies discipline including its social and academic origins, goals and development. Emphasis is placed on providing students with an understanding of the fundamental areas of study within the field and of the interdisciplinary approach to studying the African experience in America and the world. This course is intended for students who wish to major in Black Studies and/or who wish to gain general knowledge of the Black experience. Transfer Credit: CSU and/or private coll/univ.; UC.

104 Black Psychology
3 hours, 3 units
Advisory: English 51 or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5.
An introduction to some of the psychological principles and concepts of understanding the Black experience. A course in psychology recommended for students interested in broadening their understanding of Black behavior. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Black Studies (BLAS) 104 combined with Chicano Studies (CHIC) 105 or Psychology (PSYC) 101: maximum credit, one course.

106 Black Oral Expression and Interpretation
3 hours, 3 units
Advisory: English 51 or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5.
Varieties of oral expression and interpretation as taken from the Black experience are explored. Emphasis on broadening social awareness and developing communicative skills. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

110 Afro-American Art
3 hours, 3 units
Advisory: English 51 or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5.
A historical approach to the foundations of the Art of Black Americans from 1650 to present, including the influence of African and European art styles and traditions. Transfer Credit: CSU and/or private coll/univ.; UC.

111 African Art History
3 hours, 3 units
Advisory: English 51 or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5.
A historical survey of the art styles and cultural traditions of various African cultures from 4,000 BC to the present. Transfer Credit: CSU and/or private coll/univ.; UC.

116 Contemporary Social Problems from a Black Perspective
3 hours, 3 units
Advisory: English 51 or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5.
A sociological analysis of institutional variation and the process of social change, and how it affects the Black American. An exploration of those group variations in life style which cannot be accounted for by social condition. Emphasizes contemporary urban situations. An examination of the relations between various racial, cultural, ethnic, and minority groups. Transfer Credit: CSU and/or private coll/univ.; UC.

120 Black Music
3 hours, 3 units
Advisory: English 51 or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5.
An understanding and appreciation of African music and dance. Comparison and contrast of the Black experiences in Africa and America as exemplified by
their respective cultures. Transfer Credit: CSU and/or private coll/univ.; UC.

125 Dynamics of the Black Community  
3 hours, 3 units
Involves the active participation of the student in an effort to sensitize him/her to the needs of the Black community. The student participates in projects, attends outside lectures and conferences, and becomes actively involved in the community development. (FT) Transfer Credit: CSU and/or private coll/univ.

130 The Black Family  
3 hours, 3 units
Advisory: English 51 or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5.
A sociological and psychological consideration of the Black family in America. Emphasis is on the socioeconomic/political factors that impinge on the Black family structure. Transfer Credit: CSU and/or private coll/univ.; UC.

140A History of the U.S., Black Perspectives  
3 hours, 3 units
Grade Only
Advisory: English 51 or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5.
This course is a survey of American history from the colonial period to 1877, with emphasis on the experience of African Americans and the contributions they have made to the political, social, economic, and cultural development of the country. This course is intended for transfer students planning to major in African American Studies, history, political science, or other social sciences. The complete one-year course, 140A and 140B, satisfies the graduation requirement in American Institutions. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Black Studies 140AB combined with Chicano Studies 141AB, History 109, 110 or 150, 151: maximum credit, one series.

140B History of the U.S., Black Perspectives  
3 hours, 3 units
Grade Only
Advisory: English 51 or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5.
This course covers the history of the United States from Reconstruction to the present with emphasis on African American experience and contributions. It focuses on political, social, economic, cultural, and intellectual trends, the persistence of racism, and the struggle for full equality for all Americans. NOTE: The complete one-year course of Black Studies 140A and 140B satisfies the graduation requirements in American institutions and California state government. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Black Studies 140AB combined with Chicano Studies 141AB, History 109, 110 or 150, 151: maximum credit, one series.

145A Introduction to African History  
3 hours lecture, 3 units
Advisory: English 51 and English 56 each with a grade of ”C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is a survey of African History from the Stone Age through the beginnings of European colonization in the 1870s. Emphasis is placed on providing students with a broad presentation of the geographical features of the continent and its connections to the rest of the world, local and regional ways of life and institutions, slavery, European conquest and colonization and African resistance to colonization. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

150 Black Women in Literature and the Media  
3 hours, 3 units
Advisory: English 51 or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5.
Analyzes the literary achievements of Black women. Examines the images of Black women in literature and the media, past and present, including realistic self-images as presented by Black women themselves. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

155 Afro-American Literature  
3 hours, 3 units
Advisory: English 51 or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5.
Surveys the literary works of Afro-Americans from 1746 to the present. Comparisons are also made to works by non-Black authors. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

165 Sexuality and Black Culture  
3 hours, 3 units
Grade Only
Advisory: English 51 or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5.
Limitation on Enrollment: This course is not open to students with credit for Black Studies 265: Psychology and Social Aspects of Black Sexuality.
This course will provide an in-depth examination and analysis of social and psychological factors that
determine the nature of human sexuality in the Black community. Transfer Credit: CSU and/or private coll/univ., UC Transfer Credit: Black Studies (BLAS) 165 and Psychology (PSYC) 137: maximum credit, one course.

**175 Psycho-History of Racism and Sexism**  
3 hours, 3 units  
Grade Only

*Advisory:* English 51 or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5. This course will provide a comparative analysis of the historical and psychological impact of racism and sexism on American people, with particular emphasis on the impact of both ideologies on Black and White people. Transfer Credit: CSU and/or private coll/univ.; UC.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

Class sections of the following courses utilize a variety of reading and/or research materials from a Black perspective. See page 247 for complete English course descriptions and page 327 for complete Speech Communications course descriptions. Refer to the class schedule under the particular subject listing for designated sections.

**English**

43 English Review  
51 Basic Composition  
101 Reading and Composition  
105 Composition and Literature  
205 Critical Thinking and Intermediate Composition

**Speech Communications**

103 Oral Communication

**120 Blueprint Reading**  
3 hours, 3 units  
Grade Only

*Advisory:* Mathematics 35 with a grade of “C” or better, or equivalent, or Assessment Skill Level M30; and English 51 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5.

Introduction to the reading of construction blueprints and specifications. Analysis of the methods of representation of building materials, symbols, measurements and methods of construction and inspection. (FT) Associate Degree Credit.

**130 Construction Practices I**  
3 hours lecture, 3 hours lab, 4 units  
Grade Only

*Advisory:* Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

A practical application of building techniques using various materials. Related to residential and commercial building: layout, forms, structure framing using construction math, site-layout using builders transit, and concrete problems related to the trade. (FT) Associate Degree Credit.

**170 Construction Practices II**  
3 hours lecture, 3 hours lab, 4 units  
Grade Only

*Advisory:* Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

A practical application of building techniques using various building materials. Includes exterior roof coverings, wall finish coverings of wood and manufactured products, interior drywall, paneling finishes and trim, constructing cabinets, hanging doors, setting windows, completing stair layout. Technical problems related to other trades; codes and inspections. (FT) Associate Degree Credit.

**230 Construction Practices III**  
3 hours lecture, 3 hours lab, 4 units  
Grade Only

*Advisory:* Building Construction 170, with a grade of “C” or better, or equivalent; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

Practical application of building techniques in roof framing, stair building, door hanging, finish carpentry and the methodology involved in exterior, interior, wall coverings, painting and acoustical finishes. Includes blueprint interpretation, math and estimating. (FT) Associate Degree Credit.
245 Building Inspection
3 hours lecture, 3 units
Grade Only
Advisory: Architecture 130 and Building Construction 120 and 260 and 268, each with a grade of “C” or better, or equivalent; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A survey of the organization of the typical planning department and the responsibilities of the building inspector. Associate Degree Credit.

250 Construction Trades Management I
3 hours, 3 units
Grade Only
Advisory: Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56 each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
An introduction to construction films and techniques of successful operation. Types of supplies, inspections, and management problems. How to deal with individuals and groups. Opportunities in labor and management. The use of the computer to operate a professional construction business. (FT) Associate Degree Credit.

255 Construction Trades Management II
3 hours, 3 units
Grade Only
Advisory: BLDC 250 with a grade of “C” or better, or equivalent; and English 51 and 56 each with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 and R5; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20.
An advanced study directed to protect management team members, superintendents, engineers, architects, contractors or any person who intends to manage or invest in the construction business. Includes up-to-date methods of organization, planning, sales promotion and leadership development, and the use of the computer to operate a professional construction business. Associate Degree Credit.

260 Building Codes and Zoning
3 hours, 3 units
Grade Only
Advisory: Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56 each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course covers the fundamentals of local building laws and ordinances and administration. Also included are zoning and land use, building requirements by types of construction and occupancy, fire and safety regulations for both residential and commercial construction and types of inspections. Associate Degree Credit.

268 Electrical, Plumbing, and Mechanical Codes
3 hours, 3 units
Grade Only
Advisory: Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course provides the fundamentals of code application, interpretation and correlation with the National Electrical Code, Uniform Plumbing Code, Uniform Mechanical Code, Uniform Fire Code, Solar Code, California Energy Commission Regulations and inspections. (FT) Associate Degree Credit.

295 Building Contractor’s License Law
3 hours, 3 units
Grade Only
Advisory: Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Designed to inform management, contractors, subcontractors and craftsmen of their basic legal rights and liabilities. Includes an overview of related real estate and land development laws and regulations. Also designed to aid journeymen in preparing for State contractor’s (law) license exam. Associate Degree Credit.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

90A Learning Skills
1.5 hours, 1.5 units
Grade Only
This is a course designed to teach the skills necessary to become a successful learner, both in college and in the years beyond college. Emphasis is placed on time management, organizational skills, and basic thinking,
reading and writing techniques. Students will be able to successfully learn, retain and communicate information. This course is intended for the beginning or returning certificate student planning to major in vocational education. (FT) Associate Degree Credit

90B Work Success

1.5 hours, 1.5 units
Grade Only
This is a course designed to teach the skills necessary to become a successful employee. Emphasis is placed on understanding and developing the skills necessary to secure and keep a job. Students will be able to look for employment, prepare for an interview, and model the qualities of a successful employee. This course is intended for the beginning or returning student planning to seek gainful employment. (FT) Associate Degree Credit.

100 Introduction to Business

3 hours, 3 units
Grade Only
Advisory: English 43 and English 42, or Business 92, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
An elementary course for both business and non-business majors. Provides a broad understanding of the business community, its functions, terminology, occupational choices in the various fields of business and the place of business in the American economy as a whole. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

101 Business Mathematics

3 hours lecture, 3 units
Grade Only
This course provides students with a comprehensive study of business mathematics and reviews basic mathematics such as decimals, fractions, and percentages. It also covers the topics of bank services, payroll, mathematics of buying and selling, interest and loans, taxes, insurance, depreciation, and other business computations. This course is intended for students interested in pursuing careers in business. Transfer Credit: CSU and/or private coll/univ.

119 Business Communications

3 hours, 3 units
Grade Only
Advisory: English 51 and 56, or Business 92, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

Instruction in the principles of effective business communications. Development of the ability to analyze, organize and compose various types of written and oral business communications. Emphasis is on the writing of clear, concise, and persuasive letters, memos, and reports. Transfer Credit: CSU and/or private coll/univ.

140 Business Law and the Legal Environment

3 hours, 3 units
Grade Only
This course examines business legal systems, social and ethical influences, judicial and administrative systems, contracts, torts, bankruptcy, agency, business organizations, security regulations, regulation of property, and protection of intellectual property interest. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Business (BUSE) 140 and 141 combined: maximum credit, one course. (CAN BUS 8)

143 International Business Law

3 hours lecture, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is a survey of the legal environment of international business and is intended for individuals interested in applying principles of international business law or preparing for careers or further education in international business. Topics include international sales, credits, and commercial transactions; international and U.S. trade law; and regulations of the international marketplace. (FT) Transfer Credit: CSU and/or private coll/univ.

150 Human Relations in Business

3 hours, 3 units
Grade Only
Advisory: English 51 and 56, or Business 92, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Designed to assist employees and employers in understanding human behavior in social institutions, business and industry. Areas for discussion include: leadership, communication, status, decision making, motivation, personnel problems. Case problem method of instruction used. (FT) Transfer Credit: CSU and/or private coll/univ.
155 Managing the Small Business  
3 hours, 3 units  
Grade Only

Advisory: English 43 with a grade of “C” or better, or equivalent, or Assessment Skill Level W4. 
In this course students learn the elements of successfully operating a small business. Key issues include human resource management, marketing for small business, financial, and legal issues. This course is intended for the student who plans to major in the Small Business Management or Entrepreneurial and Community Service option at City College. At Mesa College, this course may be taken as an elective by Business Management students or by those who are pursuing or intend to pursue a small business career. This course is also intended for students from any discipline who are interested in owning or operating a small business. (FT) Transfer Credit: CSU and/or private coll/univ.

201 Business Organization and Management  
3 hours, 3 units  
Grade Only

Advisory: English 51 and 56, or Business 92, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5. 
Essentials of business organization and management; internal organization; operation; finance; marketing; and forms of ownership. Introduces students to techniques of decision-making with emphasis on recent advances in areas directly related to management. (FT) Transfer Credit: CSU and/or private coll/univ.

203 Principles of Lean Production  
3 hours lecture, 3 units

Advisory: English 51 and 56 and Mathematics 32, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5, R5, and M20. 
This course provides fundamental education on evolving business practices and specialized knowledge of lean production and inventory control methods designed to eliminate waste. Fundamentals, as well as advanced how-to techniques, allow students to execute methodologies that increase production efficiencies for both service and manufacturing entities. Course materials emphasize the certification process of the American Production and Inventory Control Society (APICS). Subject matter includes master planning, material requirements planning, capacity requirements planning, inventory management, just-in-time, supply chain management, and production activity control. Topics are relevant for students from any discipline requiring resource management. (FT) Associate Degree Credit.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

100 Fundamentals of Chemistry  
3 hours, 3 units

Corequisite: Chemistry 100L  
Advisory: Mathematics 95 with a grade of “C” or better, or equivalent, or Assessment Skill Level M40; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.  
Limitation on Enrollment: This course is not open to students with credit for or concurrent enrollment in Chemistry 200.

A beginning course to acquaint the student with the language and tools of chemistry. Includes elementary principles of inorganic and physical chemistry. Valuable as a foundation course for further work in chemistry. Students planning to transfer this course to a four-year institution must also complete Chemistry 100L. Concurrent enrollment in Chemistry 100L is required. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Chemistry (CHEM) 100, 100L and 151 combined: maximum credit, four units. (CAN CHEM 6 when taken with Chemistry 100L) (CAN CHEM SEQ B = CHEM 100+100L+130+130L)

100L Fundamentals of Chemistry Laboratory  
3 hours lab, 1 unit

Corequisite: Chemistry 100  
Advisory: Mathematics 95 with a grade of “C” or better, or equivalent, or Assessment Skill Level M40; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.  
A laboratory course designed to illustrate the principles presented in Chemistry 100. Acquaints the student with common laboratory equipment and data collection. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Chemistry (CHEM) 100, 100L and 151 combined: maximum credit, four units. (CAN CHEM 6 when taken with Chemistry 100) (CAN CHEM SEQ B = CHEM 100+100L+130+130L)
105 Drugs and the Human Body  
3 hours, 3 units
Advisory: English 51 and 56, or Business 92, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
Coverage of the most important classes of drugs likely to be encountered because of widespread use or abuse. Explanation of how medicines and body chemicals work; where we get them, and how they are tested below marketing. Discussions include alcohol as a drug, tranquilizers, narcotic analgesics, aspirin and salicylates, amphetamines, hallucinogens, barbiturates and marijuana. Newer drug developments such as prostaglandins will be included. This course assumes no prior course work in chemistry or biology. Intended for non-science majors. (FT) Transfer Credit: CSU and/or private coll/univ.

130 Introduction to Organic and Biological Chemistry  
3 hours, 3 units
Prerequisite: Chemistry 100 and 100L, each with a grade of "C" or better, or equivalent.
Corequisite: Chemistry 130L.
A continuation of Chemistry 100 with emphasis on organic chemistry. Pre-nursing and home economics students intending to go into the baccalaureate program must complete Chemistry 100, 100L, 130 and 130L. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Chemistry (CHEM) 130, 130L and 231, 231L combined: maximum credit, one course (with lab). (CAN CHEM 8 when taken with Chemistry 130) (CAN CHEM SEQ B = CHEM 100+100L+130+130L).

130L Introduction to Organic and Biological Chemistry Laboratory  
3 hours lab, 1 unit
Prerequisite: Chemistry 100 and Chemistry 100L, each with a grade of "C" or better, or equivalent.
Corequisite: Chemistry 130.
This is a one-semester laboratory course that illustrates the principles presented in Chemistry 130. Students are introduced to common organic chemistry laboratory equipment, fundamental organic and biochemical reactions, tests and techniques. Techniques covered include chromatography, recrystallization, and distillation. Tests and reactions of common organic functional groups, carbohydrates, fats, and amino acids are covered. Synthesis of a medicinal compound such as aspirin or a nitrogen-based analgesic is also covered. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Course List: Chemistry (CHEM) 130, 130L and 231, 231L combined: maximum credit, one course (with lab). (CAN CHEM 8 when taken with Chemistry 130) (CAN CHEM SEQ B = CHEM 100+100L+130+130L).

152 Introduction to General Chemistry  
3 hours lecture, 3 units
Corequisite: Chemistry 152L.
Advisory: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50; and English 51 and 56; each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5. Limitation on Enrollment: This course is not open to students with credit for Chemistry 151.
This is a one semester preparatory course in chemistry consisting of an intensive study of some of the principles of inorganic and physical chemistry that are needed before taking Chemistry 200. Topics include but are not limited to atomic structure, chemical nomenclature, periodicity, chemical equations, stoichiometry, solutions, intermolecular forces, and gas laws. The course emphasizes problem solving and chemical calculations. It is intended for those students majoring in one of the natural sciences, engineering, or related curricula who do not meet the entrance requirements of Chemistry 200. (FT) Transfer Credit: CSU and/or private coll/univ.; UC Transfer Credit: Chemistry (CHEM) 152 and 152L and 100, 100L combined. Maximum credit, four units.

152L Introduction to General Chemistry Laboratory  
3 hours lab, 1 unit
Corequisite: Chemistry 152.
Advisory: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50; and English 51 and 56; each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5. Limitation on Enrollment: This course is not open to students with credit for Chemistry 151.
This is a one-semester laboratory course intended as the companion course for Chemistry 152. Topics include chemical measurement, significant figures, laboratory safety, and stoichiometry. An emphasis is placed on problem solving, data analysis and chemical calculations. It is intended for those students majoring in one of the natural sciences, engineering or related curricula, who do not meet the entrance requirements of Chemistry 200. (FT) Transfer Credit: CSU and/or private coll/univ.; UC Transfer Credit: Chemistry (CHEM) 152, 152L and 100, 100L combined. Maximum credit, four units.
160 Introductory Biochemistry
3 hours, 3 units
Grade Only
Prerequisite: Chemistry 130 with a grade of “C” or better, or equivalent.
The basic principles of the chemistry of biological processes are studied. This course is intended for majors in home economics, nursing, and allied health professions or academic majors in the chemical or life sciences. Topics include acid/base chemistry, thermodynamics, cell biology, amino acids and proteins, enzymes, lipids, membranes and transport, carbohydrates, metabolism, nucleic acids and information transfer. (FT) Transfer Credit: CSU and/or private coll/univ.

161 Techniques in Biochemistry
1 hour lecture, 3 hours lab, 2 units
Grade Only
Prerequisite: Chemistry 100L with a grade of “C” or better, or equivalent.
Advisory: Biology 205 with a grade of “C” or better, or equivalent.
This course is designed to provide students with both theoretical and applied knowledge of a number of currently useful biochemical and biotechnical methods. Experiments will provide experiences in mammalian tissue culture; protein and/or enzyme analyses; immunological analyses; computer-assisted applications, and bioinfomatics. This course is designed for students in the chemistry technician program or those seeking experiences necessary for employment in the biopharmaceutical industry. (FT) Transfer Credit: CSU and/or private coll/univ.

200 General Chemistry I — Lecture
3 hours, 3 units
Prerequisite: Chemistry 151 or 152 and 152L (formerly Chemistry 151), each with a grade of “C” or better, or equivalent; and Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50.
Corequisite: Chemistry 200L.
This is the first course in a two-course sequence in general chemistry and is intended for students majoring in science or satisfying prerequisites for professional schools. The course covers the principles and laws of inorganic chemistry with emphasis on quantitative, mathematical problem solving. Topics include chemical equations, stoichiometry, atomic theory and its relationship to periodicity of the elements, bonding theories, molecular geometry, solution chemistry, liquids, solids, and the gas laws. Transfer Credit: CSU and/or private coll/univ.; UC. (CAN CHEM SEQ A = CHEM 200+200L+201+201L)

200L General Chemistry I — Laboratory
6 hours lab, 2 units
Corequisite: Chemistry 200.
This is the first course in a two-course sequence in general chemistry. It is intended for students majoring in science or satisfying prerequisites for professional schools. The course illustrates the fundamental principles and laws of chemical behavior and the properties of matter in terms of laboratory experiments, with emphasis on quantitative, mathematical problem-solving. Topics include techniques of data analysis, chemical formulae and nomenclature, chemical equations and stoichiometry, atomic theory and its relationship to the periodic properties of the elements, theories of chemical bonding, molecular geometry, states of matter, solution chemistry, and gaseous behavior. Transfer Credit: CSU and/or private coll/univ.; UC. (CAN CHEM 2 when taken with Chemistry 200) (CAN CHEM SEQ A = CHEM 200+200L+201+201L)

201 General Chemistry II Lecture
3 hours, 3 units
Prerequisite: Chemistry 200 and 200L, each with a grade of “C” or better, or equivalent.
Corequisite: Chemistry 201L.
This is the first course in a two-course sequence in general chemistry and is intended for students majoring in science or satisfying prerequisites for professional schools. The course covers the principles and laws of physical and inorganic chemistry with emphasis on quantitative, mathematical problem solving. Topics include chemical kinetics, chemical equilibrium, acid-base theory, thermochemistry, thermodynamics, electrochemistry, coordination chemistry, and nuclear chemistry. The course also includes an introduction to organic- and biochemistry. Transfer Credit: CSU and/or private coll/univ.; UC. (CAN CHEM 4 when taken with Chemistry 201L) (CAN CHEM SEQ A = CHEM 200+200L+201+201L)

201L General Chemistry II Laboratory
6 hours lab, 2 units
Corequisite: Chemistry 201.
This is the second semester laboratory course in a two-course sequence in general chemistry and is intended for students majoring in science or satisfying prerequisites for professional schools. The course illustrates the fundamental principles of physical and inorganic with some organic chemistry in terms of laboratory experiments. Topics include techniques of data analysis, chemical kinetics, chemical equilibrium,
acid, base, and salt, thermochemistry, electrochemistry, coordination chemistry and organic chemistry. Wherever appropriate and whenever possible, computer skills are introduced and applied to data analysis, laboratory simulations, and computer interfacing with laboratory equipment. Transfer Credit: CSU and/or private coll/univ.; UC. (CAN CHEM 4 when taken with Chemistry 201) (CAN CHEM SEQ A = CHEM 200+200L+201+201L)

231 Organic Chemistry I — Lecture
3 hours, 3 units
Prerequisite: Chemistry 201 and 201L, each with a grade of “C” or better, or equivalent.
Corequisite: Chemistry 231L and 232L.
Advisory: English 101 or 105 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.
Stresses aliphatic compounds and includes an introduction to aromatic compounds. Discusses molecular structure and stereochemistry of organic compounds; structure and reactivity, reaction mechanisms, organic synthesis, and special topics. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Chemistry (CHEM 130, 130L and 231, 231L combined: maximum credit, one course with Lab).

231L Organic Chemistry I — Laboratory
3 hours lab, 1 unit
Prerequisite: Chemistry 201 and 201L, each with a grade of “C” or better, or equivalent.
Corequisite: Chemistry 231.
Advisory: English 101 or 105 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.
An introduction to organic chemistry laboratory techniques including melting points, boiling points, distillation, gas chromatography, column chromatography and recrystallization. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Chemistry 130, 130L and 231, 231L combined: maximum credit, one course (with Lab).

232L Organic Chemistry I — Laboratory Continued
3 hours lab, 1 unit
Prerequisite: Chemistry 201 and 201L, each with a grade of “C” or better, or equivalent.
Corequisite: Chemistry 231.
A continuation of organic chemistry laboratory with emphasis on multi-step synthesis and qualitative organic analysis. Transfer Credit: CSU and/or private coll/univ.; UC.

233 Organic Chemistry II
3 hours, 3 units
Prerequisite: Chemistry 231 with a grade of “C” or better, or equivalent.
This course includes an examination of the nomenclature, synthesis, and chemical reaction of alcohols, ethers, carboxylic acids, aldehydes, ketones, amines, phenols, and carbohydrates. Both aliphatic and aromatic compounds are discussed. Transfer Credit: CSU and/or private coll/univ.; UC.

233L Organic Chemistry II — Laboratory
3 hours lab, 1 unit
Prerequisite: Chemistry 231 with a grade of “C” or better, or equivalent.
Corequisite: Chemistry 233.
Nomenclature, preparation and reactions of classes of aromatic and aliphatic organic compounds including alcohols, carbonyl compounds, esters, and amines. Transfer Credit: CSU and/or private coll/univ.; UC.

234L Organic Chemistry II — Laboratory Continued
3 hours lab, 1 unit
Prerequisite: Chemistry 231 with a grade of “C” or better, or equivalent.
Corequisite: Chemistry 233.
A continuation of organic chemistry laboratory with emphasis on multi-step synthesis and qualitative organic analysis. Transfer Credit: CSU and/or private coll/univ.; UC.

251 Analytical Chemistry
3 hours lecture, 6 hours lab, 5 units
Prerequisite: Chemistry 201 and 201L and Mathematics 150, each with a grade of “C” or better, or equivalent.
Advisory: English 101 or 105 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.
Theory and practice of gravimetric and volumetric methods of chemical analysis and introduction to instrumental methods of analysis. It is recommended that students who plan to enroll in this course do so the semester following completion of Chemistry 201. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN CHEM 12)

255 Inside the Pharmaceutical Industry
3 hours, 3 units
Grade Only
Prerequisite: Chemistry 231, 231L, and Biology 107, each with a grade of “C” or better, or equivalent.
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill levels W5 and R5.

This course is designed for chemistry majors or those planning to work in the local pharmaceutical industry. The course covers principles pertinent to working in the pharmaceutical industry. Topics include but are not limited to good lab practice (GLP), good manufacturing practice (GMP), hazardous materials management, the FDA, drug approval, and drug design. The course concludes with a survey of the local pharmaceutical industry. (FT) Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

### CHICANO STUDIES (CHIC)

#### 110A Introduction to Chicano Studies
3 hours, 3 units
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
An introductory course on the Chicano, including a review of those factors that characterize and influence the Chicano culture. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

#### 110B Introduction to Chicano Studies
3 hours, 3 units
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
Continuation of Chicano Studies 110A, with an emphasis on contemporary issues and social changes in the Chicano community. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

#### 135 Chicano Literature
3 hours, 3 units
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
This course is a survey of Chicano literature. The genres to be studied include poetry, the novel, essay, short story, and theatre. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

### 138 Literature of La Raza in Latin America in Translation
3 hours, 3 units
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
A survey of the novels, short stories, poetry and major Latin American writers, from the end of the Colonial Period to the present. Emphasis will be given to major contemporary authors reflecting the universality of Mestizo (Raza) masterpieces. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

### 141A United States History from a Chicano Perspective
3 hours, 3 units
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
American civilization from the Mexican and Chicano perspective. Considers the period of discovery through the Mexican-American War, the Treaty of Guadalupe Hidalgo, and the Period of Reconstruction. NOTE: The complete one-year course, Chicano Studies 141A-B, satisfies the graduation requirements in American Institutions and California State Government. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Chicano Studies (CHIC) 141AB combined with Black Studies (BLAS) 140AB, History (HIST) 109, 110 or 150, 151: maximum credit, one series.

### 141B United States History from a Chicano Perspective
3 hours, 3 units
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
Covers the period from 1877 to the present, including the history of Mexican immigration; farm labor and urban Chicano history; and contemporary movements. NOTE: The complete one-year course, Chicano Studies 141A-B, satisfies the graduation requirements in American Institutions and California State Government. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Chicano Studies (CHIC) 141AB combined with Black Studies (BLAS) 140AB, History (HIST) 109, 110 or 150, 151: maximum credit, one course.
150 History of Mexico  
3 hours, 3 units  
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.  
This is a survey of Mexican history from the earliest pre-Columbian times to the present. Special emphasis is given to major historical developments from the time of the Spanish Conquest to the Revolution of 1910. In this course special consideration is given to the economic, political, social, and cultural factors which have shaped modern Mexico. This course prepares students for careers dealing with Mexico and/or Mexican culture. This course satisfies an elective requirement for the Associate Degree in Chicano Studies. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

210 Chicano Culture  
3 hours, 3 units  
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.  
An analysis of the Indo-Hispanic roots of Chicano culture and its contemporary evolution in America. Emphasis will be placed on urban and rural cultural expressions and their historical development. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

290 Independent Study  
Hours by Arrangement; 1-3 units  
Limitation on Enrollment: Must obtain an Add Code from instructor for registration.  
For students with advanced background in Chicano Studies who wish to study special problems or work on specialized projects. This course may be taken four times with different content for a maximum of six units. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.  
This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.  
Class sections of the following courses utilize a variety of reading and/or research materials from a Chicano perspective. Refer to the class schedule under the particular subject listing for designated sections. See page 247 for complete English course descriptions and page 327 for complete Speech Communications course descriptions.
100 Introduction to Child Development  
3 hours lecture, 3 units  
Grade Only  
Advisory: English 43 and English 42 with a grade of "C" or better, or equivalent, or Assessment Skill level W4 and R4.  
This course serves as an overview of the field of child development. Emphasis is placed on the analysis of historical and contemporary philosophies and models of early childhood education, exploration of the variety and scope of programs in the community, examination of career options and career preparation in the field of child development, and current issues and trends facing early childhood education. This course partially fulfills the certification requirements for child development Infant/Toddler program requirements. (FT) Associate Degree Credit.

101 Human Growth and Development  
3 hours lecture, 3 units  
Grade Only  
Advisory: English 51 and English 56 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.  
This course is a study of the interrelationship between the physical, cognitive and psychosocial growth and development of the individual from conception through adolescence. Emphasis is placed on positive relationships with family members, peers and other significant individuals. Theories and philosophies of human development and cross-cultural patterns are explored. Observations of children and educational programs are required. This course is a core requirement for the State of California Child Development Permit and the State of California Community Care Licensing, Title XXII. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN FCS 14)

111 Curriculum: Music/Motor Skills  
3 hours lecture, 3 units  
Grade Only  
Advisory: English 43 and English 42 each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W4 and R4.  
This course is a study of the development and significance of music and perceptual motor activities in child development from infancy through kindergarten. Emphasis is placed on basic teaching techniques and selecting suitable materials and equipment for various age and maturity levels among preschool children. This course is designed for students who have an interest in working with children ages 0 - 5 in settings such as preschools, daycares etc. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

121 Curriculum: Art  
3 hours lecture, 3 units  
Grade Only  
Advisory: English 51 and English 56 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.  
This course is an introductory study of the function of creativity and the affective domain in early childhood educational programs. Emphasis is placed on the development of art curriculum activities, basic teaching skills, guidance techniques, equipment and materials. Students select appropriate activities for a variety of age and maturity levels based on child development theories and concepts. (FT) Transfer Credit: CSU and/or private coll/univ.

131 Curriculum: Language/Science  
3 hours lecture, 3 units  
Grade Only  
Advisory: English 43 and English 42 each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W4 and R4.  
This course is an introductory study of the function of language, math and science learning in early childhood educational programs. Emphasis is placed on the development of language and science curriculum activities, basic teaching skills, guidance techniques, equipment and materials. Students select appropriate activities for a variety of age groups and maturity levels based on child development theories and concepts. This course may be used for licensing, child development permits, transfer and general interest for working with children. (FT) Transfer Credit: CSU and/or private coll/univ.

141 The Child, Family and Community  
3 hours lecture, 3 units  
Grade Only  
Advisory: English 51 and English 56 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.  
This course is a study of the dynamics of human development and socialization in a culturally pluralistic society. Emphasis is placed on the influences of contemporary family living and cultural patterns on the child, school-family relationships, and community resources and services that support and strengthen families. This course is a core requirement for California Child Development teacher/director center permits as
well as for the State of California Department of Community Care Title XXII licensing child care centers requirements. (FT) Transfer Credit: CSU and/or private coll/univ.

151 Program Planning
3 hours, 3 units
Grade Only
Prerequisite: Child Development 101 and either 111 or 121 or 131, each with a grade of “C” or better, or equivalent.
Corequisite: Child Development 270 or 275.
Planning the environment to promote optimal development with emphasis on curriculum planning, guidance, safety, record keeping, observation techniques, resource units, and the daily plan. (FT) Transfer Credit: CSU and/or private coll/univ.

152 School Age Program Planning
3 hours, 3 units
Grade Only
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
Planning the environment to promote optimal development for the school-age child with emphasis on curriculum planning, guidance, health and safety, record keeping, observation techniques, resource units and the family plan. (FT) Transfer Credit: CSU and/or private coll/univ.

160 Observing and Understanding Children
1 hour lecture, 3 hours lab, 2 units
Grade Only
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
Limitation on Enrollment: This course is not open to students with credit for Child Development 160B.
This course explores current issues in child development and how these issues influence the child and the family. Emphasis is placed on effective communication skills, positive guidance techniques, kindergarten readiness skills and appropriate classroom activities. The course includes supervised participation in the campus Child Development Center. This course fulfills the specialization requirements for the State of California Master Teacher Permit when taken with Child Development 160 and 162 or Child Development 161 and 188. (FT) Transfer Credit: CSU and/or private coll/univ.

161 Observations and Issues in Child Development
1 hour lecture, 3 hours lab, 2 units
Grade Only
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
Limitation on Enrollment: This course is not open to students with credit for Child Development 160B.
This course explores current issues in child development and how these issues influence the child and the family. Emphasis is placed on effective communication skills, positive guidance techniques, kindergarten readiness skills and appropriate classroom activities. The course includes supervised participation in the campus Child Development Center. This course fulfills the specialization requirements for the State of California Master Teacher Permit when taken with Child Development 160 and 162 or Child Development 161 and 188. (FT) Transfer Credit: CSU and/or private coll/univ.

162 Observing and Guiding Child Behavior
3 hours lecture, 3 units
Grade Only
Advisory: English 43 and English 42 with a grade of “C” or better, or equivalent, or Assessment Skill level W4 and R4.
This course explores various behavior management techniques, interpersonal communication, ideas and suggestions to assist caregivers in guiding children's behavior. Application of developmental, cultural and communication principles in combination with observation of real situations is the mode of study of this course. The focus will be on children from birth through age 10. The course can be used to meet degree and certificate requirements for Child Development and the Master Teacher Permit requirement if taken with Child Development 160 and 161. (FT) Transfer Credit: CSU.

165 Children with Special Needs
3 hours, 3 units
Grade Only
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
An educational and parenting approach to working with children with exceptionalities. Methods of integrating the exceptional child into a mainstreamed educational program will be investigated. Differences and needs of each area of exceptionality will be investigated as well as the roles of different professionals in the educational
process. The course is designed primarily for parents, teachers, nurses, social workers, and paraprofessionals employed in schools, day care centers, and child development program. (FT) Transfer Credit: CSU and/or private coll/univ.

166 Special Needs Curriculum
3 hours lecture, 3 units
Grade Only
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
This course provides an in-depth look at curriculum for children with special needs. Full inclusion of children with special needs into school and community settings is explored. Application of specific strategies for integrating children into typical settings is addressed as well as use of adaptive equipment. This course is designed primarily for parents, teachers, nurses, social workers, and paraprofessionals employed in schools, day care centers, and child development programs. The course partially fulfills requirements for the Child Development Certificate and Degree programs and partially meets the specialization requirements for the Master Teacher Permit if taken with Child Development 165. (FT) Transfer Credit: CSU and/or private coll/univ.

175 The Infant-Toddler
3 hours, 3 units
Grade Only
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
Examines the physical, social, emotional, and intellectual growth of the child including the atypical infant. Discusses the selection and maintenance of toys and play equipment for indoor and outdoor environments. Appropriate observations and visitations to the community will be required. (FT) Transfer Credit: CSU and/or private coll/univ.

176 Principles of Infant/Toddler Caregiving
3 hours lecture, 3 units
Grade Only
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 nd R4.
This course explores principles and curriculum of an infant/toddler program that includes all aspects of infant and toddler development. Students will learn care strategies in a variety of caregiving situations. Content includes licensing and regulations, developmental needs, health, nutrition, and safety of the very young. The student learns to plan appropriate indoor and outdoor environments. Staff interaction, parent participation, and program development are included. This course fulfills major and master permit specializations when taken along with Child Development 160 and 161. (FT) Transfer Credit: CSU and/or private coll/univ.

180 Nutrition, Health and Safety for Children
3 hours, 3 units
Grade Only
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
This course surveys principles and application of nutrition, health and safety needs and practices for children of diverse backgrounds. It examines planning environments, programs and related activities. Completion of a First Aid and CPR class will be integrated into this course. (FT) Transfer Credit: CSU and/or private coll/univ.

185 Computer Usage with Young Children
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course explores principles of computer application in the Child Development field. Emphasis will be on the use of computers as an educational tool. Through the in-depth exploration of computer software applications, students will learn the functions, integration, and flexibility of computer usage with young children. Transfer Credit: CSU and/or private coll/univ.

188 Child Abuse
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course examines the causes and effects of child abuse and neglect. It is designed primarily for parents, teachers, nurses, and other cochlear professionals to learn strategies for understanding and responding to the various forms of stress and violence that affect many children today. This course emphasizes the skills needed for conflict resolution and explores the environmental set-up and curriculum that promotes peaceful, cooperative and nonviolent play and interactions. Information about the history, current legislation, reporting responsibilities, and
identification of abuse is also given. (FT) Associate Degree Credit.

202 Administration of Early Childhood Programs
3 hours lecture, 3 units
Grade Only
Prerequisite: Child Development 101 and 141, each with a grade of "C" or better, or equivalent.
Advisory: Child Development 111 and 121 or Child Development 131 and English 51 and English 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course provides an overview of program administration including theoretical perspectives on early childhood education, licensing regulations, funding sources, budgetary considerations, personnel management, curriculum development, and teacher selection. The course meets State of California Title 22 licensing regulations for site supervisors. It also partially fulfills State of California matrix requirements for Program Director and Site Supervisor Permits. (FT) Transfer Credit: CSU and/or private coll/univ.

210 Supervision of Early Childhood Programs
3 hours, 3 units
Grade Only
Prerequisite: Child Development 141 and 151, each with a grade of "C" or better, or equivalent.
Limitation on Enrollment: This course is not open to students with credit for Child Development 201 or 201B.
An examination of early childhood supervisory techniques with emphasis on educational philosophy, professional growth, in-service staff training, program and staff evaluation, models of parent education and involvement and supportive services. (FT) Transfer Credit: CSU and/or private coll/univ.

215 Adult Supervision and Mentoring in Early Childhood Settings
3 hours, 3 units
Grade Only
Prerequisite: Child Development 151 with a grade of "C" or better, or equivalent.
This course emphasizes the methods and principles of supervising adults in early childhood settings. Students study effective models for guidance and evaluation of adults, positive communication skills, and the role of the mentor in a teaching environment. It is designed for students who supervise other adults in the preschool classroom while simultaneously providing an appropriate setting for young children. This is a required course for the levels of Master Teacher, Site Supervisor and Program Director for the Child Development Permit issued by the Commission on Teacher Credentialing. Associate Degree Credit.

270 Work Experience
Hours by Arrangement, 1-4 units
Grade Only
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, including work experience.
Program of on-the-job learning experiences for students employed in a job related to their major. The combined maximum credit for all work experience courses from all disciplines may not exceed 16 units. Transfer Credit: CSU and/or private coll/univ.

275 Supervised Field Study
3-9 hours lab, 1-3 units
Grade Only
Corequisite: Child Development 151 with a grade of "C" or better, or equivalent.
A directed field of study designed to provide the student with an opportunity to apply classroom information in a practical setting with supervision from faculty as well as field-site supervisor. (FT) Transfer Credit: CSU and/or private coll/univ.

290 Independent Study
Hours by Arrangement; 1-3 units
Grade Only
Limitation on Enrollment: Must obtain an Add Code from instructor for registration.
Investigation of a special area in the field of Child Development. This course may be taken four times with different content for a maximum of six units. (FT) Transfer Credit: CSU and/or private coll/univ.

291 Child Development Center Practicum
Hours by Arrangement; 3-12 hours lab, 1-4 units
Grade Only
Advisory: English 43 and English 42, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W4 and R4.
Directed field experience designed to provide practical experience to supplement child development courses and related curriculum. (FT) Transfer Credit: CSU and/or private coll/univ.
291A Child Development Center Practicum  
3 hours lab, 1 unit  
Grade Only  
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.  
This course provides directed laboratory experience in the campus Child Development Center. It is designed for students who plan careers in early childhood and family support programs and for parents who seek practical experience in guiding and teaching children. Students become familiar with the operating policies and procedures of a preschool program and observe and access the development of children. This course may be used toward the experience component for the State of California Child Development Permit. The combined maximum credit for Child Development 291, 291A, 291B, 291C, and 291D is four units. (FT) Transfer Credit: CSU and/or private coll/univ.

291B Child Development Center Practicum  
3 hours lab, 1 unit  
Grade Only  
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.  
This course provides directed laboratory experience in the campus Child Development Center. It is designed for students who plan careers in early childhood education and family support programs and for parents who seek practical experience in guiding and teaching children. Students examine appropriate safety, health and nutritional practices in a preschool setting with an emphasis on implementation with young children. This course may be used toward the field experience component for the State of California Child Development Permit. The combined maximum credit for Child Development 291, 291A, 291B, 291C, and 291D is four units. (FT) Transfer Credit: CSU and/or private coll/univ.

291C Child Development Center Practicum  
3 hours lab, 1 unit  
Grade Only  
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.  
This course provides directed laboratory experience in the campus Child Development Center. It is designed for students who plan careers in early childhood education and family support programs and for parents who seek practical experience in guiding and teaching children. Students explore teaching practices that enhance children’s learning in the classroom and assist in the planning and implementation of developmentally appropriate activities. This course may be used toward the experience component for the State of California Child Development Permit. The combined maximum credit for Child Development 291, 291A, 291B, 291C, and 291D is four units. (FT) Transfer Credit: CSU and/or private coll/univ.

291D Child Development Center Practicum  
3 hours lab, 1 unit  
Grade Only  
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.  
This course provides directed laboratory experience in the campus Child Development Center. It is designed for students who plan careers in early childhood education and family support programs and for parents who seek practical experience in guiding and teaching children. Students examine the role of routines and transitional activities in the organization and structure of an early child development setting. The class emphasizes positive guidance and discipline for young children. This course may be used toward the field experience component for the State of California Child Development Permit. The combined maximum credit for Child Development 291, 291A, 291B, 291C, and 291D is four units. (FT) Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

101 First Course in Mandarin Chinese  
5 hours, 5 units  
Advisory: English 50 with a grade of “C” or better, or equivalent, or Assessment Skill Level W4.  
This is an entry-level course designed to introduce students to the Mandarin Chinese language and cultures of the Mandarin Chinese-speaking world. In this interactive course, students learn and use the language by speaking, listening, reading, and writing at the novice level. Basic language structures and vocabulary for communication are examined and explored in Mandarin Chinese. This course would be of interest to
students with a desire to study other languages. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

102 Second Course in Mandarin Chinese
5 hours lecture, 5 units
Prerequisite: Chinese 101 with a grade of “C” or better, or equivalent, or two years of high school Chinese.
Advisory: Concurrent enrollment in CHIN 296.
This is a continuation of Mandarin Chinese 101. In this interactive course, students use listening, reading, speaking and writing at a more complex level. The students further develop their receptive and productive competencies to the low- or mid-intermediate level. Additional language structures and vocabulary for communication are examined and explored in Mandarin Chinese. This course would be of interest to students with desire to study other languages. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

201 Third Course Mandarin Chinese
5 hours, 5 units
Prerequisite: Chinese 102 with a grade of “C” or better, or equivalent.
A continuation of Chinese 102. Transfer Credit: CSU and/or private coll/univ.; UC.
This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

Computer Aided Design/Drafting
(See Architecture)

Note: CBTE course numbers differ from the OFCE course numbers.

95 Keyboarding /Typing Speed Development
3 hours lab, 1 unit
Credit/No Credit
Advisory: Ability to type/keyboard by touch.
Development of speed and accuracy. Short intensified drills, timed writings, and remedial work. This course or sections of this course may be repeated for a maximum of four units. (FT) Associate Degree Credit.

101 Keyboading for Computers
.75 hour lecture, .75 hour lab, 1 unit
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for OFCE 101, 102, or 164.
This course is designed for all individuals needing basic keyboarding skills. Keyboarding for Computers teaches students to key by touch using a computer and word processing software. No previous computer or typing experience is required. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

102 Keyboading
1.5 hours lecture, 1.5 hours lab, 2 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for OFCE 101, 102, or 164 or CBTE 101 or 103.
This course teaches touch control of the keyboard and proper typing techniques. Students build speed and accuracy through specialized drills and practice on straight copy and numbers. Students apply keyboarding skills to the formatting of letters, reports, tables, and memos using word processing software. This course, or sections of this course, may be offered through distance education (FT) Transfer Credit: CSU and/or private coll/univ.

103 Beginning Computer Keyboarding
2 hours lecture, 3 hours lab, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for OFCE 100 or 265 (Beginning Computer Keyboarding - WordPerfect) or CBTE 101 or 102.
This course is designed for all students whose keyboarding skill is for vocational and/or personal use. Beginning Computer Keyboarding teaches basic keyboarding skills by touch using a computer and word processing software. Students receive basic formatting instructions for letters, tables, and reports. This course,
or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

110 Disk Operating Systems  
1.5 hours lecture, 1.5 hours lab, 2 units  
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for OFCE 151 or 151A or CBTE 110A.
This course is an introduction to PC operating systems, covering the DOS command structure and terminology. In this hands-on course, students use operating commands to perform routine computer work functions. The course also introduces the major features of Windows 3.1, Windows 95, Windows 98, and Windows NT. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

110A Introduction to Disk Operating Systems  
.75 hour lecture, .75 hour lab, 1 unit  
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for OFCE 151, 151A, or CBTE 110A.
This course covers the DOS command structure and terminology and introduces the major features of Windows 3.1, Windows 95, Windows 98, and Windows NT. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

111 Introduction to Windows 95  
.75 hour lecture, .75 hour lab, 1 unit  
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is designed for students who plan to work in a computer-related field. This course presents the basic features of Microsoft Windows NT Workstation, including navigation and file management skills. No previous experience with Windows NT Workstation is required. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

112 Introduction to Windows 98  
.75 hour lecture, .75 hour lab, 1 unit  
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 with a grade of “C” or better, or equivalent.
This basic course presents an overview of the features of the Microsoft Windows 98 operating system and the components of the Windows 98 active desktop. In this hands-on course students learn to use the Start menu; create shortcuts; work with Windows 98 accessory programs; open data files; manage disks, folders, and files; and customize the desktop. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

113 Introduction to Windows NT  
.75 hour lecture, .75 hour lab, 1 unit  
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Computer Business Technology 103 with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is designed for students who plan to work in a computer-related field. This course presents an overview of the features of the Microsoft Windows operating system and the components of managing files and folders in the Windows environment. In this hands-on course, students learn to use and customize the start menu; work with Windows accessory programs; open data files; manage disks, folders and files; create shortcuts; and customize the desktop. This course is designed for
those students planning to major in this field and may also be useful to students who wish to upgrade their computing skills. (FT)

**120 Beginning Microsoft Word**

1.5 hours lecture, 1.5 hours lab, 2 units  
*Grade Only*

*Advisory:* English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 with a grade of "C" or better, or equivalent.

*Limitation on Enrollment:* This course is not open to students with credit for CBTE 120A or 120B. This course is an introduction to text editing features in Microsoft Word including insert, delete, find and replace, move and copy, headers and footers, pagination, character and document formatting, spell check, tables, and mail merge basics. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

**120A Introduction I to Microsoft Word**

.75 hour lecture, .75 hour lab, 1 unit  
*Grade Only*

*Advisory:* English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 with a grade of "C" or better, or equivalent.

*Limitation on Enrollment:* This course is not open to students with credit for CBTE 120. This course is an introduction to text editing features in Microsoft Word including insert, delete, find and replace, move and copy, character formatting, and spell check. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

**120B Introduction II to Microsoft Word**

.75 hour lecture, .75 hour lab, 1 unit  
*Grade Only*

*Advisory:* English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 and 120A, each with a grade of "C" or better, or equivalent.

*Limitation on Enrollment:* This course is not open to students with credit for CBTE 120. This course is a continuation of CBTE 120A. Students continue using Microsoft Word text editing features including paragraph and document formatting, creating tables, and basic mail merges. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

**122 Intermediate Microsoft Word**

2 hours lecture, 3 hours lab, 3 units  
*Grade Only*

*Advisory:* English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 and 120, each with a grade of "C" or better, or equivalent. This course is a continued application of Microsoft Word text editing features including creation of envelopes and labels, mail merge, sorting, styles, templates, wizards, macros, document notations, tables of contents and indexes, online forms, columns, drawing tools, and introduction to creating Web pages. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

**126 Document Processing**

2 hours lecture, 3 hours lab, 3 units  
*Grade Only*

*Advisory:* English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 with a grade of "C" or better, or equivalent. This course is designed to give students hands-on experience creating a variety of computer-based documents. This course covers the use of computer software to create business, technical, medical and/or legal documents and to create forms, presentation documents, and documents for electronic publishing. It may include independent projects. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

**130 Beginning Corel WordPerfect**

1.5 hours lecture, 1.5 hours lab, 2 units  
*Grade Only*

*Advisory:* English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 and 120A, each with a grade of "C" or better, or equivalent.

*Limitation on Enrollment:* This course is not open to students with credit for CBTE 130A or 130B. This course is an introduction to text editing features in Corel WordPerfect including insert, delete, search and replace, move and copy, character formatting, and spell check. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.
this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

130A Introduction to Corel WordPerfect I
0.75 hour lecture, 0.75 hour lab, 1 unit
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is not open to students with credit for CBTE 130.
This course is an introduction to text editing features in Corel WordPerfect including insert, delete, spell check, printing, and character and line formatting. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ. when taken with CBTE 130B.

130B Introduction to Corel WordPerfect II
0.75 hour lecture, 0.75 hour lab, 1 unit
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 and 130A, each with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is not open to students with credit for CBTE 130.
This course is a continuation of CBTE 130A. Students continue using text editing features in Corel WordPerfect including tab set, pagination, document formatting, headers and footers, search and replace, move and copy, and the writing tools. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ. when taken with CBTE 130A.

132 Intermediate Corel WordPerfect
2 hours lecture, 3 hours lab, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 and 130, each with a grade of “C” or better, or equivalent.
This course is a continued application of WordPerfect text editing features including line and page formatting, graphics, outlines, footnotes, endnotes, table of contents, columns, tables, styles, macros, merges, sorting, and creating Web pages. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

140 Microsoft Excel
1.5 hours lecture, 1.5 hours lab, 2 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 and 111, each with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is not open to students with credit for CBTE 140A.
This course teaches the fundamentals of Microsoft Excel. Students create and format worksheets and charts and use Excel’s wizards and productivity features to enter functions and analyze data. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

140A Introduction to Microsoft Excel
0.75 hour lecture, 0.75 hour lab, 1 unit
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 and 111, each with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is not open to students with credit for CBTE 140.
This course is designed for students interested in learning basic Excel skills. Students receive hands-on practice in how to plan, define, create, and modify worksheets. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

151 Introduction to Microsoft Access
0.75 hour lecture, 0.75 hour lab, 1 unit
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 and 111, each with a grade of “C” or better, or equivalent.
This course covers basic Access skills. Students receive hands-on practice in creating, modifying, and sorting database tables, performing queries, creating reports, and designing forms. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

160A Introduction to Online Learning
0.5 hour, 0.5 unit
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and
This course is an introduction to developing the skills necessary to succeed in an online or web-based course. Students will learn and apply the basics of the Windows environment, data organization and management, the Internet, the World Wide Web, e-mail, and word processing software. This course or sections of this course may be offered through distance education. (FT) Transfer Credit: CSU and/or private col/univ.

161 Learning The Internet
.75 hour lecture, .75 hour lab, 1 unit
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 and 111, each with a grade of “C” or better, or equivalent.
This course is designed for students who are interested in an introduction to the Internet. Students receive hands-on practice using Netscape to navigate the World Wide Web and link to Internet resources. Topics include creating and sending: e-mail, FTP, and file downloading, locating newsgroups and other discussion tools, conducting business on the Internet, and creating Web pages using HTML. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

162 Web Page Creation
1.5 lecture hours, 1.5 lab hours, 2 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 111 and 161, each with a grade of “C” or better, or equivalent.
This course provides a hands-on approach to planning, designing, and creating Web pages for an Intranet or World Wide Web site. Students learn to use HTML, wizards and templates to create Web pages with hypertext links and video, graphics, and audio enhancements. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

163 Introduction to Microsoft FrontPage
1.5 hours lecture, 1.5 hours lab, 2 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 112 and 101, each with a grade of “C” or better, or equivalent.
This is an introduction to creating a web page using Microsoft FrontPage. Students will learn to design, create, manage, and publish web sites on the Internet for personal or business use. This course or sections of this course may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

164 Introduction to Microsoft Outlook
.75 hours lecture, .75 hours lab
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 112 and 101, each with a grade of “C” or better, or equivalent.
This course is an introduction to the features of Microsoft Outlook. Students will learn how to message, schedule appointments, organize and manage tasks and contacts lists and customize Outlook. This course or sections of this course may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

170 Desktop Publishing
1.5 hours lecture, 1.5 hours lab, 2 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 and 111, each with a grade of “C” or better, or equivalent.
This course is designed for office support staff, administrative assistants, small business owners, and others who require a basic knowledge of desktop publishing. Students in this hands-on course learn the features of desktop publishing software by designing and creating professional quality publications for business and home. This course, or sections of this course, may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

173 Introduction to E-Commerce
3 hours lecture, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 101 or 102, and 112 and 162, each with a grade of “C” or better, or equivalent.
This is an introduction to current and emerging e-commerce technologies. Topics include Internet technology for business advantage; managing e-commerce funds transfer; reinventing the future of business through e-commerce; business opportunities in e-commerce; e-commerce web site design; social, political, and ethical issues associated with e-commerce; and business plans for technology ventures.
Students are involved in creating an e-commerce marketing plan as well as a web site based on that plan. This course is intended for students seeking knowledge and experience in the realities of and potential for e-commerce. This course may be offered via distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

180 Microsoft Office
2 hours lecture, 3 hours lab, 3 units
Grade Only
Advisory: English 51 and English 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and Computer Business Technology 103, 112 & 161, each with a grade of "C" or better, or equivalent.
This course is designed for students interested in learning a business software suite. This course covers the Microsoft Office Professional suite, which is an integrated collection of software applications (word processing, spreadsheet, database, and presentations) that share data and work in a similar and consistent manner. This course will also provide instruction on how to seamlessly integrate data within and between the programs in an efficient manner. (FT) Transfer Credit: CSU and/or private coll/univ.

190 Introduction To Quicken
1.5 hours lecture, 1.5 hours lab, 2 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 with a grade of “C” or better, or equivalent.
This course is designed to prepare students for employment in a home-based office or small business office. This course provides hands-on practice with Quicken, a program for organizing and managing financial information and performing on-line banking and bill payments in small businesses and home-based offices. This course provides hands-on practice with Quicken, a program for organizing and managing financial information and performing on-line banking and bill payments in small businesses and home-based offices. This course may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

198A Project Lab I
1.5 hours lab, .5 unit
Credit/No Credit Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Students in this course design and complete hands-on individualized projects applicable to CBTE courses to upgrade their software skills. (FT) Transfer Credit: CSU and/or private coll/univ.

198B Project Lab II
1.5 hours lab, .5 unit
Credit/No Credit Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is an optional continuation of CBTE 198A. Students in this course design and complete hands-on individualized projects applicable to CBTE courses to upgrade their software skills. (FT) Transfer Credit: CSU and/or private coll/univ.

200 Office Telecommunications
1.5 hours lecture, 1.5 hours lab, 2 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is designed to provide students with a fundamental working knowledge of voice, data, and video telecommunications that can be applied in their business and personal lives. The course introduces telecommunications networks, transmitting, receiving, and satellite technologies. Topics covered in this course include basic communication theory, fundamentals of telephone systems, components of data communications systems, and basic Web page development using and HTML editor. This course or sections of this course may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

205 Records Management
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 and 111, each with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is not open to students with credit for OFCE 153A.
This course is designed to prepare students for employment in the field of Information Management Technology. The course covers the fundamentals of Records Management including the principles of indexing and filing; the major filing systems.
alphabetical, numerical, subject, and geographic; the role of the records management and the records manager in the information industry; selection of systems, equipment, and supplies; design, control, and maintenance of a records center; and provides experience in using the computer to manage records. This course or sections of this course may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

210 Computers in Business
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for OFCE 192.
This course is designed to prepare students for a computer related career. Computers in Business is an introductory course which covers the latest developments in computer technology, office automation, electronic communication, and the World Wide Web. This course or sections of this course may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

221 Legal Office Procedures I
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103 with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is not open to students with credit for OFCE 171.
This course is an introduction and orientation to the law office and procedures according to federal and state legal systems and is designed to prepare students for a position in a law office or law related field. The course includes structure of the courts, practices and procedures of the law, legal terminology, vocabulary building, preparation of court documents, an introduction to legal research, legal calendaring and client contact. This course or sections of this course may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

222 Legal Office Procedures II
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 221 with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is not open to students with credit for OFCE 172.
This course is a continuation of CBTE 221 with emphasis on techniques of completing and handling court documents and legal forms relating to civil procedures in various areas of California law. This course or sections of this course may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

230 Medical Transcription
2 hours lecture, 3 hours lab, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 103; and MEDA 110, each with a grade of “C” or better, or equivalent; and ability to type 40 wpm.
Limitation on Enrollment: This course is not open to students with credit for OFCE 162.
This course is designed for students who are interested in learning beginning-level medical transcription. Students in this course transcribe medical office and hospital dictation using transcribing machines. This course or sections of this course may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.

231 Advanced Medical Transcription
2 hours lecture, 3 hours lab, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and CBTE 230; and MEDA 110, each with a grade of “C” or better, or equivalent; and ability to type 40 wpm.
Limitation on Enrollment: This course is not open to students with credit for OFCE 163.
This course is designed for students who have a beginning level skill in medical transcription and are interested in learning advanced level medical transcription. Students in this course transcribe medical office and hospital dictation using transcribing machines. This course or sections of this course may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.
237 Medical Office Procedures  
3 hours, 3 units  
Grade Only  
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.  
Limitation on Enrollment: This course is not open to students with credit for OFCE 174.  
This course is designed to prepare students to work in physicians' offices, clinics, hospitals, and other medical areas. The course covers administrative and clerical functions of a medical office assistant including patient reception, scheduling appointments, telephone procedures, medical records management, written communications, patient records, financial records, office management, professional activities, personal conduct, medical ethics and law. This course or sections of this course may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.  

238 Health Insurance Procedures  
3 hours, 3 units  
Grade Only  
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and MEDA 110 with a grade of “C” or better, or equivalent.  
Limitation on Enrollment: This course is not open to students with credit for OFCE 178.  
This course is designed to prepare students to work with insurance forms in medical offices, clinics, hospitals, and other medical areas. This course is a survey of health insurance plans with emphasis on completion of benefit and claim forms, proper procedural coding, and diagnostic coding using current editions of Physicians Current Procedural Terminology and International Classification of Diseases. This course or sections of this course may be offered through distance education. (FT) Transfer Credit: CSU and/or private coll/univ.  

270 Work Experience  
Hours by Arrangement, 1-4 units  
Grade Only  
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, including work experience.  
Program of on-the-job learning experiences for students employed in a job related to their major. The combined maximum credit for all work experience courses from all disciplines may not exceed 16 units. Transfer Credit: CSU and/or private coll/univ.  
This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.  

130 Introduction to Local Area Networks  
.75 hour lecture, .75 hour lab, 1 unit  
Grade Only  
This is an introductory study of microcomputer local area and wide area network development, use and administration. Emphasis is placed on presenting students with a breadth of knowledge from wiring to applications and including hardware, software, transmission media, packets, frames, network topology, routing, protocols and layering. (FT) Transfer Credit: CSU and/or private coll/univ.  

132 Intermediate Local Area Networking  
.75 hour lecture, .75 hour lab, 1 unit  
Grade Only  
This course is an introductory study of Internetworking and network applications. Emphasis is placed on presenting students with a breadth of knowledge from wiring to applications and including Internet architecture, protocols, datagrams, routing, the client server model, electronic mail, web document technologies, network management and security. (FT) Transfer Credit: CSU and/or private coll/univ.  

133 Wide Area Networking  
1.5 hours, 1.5 units  
Limitation on Enrollment: This course is not open to students with credit for Computer and Information Sciences 265: WAN.  
This class will introduce the students to Wide Area Networks and the associated standards and protocols. The topics will include service providers, IEEE & CCITT Standards, network topologies, network protocols, hardware/software installation/diagnostics, network management, and local area to wide area network implementations. (FT) Transfer Credit: CSU and/or private coll/univ.
150 Introduction to Computer and Information Sciences

3 hours, 3 units
Grade Only

A Level I course. A survey of computer systems and techniques. History of computer and information sciences, computer equipment and programming systems, flowcharting, systems study, design, development and implementation. The use of computers in the solution of typical business management problems and tasks is emphasized. (FT) Transfer Credit: CSU and/or private coll/univ.

151 UNIX Operating Systems

3 hours, 3 units

Limitation on Enrollment: This course is not open to students with credit for Computer and Information Sciences 265: Introduction to Unix Operating System. This introductory course to the Unix Operating systems is for new users to learn the programs and services that made the Unix System so popular including: the shell, communicating to other users, manipulating files using the file structure, setting file access permissions, full-screen text editing, the Bourne and C shell, and programming simple shell scripts. (FT) Transfer Credit: CSU.

181 Principles of Information Systems

3 hours lecture, 3 hours lab, 4 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5. This course is an introduction to basic principles and theory relating to problem solving and analysis in business organizations using computers and software packages. Emphasis is placed on computer organization, data processing systems, decision support systems, and systems analysis. Business software is reviewed with an emphasis on spreadsheet systems including hands-on spreadsheet applications. This course is intended for the transfer student planning to major in business, economics, or social science. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN CSCI 2)

186 Visual Basic Programming

3 hours lecture, 3 hours lab, 4 units
Grade Only

Advisory: English 51 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5. This course is an introduction to programming using Visual Basic. The course covers the fundamentals of event oriented programming in a Windows environment. Students learn to use and program a mouse, windows, forms, menus, dialog boxes, icons, buttons, text fields, files, graphics, and other components of a Windows environment in Visual Basic. (FT) Transfer Credit: CSU and/or private coll/univ. (CAN CSCI 12)

190 Java Programming

3 hours lecture, 3 hours lab, 4 units
Grade Only

Advisory: English 51 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5. This course is an introduction to programming using Java. The course covers the fundamentals of object oriented programming utilizing the Java programming language for general purpose business programs and interactive World Wide Web based Internet programs. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

192 C/C++ Programming

3 hours lecture, 3 hours lab, 4 units
Grade Only

Advisory: CISC 186 with a grade of “C” or better, or equivalent; and English 51 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5. This course presents basic programming concepts using the C++ programming language. The organization of standard I/O classes is emphasized. Structured and object oriented programming techniques are presented and used to design and implement a variety of programming problems. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN CSCI 16)

210 Systems Analysis and Design

3 hours, 3 units
Grade Only

Advisory: English 101 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6. This course is an introductory, experiential study of the phases of the object-oriented software development life cycle (OOSDLC) including stakeholder and requirements analysis, use cases development, software architecture; project management, user interface considerations, iterative and prototyping methodology, component construction, quality assurance, and configuration management. This course is intended for students seeking advanced knowledge and applications in Computer and Information Sciences. (FT) Transfer Credit: CSU and/or private coll/univ.
290 Independent Study
Hours by Arrangement; 1-3 units
Grade Only

Limitation on Enrollment: Must obtain an Add Code from instructor for registration.
Typically for advanced students in Computer and Information Sciences who wish to pursue special problems and projects related to the area. The student will meet with the instructor at specific intervals and will be expected to accomplish primary research, problem analysis and report preparation relating to an approved project or course of study. This course may be taken four times with different content for a maximum of six units. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

Construction Management
(See Architecture)

101 Life Success Skills
3 hours lecture, 3 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent. Assessment skill levels W5 and R5.

This course covers decision making and resource management skills required to meet the challenges facing individuals and families. Emphasis is placed on developing skills which increase quality and control of life. Major topics include stress and time management, communication, conflict resolution, goal setting, risk and change, and techniques for improving self-understanding and interpersonal relationships.

Changing family structure, value conflicts, dual role skills, income and health management are also discussed. This is a required course for a Certificate of Completion in Skills for Success. (FT) Transfer Elective Credit: CSU and/or private coll/univ.

110 Personal Financial Management
3 hours lecture, 3 units
Grade Only

Advisory: English 51 and 56 and Mathematics 32, each with a grade of “C” or better, or equivalent, or Assessment skill levels W5, R5, and M20.

This course explores theories and techniques of managing personal income, with an emphasis on financial goal setting, culminating in the development of a personal financial plan. It includes practical methods of gaining maximum advantages from income through efficient spending, effective use of credit, savings, budgeting, insurance, and investment. Stock portfolios and retirement planning are discussed. This is a required course for a Certificate of Completion in Skills for Success and Certificate of Achievement and/or Associate Degree in Consumer Resource Management. (FT) Transfer Elective Credit: CSU and/or private coll/univ.

140 Textiles
3 hours, 3 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

Analysis and testing of natural and man-made fibers, textile construction and design, and textile products. Intended for students who plan a career in retail buying or management of fashion merchandise or interior design. Consumer information regarding the selling points and care of textile products is emphasized. Transfer Credit: CSU and/or private coll/univ.

290 Independent Study
Hours by Arrangement; 1-3 units
Grade Only

Limitation on Enrollment: Must obtain an Add Code from instructor for registration.

Designed to deal with current problems and topics of special interest in home economics. This course may be taken four times with different content for a maximum of six units. Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.
110 Ballet
2 - 3 hours lab, 0.5 - 1 unit
Ballet is a course in traditional ballet technique focusing on correct body alignment and placement through repetition and centre work. The class analyzes, discusses, and critiques the line, design, ballet technique, choreography and dynamics of ballet movements. Ballet fulfills lower division requirements for Dance majors. This course, in combination with Physical Education 110, may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

111 Ethnic Dance Forms
1 hour lecture, 3 hours lab, 2 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is an introduction to village and country dance traditions within selected cultures. Each tradition is examined in terms of its particular set of techniques, styles and rhythms. Special emphasis is placed on the exploration of movement characteristic of each cultural dance form. This course is not limited to dance majors and minors but majors are encouraged to expose themselves to a variety of cultural dance forms and are expected to learn both parts of partner dances. (FT) Transfer Credit: CSU and/or private coll/univ.

120 American Street Dance
2-3 hours lab, 0.5 - 1 unit
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5. American Street Dance is an introductory course in a variety of established and emerging dance forms including Hip Hop, Funk, Pop, Lock and Fly. Street dance movements, rhythms and styles are explored through dance combinations. This course may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

130 Dance Repertoire
2-3 hours lab, 0.5 - 1 unit
Advisory: Dance 110, 135, or 140 or Physical Education 110, 135, or 140 with a grade of "C" or better, or equivalent. Dance Repertoire is designed to introduce the dancer to the choreography of renowned choreographers. This course provides the opportunity for students to learn and perform selected choreography in ballet, modern, jazz, tap and musical theater. This course, in combination with Physical Education 130, may be taken four times for credit. Transfer Credit: CSU and/or private coll/univ.; UC.

135 Jazz Dance
2-3 hours lab, 0.5 - 1 unit
Jazz Dance is a course which explores a variety of jazz dance techniques focusing on the development of coordination, flexibility, balance, strength, correct body alignment and rhythmic perception. Dance combinations are performed to demonstrate technical ability at all skill levels. Jazz Dance fulfills lower division requirements for dance majors. This course, in combination with Physical Education 135, may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

140 Modern Dance
2 - 3 hours lab, 0.5 - 1 unit
Modern Dance is a course that explores the fundamental concepts and techniques of modern dance including floor stretch, center work, locomotor sequences and dance combinations. The student demonstrates, defines and performs flexibility, coordination, rhythmic and dynamic perception, control and strength. The class critiques, discusses and analyzes line, design, technique, choreography and dynamic qualities through lectures, videotapes and concert critiques. Modern Dance fulfills lower division requirements for dance majors. This course, in combination with Physical Education 140, may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

177 Dance Improvisation
2-3 hours lab, 0.5 - 1 unit
Advisory: Physical Education 110 or 135 or 140 or Dance 110 or 135 or 140 with a grade of "C" or better, or equivalent. This course is designed to give students the opportunity to learn beginning and intermediate improvisational dance skills through the use of space, time, dynamics, and motion of body parts. Emphasis is placed on performance ability and technique. The student is involved in a structured dance performance in various situations and progresses to spontaneous movement in group and individual works. This course fulfills lower division requirements for dance majors. This course, in combination with Physical Education 177, may be taken four times for credit. Transfer Credit: CSU and/or private coll/univ.; UC.
178 Advanced Contemporary Dance
3 hours lab, 1 unit
Advisory: Physical Education 135 or Dance 135 with a grade of "C" or better, or equivalent.
This course focuses on the movement principles of American dance masters Jack Cole, Bob Fosse, Luigi and Matt Mattox. Instruction includes student performance of various contemporary dance styles for videotaped analysis of technical proficiency. This course, in combination with Physical Education 178, may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

179 Advanced Classical Dance
3 hours lab, 1 unit
Advisory: Physical Education 110 or Dance 110 with a grade of "C" or better, or equivalent.
This course focuses on correct advanced body alignment, coordination, flexibility and strength. The class compares, discusses and analyzes the movement principles of the Royal, French, Cecchetti and Russian methods. This course, in combination with Physical Education 179, may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

181 Introduction to Dance
3 hours lecture, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for Physical Education 260.
Introduction to Dance is designed to give students the opportunity to appreciate the aesthetic foundations of dance as interpreted within Western traditions. The course covers basic techniques of Western dance traditions that foster an awareness of dance as therapy and fitness as well as art and dance in film, video, and live performance. Additionally, students are introduced to dance as the expression of social discourse distinct to historical periods within Western history. Finally, students study the techniques of selected canonical or well known dancers, choreographers and their craft. This course is introductory but prepares both potential performers and scholars with an interest in performance for intermediate studies in dance. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

183 Music for Dance
2 hours lecture, 2 units
Grade Only
Advisory: Dance 253 or Physical Education 116 with a grade of "C" or better, or equivalent and English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
Music for Dance introduces the fundamentals of music through the study of terminology, notation, elements and form as they relate to movement. The course explores the interrelationship of music and dance and provides students the opportunity to compose and perform rhythmic and movement projects. This course fulfills lower division requirements for dance majors. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

253 Choreography
1.5 hours lecture, 1.5 hours lab, 2 units
Advisory: Physical Education 110 or 135 or 140 or Dance 110 or 135 or 140 with a grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with credit for Physical Education 116.
Choreography is a course that explores the theories and elements utilized in the creative process of dance composition. Emphasis is placed on student application of choreographic concepts through the development of movement compositions. This course fulfills lower division requirements for dance majors. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

261 Dance Performance
6 hours lab, 2 units
Advisory: Physical Education 110 or 135 or 140 or Dance 110 or 135 or 140 with a grade of "C" or better, or equivalent.
Dance Performance provides the opportunity for students to apply intermediate and advanced skills in ballet, jazz and modern dance in preparation for public performance. Emphasis is placed on student application of dance, staging, and performance techniques in a theatrical environment. This course fulfills lower division requirements for dance majors. This course, in combination with Physical Education 129, may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

271 Dance Production
3-6 hours lab, 1-2 units
Dance Production explores the technical and management aspects of producing a dance concert. Emphasis is placed on student application of design and construction of costumes, lighting design, makeup application, stage and house management, and publicity. This course fulfills lower division requirements for dance majors. This course, in combination with Physical Education 118, may be taken
Additional Dance Classes
(See Physical Education)

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

102 Dental Communications
3 hours, 3 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

This course aids the student in an understanding of the dental profession by exploring its advances from early times through present day practice. Ethical and legal aspects and standards of patient care are presented. Students develop oral, written, and non-verbal communication skills and an understanding of psychological needs of patients, employers, and co-workers. This is an introductory course to the Dental Assisting program. Students completing the course are prepared for Dental Assisting 122 and 122L. (FT) Transfer Credit: CSU and/or private coll/univ.

104 Preventive Dental Care
1 hour lecture, 1.5 hours lab, 1.5 units
Grade Only

Prerequisite: Completion of or concurrent enrollment in Dental Assisting 102.
Corequisite: Dental Assisting 106.
Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 101.

This course surveys the principles and techniques necessary for personal preventive oral hygiene. This course also includes an analysis of personal nutrition and nutrition counseling. Patient education strategies for maintaining preventive oral hygiene and regular professional care are included. The practice of using fluoridation as a preventive measure against tooth decay is also presented. This course is for students enrolled in the Dental Assisting program. (FT) Transfer Credit: CSU and/or private coll/univ.

106 Dental Anatomy/Physiology
3 hours, 3 units
Grade Only

Prerequisite: Completion of or concurrent enrollment in Dental Assisting 102.
Corequisite: Dental Assisting 104.
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 105.

This is a basic science course covering anatomy and physiology of the human body. It exposes the student to various dental science areas including tooth morphology, bones, nerves, and muscles of the head and neck. It also includes an introduction to dental office microbiology and sterilization. Pharmacology, anesthesiology, oral pathology, and first aid are included. Field trips are required to obtain CPR certification. (FT) Transfer Credit: CSU and/or private coll/univ.

116 Dental Materials
1 hour, 1 unit
Grade Only

Prerequisite: Dental Assisting 104 and 106, each with a grade of “C” or better, or equivalent.
Corequisite: Dental Assisting 116L, 122, 122L, and 185A.

Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 115.

This course covers chemical and physical properties of dental materials. The preparation of dental materials and their effect on the oral environment are examined. The effects of proper and improper material manipulation by the chairside assistant are also presented. (FT) Transfer Credit: CSU and/or private coll/univ.

116L Dental Materials - Lab
1.5 hours lab, 0.5 unit
Grade Only

Prerequisite: Dental Assisting 104 and 106, each with a grade of “C” or better, or equivalent.
Corequisite: Dental Assisting 116, 122, 122L, and 185A.

Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 115.

This course affords the student an opportunity to prepare and manipulate a variety of dental laboratory and restorative materials. The assignments and demonstrations focus on the effects of proper and improper material manipulation by the chairside assistant.
assistant. (FT) Transfer Credit: CSU and/or private coll/univ.

122 Basic Dental Assisting

1 hour 1 unit
Grade Only

Prerequisite: Dental Assisting 104 and 106, each with a grade of “C” or better, or equivalent.
Corequisite: Dental Assisting 116, 116L, 122L, and 185A.

Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 120.
This basic dental assisting course presents the role of the chairside dental assistant. This role includes sterilization principles, preparation of instruments, and care and maintenance of equipment. Principles of team positioning in four- and six-handed dentistry and oral evacuation methods are stressed. Patient relations and techniques of team interactions are introduced. (FT) Transfer Credit: CSU and/or private coll/univ.

122L Basic Dental Assisting - Lab

3 hours lab, 1 unit
Grade Only

Prerequisite: Dental Assisting 104 and 106, each with a grade of “C” or better, or equivalent.
Corequisite: Dental Assisting 116, 116L, 122, and 185A.

Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 120.
This basic dental assisting laboratory course allows for the practical application of chairside dental assisting techniques. Students develop skills in manipulation and delivery of restorative materials. In addition, skills are developed in sterilization procedures and in the preparation of instruments. Care and maintenance of equipment used in restorative dentistry are stressed. Team positioning, four- and six-handed dentistry, and oral evacuation skills are developed as well as skills in patient handling. (FT) Transfer Credit: CSU and/or private coll/univ.

127 Dental Radiology

2 hours lecture, 2 units
Grade Only

Prerequisite: Dental Assisting 102 with a grade of “C” or better, or equivalent.
Corequisite: Dental Assisting 104, 106, and 127L or equivalent.

Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 125.
This is a lecture course designed to acquaint the student with principles of dental radiographic production, including exposure and processing. Intraoral techniques, dental anatomy and landmarks pertaining to dental radiography are presented. (FT) Transfer Credit: CSU and/or private coll/univ.

127L Dental Radiography Lab

3 hours lab, 1 unit
Grade Only

Corequisite: Dental Assisting 127 with a grade of “C” or better, or equivalent.

Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 125.
This is a laboratory course in which students practice the process of caring for darkroom equipment, preparing solutions, exposing, processing, mounting, and evaluating dental x-ray films. Exposures are accomplished using dental x-ray manikins in preparation for exposures on real patients. (FT) Transfer Credit: CSU and/or private coll/univ.

131 Clinical Business Management

1 hour lecture, 1.5 hours lab, 1.5 units
Grade Only

Prerequisite: Dental Assisting 102, 104, 106, 116, 122, and 122L each with a grade of “C” or better, or equivalent.
Corequisite: Dental Assisting 161 and 185B.

Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 130.
This course presents the role of the chairside assistant in clinical record keeping, including the charting of existing conditions and treatment planning. The course includes the use of computers in maintaining recall systems, inventory control, accounts payable management, aging receivables, appointment scheduling, marketing systems, and insurance claims processing. Gaining and maintaining employment is also covered in the course. (FT) Transfer Credit: CSU and/or private coll/univ.

136 Dental Radiography II

3 hours lab by arrangement, 1 unit
Grade Only

Prerequisite: Dental Assisting 127 and 127L, each with a grade of “C” or better, or equivalent.
Corequisite: Dental Assisting 185C.

This course covers techniques and skills of exposing full mouth series of dental radiographs, including the use of various radiographic positioning aids. The student has the opportunity to expose radiographs in a simulated private practice environment through a program of referral of patient by local dentists. Students obtain a California State Radiation Safety Certification upon
satisfactory completion of course requirements. (FT) Transfer Credit: CSU and/or private coll/univ.

161 Intermediate Dental Assisting

2 hours, 2 units  
Grade Only

Prerequisite: Dental Assisting 116, 122, and 185A, each with a grade of “C” or better, or equivalent.  
Corequisite: Dental Assisting 131, 161L, and 185B.  
Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 160. This course presents the role of the chairside dental assistant in specialty areas such as pediatric dentistry, oral and maxillofacial surgery, and fixed and removable prosthodontic practice. Principles of time, motion, and work simplification are presented. (FT) Transfer Credit: CSU and/or private coll/univ.

161L Intermediate Dental Assisting Lab

3 hours lab, 1 unit  
Grade Only

Prerequisite: Dental Assisting 116, 116L, 122, 122L, and 185A, each with a grade of “C” or better, or equivalent.  
Corequisite: Dental Assisting 131, 161, and 185B.  
Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 160. This laboratory course presents the practical application of chairside and laboratory techniques in assisting in the specialty areas of fixed and removable prosthodontics, oral and maxillofacial surgery, and pediatric dentistry practice. Laboratory practice includes developing skills in constructing provisional crowns and bridges for direct and indirect application, use and care of specialized instruments, and preparation of impression materials. (FT) Transfer Credit: CSU and/or private coll/univ.

181 Advanced Dental Assisting

2 hours lecture, 2 units  
Grade Only

Prerequisite: Dental Assisting 161, 161L, and 185B with a grade of “C” or better, or equivalent.  
Corequisite: Dental Assisting 181L and 185D.  
Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 180. This course allows the student to perform procedures of the chairside dental assistant in the specialty areas of periodontology, orthodontia, and endodontia. Students develop the skills that prepare them to take the California State Registered Dental Assistant (RDA) practical and written examinations and the National Certified Dental Assistant (CDA) written examination. The laboratory practice includes mouth mirror inspection, use of intra-oral camera, recording findings, taking impressions for study casts, bite registration, intra-oral and facial measurements, placement of isolation dams, matrices,liner bases and temporary restorations, and coronal polish techniques. (FT) Transfer Credit: CSU and/or private coll/univ.

181L Advanced Dental Assisting Lab

6 hours lab, 2 units  
Grade Only

Prerequisite: Dental Assisting 161, 161L and 185B with a grade of “C” or better, or equivalent.  
Corequisite: Dental Assisting 181 and 185D.  
Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 180. This course allows the student to perform procedures of the chairside dental assistant in the specialty areas of periodontology, orthodontia, and endodontia. Students develop the skills that prepare them to take the California State Registered Dental Assistant (RDA) practical and written examinations and the National Certified Dental Assistant (CDA) written examination. The laboratory practice includes mouth mirror inspection, use of intra-oral camera, recording findings, taking impressions for study casts, bite registration, intra-oral and facial measurements, placement of isolation dams, matrices,liner bases and temporary restorations, and coronal polish techniques. (FT) Transfer Credit: CSU and/or private coll/univ.

185A Directed Clinical Practice

75 hours lab (total) by arrangement, 1 unit  
Grade Only

Prerequisite: Dental Assisting 102, 104, and 106, each with a grade of “C” or better, or equivalent.  
Corequisite: Dental Assisting 116, 116L, 122, and 122L.  
Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 180. This course is designed for students in the Dental Assisting program to gain experience in directed clinical practice in a private dental office or clinic. Students are assigned basic dental assisting support procedures, including sterilizing instruments, preparing patients for treatment, assisting in simple chairside procedures, confirming appointments, and filing and retrieving charts. The directed clinical practice is coordinated by a member of the college staff. Supervision of the student is shared by the staff of the affiliating institution and the college faculty. (FT) Transfer Credit: CSU and/or private coll/univ.

185B Directed Clinical Practice

75 hours lab (total) by arrangement, 1 unit  
Grade Only

Prerequisite: Dental Assisting 161, 161L, 122, 122L, and 185A, each with a grade of “C” or better, or equivalent.  
Corequisite: Dental Assisting 161 and 161L.  
Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 185. This course is designed for students in the Dental Assisting program to gain experience in directed clinical practice in a private dental office or clinic. Students are assigned basic dental assisting support procedures, including sterilizing instruments, preparing patients for treatment, assisting in simple chairside procedures, confirming appointments, and filing and retrieving charts. The directed clinical practice is coordinated by a member of the college staff. Supervision of the student is shared by the staff of the affiliating institution and the college faculty. (FT) Transfer Credit: CSU and/or private coll/univ.
This course requires supervised clinical practice in a private dental office or clinic. Students are assigned duties delegated to the dental assistant and put into practice duties learned in current and previous dental assisting laboratory courses. These duties include preparation of laboratory, impression, and restorative materials and chairside assisting with fixed and removable prosthetic procedures. Supervision of the student is shared by the staff of the affiliating institution and the college faculty. The directed clinical practice is coordinated by a member of the college staff. (FT) Transfer Credit: CSU and/or private coll/univ.

185C Directed Clinical Practice
75 hours lab (total) by arrangement, 1 unit
Grade Only
Prerequisite: Dental Assisting 127 and 127L, each with a grade of “C” or better, or equivalent.
Corequisite: Dental Assisting 136.
Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 185.
Directed clinical practice is conducted in a private dental office or clinic. Students are assigned basic duties of the dental X-ray technician and apply techniques learned in Dental Assisting 136. These techniques include exposing bite-wing and full-mouth radiographs on patients; processing, mounting, identifying, labeling and filing radiographs. Supervision of the student is shared by the staff of the affiliating institution and the college faculty. The directed clinical practice is coordinated by a member of the college staff. (FT) Transfer Credit: CSU and/or private coll/univ.

185D Directed Clinical Practice
75 hours lab (total) by arrangement, 1 unit
Grade Only
Prerequisite: Dental Assisting 161, 161L, and 185B, each with a grade of “C” or better, or equivalent.
Corequisite: Dental Assisting 181 and 181L.

Limitation on Enrollment: This course is not open to students with credit for Dental Assisting 185.
Directed clinical practice is conducted in a private dental office or clinic. Students are assigned duties learned in prerequisite and corequisite courses. These duties include general chairside assisting procedures such as taking impressions, applying fluoride, assisting with nitrous oxide and performing mouth-mirror inspection and charting. Also included in the course are duties of the Registered Dental Assistant such as placing and removing post-extraction dressings, removing sutures, placing and removing temporary crowns, and performing coronal polishing procedures. Supervision of the student is shared by the staff of the affiliating institution and thecollege faculty. The directed clinical practice is coordinated by a member of the college staff. (FT) Transfer Credit: CSU and/or private coll/univ.

290 Independent Study
Hours by Arrangement; 1-3 units
Grade Only
Limitation on Enrollment: Must obtain an Add Code from instructor for registration.
Provides for additional research, academic or clinical experiences for students with special interests. The course consists of individualized research problems, conferences with the instructor at prearranged intervals and a final written report on the work completed. This course may be taken four times with different content for a maximum of six units. (FT) Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.
Courses listed under DSPS have been designed for students with disabilities. Additional classes are offered at City and Miramar campuses. See appropriate catalog.

Physically Disabled
(See Adapted P.E. Classes Under Physical Education)

All Disabled Students

21 Accessible Computing Lab
1.5 - 6 hours lab, 0.5 - 2 units
Credit/No Credit Only

**Limitation on Enrollment:** This course is not open to students with credit for Disabled Students Programs and Services 76.

This course is offered for students who benefit from adaptive computer access. The course modules teach students how to use the necessary adaptive hardware or software needed to access the computer. Training in all modules is individualized. Students also have the option of completing only those sections of the modules that are relevant to the goals on their Student Educational Contract (SEC). Credit for this course does not apply to the associate degree.

27 Career Planning for Students with Disabilities
2 hours, 2 units
Credit/No Credit Only

This course is designed to assist students with disabilities in acquiring an understanding of the world of work. Emphasis is placed on developing and pursuing goals for employment and on identifying community, state, and national assistance resources. Throughout the course, students evaluate their individual career goals, analyze their job skills, research the job market and construct an effective resume and cover letter for prospective employers. Course material also emphasizes preparing students to meet the psychological, social and cognitive demands of employment. (FT) Credit for this course does not apply to the associate degree.

77 Exploration of Computer Access
0.5 hour lecture, 1 hour lab, 1 unit
Credit/No Credit Only

This course has been designed for students with disabilities. Designed to introduce students to computer access equipment that is available in large print, Braille and voice output. To provide an overview of resources in software and hardware that allow disabled students to compete in educational and business settings. This course may be repeated as necessary to achieve course objectives. Credit for this course will not apply to the associate degree. (FT)

**Learning Disabled**

38 Math Strategies for the Learning Disabled
3 hours, 3 units
Credit/No Credit Only

This course is designed for students with verified disabilities related to mathematics. It is taught as a lecture class that can be taken independently or in conjunction with Mathematics 32/Mathematics 35. This class utilizes a strategies-oriented course developing competency with basic mathematical operations and pre-algebra concepts. This course, in combination with Disabled Students Programs and Services 73, may be taken four times for credit. Credit for this course does apply to the associate degree.

40 Individual Assessment and Educational Planning
0.5 hour, 0.5 unit
Credit/No Credit Only

**Limitation on Enrollment:** This course is not open to students with credit for Disabled Students Programs and Services 50.

This course is designed to facilitate students’ awareness of individual learning aptitude as compared to measured academic achievement. Standardized achievement and aptitude assessment instruments are individually administered during the course in accordance with California Community College Learning Disabilities Eligibility Model to document a learning profile related to community college academic demands. Related academic study strategies and possible learning disability accommodations are addressed when appropriate. Credit for this course will not apply to the associate degree.

41 Introduction to Applied Study Skills and Strategies
0.5 hour lecture, 2 – 3 hours lab, 0.5 – 1.5 units
Credit/No Credit Only

This course is designed for students who are enrolled in a college course in which they have a verified disability related limitation. It is recommended for students who would benefit from formal assessment and small group instruction in applied study skills and learning strategies. The course provides guided instruction in the application of study skill strategies to a
mainstreamed course. The focus of the course is on developing generalized study skills that (1) relate to successful learning in the community college setting and (2) can be altered through individual effort and instruction. Individually guided practice of study skills is supported in an individual and/or small group setting. This course may be taken for lab credit four times with different content for a maximum of four units. Credit for the course does not apply to the associate degree.

42 Basic Skills Applied Study Strategies
2 - 3 hours lab, 0.5 – 1 unit
Credit/No Credit Only
This course is intended primarily for students needing disability related specialized support in mainstream basic skills classes in addition to the campus wide academic support services. The focus of this class is to provide study skill assistance for students enrolled in basic skill college classes. Initial emphasis is placed both on the application and generalization of study strategies as well as on assistive technology. Computer assisted instruction is utilized to supplement, review and rehearse basic skills learning. This course may be taken four times with different content for a maximum of four units. Credit for the course does not apply to the associate degree.

43 Advanced Applied Study Strategies
2 - 3 hours lab, 0.5 - 1 unit
Credit/No Credit Only
This course is intended primarily for students needing advanced academic disability related support in addition to the campus wide academic support services currently available. The focus of this class is to provide individualized study assistance for students in mainstream degree applicable college classes. Emphasis is placed on the application of study strategies to a specific course. Both study strategies and assistive technology are utilized to meet the demands of a mainstream course content. Computer assisted instruction is used to review related basic skills instruction and to support research skill development. This course may be taken four times with different content for a maximum of four units. Credit for the course does not apply to the associate degree.

47 Spelling and Auditory Processing
2 hours lecture, 2 units
Credit/No Credit Only
This course is designed for students who have identified learning disabilities related to effective spelling and/or reading decoding skills. The course introduces learning and memory research related to spelling disabilities. A multisensory awareness of speech sounds and auditory processing strategies are emphasized. Common spelling rules and expectations are taught, and the effective use of spelling related assistive technology is introduced. Credit for the course does not apply to the associate degree.

48 Effective Sentence Writing and Grammar
2 hours lecture, 2 units
Credit/No Credit Only
This course is designed for students who have verified disabilities related to effective sentence writing skills. It is intended to prepare students for a more successful entry into the mainstream basic skills English curriculum. Multisensory learning strategies are emphasized that assist in the recognition of acceptable sentence structures and appropriate grammar. Sentence writing instruction progresses from very simple to more complex structures. Credit for the course does not apply to the associate degree.

49 Writing Structured Paragraphs
2 hours lecture, 2 units
Credit/No Credit Only
This course is designed for students who demonstrate difficulty with written language. It is intended to prepare students who have a writing related disability to more successfully meet the minimum college requirements for multi-paragraph essay writing. This course is unique for the highly structured and sequential strategies applied to essay writing. Additionally, the course emphasizes the application of assistive computer technology for facilitating organizational pre-writing strategies, document checking, and written language fluency. Credit for the course does not apply to the associate degree.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

101 Fundamentals of Performance
12 hours lab, 4 units
A participating core study unifying fundamental aspects of seven areas of drama: history, dramaturgy, acting,
Dramatic Arts (DRAM)

102 Fundamentals of Production
12 hours lab, 4 units
A participating core study unifying fundamental aspects of seven areas of drama: history, dramaturgy, acting, production, form and style, makeup and costumes, and theater management. Focus is on the total involvement of the above areas as related to elementary acting — development of ability to express thought and emotion through effective use of the voice and body. These fundamental skills may be applied to stage, radio and TV acting. Lectures, semester projects and major productions will be included. Transfer Credit: CSU and/or private coll/univ.; UC.

105 Introduction to Dramatic Arts
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is an introductory study of the art and literature of the theater. Emphasis is placed on the examination and evaluation of dramatic texts in terms of genre, historical context, aesthetics and reception. In addition, this course introduces students to the technical aspects of the theatrical industry including production and personnel through campus drama productions and field trips. This course is designed for students pursuing a Liberal Arts degree with an emphasis in drama performance. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN DRAM 18)

122 Makeup for The Stage
1 hour lecture, 3 hours lab, 2 units
Grade Only
This course is an introductory hands-on study of the materials and techniques used in stage makeup design and application. Emphasis is placed on the acquisition of a lexicon pertinent to the history and use of makeup in the theater as well as on the actual application of stage makeup in the classroom as a member of the makeup crew for a theatrical production. (FT) Transfer Credit: CSU and/or private coll/univ. (CAN DRAM 14)

130 Elementary Acting
3 hours, 3 units
Reading and analysis of contemporary plays: theory and practice of acting with emphasis on character analysis and interpretation. Development of the ability to express thought and emotion through the effective use of voice and body. Transfer Credit: CSU and/or private coll/univ.; UC. (CAN DRAM 8)

131A Intermediate Acting
3 hours, 3 units
Limitation on Enrollment: This course is not open to students with credit for Dramatic Arts 131.
Continuation of Dramatic Arts 130 emphasizing the application of fundamental skills to the problems of emotion, timing, character and ensemble acting in longer scenes. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

131B Intermediate Acting
3 hours, 3 units
Continuation of Dramatic Arts 131A emphasizing the application of fundamental skills to the problems of emotion, timing, character and ensemble acting in longer scenes and one act plays. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

150 Cinema as Art and Communication I
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A film class designed to meet the needs and experiences impact of the feature film, the documentary, educational commercial television through the historical and stylistic influences upon the aesthetic values and social implications of cinema. Traces and explains the impact of silent comedy. American film before 1940, German expressionism and Russian expressive realism as they influence today's films. Not recommended for students who have taken Radio and Television 160. Transfer Credit: CSU and/or private coll/univ.; UC.

151 Cinema as Art and Communication II
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A film class designed to meet the needs and experience of a modern society that uses the film media as a relevant part of the life style. Traces and explains the
impact of the French film, Italian neorealism and the influence of outstanding directors and movements in the second half of the twentieth century. Transfer Credit: CSU and/or private coll/univ.; UC.

165A Introduction to Stage Movement

3 hours, 3 units

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

This course serves as an introduction to basic techniques of movement for the stage. Stage movement focuses on the actor’s body as an expressive instrument. Students acquire flexibility, strength, and physical repertoire of stage movement. The student is challenged to explore and utilize new areas of dramatic expression. Some examples of contemporary movement are Tai Chi, Suzuki, Alexander, and Feldenkrais. This course is intended for students pursuing a degree in Visual and Performing Arts with an emphasis in Drama. Transfer Credit: CSU and/or private coll/univ.; UC. (CAN DRAM 20)

170A-B Musical Comedy

Each course: 3 hours, 3 units

A study of the physical and vocal aspects of theatrical musical comedy as related to historical time periods and aesthetic techniques associated with specific schools of performance. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

171A Intermediate Musical Comedy

3 hours, 3 units

A continuation of the study of the physical and vocal aspects of theatrical musical comedy as related to historical time periods and aesthetic techniques associated with specific schools of performance. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

171B Intermediate Musical Comedy

3 hours, 3 units

A continuation of the study of the adaptation of musical comedy performance to various types of staging including: proscenium, arena, thrust, cabaret and night club, and for various types of audiences involved in these presentations. Public performance required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

201 Intermediate Performance

12 hours lab, 4 units

Prerequisite: Dramatic Arts 102 with a grade of “C” or better, or equivalent.

202 Intermediate Production

12 hours lab, 4 units

Prerequisite: Dramatic Arts 201 with a grade of “C” or better, or equivalent.

A participating core study unifying aspects of seven areas of drama: history, dramaturgy, acting, production, form and style, makeup and costumes, and theater management. Focus is on the total involvement of the above areas as related to intermediate acting (continuation of elementary acting, emphasizing the application of fundamental skills to the problems of emotion, timing, character and ensemble acting), costume and makeup (principles and application of makeup for stage and TV; pattern drafting, color harmony and use of fabrics for stage costumes) through lectures, semester projects, and major productions. Transfer Credit: CSU and/or private coll/univ.; UC.
production. This course may be repeated three times. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

251 Musical Comedy Rehearsal, Production and Performance

3-9 hours lab, 1-3 units

This course is a study and application of the skills, responsibilities and commitment required for work in the production and performance of a musical. Throughout the course, students participate in rehearsal, production and performance as actors, singers, dancers, technicians, assistant directors, stage managers and production crew. As part of this process, students research and provide written critiques of the background, style, historical conditions and artistic theory connected to the given musical and apply these to an original interpretation of the production. This course may be repeated three times. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

267 Experimental Theatre

3 hours lab, 1 unit

This course will focus primarily on non-commercial theatre and areas not covered in the drama core program. Students will be grouped into production companies, which will produce Thursday Theatre, Readers’ Theatre, Children’s Theatre or Touring Theatre productions, with each student concentrating on a specific area. Areas of concentration: playwriting, production of one-acts, sound, direction, lighting design, stage design, stage managing, musical comedy, advanced acting problems, and stage dialects. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

290 Independent Study

Hours by Arrangement; 1-3 units

Limitation on Enrollment: Must obtain an Add Code from instructor for registration.
Advanced special work in dramatic arts: acting, design, lighting, film, business, makeup, costumes, direction, or play production. This course may be taken four times with different content for a maximum of six units. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

120 Principles of Economics I

3 hours, 3 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Introduction to basic economic principles and theory relating to problem analysis, structure of our institutions and the formation of public policies. Emphasis is placed on the broad overall performance (macro-analysis) of the economy with concentration in such areas as incomes, employment and output; economic stability and growth; fiscal and monetary policy. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ECON 2)

121 Principles of Economics II

3 hours, 3 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A continued study of principles and applications regarding specific economic sectors (micro analysis). Various competitive models in a market economy are studied in detail. Economics of labor unions, farming, international trade and finance provide a background for study and analysis of many current world and domestic problems. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ECON 4)

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

100 Tutor Training

0.5 hour lecture, 1.5 hours lab, 1 unit
Credit/No Credit Only

Limitation on Enrollment: Student must have completed a minimum of 12 units of college credit with an accumulated grade point average of 3.0 or better in subject area he/she will tutor.
This course is designed to prepare college-level persons to tutor adult/college students. Tutoring methods, uses of appropriate written and mediated instructional materials, and supervised practice tutoring are included in this course. (FT) Transfer Credit: CSU and/or private coll/univ.

200 Teaching as a Profession

3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and Educational Technology 199 with a grade of "C" or better, or equivalent.
Limitation on Enrollment: Must meet safety and health clearance standards for a public school field experience placement.
This course is designed for students considering teaching as a profession, for paraprofessionals, and for volunteer tutors working in the public school system. Career exploration, foundations of education, critical issues, and an introduction to literacy acquisition are addressed. Guided observations of public school classrooms in a variety of subject areas are a requirement of the course. (FT) Transfer Credit: CSU and/or private coll/univ.

202 Introduction to Literacy Instruction

2 hours lecture, 2 units
Grade Only
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is designed for students participating in the Liberal Studies Blended Teacher Education Program, for students considering teaching as a profession, and for prospective literacy tutors. The basic processes of literacy acquisition are presented. Students develop competency in instructional literacy strategies and essential competencies for delivering culturally relevant reading instruction to emerging readers. Students should be prepared to complete the procedures necessary for field work in schools. (FT) Transfer Credit: CSU and/or private coll/univ.

203 Service Learning for Introduction to Literacy

1 hour lecture, 1 unit
Prerequisite: Education 202 with a grade of "C" or better, or equivalent.
Limitation on Enrollment: Student must meet safety and health clearance standards for public school volunteer experience placement.

270 Teaching as a Profession-Work Experience

Hours by arrangement, 1-4 units
Grade Only
Prerequisite: Education 200 with a grade of "C" or better, or equivalent and approval of Work Experience Coordinator.
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units, including Work Experience, during the semester (or four units during the summer session) and must meet safety and health clearance standards for public school Work Experience placement.
This course is directed work study designed to provide the pre-service teacher with an opportunity to apply classroom theory in a public school setting with an assigned Work Experience supervisor. It is the purpose of this course to provide early supervised experience to pre-service teachers in order that they may begin to develop fluency with fundamental skills of literacy development, individual and small group tutoring, classroom management, and other routine teaching skills required in public schools. (FT) Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.
EDUCATIONAL TECHNOLOGY (EDTC)

199 Introduction to Educational Technology
1.5 hours lecture, 1.5 hours lab, 2 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Computer Business Technology 101 with a grade of “C” or better, or equivalent.

This course is intended for students participating in the Liberal Studies Blended Teacher Education program and for students considering teaching as a profession. The curriculum is designed to introduce basic computer skills and terminology in the context of teacher education. Basic competencies required for meeting the Educational Technology standards required for teachers are addressed in the curriculum. (FT) Transfer Credit: CSU and/or private coll/univ.

ENGINEERING (ENGE)

115 FORTRAN and Numerical Methods for Engineers and Scientists
1.5 hours lecture, 1.5 hours lab, 2 units
Grade Only

Prerequisite: Mathematics 141 with a grade of “C” or better, or equivalent.

An introductory course which presents the concepts of computer programming using the FORTRAN language. Emphasis is on the solution of practical engineering and scientific problems using standard structured programming techniques and numerical methods.

Transfer Credit: CSU and/or private coll/univ. UC
Transfer Credit: Engineering (ENGE) 115 combined with Computer and Information Sciences (CISC) 154: maximum credit, one course.

151 Engineering Drawing
6 hours lab, 2 units

Prerequisite: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50.
Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.

This course is a study of engineering design with an emphasis on developing drawing skills and techniques for engineers. Course content includes elementary orthographic and pictorial drawing, sections and dimensioning, instrument and freehand drawing as an aid to visualization and design, and computer-aided design (CAD). This course is designed for the transfer student planning to major in engineering or disciplines included in the physical sciences. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ENGR 2)

200 Statics
3 hours, 3 units

Prerequisite: Physics 195A with a grade of “C” or better, or equivalent.
Corequisite: Completion of or concurrent enrollment in Mathematics 151.

Limitation on Enrollment: This course is not open to students with credit for Engineering Technology 150.

This course is a study of the applications of the principles of mechanics to rigid bodies in equilibrium. Course content emphasizes areas of friction, centroids, center of gravity, analysis of structures, moments of inertia and methods of virtual work. This course is designed for the transfer student planning to major in engineering or disciplines included in the physical sciences. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ENGR 8)

210 Properties of Materials
3 hours, 3 units

Prerequisite: Physics 195A with a grade of “C” or better, or equivalent.
Corequisite: Completion of or concurrent enrollment in Chemistry 200 and 200L.

This course is a study of the chemical, physical and mechanical properties of engineering materials including metals, ceramics, polymers and composites. Emphasis is placed on function and structure as they relate to specific design considerations. This course is designed for the transfer student planning to major in engineering or disciplines included in the physical sciences. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ENGR 4)

240 Digital Systems
3 hours, 3 units
Grade Only

Advisory: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50.

Limitation on Enrollment: This course is not open to students with credit for Physical Sciences 265: Digital Systems.

This course is an introduction to modeling, analysis, and design of digital systems, primarily at the Logic Design Level. Students apply the basic theory of switching networks, use Boolean algebra to analyze and synthesize switching networks, design logic gate networks, use simplification schemes to minimize part count and cost while providing optimum performance, and design and analyze sequential and combinational
circuits using flip-flops and logic gate networks. This course is designed for the transfer student planning to major in engineering or disciplines included in the physical sciences. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

250 Dynamics
3 hours, 3 units
Prerequisite: Engineering 200 with a grade of “C” or better, or equivalent.
Corequisite: Completion of or concurrent enrollment in Mathematics 252.
Limitation on Enrollment: This course is not open to students with credit for Engineering Technology 250. This course is a study of the fundamental principles of bodies in motion with an emphasis on kinematics and kinetics of particles and rigid bodies, moving reference frames, work-energy, linear and angular momentum relationships and their application to engineering problems. Vector notation is used throughout the course. This course is designed for the transfer student planning to major in engineering or disciplines included in the physical sciences. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

260 Electric Circuits
3 hours, 3 units
Prerequisite: Physics 195B and Mathematics 151, each with a grade of “C” or better, or equivalent.
This course is an introduction to network analysis, basic network theorems, mesh and nodal analysis with independent and controlled sources. Course content emphasizes steady state and transient responses of networks, complex frequency transformation; A.C. circuit analysis, power, reactive apparent power, and power factor as well as balanced three-phase electric power systems. This course is designed for the transfer student planning to major in engineering or disciplines included in the physical sciences. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ENGR 12)
This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

The English for Speakers of Other Languages Program is designed to prepare students to read, write, speak and listen at a level that enables them to succeed in college courses.

The program consists of four levels and the student is assigned a level based on the result of his/her placement test.

The first level, L19, is a combined skills class in a lecture/lab format. Students who successfully complete this course are at the intermediate-low level. Some students at the beginning level may find ESOL 19 difficult. For these students, counselors are available to discuss options and resources, including classes at Continuing Education.

The second and third levels, L20 and L30, are made up of three courses. The grammar-writing component is a six-unit course; the reading and listening/speaking components are three units each.

The fourth level, L40, is a single course in reading and writing. Students who successfully complete ESOL 40 can read and write at an advanced level. They are prepared to take English courses one level below transfer (ENGL 51 & 56).

019 Transitional English for ESOL Students
3 hours lecture, 6 hours lab, 5 Units
Advisory: Assessment Skill Level L19. Students are advised to take the ESOL placement test prior to enrollment and perform at level 19.
Limitation on Enrollment: This course is not open to students with credit for English 007 or 58. This course prepares students to read, write, listen and speak at the intermediate-low ESOL level to facilitate successful participation in a college setting. This course will emphasize development of reading and writing skills in academic contexts, focusing heavily on the production of complete sentences with minimal errors and basic paragraph and composition development. Satisfactory completion of this course will enable students to enroll in ESOL 20, 21 and 22. (FT) Credit for this course is not applicable to the associate degree.
020 Writing for Non-native Speakers of English I
6 hours, 6 units
Prerequisite: English for Speakers of Other Languages 19 with a grade of “C” or better, or equivalent, or Assessment Skill Level L20.
Limitation on Enrollment: This course is not open to students with credit for English 008 or 60.
This course in writing and grammar prepares students to write at the intermediate-mid ESOL level. In this course, students learn to write paragraphs, basic compositions and other types of texts and practice critical reasoning in their writing. Students read and understand a variety of texts and develop academic study skills and work habits. Students also practice grammatical structures in the production and editing of compositions so that meaning is generally clear and not obscured by error. Credit does not apply to the associate degree. (FT)

021 Reading for Non-native Speakers of English I
3 hours, 3 units
Prerequisite: English for Speakers of Other Languages 19 with a grade of “C” or better, or equivalent, or Assessment Skill Level L20.
This course prepares students to read at the intermediate-mid ESOL level. In this course, students learn reading strategies and apply them as they read a variety of texts. Students practice identifying text organization, vocabulary and grammar to facilitate comprehension. Students also begin to use information from class readings in discussion, critical thinking and writing. (FT) Credit does not apply to the associate degree.

022 Listening and Speaking for Non-native Speakers of English I
3 hours, 3 units
Prerequisite: English for Speakers of Other Languages 19 with a grade of “C” or better, or equivalent, or Assessment Skill Level L20.
This course prepares students to understand spoken English and to speak at the intermediate-mid ESOL level. In this course, students begin to develop communicative competence through listening to and participating in a variety of communicative activities. Students also begin to study grammatical structures specifically related to oral/aural course work to make connections between structure and communicative needs. In addition, students discuss, write about and think critically about information from oral and written sources. (FT) Credit does not apply to the associate degree.

030 Writing for Non-native Speakers of English II
6 hours, 6 units
Grade Only
Prerequisite: English for Speakers of Other Languages 20, 21, and 22, each with a grade of “C” or better, or equivalent, or Assessment Skill Level L30.
Limitation on Enrollment: This course is not open to students with credit for English 009 or 61.
This course in writing and grammar prepares students to write at the intermediate-high ESOL level. In this course, students learn to write compositions and other types of texts that communicate a basic awareness of critical reasoning and the components of the academic essay and other types of writing. To achieve these goals, students learn and apply knowledge of syntax and grammatical structures in the production and editing of compositions so that errors, which may be frequent, will not obscure meaning. Students also read and understand a variety of texts as well as communicate a familiarity with academic study skills and work habits. Credit does not apply to the associate degree.

031 Reading for Non-native Speakers of English II
3 hours, 3 units
Prerequisite: English for Speakers of Other Languages 20, 21, and 22, each with a grade of “C” or better, or equivalent, or Assessment Skill Level L30.
This course prepares students to read at the intermediate-high ESOL level. In this course, students continue to develop reading skills needed for academic and workplace success. To achieve these goals, students read a variety of texts and apply appropriate reading strategies to facilitate comprehension. In addition, students engage in activities to build background knowledge as well as knowledge of text structure, grammar and vocabulary. Students also use information from class reading in class discussion, critical thinking and writing. (FT) Credit does not apply to the associate degree.

032 Listening and Speaking for Non-native Speakers of English II
3 hours, 3 units
Prerequisite: English for Speakers of Other Languages 20, 21, and 22, each with a grade of “C” or better, or equivalent, or Assessment Skill Level L30.
This course prepares students to understand spoken English and speak at the intermediate-high ESOL level. In this course, students continue to develop communicative competence through listening to and participating in a variety of communicative activities. Students also continue to develop knowledge of grammatical structures specifically related to oral/aural course work. In addition, students discuss, write about, and think critically about information from oral and written sources. (FT) Credit does not apply to the associate degree.

040 Reading and Writing for Non-native Speakers of English III

6 hours, 6 units

Prerequisite: English for Speakers of Other Languages 30, 31, and 32, each with a grade of “C” or better, or equivalent, or Assessment Skill Level L40.

Limitation on Enrollment: This course is not open to students with credit for English 010 or 62.

This course prepares students to read and write at the advanced ESOL level. In this course students write essays and other types of texts that have some complexity of expression, contain relatively few mechanical and grammatical errors and illustrate evidence of critical reasoning. Students also read academic and workplace texts and apply study skills and work habits necessary for success in further academic and vocational studies. Students who complete this course will be prepared to enter English 51 and 56. (FT) Credit does not apply to the associate degree.

Basic Skills Courses

All courses at this level are offered for college credit. Credit for these courses will not apply toward the associate degree but will count toward the determination of a student’s workload and eligibility for financial aid.

Reading

042 College Reading and Study Skills I

(Formerly English 055)

3 hours lecture, 3 units

Advisory: Assessment Skill Level R3. This course is designed for native speakers of English. ESL students should enroll in ESOL 19, 20, 21, 22, 30, 31, 32 or 40 as recommended by the placement test for non-native English speakers.

050 English Review

(see English 043 on page 247)

055 College Reading and Study Skills I

(see English 042 on page 247)

Writing

043 English Review

(Formerly English 050)

3 hours lecture, 3 units

Advisory: English 42 with a grade of "C" or better, or equivalent, or Assessment Skill Level W3. This course is designed for native speakers of English. ESL students should enroll in ESOL 19, 20, 21, 22, 30, 31, 32, or 40 as recommended by the placement test for non-native speakers.

Limitation on enrollment: This course is not open to students with previous credit for English 050.

This course is designed for students who need review of and practice with writing unified paragraphs and purposeful basic compositions. In this course students develop knowledge of the writing process as well as knowledge of grammatical structures to compose clear and complete sentences, paragraphs, and short essays. Students also read texts as the basis for writing and develop critical thinking skills necessary for success in college courses. (FT) Credit for this course does not apply to the associate degree.

050 English Review

(see English 043 on page 247)

055 College Reading and Study Skills I

(see English 042 on page 247)

English 101 Preparatory Courses

All courses at this level are offered for college credit. Three units of course work at this level may be applied to the associate degree. Credit for courses at this level will count toward the determination of a student’s workload and eligibility for financial aid.
Writing

047L Skills: English Center and Laboratory
1-12 hours lab, 0 units
Credit/No Credit

Limitation on Enrollment: Student must be enrolled in a companion college course.
This is an open entry/open exit supplemental course designed to assist students to succeed in completing their computer assignments in a companion course. This course may be taken four times with different companion subject matter courses as needed. This course does not apply to the associate degree.

051 Basic Composition
3 hours lecture, 3 units
Prerequisite: English for Speakers of Other Languages 40 or English 43 with a grade of "C" or better, or equivalent, or Assessment Skill Level W4.
This course is designed to prepare students to write successfully at the transfer level. In this course students practice the writing process in the production and editing of essays. Students also review grammatical and mechanical structures as needed to support the successful expression of meaning. In addition, students read and think critically using a variety of texts which are the basis for writing and class discussion. A District-wide, timed-writing examination, holistically graded by English instructors, is part of the final course grade. Designated sections of this course may be taught from a specific cultural perspective and are cross-listed under Black Studies and Chicano Studies in the class schedule. Three units of English credit at this level (either English 51 or English 56) may be applied to the associate degree. (FT) Associate Degree Credit.

Reading

056 College Reading and Study Skills II
3 hours lecture, 3 units
Prerequisite: English for Speakers of Other Languages 40 or English 42 with a grade of "C" or better, or equivalent, or Assessment Skill Level R4.
This course is designed for students who need to develop advanced reading skills to succeed in transfer level courses. In this course, students focus on academic reading and study skills and practice strategies to improve reading comprehension and critical thinking. Students also build writing, vocabulary, discussion and study skills to accurately express information and reflect the meaning of class readings. Three units of English credit at this level (either English 51 or English 56) may be applied to the associate degree. (FT) Associate Degree Credit.

064 Writing Essays
3 hours, 3 units

Limitation on Enrollment: A score of 3 or lower on the University of California “Subject A” Exam.
This is a course in essay writing that focuses on the writing of the argumentative essay. Classes are taught at the UCSD campus. (FT) Associate Degree Credit.

092A Persuasive Writing
3 hours, 3 units
Credit/No Credit

This course is intended for students enrolled at San Diego State University; for Freshmen, a score of 150 or lower on the CSU English Placement Test (EPT), and for transfer students, a score of 7 or lower on the Transfer Writing Assessment (TWA). It is designed to help students develop methods of reading and writing necessary for success in SDSU’s Rhetoric and Writing Studies 100. In this course, students read persuasive texts and integrate the ideas of multiple authors and their own into argumentative essays. The course stresses paragraph and essay development and reviews sentence structure, mechanics, and grammar as needed. (FT) Associate Degree Credit.

092B Persuasive Writing II
3 hours, 3 units
Credit/No Credit

Limitation on Enrollment: This course is not open to students with credit for English 092A.
Enrollment is intended for students admitted to San Diego State University who have taken SDSU’s Rhetoric and Writing Studies 92A, 94, or 95 and received a grade of Satisfactory Progress (SP). Only students who have not received credit for English 92A or Satisfactory Progress (SP) for RWS 92A or 97A at San Diego State University may enroll in English 92B. This course is designed to help students develop methods of reading and writing necessary for success in SDSU’s Rhetoric and Writing Studies 100. In this course, students read persuasive texts and integrate the ideas of multiple authors and their own into argumentative essays. The course stresses paragraphs and essay development and reviews sentence structure, mechanics, and grammar as needed. To earn a grade of "CR," SDSU students must submit a passing final portfolio graded by SDSU’s Rhetoric and Writing Studies (RWS) Department. (FT) Associate Degree Credit.

English Courses
(Also see Humanities)
101 Reading and Composition
3 hours lecture, 3 units
Prerequisite: English 51 and English 56; or English 92A or English 92B or English 64, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is designed for transfer-level students or for those who want to develop competence in college level reading and composition. In this course, students read, analyze, discuss and think critically using a variety of works and sources. Based on these activities, students write essays, fully-documented research projects, and other types of texts for various purposes and audiences. This written work, which demonstrates effective, logical, and precise expression of ideas, totals at least 6000 graded words. Designated sections of this course may be taught from a specific cultural perspective. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ENGL 2) (CAN ENGL SEQ A = ENGL 101+105).

205 Critical Thinking and Intermediate Composition
3 hours, 3 units
Prerequisite: English 101 or English 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course is designed to help students who are planning to transfer to a four-year college or university to develop critical thinking, reading, writing, and research skills beyond the level of English 101 and English 105; it is a required course within many curricula. Assignments require a total of at least 8,000 words of graded writing. The course focuses on writing argumentative prose and critically evaluating arguments. A majority of the written assignments require some research and documentation, including library research. Designated sections of this course may be taught from a specific cultural perspective and are cross-listed under Black Studies and Chicano Studies in the catalog and class schedule. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

207 The Art of the Sentence
3 hours lecture, 3 units
Prerequisite: English 101 or English 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.
This is a course in sentence stylistics beyond the level of English 101 and English 105. The course focuses on the intensive development of skills in analysis and application of linguistic and rhetorical principles. It stresses the interconnections among grammatical design, content, and purpose. Students move beyond basic correctness to sophisticated aspects of sentence patterning in order to achieve clarity and force in written expression. Assignments require a total of at least 8,000 words of graded writing. This course is intended for transfer students, those who desire to write and/or speak as effectively as possible in their academic work and/or career, and those with a special interest in language and linguistics. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.
208 Introduction to Literature
3 hours, 3 units

Prerequisite: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.

Advisory: Completion of English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course provides an inquiry into the basic nature of literature and is designed for students with a general interest as well as for those majoring in the field. Students read and analyze representative literary works in fiction, non-fiction, poetry and drama from various cultures and periods, applying practical critical techniques in essays, reports, and exams. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

209 Literary Approaches to Film
3 hours lecture, 3 units

Prerequisite: English 51 and English 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.

Advisory: English 101 or English 105, with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course focuses on literary values, such as plot, conflict, symbolism, theme and character as observed in feature films. It also focuses on cultural values with special reference as to how films define problems, establish a network of varied values, confront moral dilemmas, and explore human emotions. This course satisfies general education requirements in humanities and serves as an elective for English majors. It is designed for students who are interested in literature as well as those interested in the study of film. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

210 American Literature I
3 hours, 3 units

Prerequisite: English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course is a survey of American literature from its beginning to the late 19th Century including representative works from the Colonial Period (1588-1765), the New Republic (1765-1829). In this class students read and discuss the authors of these periods, addressing relevant social, political, cultural, and religious issues. Students critically analyze in essays, exams, and research papers the authors, specific works, and other topics as assigned. Classroom activities include lectures and discussions of the principal authors and works. Selected representative readings are required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ENGL 14) (CAN ENGL SEQ C = ENGL 210+211).

211 American Literature II
3 hours, 3 units

Prerequisite: English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.

A survey of American Literature from the late 19th Century to the present which includes representative works from the Age of Realism (1865-1914), the Modernist Period (1914-1945), and the Postmodern Era (1950-present). In this class students read and discuss the authors of these periods, addressing relevant social, political, cultural, and religious issues. The students critically analyze in essays, exams, and research papers the authors, specific works, and other topics as assigned. Classroom activities include lectures and discussions of the principal authors and their works. Selected representative readings are required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ENGL 16) (CAN ENGL SEQ C = ENGL 210+211).

215 English Literature I: 800-1799
3 hours, 3 units

Prerequisite: English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course offers a survey of British literature from the Anglo-Saxon period to the pre-Romantic period (approximately 800 to 1799), including representative works from the Old and Middle English periods, the Renaissance and the Elizabethans, the Cavalier, Metaphysical, and Puritan periods, the Restoration and the Neoclassical periods. Students read and discuss the major authors of these periods, addressing relevant social, political, cultural, and religious issues. Students critically analyze, in essays and research papers, the authors, specific works, and other topics as assigned. This course satisfies requirements for the major in English as well as general education and humanities requirements. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ENGL 8) (CAN ENGL SEQ B = ENGL 215+216).

216 English Literature II: 1800-Present
3 hours, 3 units

Prerequisite: English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course offers a survey of British literature from the Romantic period to the 20th century (approximately...
1800 to the present) including representative works from the pre-Romantic and Romantic periods, the Victorian and later Victorian period, and the Modern period. Students read and discuss the major authors of these periods, addressing relevant social, political, cultural, and religious issues. Students critically analyze, in essays and research papers, authors, specific works, and other topics as assigned. This course satisfies requirements for the major in English as well as general education and humanities requirements. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ENGL 10) (CAN ENGL SEQ B = ENGL 215+216).

220 Masterpieces of World Literature I: 1500 BCE - 1600 CE

3 hours lecture, 3 units
Prerequisite: English 51 and English 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Level W5/R5.
Advisory: English 101 or English 105, each with a grade of "C" or better, or equivalent, or Assessment Skill Level W6/R6.
This course offers a survey of world literature in translation, from the ancient world through the European renaissance (approximately 1500 BCE - 1600 CE), including the established classic literature of the Near East, Greece and Rome, India, China, Japan, Africa, the Islamic world, and Europe. Students read and discuss a variety of authors from these regions, and address relevant social, cultural, and religious issues. Students critically analyze, in essays and papers, specific authors, works, themes, and other topics as assigned. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

221 Masterpieces of World Literature II: 1600 - Present

3 hours, 3 units
Prerequisite: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Advisory: English 101 or 105 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course offers a survey of world literature in translation, from the close of the European renaissance through the present time, including the literature of Asia, Europe, North America, Central America, South America, Africa and the Islamic world. Students read and discuss a variety of authors from these regions, and address relevant social, religious, and cultural issues. Students critically analyze, in essays and papers, specific authors, works, themes, and other topics as assigned. This course satisfies requirements for the major in English as well as general education and humanities requirements. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

230 Asian American Literature

3 hours lecture, 3 units
Prerequisite: English 101 or English 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels R6 and W6.
This course is a survey of Asian American literature from the 1900's to the present that includes representative works by early immigrants, as well as the writing of contemporary Asian American writers. Students read and discuss the authors and major works, while addressing relevant social, political, cultural, religious, and sociolinguistic issues. The students critically analyze these issues and other topics addressed in specific works in assigned essays and research papers. Selected representative readings are required. This course is designed for students transferring with a literature or history major as well as those with an interest in this field. (FT) Transfer Credit: CSU and/or private coll/univ; UC.

238 Evaluating Children’s Literature

3 hours lecture, 3 units
Prerequisite: English 51 and English 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Advisory: English 101 or English 105, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course is a survey of children's literature from folktales to current works. The course compares works from a variety of authors, cultures, and historical periods while emphasizing current American works. Principles of literary criticism are applied in evaluating the themes, language, and structure of works studied. This class is suitable for students interested in literature as well as for students who are preparing to teach. (FT) Transfer Credit: CSU and/or private coll/univ;

240 Shakespeare

3 hours lecture, 3 units
Prerequisite: English 51 and English 56 each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Advisory: English 101 or English 105 with a grade of "C" or better, or equivalent or W6 or R6.
This course introduces students to William Shakespeare's drama and poetry in a survey of his work, its historical and political context, and its influence on subsequent literature. Students study and analyze
representative plays and poems from the perspectives of theme, character, structure, and language, addressing relevant social, political, cultural, and religious issues. Students critically analyze, in essays and other writing assignments, specific works, criticism from his contemporaries to the modern day, interpretations of his works on both stage and screen, and other topics as assigned. This course is designed for students majoring in English and other related majors as well as those with a general interest in the author or the period. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

245 Writing Creative Nonfiction

3 hours, 3 units
Prerequisite: English 51 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5.
Advisory: English 101 or 105 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.
Limitation on Enrollment: This course is not open to students who have credit for English 246A and/or 246B.
This course is an intensive workshop in writing creative nonfiction. Students submit original creative nonfiction for class discussion and learn to use the workshop format to further their work. Additional exploration of the principles and methods of creative nonfiction are offered through lecture and the critical analysis of student and master works addressing personal, social, political, and/or cultural issues. Increased writing skills help students not only in preparing for such writing-related careers as publishing, journalism, communications, and education, but also in better understanding literature and learning to use language successfully, which is necessary in nearly all professions. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

247 Writing Seminar — Poetry

3 hours, 3 units
Prerequisite: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Advisory: English 101 or 105 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.
This introductory workshop provides guidance and models for students creating poetry, which is discussed and analyzed by the class. Students read and critique traditional, contemporary and multicultural poems that provide models for their original work. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

249 Introduction to Creative Writing

3 hours, 3 units
Prerequisite: English 51 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5.
Advisory: English 101 or 105 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.
Limitation on Enrollment: This course is not open to students who have credit for English 249A or 249B.
This is an introductory course in creative writing which focuses on the study of fiction and poetry. Students analyze technique in the works of professional writers and in their own original works. After submitting writing, students participate in informal discussion of their work which includes helpful criticism from the class and the instructor. Increased writing skills help students prepare for careers in communication, education, writing, advertising, selling, journalism, law, business, and government. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ENGL 6)

253 Fundamentals of Fiction Writing

3 hours, 3 units
Prerequisite: English 51 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5.
Advisory: English 101 or 105 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.
Limitation on Enrollment: This course is not open to students who have credit for English 252A.
This course is an intensive workshop in fiction-writing techniques. Students submit original fiction for class discussion and learn to utilize criticism offered by the instructor and peers. Critical thinking abilities are applied as students analyze orally and in writing student and master works addressing personal, social, political, and/or cultural issues. Increased writing skills help students not only in preparing for such writing-related careers as publishing, journalism, communications, and education, but also in better understanding literature and learning to use language successfully, which is necessary in nearly all professions. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

254 Intermediate Fiction Writing

3 hours, 3 units
Prerequisite: English 253 with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is not open to students who have credit for English 252B.
This course emphasizes the more direct application of fiction-writing technique introduced in English 253,
more advanced critical abilities after experiencing a semester of a fiction-writing workshop, a clearer understanding of how to incorporate personal, social, political, and/or cultural issues into fictional work, and the expectation that students and their fiction will benefit from and make further advancements by continuing in the workshop atmosphere. These students may want to prepare a portfolio for a four-year college and/or to further prepare for transferring to a creative writing program at a university. Increased writing skills help students not only in education, but also in better understanding literature and learning to use language successfully, which is necessary in nearly all professions. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

Environmental Design Studies
(See Architecture)

ESCROW (ESCR)

101 Escrow Procedures — Beginning
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course covers methods and techniques of escrow procedure for various types of real estate transactions, including the legal and ethical responsibilities of persons engaged in escrow work. Some of the topics included are types of escrow, preparation of documents, terminology, phraseology, title and escrow procedures, and the method of adjusting taxes, rents, and other charges. (FT) Transfer Credit: CSU and/or private coll/univ.

111 Escrow Procedures — Advanced
3 hours, 3 units
Grade Only
This course covers a study of exchanges, loan escrow, sales of trust deeds and notes, consummation of land contracts and leasehold escrow’s. (FT) Transfer Credit: CSU.

FASHION (FASH)

105 Introduction to Fashion
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A survey of fashion career opportunities as well as requirements and qualifications for success in the fashion world. Exploration of all aspects of the fashion field including the manufacturing, designing, coordination, and retailing of fiber, fabric, leather, and fur products. Development of a fashion vocabulary and an awareness of the relationship of fashion trends to current economic and social factors relating to men’s, women’s and children’s clothing. (FT) Transfer Credit: CSU.

108 Analysis, Evaluation, and Comparison of Ready-to-Wear Fashion
3 hours lecture, 3 units
Grade Only
Advisory: English 51 and 56 and Mathematics 32, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5, R5, and M20; and Concurrent enrollment in Fashion 105
This course provides an analysis of the quality of materials, design, and construction in ready-to-wear garments and accessories. This course includes comparisons of the processes involved in manufacturing and concepts of sizing. Principles of fit, as well as aids in buying and selling are also included. This course is required for Fashion Merchandising majors. The content is beneficial to marketing students interested in ready-to-wear and retail skills. (FT) Transfer Credit: CSU and/or private coll/univ.

110 Fashion Buying/Management
3 hours, 3 units
Grade Only
Advisory: Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and
English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5. This course studies the principles of buying for resale in independent stores, department stores, and chain stores with centralized buying. It includes buying fashion merchandise staples, hard and soft merchandise lines. Topics covered are merchandise planning and selection, resource relations, legal trade regulations, pricing, merchandise management and control. Transfer Credit: CSU and/or private coll/univ.

112 Fashion Promotion
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Principles of fashion promoting and coordinating fashion, functions of the fashion coordinator, and techniques and procedures for presenting fashion. Students will observe and participate in an area of the fashion industry. Emphasis is on the study of the function of fashion coordinators and directors in retail and wholesale fields. Transfer Credit: CSU and/or private coll/univ.

115 Visual Merchandising
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Techniques of coordinating fashion merchandise and applying the principles and elements of design to sell merchandise and fashion ideas in visual displays. Career opportunities in visual presentation will be explored. (FT) Transfer Credit: CSU and/or private coll/univ.

120 Fashion History and Trends
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A survey of the evolution of clothing styles throughout history from the Egyptian period to the present, with emphasis on the relation of recurring style trends to contemporary fashion. Students will design contemporary garments based on historic styles. Transfer Credit: CSU and/or private coll/univ.

121 Ethnic Costume: History and Design
1 hour, 1 unit
Grade Only
Advisory: Fashion 120 and 171, each with a grade of “C” or better, or equivalent.
In Ethnic Costume: History and Design, students study world costume, its history and evolution. Students learn how costume is influenced by a country’s geography, history and culture. Included in the course is a study of costume silhouette, design, construction and embellishment. Traditional and online research and garment design by computer are incorporated into the course. This course is appropriate for fashion design majors and any student interested in ethnic costume. (FT) Transfer Credit: CSU and/or private coll/univ.

125 Fashion Selection
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course covers analysis of fashion and individual characteristics related to selecting and recommending appropriate clothing for occupational and individual needs. Transfer Credit: CSU and/or private coll/univ.

130 Apparel Construction I
3 hours, 3 units
Grade Only
Advisory: English 51 and 56 and Mathematics 32, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5, R5, and M20; and concurrent enrollment in Fashion 199A.
In this course students learn to construct garments, operate and maintain sewing equipment and analyze simple fitting problems. Domestic and trade methods of apparel construction are used. This is a required class for all fashion design majors and students interested in fitting and constructing clothing. (FT) Transfer Credit: CSU and/or private coll/univ.

131 Apparel Construction II
3 hours, 3 units
Grade Only
Advisory: Fashion 130 with a grade of “C” or better, or equivalent; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and completion of or concurrent enrollment in Fashion 199C.
Limitation on Enrollment: Not open to students with credit for Fashion 265: Clothing Construction. This course will cover development of advanced knowledge in apparel construction including couture, the use of special fabrics, and trade methods of apparel construction. Transfer Credit: CSU.

135 Tailoring
2 hours, 2 units
Grade Only
Advisory: Fashion 130 with a grade of “C” or better, or equivalent; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Continued development of judgment, originality and skill in clothing construction. Emphasis on fitting, pressing, and alteration as related to tailoring. (FT) Transfer Credit: CSU and/or private coll/univ.

140 Clothing Design and Flat Pattern I
3 hours, 3 units
Grade Only
Advisory: Fashion 130 with a grade of “C” or better, or equivalent; and Mathematics 32, and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5, R5, and M20.
In this course students learn to make patterns by manipulation of a basic sloper to create a variety of designs. This is a required class for all fashion design majors and students interested in creating original clothing designs. (FT) Transfer Credit: CSU and/or private coll/univ.

141 Clothing Design and Flat Pattern II
3 hours, 3 units
Grade Only
Advisory: Fashion 140 with a grade of “C” or better, or equivalent; and Mathematics 32, and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5, R5, and M20.
This course continues the study of principles of design and the application of those techniques in developing and constructing original garments. Transfer Credit: CSU and/or private coll/univ.

142 Fashion Sketching
3 hours lecture, 3 units
Grade Only
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20.
In this course the student learns fashion illustration techniques for drawing design sketches, production technical flats and theme presentation boards. The student learns how to draw and use the basic figure (croquis) and to draw garment shapes and original designs. Exposure to various media enhances personal style and expression. This course is required for fashion design majors. (FT) Transfer Credit: CSU and/or private coll/univ.

145 Clothing Design Through Draping
3 hours lecture, 3 units
Grade Only
Corequisite: Fashion 199B.
Advisory: Fashion 130 and Mathematics 32 and English 51 and 56, each with a grade of “C” or better, or equivalent, or M20/W5/R5.
In this course, students study the terminology and basic techniques of fabric draping. Students drape and fit fabrics on a three-dimensional form, design patterns and construct original garments from these patterns. This is a required course for all fashion design majors and is open to any student interested in expanding design skills. (FT) Transfer Credit: CSU and/or private coll/univ.

150 Clothing Design — Advanced
3 hours, 3 units
Grade Only
Advisory: Fashion 140 with a grade of “C” or better, or equivalent; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course covers advanced principles of creating and producing original garments related to specific customers. This course emphasizes development of a line of original garments for presentation to industry to promote a professional career in design. Transfer Credit: CSU and/or private coll/univ.

155 Fashion Field Studies
3-12 hours, 1-4 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
The student will be introduced to a wide variety of fashion merchandising and design businesses in
San Diego and Los Angeles, alternating field trip outings with in-class sessions. The student will have the opportunity to explore possible areas of employment interest in the fashion industry. (FT)
Transfer Credit: CSU and/or private coll/univ.

160 Millinery I
1 hour, 1 unit
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for Fashion 265: Beginning Millinery.
This course covers the basic principles of designing and constructing hats. Transfer Credit: CSU and/or private coll/univ.

161 Millinery II
1 hour, 1 unit
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for Fashion 265: Intermediate Millinery.
This course covers the intermediate principles of designing and constructing a hat. Transfer Credit: CSU and/or private coll/univ.

162 Millinery III
1 hour, 1 unit
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for Fashion 265: Advanced Millinery.
This course covers the advanced principles of designing and constructing a hat. Transfer Credit: CSU and/or private coll/univ.

170 Textile Design
1 hour, 1 unit
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

171 Computer Flat Pattern Design
3 hours, 3 units
Grade Only
Advisory: Fashion 140 with a grade of “C” or better, or equivalent is strongly recommended.
In this course, students learn how to draft apparel patterns through the use of CAD software. They adapt hand pattern drafting techniques to the computer by building a basic sloper and applying pattern manipulations in order to create fashion patterns. Students work with a variety of pattern design software. They evaluate the functions and suitability of each program to apparel manufacturers and small business operations. (FT) Associate Degree Credit.

172 Computer Flat Pattern Design II
3 hours, 3 units
Grade Only
Advisory: Fashion 140 with a grade of “C” or better, or equivalent is strongly recommended.
In Computer Flat Pattern Design II, students learn how to draft apparel patterns through the use of Industrial Pattern Making software. They utilize hand drafting experience to develop computer drafting skills necessary to create patterns suitable for apparel production. Digitizing and plotting equipment is used in the process of design. Grading for multiple sizes is covered. (FT) Associate Degree Credit.

173 Fashion Marketing on the Internet
1 hour, 1 unit
Grade Only
Advisory: Fashion 105 and 178, each with a grade of “C” or better, or equivalent.
In this course, students research the Internet to determine how a fashion business is marketed in various forms through web pages, mail lists, user groups and FTP sites. Students develop a marketing plan and web site structure for a fashion-oriented business and create a simple web site that effectively markets a fashion or design product.
175 Computer Fashion Design
2 hours lecture, 3 hours lab, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course will introduce students to computer graphic techniques in relation to textiles and apparel design. Students will learn to use a computer and commercial paint program to design and render textiles and garments. (FT) Transfer Credit: CSU and/or private coll/univ.

176 Computer Fashion Design II
2 hours lecture, 3 hours lab, 3 units
Grade Only
Advisory: Fashion 175 with a grade of “C” or better, or equivalent; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
In Computer Fashion Design II, students learn how to use Illustration and Image Processing software to design garments and fabrics. Computer techniques include drawing and rendering fabrics and garments. In addition, students will work with scanners and other peripheral equipment to advance their skills. (FT) Transfer Credit: CSU and/or private coll/univ.

178 Computer Publishing and Portfolio
2 hours lecture, 3 hours lab, 3 units
Grade Only
In this course, students learn how to use Illustration and Desktop Publishing software to create brochures, flyers, newsletters, business materials, and other published documents related to marketing and promotion. In addition, students learn how to prepare and present a professional portfolio using the computer as an aid. This course would benefit any student in a design field. (FT) Associate Degree Credit.

190 Fashion Entrepreneurship
3 hours, 3 units
Grade Only
Advisory: Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5. Principles and applications associated with starting a fashion-related business. Transfer Credit: CSU and/or private coll/univ.

199A Fashion Laboratory A
3 hours lab, 1 unit
Grade Only
Advisory: Concurrent enrollment in Fashion 130. Limitation on Enrollment: This course is not open to students with maximum credit for Fashion 199. This course provides hands-on experience using and maintaining apparel construction equipment. It also provides the opportunity for the student to practice the basic techniques presented in the lecture class. The laboratory sessions provide assistance where needed to those students working on basic apparel construction projects. (FT) Transfer Credit: CSU and/or private coll/univ.

199B Fashion Laboratory B
3 hours lab, 1 unit
Grade Only
Advisory: Concurrent enrollment in Fashion 145. Limitation on Enrollment: This course is not open to students with maximum credit for Fashion 199. This course provides hands-on experience using and maintaining industry dress forms. The laboratory sessions provide students the opportunity to drape their three dimensional design assignments and course projects on an industry dress form. The laboratory also provides assistance where needed to those students working on projects for their concurrent Clothing Design through Draping course. (FT) Transfer Credit: CSU.

199C Fashion Laboratory C
3 hours lab, 1 unit
Grade Only
Advisory: Concurrent enrollment in Fashion 131. Limitation on Enrollment: This course is not open to students with maximum credit for Fashion 199. This course provides hands-on experience using and maintaining apparel construction equipment. The emphasis is on providing the opportunity for the student to practice advanced techniques presented in the lecture class. The laboratory sessions provide assistance where needed to those students working on advanced apparel construction projects. (FT) Transfer Credit: CSU and/or private coll/univ.

270 Work Experience
Hours by Arrangement, 1-4 units
Grade Only
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, including work experience.
Program of on-the-job learning experiences for students employed in a job related to their major. The combined maximum credit for all work experience courses from all disciplines may not exceed 16 units. Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

### 100 Filipino American Experience

**3 hours, 3 units**

**Advisory:** English 51 and English 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

This course introduces the student to sociological overviews of Filipino Americans. Current Filipino American perspectives are analyzed by discussing the history of the Philippines, the factors contributing to immigration to the United States, and the aspects of the integration experiences that may be unique to Filipino Americans. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

### 105 Fundamentals of Food Production

**3 hours, 3 units**

**Grade Only**

**Advisory:** Concurrent enrollment in Food Service Operations 110; and completion of English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.

Basic terminology. Physical, chemical, and biological characteristics of food. Survey of the variety of basic and specialty foods served in hotels, restaurants and other types of food service establishments. Grades of foods and standards of quality for finished products. Transfer Credit: CSU and/or private coll/univ.

### 107 Sanitation, Safety and Equipment

**3 hours, 3 units**

**Grade Only**

**Advisory:** Food Service Occupations 105 with a grade of “C” or better, or equivalent; and English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.

Basic concepts of personal and institutional sanitation and their application to food preparation, storage, and service; prevention of food contamination; dishwashing and housekeeping materials and procedures; garbage and refuse disposal; and pest control. OSHA regulations; safety procedures and programs; fire prevention and control; concepts of safety and sanitation related to the selection, layout and use of equipment. Transfer Credit: CSU and/or private coll/univ.

### 110 Basic Food Preparation

**15 hours lab, 5 units**

**Grade Only**

**Advisory:** Food Service Occupations 107 with a grade of “C” or better, or equivalent; and English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.

A beginning course in food preparation procedures including the safe use of kitchen equipment and hand tools; use of weights and measures and interpretation of recipes; study and demonstration of materials used in cooking and physical changes occurring during the preparation of food; equipment and methods used to cook different types of food. Transfer Credit: CSU and/or private coll/univ.

### 115 Food Service Operations and Management

**3 hours, 3 units**

**Grade Only**

**Advisory:** English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.

Organization and management of food service operations; occupational levels and responsibilities; legal aspects and insurance; labor-management relations; dining room management and operations; and sale promotion. Transfer Credit: CSU and/or private coll/univ.
120 Food Services, Catering, and Advanced Menu Planning

3 hours, 3 units
Grade Only

Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.

Various types of commercial, industrial, institutional, and transportation food services. Hotel, restaurant, and off-premise catering. Planning, designing and pricing menus. (FT) Transfer Credit: CSU and/or private coll/univ.

130 Quantity Food Preparation — Theory

3 hours, 3 units
Grade Only

Advisory: Food Service Occupations 105 and 110, each with a grade of “C” or better, or equivalent; and English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4; and concurrent enrollment in Food Service Occupations 131.

Techniques of preparing entrees, breakfast foods, salads, sandwiches, short orders, and desserts. Emphasis on recipe standardization; determination of need and procurement of supplies; organization of work stations; effective use of equipment and time; and attractive service. Transfer Credit: CSU and/or private coll/univ.

131 Quantity Food Preparation — Laboratory

15 hours lab, 5 units
Grade Only

Advisory: Food Service Occupations 105 and 110 and 130 and 131, each with a grade of “C” or better, or equivalent; and English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4; and concurrent enrollment in Food Service Occupations 130.

Laboratory experience to supplement Food Service Occupations 130. Transfer Credit: CSU and/or private coll/univ.

132 Advanced Quantity Food Preparation Lab

3 hours lab, 1 unit
Grade Only

Advisory: Food Service Occupations 105 and 110, each with a grade of “C” or better, or equivalent; and English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4; and concurrent enrollment in Food Service Occupations 130 and 270.

Laboratory experience to supplement Food Service Occupations 130. Application of cutting and storage of meat, poultry and fish; and advanced techniques of preparing entrees, salads, and short orders. Transfer Credit: CSU and/or private coll/univ.

140 Food and Beverage Purchasing and Control

3 hours, 3 units
Grade Only

Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.

Techniques for purchasing food, beverages, and supplies used in hotels and restaurants. An analysis of the operation, promotion, sales cost, and inventory controls on food and beverages. Transfer Credit: CSU and/or private coll/univ.

201 Gourmet Food Preparation Laboratory

3-15 hours lab, 1-5 units
Grade Only

Advisory: Food Service Occupations 105 and 110 and 130 and 131, each with a grade of “C” or better, or equivalent; and English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.

Preparation of gourmet items, buffet specialties, hors d’oeuvres, and canapés. Sauté, broiler and roasting techniques. (FT) Transfer Credit: CSU and/or private coll/univ.

205 Decorative Techniques of Buffet Catering

3-15 hours lab, 1-5 units
Grade Only

Advisory: Food Service Occupations 105 and 110 and 130 and 131, each with a grade of “C” or better, or equivalent; and English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.

Decorative techniques in garde-manager work employing a diversity of food products. Includes buffet presentations, centerpieces, and culinary showpieces. Techniques of ice carving and sculpture. (FT) Transfer Credit: CSU and/or private coll/univ.

210 Baking and Pastry

6-15 hours lab, 2-5 units
Grade Only

Advisory: Food Service Occupations 105 and 110 and 130 and 131, each with a grade of “C” or better, or equivalent; and English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
A course in restaurant baking designed for students who intend to specialize in baking and pastry making instead of general cooking. Emphasis is placed on the more sophisticated items and gourmet specialties, including cakes and pastries for weddings, birthdays and special occasions. (FT) Transfer Credit: CSU and/or private coll/univ.

**270 Work Experience**
*Hours by Arrangement, 1-4 units*  
*Grade Only*

**Limitation on Enrollment:** To receive credit a student must complete a minimum of seven units during the semester, including work experience. Program of on-the-job learning experiences for students employed in a job related to their major. The combined maximum credit for all work experience courses from all disciplines may not exceed 16 units. Transfer Credit: CSU and/or private coll/univ.

**290 Independent Study**
*Hours by Arrangement; 3-9 hours lab, 1-3 units*  
*Grade Only*

**Limitation on Enrollment:** Must obtain an Add Code from instructor for registration. Individual projects and advanced study conducted during supervised laboratory periods. Credit is granted on the basis of one unit for three hours laboratory activity. This course may be taken four times with different content for a maximum of six units. Transfer Credit: CSU and/or private coll/univ.

**291 Food Service Practicum**
*3-9 hours lab, 1-3 units*  
*Grade Only*

**Limitation on Enrollment:** Enrollment in an approved related course; Must obtain an Add Code from instructor for registration. Practical experiences designed to supplement the basic curriculum. Includes special and short order food preparation and service, buffet service, catering, dining room management and service and receiving and storeroom procedures. Transfer Credit: CSU and/or private coll/univ.

*This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.*

**FRENCH (FREN)**

101 First Course in French  
*5 hours, 5 units*

**Advisory:** English 43 with a grade of “C” or better, or equivalent, or Assessment Skill Level W4.  
**Limitation on Enrollment:** This course is not open to students with credit for French 100.  
A continuation of French 101. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN FREN 2) (CAN FREN SEQ A = FREN 101 + 102)

102 Second Course in French  
*5 hours, 5 units*

**Prerequisite:** French 101 with a grade of “C” or better, or two years of high school French, or equivalent.  
**Limitation on Enrollment:** This course is not open to students with credit for French 100.  
A continuation of French 102. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN FREN 4) (CAN FREN SEQ A = FREN 101 + 102)

201 Third Course in French  
*5 hours, 5 units*

**Prerequisite:** French 201 with a grade of “C” or better, or three years of high school French, or equivalent  
**Limitation on Enrollment:** This course is not open to students with credit for French 199 or 200.  
A continuation of French 102. A continuation of grammar, and abundant exercises in hearing, speaking, reading and writing French. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN FREN 8) (CAN FREN SEQ B = FREN 201 + 202)

202 Fourth Course in French  
*5 hours, 5 units*

**Prerequisite:** French 201 with a grade of “C” or better, or equivalent.  
A continuation of French 201. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN FREN 10) (CAN FREN SEQ B = FREN 201 + 202)

210 The Grammar of Spoken French I  
*3 hours, 3 units*

**Prerequisite:** French 102 with a grade of “C” or better, or three years of high school French, or equivalent.
Advisory: Concurrent enrollment in French 201. French 210 is designed to give students abundant practice in developing oral and written fluency in the language. Topics providing basis for discussion and prepared talks will include everyday life situations, current events and French culture. (NOTE: Although French 210 may be taken after the completion of French 102, or three years of high school French, majors and minors are advised to take French 210 concurrently with French 201, if possible.) (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

211 The Grammar of Spoken French II

3 hours, 3 units
Prerequisite: French 210 with a grade of “C” or better, or three years of high school French, or equivalent. French 211 is a continuation of French 210 at a more advanced level. (NOTE: French majors and minors are advised to take French 211 concurrently with French 202, if possible.) (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

Garden Design
(See Architecture)

110 Introduction to Mapping and Geographic Information Systems

3 hours lecture, 3 units
Grade Only
Advisory: English 101 or 105 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.

This is an interdisciplinary course designed to introduce the mapping sciences. The primary focus is on electronic methods of cartography following a presentation of mapping concepts and methods. This course covers the history, structure and uses of the basic operations of Geographic Information Systems (GIS) including hardware and software requirements. This course also examines the role of other spatial technologies (aerial photography, remote sensing, and Global Positioning Systems (GPS) as they relate to GIS applications. This course is required for the GISG certificate program and the Associate in Science Degree in GIS. This course is also recommended for anyone who is using or anticipates using any type of data that can be expressed spatially. (FT) Transfer Credit: CSU and/or private coll/univ.

111 Geographic Information Systems: Intermediate Applications

3 hours lecture, 3 units
Grade Only
Prerequisite: Geographic Information Systems 110.

Students may take GISG 110 concurrently with approved petition to waive prerequisite. Students should consult with their instructor and department chair.

This course is a continuation of GISG 110. This course addresses hardware and software requirements for vector and raster, modeling and intermediate map analysis of digital data for analyzing and solving spatial application problems. Students acquire intermediate skills needed to implement a geographic information system. A semester project is required of each student. (FT) Transfer Credit: CSU and/or private coll/univ.

112 Spatial Analysis with Geographic Information Systems

3 hours lecture, 3 units
Grade Only
Prerequisite: Geographic Information Systems 110.

This course provides a general survey of the fundamentals of spatial information systems and a survey of quantitative techniques applicable to spatial data. This course is focused on the functionality of geographic information systems as effective tools for modeling and analyzing complex spatial relationships. Quantitative methods, including measures of central tendency, dispersion, density, samplings, strategies, statistical estimation and other basic principles of statistics are applied using empirical data. (FT) Transfer Credit: CSU and/or private coll/univ.

113 Advanced Geographic Information Systems Applications

3 hours lecture, 3 units
Grade Only
Prerequisite: Geographic Information Systems 111.
Advisory: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50.

This course introduces students to advanced topics, techniques and applications of geographic information systems (GIS). Students work on individual projects in specialized areas using GIS. Projects include hardware
and software requirements, methods of data acquisition, formulations of data standards, methods of base map development, cost benefits analysis and generation of presentation quality map layouts for specific GIS applications. Students evaluate the effectiveness of GISP as a tool in the decision making process by completing a GISP semester project. (FT) Transfer Credit: CSU and/or private coll/univ.

270 Geographic Information Systems Work Experience

1-4 hours by arrangement, 1-4 units
Grade Only

Prerequisite: Geographic Information Systems 111.
This course is a directed field study in which students apply classroom instruction to real world geographic information systems (GIS) projects in the community. Limitation on Enrollment: To receive credit, a student must complete a minimum of seven units during the semester, including Work Experience. Students arrange for faculty and department chair approval prior to enrolling in Work Experience. Students are supervised by a college faculty member while participating in a short-term work experience/internship program in a business or government agency that uses GIS. Work Experience students meet periodically with their assigned faculty member, complete interim reports, and present a final report. (FT) Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

101 Physical Geography

3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R6.

This course provides a critical survey of the physical, political, and economic characteristics of the major geographical regions of the world. The regions examined are Europe, North America, Latin American, Africa, Asia, Australia, and the Pacific Rim. Analysis of concepts such as spatial distribution of particular phenomena, factors that change regions, and human

101L Physical Geography Laboratory

3 hours, 1 unit
Corequisite: Completion of or concurrent enrollment in Geography 101.
Advisory: Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is an introduction to thematic cultural geography. The elements covered include population, race, language, religion, settlement patterns, political organization, economic activities, industry, and the regional distribution of these elements. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN GEOG 4)

102 Cultural Geography

3 hours, 3 units
Advisory: English 101 or English 105 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course provides a critical survey of the physical, political, and economic characteristics of the major geographical regions of the world. The regions examined are Europe, North America, Latin American, Africa, Asia, Australia, and the Pacific Rim. Analysis of concepts such as spatial distribution of particular phenomena, factors that change regions, and human

103 Introduction to Meteorology

3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

The composition, structure, and dynamics of the earth’s atmosphere. Meteorological processes and the resulting weather patterns are analyzed with reference to the cause and regional distribution of climate. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.
and environment interactions are explored. This course is designed to serve as an elective in the social sciences as part of a general education requirement for transfer students. (FT) Transfer Credit: CSU and/or private coll/univ; UC.

154 Introduction to Urban Geography

3 hours, 3 units

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

This course examines the evolution, function and form of world cities, with an emphasis on American cities and their problems. The social, economic, and technical forces that shaped the internal structure of cities are examined, together with future urban alternatives. Transfer Credit: CSU and/or private coll/univ.; UC.

290 Independent Study

Hours by Arrangement; 1-3 units

Limitation on Enrollment: Must obtain an Add Code from instructor for registration.

For students who wish to study special problems. This course may be taken four times with different content for a maximum of six units. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

101 General Geology Laboratory

3 hours lab, 1 unit

Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5; and completion of or concurrent enrollment in Geology 100. This laboratory course covers mineral and rock identification, landforms, topographic/geologic map interpretation, and geologic structures. The course is designed to supplement Geology 100 with laboratory experience. (FT) Transfer Credit: CSU and/or private coll/univ; UC. (CAN GEOL 2 when taken with Geology 100)

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

101 First Course in German

5 hours, 5 units

Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.

This course is not open to students with credit for German 100.

An introductory course stressing correct pronunciation and the ability to speak, understand and read the language of everyday life. Fundamentals of grammar and composition and a rapid reading of simple German are practiced. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN GERM 2) (CAN GERM SEQ A = GERM 101+102)

102 Second Course in German

5 hours, 5 units

Prerequisite: German 101 with a grade of “C” or better, or equivalent.

This course is not open to students with credit for German 100.

A continuation of German 101. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN GERM 4) (CAN GERM SEQ A = GERM 101+102)

201 Third Course in German

5 hours, 5 units

Prerequisite: German 102 with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is not open to students with credit for German 200. A continuation of German 102. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN GERM 8)

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

101 Health and Life-Style
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course studies aspects of mental, emotional, and physical health. Emphasis is placed on knowledge for development of attitude, understanding, and practice of a preventive life style for healthy living and optimal wellness. Specific instructional areas include chronic diseases, physical activity, nutrition, weight management, birth control methods, human sexuality, alcohol, tobacco and illicit chemical use, stress, and factors that contribute to wellness and longevity. Experience in personal health assessment and the changing of health behaviors is stressed. Satisfies State of California Health Education requirement for teaching credential. (FT) Transfer Credit: CSU and/or private coll/univ.

131 First Aid
3 hours, 3 units
This course satisfies the requirements of the American Red Cross and trains individuals who respond in emergency situations with the knowledge and skills necessary to help sustain life, reduce pain, and minimize the consequences of injury or sudden illness until more advanced medical help arrives. Students who successfully complete the course receive the following American Red Cross Certification: Emergency Response certification is valid for three years and CPR for the Professional Rescuer certification is valid for one year. Emergency Response certification is consistent with the U.S. Department of Transportation First Responder curriculum and exceeds the requirement of the California Health and Safety Code (Title 22). This course may be repeated as needed to update certification and skills. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

190 Health Education for Teachers
1 hour lecture, 1 unit
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course overviews health-related issues and problems in the kindergarten through 12th grade. Topic areas include Behavior modification, stress symptoms and management, physical activity, nutrition, cardiovascular disease, sexually transmitted diseases, illicit substance abuse, alcohol and nicotine use and misuse. This course satisfies the State of California Health Education requirement for the K-12 Teaching Credential. Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

105 Introduction to Health Information
3 hours lecture, 3 hours lab, 4 units
Grade Only
This course is an introduction to health care delivery systems; health information department functions; medical staff organization; health record storage, retrieval, and retention; quantitative and qualitative analysis of records; and release of information. This course is useful for those considering a career in health information and is required for students in the Health Information Technology program. (FT) Transfer Credit: CSU and/or private coll/univ.

125 Basic Pharmacology for Allied Health
2 hours, 2 units
Grade Only
This course is an introduction to pharmacology for Allied Health and other interested students and includes an historical overview of pharmacology. Also covered are basic pharmacologic terminology and concepts such as drug categories, mechanisms of drug action, drug forms, and routes of administration.
Generic and proprietary names are introduced for drugs prescribed for common diseases and disorders. (FT) Transfer Credit: CSU and/or private coll/univ.

155A ICD-9-CM Coding I

3 hours lecture, 3 hours lab, 4 units
Grade Only

Prerequisite: Medical Assisting 105 and 110, each with a grade of “C” or better, or equivalent.
This is an introductory course in the International Classification of Disease (ICD) coding system. It includes the basic coding guidelines applicable to coding signs and symptoms, diseases, disorders, and procedures as well as coding ethics. The student codes using both the code books and computer software program. (FT) Transfer Credit: CSU and/or private coll/univ.

155B ICD-9-CM Coding II

3 hours lecture, 3 hours lab, 4 units
Grade Only

Prerequisite: Health Information Technology 155A with a grade of “C” or better, or equivalent.
This course is a continuation of Health Information Technology 155A with an emphasis on advanced principles of ICD-9-CM coding of conditions, diseases, and procedures. Students code using both code books and computer software. This course includes coding, indexing, retrieval, and abstracting of patient data, along with instruction on how codes generate DRG’s and how case mix is derived. (FT) Transfer Credit: CSU and/or private coll/univ.

155C CPT Coding

1 hour lecture, 1.5 hours lab, 1 unit
Grade Only

This introductory course on CPT coding prepares the student to code procedures and services performed by physicians and includes coding from the six divisions of CPT (Evaluation and Management, Anesthesia, Surgery, Radiology, Pathology, and Medicine). HCPCS local and national codes are also covered. The course introduces insurance requirements for CPT codes and federal compliance rules. (FT) Transfer Credit: CSU and/or private coll/univ.

156 Hospital and Health Statistics

2 hours lecture, 3 hours lab, 3 units
Grade Only

Limitation on Enrollment: This course is not open to students with credit for Medical Record Technology 156. This course provides instruction in the basic principles of data collection and calculation of hospital and non-acute facility health statistics. Calculation of Health Information Management Department statistics is included. In addition, the course covers the calculation of specific vital statistics as well as discharge analysis reporting. There is instruction in the preparation of monthly and annual medical, administrative, and outside agency reports utilizing tables and graphs. Practice in the interpretation of statistical reports is also provided. (FT) Transfer Credit: CSU and/or private coll/univ.

205 Health Law, Accreditation and Licensing Standards

3 hours, 3 units
Grade Only

Advisory: Health Information Technology 105 with a grade of “C” or better, or equivalent.
This course covers the legal aspects of health information management including the American legal system and causes of medical malpractice. State, federal and other agency rules regarding record access, retention, release of information, processing subpoenas, and confidentiality are also included. Accreditation, licensing, and certification requirements for acute as well as non-acute health care facilities are included. (FT) Transfer Credit: CSU and/or private coll/univ.

258 Quality Assessment, Utilization Review & Risk Management

3 hours, 3 units
Grade Only

This course introduces the concepts of quality assessment (QA), utilization review (UR), and risk management (RM) in health care. Topics included are purpose, philosophy, historical development, analysis techniques, and program development strategies. Quality assessment activities in medical staff appointment/reappointment are covered. Additional topics include physician confidentiality issues and key concepts in continuous quality improvement (CQI). (FT) Transfer Credit: CSU and/or private coll/univ.

260 Principles of Supervision and Administration

3 hours, 3 units
Grade Only

This course introduces the basic concepts of personnel supervision including role transition, recruitment, training, performance standards, discipline, and performance evaluation. Other topics include writing job descriptions and policy and procedure manuals. Budget management, department layout/design,
meetings management, stress and time management are also included. (FT) Transfer Credit: CSU and/or private coll/univ.

261 Directed Clinical Practice A  
10 Hours Weekly by Arrangement; 2 units  
Grade Only

Prerequisite: Health Information Technology 105 and Medical Assisting 115, each with a grade of "C" or better, or equivalent.

This course provides actual professional practice for the Health Information Technology student in a health information services department in selected health care facilities affiliated with the college. Students are given experience in entry level clerical skills performed in the department, such as the following: patient admitting and discharge procedures and release of information. The student is given a detailed orientation of the facility dictation and transcription systems. Transfer Credit: CSU and/or private coll/univ.

262 Directed Clinical Practice B  
15 Hours Weekly by Arrangement; 3 units  
Grade Only

Prerequisite: Health Information Technology 155B with a grade of "C" or better, or equivalent.

This course provides actual professional practice in a health information services department in selected health care facilities affiliated with the college. The Health Information Technology student is given experience in areas such as coding and abstracting, data collection for statistical reports, personnel supervision and department administration, quality assessment, department computer applications, and other activities as appropriate. Transfer Credit: CSU and/or private coll/univ.

290 Independent Study  
Hours by Arrangement; 1-3 units  
Grade Only

Limitation on Enrollment: Must obtain an Add Code from instructor for registration.

Provides for additional research, academic or clinical experiences for students with special interests. The course consists of individualized research problems, conferences with the instructor at prearranged intervals and a final written report on the work completed. This course may be taken four times with different content for a maximum of six units. (FT) Transfer Credit: CSU and/or private coll/univ.

Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

HISTORY (HIST)

100 World History I  
3 hours, 3 units  
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

The growth of civilizations and the interrelationships of peoples of Europe, Asia, Africa and America to 1650. Transfer Credit: CSU and/or private coll/univ.; UC. (CAN HIST 14) (CAN HIST SEQ C = HIST 100 + 101)

101 World History II  
3 hours, 3 units  
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

The growth of civilizations and the interrelationships of peoples of Europe, Asia, Africa and America since 1650. Transfer Credit: CSU and/or private coll/univ.; UC. (CAN HIST 16) (CAN HIST SEQ C = HIST 100 + 101)

105 Introduction to Western Civilization I  
3 hours, 3 units  
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

A broad study of the major elements in the Western heritage, from the world of the earliest civilizations to that of the Reformation, designed to further the beginning student’s general education, introduce him/her to the ideas, attitudes, and institutions basic to Western civilizations. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN HIST 2) (CAN HIST SEQ A = HIST 105 + 106)

106 Introduction to Western Civilization II  
3 hours, 3 units  
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

Traces Western civilization from the Scientific Revolution to the present. (FT) Transfer Credit: CSU
and/or private coll/univ.; UC. (CAN HIST 4) (CAN HIST SEQ A = HIST 105 + 106)

109 History of the United States I
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with previous credit for Black Studies 112A, 140A or History 110A.
This course, which covers the history of the United States from its colonial origins through the period of Reconstruction, provides an overview of the diverse peoples who interacted, settled, and influenced the history of the nation and its developing economic, social, and political institutions. The course requires students to analyze a variety of materials, think critically, and write thesis-based essays. The course is required for history majors and is recommended for transfer students. History 109 taken in conjunction with History 110, 115B, 123, 151; Black Studies 140B; Chicano Studies 141B; or Political Science 102 satisfies the District and may satisfy the CSU graduation requirements in United States History, Constitution, and American Institutions and the requirement in California state and local government. History 110 also satisfies the District and CSU requirements in California state and local government for those students who have completed equivalent United States history, Constitution, and American Ideals courses outside the State of California. (FT) Transfer Credit: CSU and/or private coll/univ; UC Transfer Credit: History (HIST) 109, 110 combined with 150, 151, Black Studies 140AB or Chicano Studies 141AB: maximum credit, one series. (CAN HIST 10) (CAN HIST SEQ B = HIST 109 + 110).

110 History of the United States II
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with previous credit for Black Studies 112B, 140B, or History 110B.
This course, which covers the history of the United States from Reconstruction to the present, provides an overview of the diverse peoples who influenced the history of the nation and its maturing economic, social, and political institutions. The course requires students to analyze a variety of materials, think critically, and write thesis-based essays. The course is required for history majors and is recommended for transfer students. History 110 taken in conjunction with History 110, 115A, 150; Black Studies 140A; or Chicano Studies 141A satisfies the District and may satisfy CSU requirements in United States History, Constitution, and American Institutions and the requirement in California state and local government. History 110 also satisfies the District and CSU requirements in California state and local government for those students who have completed equivalent United States history, Constitution, and American Ideals courses outside the State of California. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

113 Race in United States History
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course examines how people of the United States have conceived of race through time, and the patterns of race relations, from the colonial era to the present. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

115A History of the Americas I
3 hours lecture, 3 units
Advisory: English 51 and English 56, each with grade of “C” or better or equivalent, or Assessment Skill Levels W5 and R5.
This course provides a framework for interpreting the history of the Americas, from 1500 through 1800. This survey examines how diverse peoples migrated or were transported to perform labor among indigenous peoples of varying levels of social organization and technological sophistication. The course includes treatment of how these peoples interacted and reciprocally influenced each others’ cultural forms, political institutions, social relations, and economics. Emphasizing the comparative history of these societies, the course traces the eventual emergence of independence movements setting the stage for establishment of autonomous nation states. The course also traces the simultaneous development and evolution of capitalism in the Western Hemisphere during the period. This course requires students to analyze a variety of source materials, think critically, and write thesis-based essays. This general education course is designed for both history majors and the general transfer student. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

115B History of the Americas II
3 hours lecture, 3 units
Advisory: English 51 and English 56, each with grade of “C” or better or equivalent, or Assessment Skill levels W5 and R5.
This course provides a framework for interpreting the history of the Americas, from the 19th century into the 21st century. This survey examines the independence movements and the development of autonomous nation states throughout the Americas. Emphasizing the comparative history of these societies, the course traces Roman Catholic Church-state relations, the constitutional history of Latin American nations in relation to California, the United States, and Canada, including 20th century constitutional reforms. The course also outlines economic shifts, involving the expansion of agricultural commodity production, global commerce, and industrialization. Finally, the course highlights international relations among nations in the Western Hemisphere, the cold War, and the impact of modernization theory. This general education course is designed for both history majors and the general transfer student. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

**120 Introduction to Asian Civilizations**  
3 hours lecture, 3 units  
**Grade Only**

*Advisory:* English 51 and 56, each with a grade of "C" or better, or equivalent, or W5 and R5.

Students learn about early seventeenth century Asian culture, thought, and institutions. Subjects include governmental development, cultural and artistic achievements, philosophy, and religion. This course is intended for transfer students planning to major in history, business, or other social science. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

**121 Asian Civilizations in Modern Times**  
3 hours lecture, 3 units  
**Grade Only**

*Advisory:* English 51 and English 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.

This course examines the evolution of the distinct cultures, thought, and institutions in East, South, and Southeast Asia from the sixteenth century to the present through critical investigations into the impact of modernization on the political, social, economic, and cultural dimensions of these societies. Emphasis is placed on topics such as the first encounters with Western powers, the evolution of Western imperialism, the rise of nationalist movements and independent nation states, and their evolution and progress to the present. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

**123 U.S. History from the Asian Pacific American Perspective**  
3 hours lecture, 3 units  
**Grade Only**

*Advisory:* English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.

*Limitation on Enrollment:* This course is not open to students with previous credit in Black Studies 112 or 140 or History 110 and 110B.

This course is a review of Asian Pacific Americans in the social, political, economic and cultural development of the United States from Reconstruction to the present. The emphasis is on the Chinese, Japanese, Korean, Filipino, Vietnamese, Cambodian, Lao, Hmong, and Hawaiian experiences. This course presents American history as it relates to the experience of Asian immigrants and Asian Pacific Americans. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

**125 History of England and the Commonwealth I**  
3 hours, 3 units  
**Grade Only**

*Advisory:* English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.

A survey of the cultural, economic, and political growth of England from the earliest times to the eve of the American Revolution. The origin of Anglo-American liberties, the common law, and constitutional government are traced. England's emergence to a central position in a world empire is developed. Transfer Credit: CSU and/or private coll/univ.; UC.

**126 History of England and the Commonwealth II**  
3 hours, 3 units  
**Grade Only**

*Advisory:* English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.

England's leadership during the Napoleonic Wars is traced, followed by the significance of England in the Industrial Revolution. England's influence on world politics during the Victorian era is followed by a consideration of the British Empire in the twentieth century. Emphasis is placed on the development of the Commonwealth, the common interests and aspirations of the English-speaking countries, and the spread of the Anglo-American heritage of individual freedoms under the law. Transfer Credit: CSU and/or private coll/univ.; UC.
130 The Middle East Today
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course will develop an understanding of the contemporary Middle Eastern culture by tracing their origins in the religious, social, and political history of the area. Covers the forces of the intrusion of Western thought, the breakdown of traditional values, evolving political patterns, and the problems of communication between Easterner and Westerner. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

141 Women in United States History I
3 hours lecture, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or W5 and R5.
This course, which covers the history of the United States from its colonial origins through the period of Reconstruction, provides a special emphasis on the history and role of women, who in their diverse contributions influenced the history of the nation and its developing economic, social, and political institutions. The course requires students to analyze a variety of materials, think critically, and write thesis-based essays. This course may be of interest to students interested in Women's Studies. (FT) Transfer Credit: CSU and/or private coll/univ.

142 Women in United States History II
3 hours lecture, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or W5 and R5.
This course, which covers the history of the United States from Reconstruction to the present, provides an overview of the diverse peoples who influenced the history of the nation and its maturing economic, social and political institutions, with a special emphasis on the history and role of women. This course requires students to analyze a variety of materials, think critically, and write thesis-based essays. This course may be of interest to students interested in Women's Studies. (FT) Transfer Credit: CSU and/or private coll/univ.

150 Native Americans in United States History
3 hours lecture, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course covers the history of the United States from the Pre-contact Colonial Period to the mid-nineteenth century, with an emphasis on the history of Native American Indians, the development of United States Indian policy, and the interaction of divergent cultures. This course requires students to analyze a variety of materials, think critically, and develop thesis-based essays. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: History (HIST) 109, 110 combined with History (HIST) 150, 151, Black Studies (BLAS) 140AB or Chicano Studies (CHIC) 141AB: maximum credit, one series.

151 Native Americans in United States History
3 hours lecture, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or W5 and R5.
This course covers the history of the United States from the Civil War to the present, with an emphasis on the history of Native American Indians, changing United States Indian policy, and the interaction of divergent cultures. This course requires students to analyze a variety of materials, think critically, and write thesis-based essays. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: History (HIST) 109, 110 combined with History (HIST) 150, 151, Black Studies (BLAS) 140AB or Chicano Studies (CHIC) 141AB: maximum credit, one series.

154 Ancient Egypt
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course provides a study of the geography, history, life, society, religion, art, archaeology, language, architecture, literature, diplomacy and economics of ancient Egypt from the first dynasty to the Roman occupation. (FT) Transfer Credit: CSU and/or private coll/univ.

155 Introduction to Classical Civilization
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is an introduction to classical Greek and Roman civilization. The political and cultural evolution of these societies on a continuous time basis and their relationships. Ideological and societal advances will be analyzed as to their relevance to the 20th Century. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.
168 The United States in Vietnam
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A lecture and video course in the history of the United States involvement in Southeast Asia between 1945 and 1975. The course incorporates one of the most comprehensive recent studies of the era, “Vietnam: A Television History,” produced by Boston’s public television station WGBH in 1983. The emphasis throughout will be on the motivations leading the United States into the Vietnam War, and the impact of that involvement on American society. There will be some focus on internal Southeast Asian developments, but this will be secondary. Transfer Credit: CSU and/or private coll/univ.

171 Twentieth Century America on Film
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A film class designed to illustrate the people and events which shaped United States history in the 20th Century. Focus is placed upon personalities in Europe as well as America who made key decisions which affected historical movements. Documentary footage is emphasized. Transfer Credit: CSU and/or private coll/univ.

175 California History
3 hours lecture, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or W5 and R5.
This course, which covers the history of California from its earliest times to the present, provides an overview of both the physical characteristics and the diverse peoples of California and how they interacted and influenced the history of this state and its economic, social, cultural, and political institutions. The course requires students to analyze a variety of materials, think critically, and write thesis-based essays. This course may be of special interest to students planning a career in education. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.
This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

**HUMANITIES (HUMA)**

### 101 Introduction to the Humanities I

**3 hours, 3 units**

**Advisory:** English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

The development of an understanding and appreciation of mankind’s cultural heritage from the earliest times to approximately 1500. A survey will be made of the literature, philosophy, music, painting, architecture, and sculpture of both Western and Eastern civilizations during this period of time. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

### 102 Introduction to the Humanities II

**3 hours, 3 units**

**Advisory:** English 101 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.

This interdisciplinary course is designed for students interested in meeting general education requirements in humanities. The course develops students’ understanding and appreciation of humankind’s cultural heritage from approximately 1400 CE to the present time. A survey is made of the literature, philosophy, music, painting, architecture, and sculpture of both Western and non-Western civilizations. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

### HUMANITIES-RELIGIOUS STUDIES (HUMA)

### 103 Introduction to the New Testament

**3 hours lecture, 3 units**

**Advisory:** English 101 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course provides an introduction to the history and culture of the New Testament period (First Century C.E.), methods of critical analysis of Biblical materials, and the content of the New Testament. It also examines the impact of the New Testament on western culture. This course may be of interest to students of history, literature, anthropology or those with a general interest in biblical studies. (FT) Transfer credit: CSU and/or private coll/univ.; UC.

### 104 Introduction to the Old Testament

**3 hours lecture, 3 units**

**Advisory:** English 51 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5.

This course is an introduction to the texts and development of the Old Testament (Hebrew Bible) through a critical reading of its writings, taking into account its relevant history, cultural influences, the original language, and the important events, personages/characters, ideas, and beliefs of ancient Israel. Also addressed are the contributions of other disciplines to a critical understanding of Hebrew Scriptures, including archaeology, literature, history, current Biblical scholarship and criticism, and women’s studies. This course may be of particular interest to students in literature, anthropology, and other such disciplines. Transfer credit: CSU and/or private coll/univ.; UC.

### 106 World Religions

**3 hours, 3 units**

**Advisory:** English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

This course is an introduction to the basic elements of the religions of the world, their similarities and differences, and their impact on believers and society. The course includes a study of the historical development, basic doctrines, and important sects of the major religions of the world, as well as a study of scriptural and artistic creations from these traditions. Some analysis of tribal religious beliefs and practices is included. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

### HUMANITIES-INTERDISCIPLINARY (HUMA)

(Related courses: Speech 180 and Music 125.)

### 201 Mythology

**3 hours, 3 units**

**Advisory:** English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R6.

This course introduces students to the major images and themes of the myths of widely separated peoples of the world throughout history. By analyzing various archetypal patterns found in the great civilizations and tribal cultures of the world, students understand both the uniqueness of each culture’s world view and the commonality of human mythological conceptions.
Literature and the arts are used to demonstrate these cultures’ mythic ideas. This course meets GE and CSU requirements. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Humanities (HUMA) 201 and 203A,B,C combined: maximum credit, two courses.

202 Mythology: Hero’s Journey
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Analysis of the hero’s journey, internal and external, as reflected in myths of the world, with consideration of such phenomena as the “shadow,” the “double,” the “other.” Also, exposure to art in which the hero’s journey is thematic. Transfer Credit: CSU and/or private coll/univ.

205 Exploring Human Values Through Films
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
In this course students become familiar with film as an art form that expresses humanistic values. The course covers basic film techniques used to realize the ideas, values, morals, and social ideologies expressed in various thematically related films, and the important influence of the humanities on this popular art form and its viewers. This course is designed for students who are interested in film and in the impact of human values on this artistic medium, the individual, and society. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

290 Independent Study
Hours by Arrangement; 1-3 units
Limitation on Enrollment: Must obtain an Add Code from instructor for registration.
For students who evidence ability and interest in pursuing special studies in Humanities. This course may be taken four times with different content for a maximum of six units. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.
This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

101 Introduction to Interior Design
3 hours, 3 units
Grade Only
Advisory: English 51 with a grade of “C” or better, or equivalent, or Assessment Skill Level W5.
This course is an introduction to the profession of interior design with emphasis on the basic concepts of planning and functional design. The course covers analysis and application of methods of the design process as it relates to the decisions that determine how an interior space is to be created. Exercises and simple projects will advance the student’s creative capabilities. Transfer Credit: CSU and/or private coll/univ.

105 Residential Design
2 hours lecture, 3 hours lab, 3 units
Grade Only
Prerequisite: Interior Design 101 and 112A, each with a grade of “C” or better, or equivalent.
Advisory: English 56 and Mathematics 32 each with a grade of “C” or better, or equivalent, or Assessment Skill Levels R5 and M20.
This course introduces the interior design student to the planning of residential interiors. Emphasis is placed on the interrelationship of interior elements, principles, space planning, and conceptual problem solving in three-dimensional space. This course is designed for those students planning to major in the field as well as for those students interested in interior design. (FT) Transfer credit: CSU and/or private coll/univ.

110 Materials and Resources
3 hours lecture, 3 units
Grade Only
Prerequisite: Interior Design 101 and 112A, each with a grade of “C” or better, or equivalent.
Advisory: English 56 and Mathematics 32 each with a grade of “C” or better, or equivalent, or Assessment Skill Levels R5 and M20.
This course emphasizes the technical specification of finishes, furnishings, and equipment needed to complete a variety of interior environments. Product knowledge, available resources, industry procedures, and terminology are incorporated. Liabilities and regulations as they pertain to the professional interior designer are covered. Finishes, furnishings, and
equipment estimated and specified are graphically designated on drafted plans and elevations. This course is designed for those students planning to major in this field as well as for students interested in interior design. (FT) Transfer credit: CSU and/or private coll/univ.

**112A Drafting for Interiors**

*3 hours lecture, 3 hours lab, 3 units Grade Only*

Advisory: English 56 and Mathematics 32 with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and M20.

This course introduces the interior design student to the tools and techniques necessary for interior architectural drafting. Emphasis is on lettering, line quality, measuring techniques, scale problems, use of architectural graphic standards, dimensioning, and drafting plans, elevations, and sections. This course is designed for those students planning to major in this field as well as for students interested in interior design. (FT) Transfer credit: CSU and/or private coll/univ.

**112B Conceptual Drawings for Interiors II**

*3 hours, 3 units Grade Only*

Advisory: Interior Design 112A with a grade of "C" or better, or equivalent; and Mathematics 32 with a grade of "C" or better, or equivalent, or Assessment Skill Level M20; and English 56 with a grade of "C" or better, or equivalent, or Assessment Skill Level R5.

This course is a continuation of 112A with advanced exercises, procedures and projects. The student's skills in lettering and drafting rendered floor plans and elevations will be refined. Quick sketching of interiors will lead to the theories and laws of perspective. Projections from blueprints or location sketches with measurements will be used to create orthographic, paraline, and one and two-point perspective drawings of interiors. Transfer Credit: CSU and/or private coll/univ.

**115 Lighting and Color**

*3 hours, 3 units Grade Only*

Advisory: Interior Design 101 and 112A, each with a grade of "C" or better, or equivalent; and Mathematics 32 with a grade of "C" or better, or equivalent, or Assessment Skill Level M20; and English 56 with a grade of "C" or better, or equivalent, or Assessment Skill Level R5.

An introductory course involved in developing color schemes and creating aesthetically effective lighting for interiors. (FT) Transfer Credit: CSU and/or private coll/univ.

**125 Decorative Arts**

*3 hours, 3 units Grade Only*

Advisory: English 56 with a grade of "C" or better, or equivalent, or Assessment Skill Level R5.

This course surveys the decorative arts from all parts of the world from the ancient past to today's modern interiors. The course will include how major developments in the decorative arts relate to the historical and social events of each period. (FT) Transfer Credit: CSU and/or private coll/univ.

**130 Interior Design Professional Practice**

*3 hours lecture, 3 units Grade Only*

Prerequisite: Interior Design 105 with a grade of "C" or better, or equivalent.

Advisory: English 56 and Mathematics 32 each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and M20.

This course examines the business and management of a professional interior design practice. Included are client/designer communication, phases of design, project management, legal issues, business practices, marketing, and project presentation. This course is designed for those students planning to major in this field as well as for students interested in interior design. (FT) Transfer credits: CSU and/or private coll/univ.

**145 Contemporary Housing**

*3 hours lecture, 3 units Grade Only*

Prerequisite: Interior Design 101 and 112A, each with a grade of "C" or better, or equivalent.

Advisory: English 56 and Mathematics 32 each with a grade of "C" or better, or equivalent, or Assessment Skill Levels R5 and M20.

This course provides an overview of the basic structural systems of modern buildings. The student is introduced to the materials and methods of construction with an emphasis on the relationship of these issues to interior design projects. It creates an understanding of available materials for an awareness of building options when designing a living environment. It explores the legal, social, and economic forces that affect housing design. Provided is an overview of the technical aspects of basic building systems as they relate to design and the building industry. This course is designed for those
students planning to major in this field as well as for students interested in interior design. (FT) Transfer credit: CSU and/or private coll/univ.

200 Advanced Residential Space Planning
3 hours, 3 units
Grade Only
Advisory: Interior Design 101 and 112A, each with a grade of “C” or better, or equivalent; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
This course provides problem-solving exercises in residential interior spaces. Programming, space planning, and the selection of all finish materials and furniture will be included. Students will consider the architecture, the functional requirements, and the individual lifestyle of the client as they relate to the development of interior design. Transfer Credit: CSU and/or private coll/univ.

205 Non-Residential Space Planning
3 hours, 3 units
Grade Only
Advisory: Interior Design 101 and 112A, each with a grade of “C” or better, or equivalent; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
In this course students will learn to analyze and solve non-residential space planning problems and will present their solutions through designed and drafted projects. A variety of spaces will be addressed and may include professional offices, medical facilities, institutional facilities, hospitality facilities, and other specialty spaces. Transfer Credit: CSU and/or private coll/univ.

210 Presentation and Color Rendering
3 hours, 3 units
Grade Only
Advisory: Interior Design 101 and 112A, each with a grade of “C” or better, or equivalent; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
This course will emphasize developing the student’s color rendering skills and presentation methods. The student will quick sketch, draft and color render floor plans, elevations and perspective drawings with a variety of techniques. Transfer Credit: CSU and/or private coll/univ.

212 Interior Design Computer Aided Design
2.5 hours lecture, 1.5 hours lab, 3 units
Grade Only
Advisory: Interior Design 112A with a grade of “C” or better, or equivalent; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
This is a beginning level course in computer drawing skills for interior design students. Emphasis will be on interior space planning, presentation graphics, and business forms and charts. Transfer Credit: CSU and/or private coll/univ.

215 Environmental Lighting Design
3 hours, 3 units
Grade Only
Advisory: Interior Design 101 and 112A, each with a grade of “C” or better, or equivalent; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
Students will solve problems in lighting design for non-residential interiors. Contemporary lighting technologies and materials will be stressed for the completion of the student’s electrical and reflected ceiling plans. Emphasis will be placed on cost and California’s Title 24 requirements. Transfer Credit: CSU and/or private coll/univ.

270 Work Experience
Hours by Arrangement, 1-4 units
Grade Only
Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, including work experience.
Program of on-the-job learning experiences for students employed in a job related to their major. The combined maximum credit for all work experience courses from all disciplines may not exceed 16 units. Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.
101 First Course in Italian
5 hours, 5 units
Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
Limitation on Enrollment: This course is not open to students with previous credit for Italian 100.
This is the first course in the sequence of study of the Italian language and culture. In this interactive course, students use Italian in speaking, listening, reading, and writing at the novice level. Basic language structures and vocabulary for communication are examined and explored in Italian. Students with two years of high school Italian are eligible to enroll in Italian 101. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ITAL 2) (CAN ITAL SEQ A = ITAL 101 + 102)

102 Second Course in Italian
5 hours lecture, 5 units
Prerequisite: Italian 101 with a grade of “C” or better, or equivalent. Students with two years of high school Italian are eligible to enroll in this course.
Advisory: concurrent enrollment in Italian 296
Limitation on Enrollment: This course is not open to students with previous credit for Italian 100.
This is a continuation of Italian 101. In this interactive course, students use listening, reading, speaking and writing at a more complex level. The students further develop their receptive and productive language competencies at the low- to mid-intermediate level. Additional language structures and vocabulary for communication are examined and explored in Italian.
(FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ITAL 4) (CAN ITAL SEQ A = ITAL 101 + 102)

201 Third Course in Italian
5 hours lecture, 5 units
Prerequisite: Italian 102 with a grade of “C” or better, or equivalent or three years of high school Italian with a grade of “C” or better, or equivalent.
Advisory: Concurrent enrollment in Italian 296.
This is an intermediate course in Italian. In this interactive course, students use the language through speaking, listening, reading and writing at the intermediate level. More complex language structures and vocabulary for communication are examined and explored.
(FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN ITAL 8)

101 First Course in Japanese
5 hours, 5 units
Advisory: English 43 with a grade of “C” or better, or equivalent, or Assessment Skill Level W4.
Limitation on Enrollment: This is an entry-level course designed to introduce students to the Japanese language and cultures of Japan. In this interactive course, students learn and use the language by speaking, listening, reading, and writing at the novice level. Basic language structures and vocabulary for communication are examined and explored in Japanese.
(FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN JAPN 2) (CAN JAPN SEQ A = JAPN 101 + 102)

102 Second Course in Japanese
5 hours, 5 units
Prerequisite: Japanese 101 with a grade of “C” or better, or equivalent, or two years of high school Japanese with a grade of “C” or better, or equivalent.
This is a continuation of Japanese 101. In this interactive course, students use listening, reading, speaking and writing at a more complex level. Students further develop their receptive and productive competencies to the low- or mid-intermediate level. Additional language structures and vocabulary for communication are examined and explored in Japanese.
Transfer Credit: CSU and/or private coll/univ.; UC. (CAN JAPN 4) (CAN JAPN SEQ A = JAPN 101 + 102)

201 Third Course in Japanese
5 hours, 5 units
Prerequisite: Japanese 102 with a grade of “C” or better, or equivalent. Students with three years of high school Japanese are eligible to take this course.
This is an intermediate course and is the third in the Japanese language sequence. In this interactive course, students use the language through speaking, listening, reading and writing at the intermediate level. More complex language structures and vocabulary for communication are examined and explored in Japanese 201.
Transfer Credit: CSU and/or private coll/univ.; UC. (CAN JAPN 8) (CAN JAPN SEQ B = JAPN 201 + 202)
202 Fourth Course in Japanese
5 hours lecture, 5 units
Prerequisite: Japanese 201 with a grade of "C" or better, or equivalent or four years of high school Japanese with a grade of "C" or better, or equivalent.
Advisory: Concurrent enrollment in Japanese 296.
This is an advanced-intermediate course and is the fourth in the Japanese language sequence. In this interactive course, students use the language through speaking, listening, reading, and writing at the advanced-intermediate level. More complex language structures and vocabulary for communication are examined and explored. Readings of literary and/or culturally relevant authentic materials are examined in depth in Japanese 202. This course is designed for students who have a strong interest in Japanese language and culture and is a core course in the Japanese major. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.
(CAN JAPN 10) (CAN JAPN SEQ B = JAPN 201 + 202)

210 Conversation and Composition in Japanese I
3 hours, 3 units
Prerequisite: Japanese 102 with a grade of "C" or better, or equivalent.
This course further develops oral comprehension and fluency as well as written communication at a mid-intermediate level in Japanese through culturally relevant materials. Students increase vocabulary, dramatize everyday topics of conversation, interpret and describe materials and compare and contrast Japanese culture with U.S. culture both orally and in writing. Writing strategies are emphasized and literature is introduced. This course is intended for students who wish to enhance their skills in the Japanese language. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

211 Conversation and Composition in Japanese II
3 hours, 3 units
Prerequisite: Japanese 210 with a grade of "C" or better, or equivalent.
This course further develops oral comprehension and fluency as well as written communication at an advanced-intermediate level in Japanese through culturally relevant materials. Students further increase vocabulary, dramatize everyday topics of conversation, interpret and describe materials and compare and contrast Japanese culture with U.S. culture both orally and in writing. Pre-reading strategies introduced in Japanese 210 are used as a basis upon which to build course emphasis in reading. More literature is introduced. This course is intended for students who want to further enhance their skills in Japanese. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.
This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

200 Introduction to Newswriting and Reporting
2 hours lecture, 3 hours lab, 3 units
Advisory: English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course serves as preparation for the major for students preparing to transfer and is also intended to serve as an elective for students interested in learning to write for newspapers and other publications. The course is an introduction to evaluating, gathering, and writing news in accepted journalistic style under newsroom conditions. Topics include the role of the reporter and the legal and ethical issues related to reporting. Students have writing and reporting experiences, including personal interviews, speech, meeting and other event coverage, deadline writing, and use of AP style. (FT) Transfer Credit: CSU and/or private coll/univ. (CAN JOUR 2)

210A Journalism Workshop I
Hours by Arrangement; 6-9 hours lab, 2-3 units
Advisory: English 51 and English 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is designed to provide experience in the production and publication of a student newspaper. Emphasis is placed on helping beginning students gain experience in the gathering and writing of news and features. Students at this level learn the basic principles of reporting, news writing, copy editing, photography, and newspaper design and layout. Assignments focus on routine stories, and may include editorials or features such as profiles. Copy editing is limited to reading for technical errors. This class is designed for students with an interest in print media and provides instruction in the journalistic process on an entry level. Skills developed in this course include
research techniques and the evaluation and analysis of information. Students are guided by ongoing advice, criticism, and evaluation from a faculty adviser. Students enrolled in the course for 2 units are expected to participate in the production of the student newspaper for at least 6 hours per week, while students enrolled for 3 units are expected to participate at least 9 hours per week and contribute more extensively to the layout and/or production of the paper. (FT) Transfer Credit: CSU and/or private coll/univ.

210B Journalism Workshop

Hours by Arrangement; 6-9 hours lab, 2-3 units
Prerequisite: Journalism 210A with a grade of “C” or better, or equivalent.
Experience in production and publication of a student newspaper accompanied by ongoing advice, criticism and evaluation from the faculty advisor. Emphasis is on planning, laying out, editing, pasting up and proofreading, but with continued experience in gathering and writing news, editorials, and in-depth stories. (FT) Transfer Credit: CSU and/or private coll/univ.

210C Journalism Workshop

Hours by Arrangement; 6-9 hours lab, 2-3 units
Prerequisite: Journalism 210B with a grade of “C” or better, or equivalent.
Experience in production and publication of a student newspaper accompanied by ongoing advice, criticism and evaluation from a faculty advisor. Emphasis is on editorial aspects of newspaper production. (FT) Transfer Credit: CSU and/or private coll/univ.

210D Journalism Workshop

Hours by Arrangement; 6-9 hours lab, 2-3 units
Prerequisite: Journalism 210C with a grade of “C” or better, or equivalent.
Experience in production and publication of student newspaper accompanied by ongoing advice, criticism, and evaluation from faculty advisor. This is an elective course that does not count toward the A.A. Degree. It is designed for those students who want to use workshop situations in which to sharpen their skills and to develop skills other than those learned in Journalism 210A, 210B, 210C. (FT) Transfer Credit: CSU and/or private coll/univ.

101 First Course in Latin

5 hours, 5 units
Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5 and concurrent enrollment in LATI 296.
This is the first of a three-course sequence in Latin providing beginning level instruction in classical Latin language and culture. In this course, students study classical Latin grammar, syntax and pronunciation at the novice level. Elementary translations from Latin to English and English to Latin are accomplished. Basic language structures and vocabulary are examined and explored. This course is intended for students interested in language study and linguistics, and meets general education requirements in the humanities. Transfer Credit: CSU and/or private coll/univ.; UC.

102 Second Course in Latin

5 hours lecture, 5 units
Prerequisite: Latin 101 with a grade of “C” or better, or equivalent.
Advisory: English 56 with a grade of "C" or better, or equivalent, or Assessment Skill Level R5 and LATI 296 with a grade of "C" or better, or equivalent.
This is a continuation of Latin 101. In this course, students study classical Latin grammar, syntax and pronunciation at the novice-mid level. A special emphasis is placed on classical Latin culture as well. Translations from Latin to English and English to Latin. Additional language structures and vocabulary are examined and explored in the target language. This course is intended for students interested in language study and linguistics, and meets general education requirements in the humanities. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

201 Third Course in Latin

5 hours, 5 units
A continuation of Latin 102. Review of grammar. Syntax of classical prose and poetry. Transfer Credit: CSU and/or private coll/univ.; UC.
or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

Legal Administrative Assistant
See Computer Business Technology (CBTE)

LIBRARY SCIENCE (LIBS)

101 Information Literacy and Research Skills
1 hour lecture, 1 unit
Advisory: English 51 or English 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Level W5 or R5.

This course is an overview of information resources and the skills required to use them effectively. Through lectures, hands-on assignments, and other methods, students learn how to use library resources such as electronic indexes and databases, online services, and the Internet as well as develop strategies for conducting research. This course is intended for students who wish to acquire skills that enable them to find information for academic research, career demands, and/or lifelong learning. (FT) Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

MARKETING (MARK)

100 Principles of Marketing
3 hours, 3 units
Grade Only

Survey of the nature, scope, and significance of marketing. Study of channels of distribution, the consumer, marketing policies and practices, public and private regulations. (FT) Transfer Credit: CSU and/or private coll/univ.

105 Professional Selling
3 hours, 3 units
Grade Only

This course will cover principles of selling as related to human relations and the selling of products, intangibles, and ideas. This course also covers the techniques of opening the sale, discovering the needs and wants, meeting objections, closing the sale, etc. Written and oral presentations. (FT) Transfer Credit: CSU.

110 Principles of Retailing
3 hours, 3 units
Grade Only

Designed for the marketing student. Instruction in the history of retailing, and involvement of various types of retail institutions. Specific instruction in principles of retail organization, store location and layout, mathematics of buying and pricing, receiving and stock control, and the formulation of store policy. (FT) Transfer Credit: CSU and/or private coll/univ.

130 Advertising Principles
3 hours, 3 units
Grade Only

Fundamentals of advertising. Advertising as an aid to selling and the importance of its relationship to the entire field of marketing. The uses, problems and effectiveness of advertising media. Introduction to copyrighting and layout. (FT) Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

MATHMATICS (MATH)

Basic Skills Courses

All courses at this level are offered for college credit. Credit for these courses will not apply toward the associate degree but will count toward the determination of a student's workload and eligibility for financial aid.

32 Fundamentals of Mathematics
5 hours, 5 units

It is recommended that students take the Mathematics Assessment Test prior to enrollment. Fundamental concepts in arithmetic and their applications. Topics will include: whole numbers, prime numbers, fractions, decimals, and percents. Credit for this course will not apply to the associate degree.
33 Math for the Math Anxious 5 hours, 5 units
Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
This course covers the development of self-confidence, effective study skills, and test taking techniques for mathematics, as well as the fundamentals of arithmetic. A variety of non-traditional materials and techniques are used in the presentation of concepts. Short essays and other appropriate writing assignments are required. (FT) Credit for this course does not apply to the associate degree.

35 Prealgebra 3 hours, 3 units
Advisory: Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20
The concepts in arithmetic, measurement, geometry, and introductory algebra needed to succeed in Mathematics 95. The calculator will be used as a tool for problem-solving. Credit for this course will not apply to the associate degree.

41 Math Study Skills 1 hour lecture, 1 unit
Credit/No Credit
Limitation on Enrollment: This course is not open to students with credit for Mathematics 265, Math Study Skills.
This course is designed to assist students in learning mathematics through the development of successful study skills and exam taking methods. This course addresses learning styles, how to read a math book, completing homework assignments, how to take notes and exams, basics of calculator operations and techniques for overcoming math anxiety. Credit for this course does not apply to the associate degree. (FT) Credit for this course will not apply to the associate degree.

Associate Degree Courses

95 Elementary Algebra and Geometry 5 hours lecture, 5 units
Prerequisite: Mathematics 35 with a grade of “C” or better, or equivalent, or Assessment Skill level M30. Advisory: English 43 and English 42, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R4.
Limitation on Enrollment: This course is not open to students with credit for Mathematics 54 or 54A & 54B. Elementary algebra serves as the foundation for the other math courses and is the first of a two-semester integrated sequence in algebra and geometry. This course covers the real number system; the writing, simplifying, solving and graphing of linear equations and inequalities; operations with polynomial functions; and an introduction to rational expressions and the properties of lines, angles, and triangles. (FT) Associate Degree Credit.

96 Intermediate Algebra and Geometry 5 hours lecture, 5 units
Prerequisite: Mathematics 95 with a grade of “C” or better, or equivalent, or Assessment Skill Level M40. Advisory: English 43 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W4 and R5.
This course replaces Mathematics 100 and will be offered starting with the spring 2000 term. Intermediate Algebra and Geometry serves as the foundation for the other math courses and is the second of a two-semester integrated sequence in algebra and geometry. This course covers rational, radicals, and quadratic equations; conic sections; systems of equations and inequalities; exponential and logarithmic functions; sequences and series; solid geometry; and an introduction to trigonometric functions. The course will also include application problems involving the topics covered. This course is the prerequisite for all transferable mathematics courses. (FT) Associate Degree Credit.

Transfer Level Courses

104 Trigonometry 3 hours, 3 units
Grade Only
Prerequisite: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50. This course is a study of the numerical, analytical, and geometric properties of right and oblique triangles, of trigonometric and inverse trigonometric functions, and their applications. The course content includes right angle trigonometry, radian measure, circular functions, graphs of circular functions and their inverses, trigonometric identities, equations involving trigonometric and inverse trigonometric functions, an introduction of the complex plane, vectors and their operations, and the trigonometric form of complex numbers. This course is designed as a preparation for calculus and it is intended for the transfer student planning to major in mathematics, engineering, economics, or disciplines included in the physical or life sciences. This course meets CSU general education
requirements. (FT) Transfer Credit: CSU and/or private coll/univ. (CAN MATH 8)

106 Introduction to Boolean Algebra
1 hour, 1 unit

Prerequisite: Mathematics 96 with a grade of "C" or better, or equivalent, or Assessment Skill Level M50.
This course covers Boolean algebra as it applies in general to sets and logical propositions as well as an introduction to modern applications. This course is designed to give students in a broad variety of majors a classical background in mathematical logic including computer logic circuits. It is strongly recommended for math, engineering, and computer science majors (FT) Transfer Credit: CSU and/or private coll/univ.

107 Introduction to Scientific Programming
3 hours, 3 units

Prerequisite: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50.
Corequisite: Mathematics 107L.
Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
This course is an introduction to mathematical and scientific problem-solving on a computer; focusing on designing algorithms of a high level programming language. Extensive programming is required. Students are expected to plan and write programming projects with documentation. This course is recommended for students transferring to majors in Computer Science and/or mathematics. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Mathematics 107 combined with Computer and Information Sciences 185: maximum credit, one course.

107L Introduction to Scientific Programming Lab
3 hours lab, 1 unit

Corequisite: Mathematics 107.
This is a lab course to be taken concurrently with Mathematics 107. Extensive programming is required. Students are expected to plan and write programming projects with documentation. This course is recommended for students transferring to majors in Computer Science and/or mathematics. (FT) Transfer Credit: CSU and/or private coll/univ.

108 Intermediate Scientific Programming
3 hours, 3 units

Prerequisite: Mathematics 107 with a grade of “C” or better, or equivalent.
Advisory: Concurrent enrollment in Mathematics 108L.
This course provides further training in program design and development, especially with regard to large projects. Advanced techniques in programming are studied along with basic data structures and algorithms. Problem-solving techniques in the fields of engineering, mathematics, and the sciences are covered. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

108L Intermediate Scientific Programming Lab
3 hours lab, 1 unit

Corequisite: Mathematics 108.
This is a lab course open only to those concurrently enrolled in Mathematics 108. Extensive programming is required. (FT) Transfer Credit: CSU and/or private coll/univ.

116 College and Matrix Algebra
3 hours, 3 units

Prerequisite: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50.
Advisory: English 101 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course is designed to strengthen the algebra skills of students seeking Business or Natural Science degrees that are required to take an applied calculus course. Topics in the course include the theory of functions; graphing functions; exponential and logarithmic functions; solving equations involving algebraic, exponential and logarithmic functions; solving systems of linear equations, matrix algebra, linear programming, modeling, and applications problems. Analytical reading and problem solving are required for success in this course. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Mathematics (MATH) 116 and 141 combined: maximum credit, four units. (CAN MATH 10)

118 A Survey of Modern Mathematics
3 hours, 3 units

Prerequisite: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50.
Advisory: English 101 with a grade of “C” or better, or equivalent or Assessment Skill Levels W6 and R6.
This course covers topics in probability, statistics, logical reasoning, quantitative literacy, the history of mathematics, and applications of mathematics to the real world. This is a general education course designed for students who do not intend to prepare for a career in science or business. Analytical reading and problem solving are required for success in this course. Transfer Credit: CSU and/or private coll/univ. (CAN MATH 2)
119 Elementary Statistics  
3 hours, 3 units  
Prerequisite: Mathematics 96 with a grade of "C" or better, or equivalent, or Assessment Skill Level M50.  
This course covers descriptive and inferential statistics. The descriptive portion analyzes data through graphs, measures of central tendency and spread. Other statistical practices utilize basic probability, binomial and normal distributions, estimation of population parameters, hypothesis testing, linear regression and correlation. Analytical reading and problem solving are required for success in this course. This course meets district G.E. requirements. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Mathematics (MATH) 119 combined with Biology 200 or Psychology 258: maximum credit, one course. (CAN STAT 2)

121 Basic Techniques of Applied Calculus I  
3 hours, 3 units  
Prerequisite: Mathematics 116 with a grade of "C" or better, or equivalent.  
This is a course designed for students intending to major in business, natural science or social science. It does not fulfill a mathematics requirement for students majoring in mathematics, chemistry, physics or engineering. This course combines the study of algebra, analytic geometry, and calculus using numerical, graphical, and analytical methods to analyze calculus problems encountered in real world applications. Topics include limits, derivatives, and integrals of algebraic, exponential and logarithmic functions. Also covered are functions of several variables, partial derivatives, and optimization of multivariable functions. Applications of calculus include curve sketching, optimization, and areas under curves. Analytical reading and problem solving are required for success in this course. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Mathematics (MATH) 121 and 150 combined: maximum credit, one course. (CAN MATH 30)  
(CAN MATH SEQ D = MATH 121 + 122)

122 Basic Techniques of Calculus II  
3 hours, 3 units  
Prerequisite: Mathematics 121 with a grade of "C" or better, or equivalent.  
In this continuation of Mathematics 121, students intending to major in business, natural science, or social science learn about integration, multivariable functions, differential equations, series, and formatting trigonometric functions. This course does not fulfill a mathematics requirement for students intending to major in mathematics, chemistry, physics, or engineering. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Mathematics (MATH) 122 and 151 combined: maximum credit, one course. (CAN MATH 32)  
(CAN MATH SEQ D = MATH 121 + 122)

141 Precalculus  
5 hours lecture, 5 units  
Prerequisite: Mathematics 104 with a grade of "C" or better, or equivalent.  
This course is a study of numerical, analytical, and graphical properties of functions. The course content includes polynomial, rational, irrational, exponential, logarithmic, and trigonometric functions. Additional topics include: inverse functions, complex numbers, polar coordinates, matrices, conic sections, sequences, series and the binomial theorem. This course is designed as a preparation for calculus and is intended for the transfer student planning to major in mathematics, engineering, economics, or disciplines included in the physical or life sciences. (FT) Transfer Credit: CSU and/or private coll/univ; UC Transfer Course List: Mathematics (MATH) 116 and 141 combined: maximum credit, one course. (CAN MATH 16)

150 Calculus with Analytic Geometry I  
5 hours lecture, 5 units  
Prerequisite: Mathematics 141 with a grade of "C" or better, or equivalent.  
This course is a primary introduction to university level calculus. The topics of study include analytic geometry, limits, differentiation and integration of algebraic and transcendental functions. Emphasis is placed on calculus applications. Analytical reading and problem solving are required for success in this course. This course is intended for the transfer student planning to major in mathematics, computer science, physics, chemistry, engineering, or economics. This course meets general education, CSU, IGETC, and TAG requirements. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Mathematics 150 and Mathematics 121 combined: maximum credit, one course. See a counselor. (CAN MATH 18)  
(CAN MATH SEQ B = MATH 150 + 151)  
(CAN MATH SEQ C = MATH 150 + 151 + 252)

151 Calculus with Analytic Geometry II  
4 hours, 4 units  
Prerequisite: Mathematics 150 with a grade of "C" or better, or equivalent.  
This course is a continuation of Mathematics 150. This course covers more advanced topics in analytic geometry, differentiation and integration of algebraic and transcendental functions, infinite series, Taylor series,
and parametric equations. This course also covers a general introduction to the theory and applications of power series, techniques of integration, and functions in polar coordinates, as it serves as a basis for multivariable calculus and differential equations, as well as most upper division courses in mathematics and engineering. It is intended for the transfer student planning to major in mathematics, computer science, physics, chemistry, engineering and economics. This course meets general education requirements, CSU, IGETC, and TAG requirements. (FT). Transfer Credit: CSU and/or private coll/univ., UC. UC Transfer Credit: Mathematics 151 and Mathematics 122 combined: maximum credit, one course. See a counselor. (CAN MATH 20) (CAN MATH SEQ B = MATH 150 + 151) (CAN MATH SEQ C = MATH 150 + 151 + 252)

210A Concepts of Elementary School Mathematics I

Prerequisite: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50. Advisory: English 101 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6. This course is a study of the mathematical concepts needed for teaching elementary school mathematics with emphasis on number, function, and geometry. This course promotes an appreciation of the importance of logical thinking and applications of mathematics in problem solving and critical thinking. It is designed especially for students preparing for credentials in elementary education. Analytical reading and problem solving are required for success in this course. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitation: Math 210A and 210B combined, maximum credit, one course. (CAN MATH 4)

210B Concepts of Elementary School Mathematics II

Prerequisite: Mathematics 210A with a grade of “C” or better, or equivalent. Advisory: English 101 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6. This course is a study of the mathematical concepts needed for teaching elementary school mathematics with emphasis on number, function, and geometry. This course will also promote an appreciation of the importance of logical thinking and applications of mathematics in problem solving and critical thinking. It is designed especially for students preparing for credentials in elementary education. Analytical reading and problem solving are required for success in this course. (FT) Transfer Credit: CSU and/or private coll/univ.

212 Children's Mathematical Thinking

1 hour, 1 unit
Grade Only
Advisory: Concurrent enrollment in Mathematics 210A.* This course focuses on children's mathematical thinking and includes an in-depth study of place value, fractions, and how children solve mathematical problems. Students observe children and evaluate the problem strategies that are used. *For students in San Diego State University's Liberal Studies Blended Teacher Education program, this course is required and must be taken concurrently with Mathematics 210A. (FT) Transfer Credit: CSU and/or private coll/univ.

237 Machine and Assembly Language

3 hours, 3 units
Prerequisite: Mathematics 108 with a grade of “C” or better, or equivalent. Corequisite: Mathematics 237L. Limitation on Enrollment: This course is not open to students with credit for Mathematics 137. This course covers general concepts of machine and assembly languages, including data representation, looping and addressing techniques, subroutine linkage, and use of system and programmer-defined macros. Problem-solving techniques in the fields of engineering, mathematics, and the sciences are covered. This course is designed for computer science and mathematics majors who are intending to transfer to a four-year university (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Mathematics (MATH) 237: maximum credit, one course. (CAN CSCI 10, when taken with Mathematics 237L)

237L Assembly Language Lab

3 hours lab, 1 unit
Corequisite: Mathematics 237. Limitation on Enrollment: This course is not open to students with credit for Mathematics 137L. This is a lab course to be taken concurrently with Mathematics 237. Practice is provided in applying programming techniques and problem solving skills using assembly language. (FT) Transfer Credit: CSU and/or private coll/univ. (CAN CSCI 10, when taken with Mathematics 237)
245 Discrete Mathematics
3 hours, 3 units
Prerequisite: Mathematics 122 or 151 with a grade of “C” or better, or equivalent.
Advisory: English 101 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course covers logic, methods of proof, set theory, Boolean algebra, number theory, equivalence and order relations, counting (combinations and permutations), solving recurrence relations. Transfer Credit: CSU and/or private coll/univ.; UC. (CAN CSCI 26)

252 Calculus with Analytic Geometry III
4 hours, 4 units
Prerequisite: Mathematics 151 with a grade of “C” or better, or equivalent.
The content of this course includes the algebra and geometry of 2- and 3-dimensional Euclidean vectors, limits, continuity, partial differentiation, extrema of vector-valued and multivariable functions, higher order derivatives, the chain rule, Lagrange's theorem, multiple integrals, integrals over paths and surfaces, and integral theorems of vector analysis. This course is intended as a general introduction to the theory and applications of multivariable calculus. It is essential for most upper division courses in mathematics and forms part of the foundation for engineering and physics. It is intended for the transfer student planning to major in mathematics, physics, engineering, computer science, physical chemistry, operational research, or economics. This course meets general education requirements, CSU, IGETC, and TAG requirements. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN MATH 22) (CAN MATH SEQ C = MATH 150 + 151+ 252)

254 Introduction to Linear Algebra
3 hours, 3 units
Prerequisite: Mathematics 151 with a grade of “C” or better, or equivalent.
This course covers matrix algebra, Gauss elimination, determinants, vector spaces, linear transformations, orthogonality, eigenvalues and eigenvectors. Transfer Credit: CSU and/or private coll/univ.; UC. (CAN MATH 26)

255 Differential Equations
3 hours, 3 units
Grade Only
Prerequisite: Mathematics 252 and 254, each with a grade of “C” or better, or equivalent.
Limitation on Enrollment: This course is not open to students with credit for Mathematics 253.
This course covers first order and higher order equations and their applications. Topics include linear first order and higher order equations, homogeneous and nonhomogeneous equations with constant or variable coefficients, and systems of ordinary differential equations. Methods used to solve equations include substitution methods, integrating factors, reduction of order, variation of parameters, power series solutions, and Laplace Transforms. This course is intended as an introduction to the theory and applications of differential equations and is the basis for many upper division courses in engineering, physics, and mathematics. It is intended for the transfer student planning to major in mathematics, engineering, operational research, physics, or other physical science. This course meets CSU general education requirements. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN MATH 24)

290 Independent Study
Hours by Arrangement; 1-3 units
Limitation on Enrollment: Must obtain an Add Code from instructor for registration.
This course is for advanced students who wish to pursue special investigations. This course may be taken four times with different content for a maximum of six units. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

105 Human Anatomy and Physiology
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course examines the structures of the human body and the functions of the major body systems including the principles of human anatomy and physiology. Students are instructed in cell structure and physiology, tissue classification and function, and general body organization. This course is a foundation course for
medical assisting majors and may also be taken by non-
medical assisting majors to meet associate degree GE
requirements. Associate degree credit.

110 Medical Terminology
3 hours, 3 units
Grade Only
Advisory: English 56 with a grade of "C" or better, or
equivalent, or Assessment Skill Level R5.
Limitation on Enrollment: This course is not open to
students with previous credit for Health Information
Technology 115.
This course covers basic medical terminology and the
vocabulary of medical specialties. Special emphasis is
on the use of prefixes and suffixes and non-technical
explanations of medical terms and descriptions of
anatomy, physiology, and pathology. Students learn to
utilize medical terminology as it applies to the
structure of the human body, common laboratory tests,
radiological and operative procedures, as well as basic
pharmacology. This course is open to the general public
as well as to students in special programs or those who
wish to review the information. (FT) Transfer Credit:
CSU and/or private coll/univ.

115 Pathophysiology
3 hours lecture, 3 units
Grade Only
Prerequisite: Medical Assisting 105 or Medical Assisting
110 with a grade of "C" or better, or equivalent.
Advisory: English 51 and English 56, each with a grade
of "C" or better, or equivalent, or Assessment Skill
Levels W5 and R5.
The course focuses on disease processes in the human
body from a systems approach. Analysis of some of the
most common and significant diseases is included. The
signs and symptoms, etiology, diagnosis, and treatment
of disease are examined along with the appropriate
medical terminology. This course is designed for
students in allied health programs, but is also open to
those who wish to broaden their medical background or
review this information. (FT) Transfer Credit: CSU and/or
private coll/univ.

120 Basic Clinical Assisting
2 hours lecture, 3 hours lab, 3 units
Grade Only
Prerequisite: Medical Assisting 105 with a grade of "C"
or better, or equivalent.
The medical assistant, as part of the medical team,
professional and patient relationships and
communication, examining room techniques and non-
sterile treatments with emphasis on patient preparation
and use of clinical records and routine medical office
management. (FT) Transfer Credit: CSU and/or private
coll/univ.

130 Advanced Clinical Assisting
3 hours lecture, 3 hours lab, 4 units
Grade Only
Prerequisite: Medical Assisting 120 with a grade of "C"
or better, or equivalent.
Students are instructed in basic microbiology,
immunology and hematology. Principles of various
methods of disinfection and sterilization and principles
of minor surgery as performed in the medical office.
They are introduced to elementary pharmacology with
emphasis on prescription reading and handling and care
of medicines, preparation of patients for diagnostic
examinations. Students are required to obtain CPR
certification from a community source and present the
certificate before completion of the course. (FT)
Transfer Credit: CSU and/or private coll/univ.

145 Directed Clinical Practice
225 hours (total), 3 units
Grade Only
Prerequisite: Medical Assisting 110 and Medical
Assisting 120, each with a grade of "C" or better, or
equivalent.
Limitation on Enrollment: Special Admission - must be
admitted to program.
This course is designed to give medical assisting
students hands-on clinical experience at a medical
facility. Students have the opportunity to practice and
perfect skills learned in prior medical assisting courses.
The directed clinical practice is coordinated by a
member of the college staff. Supervision of students is
shared by the staff of the affiliating institution and the
college faculty. 225 clinical hours are required to
complete this course. This is an unpaid position in a
clinical office. (FT) Transfer Credit: CSU and/or private
coll/univ.

150 Phlebotomy
2 hours lecture, 1 hour lab, 2 units
Grade Only
Advisory: English 51 and 56 and Mathematics 95, each
with a grade of "C" or better, or equivalent, or
Assessment Skill Levels W5, R5, and M40.
This course prepares students to perform vein
punctures, capillary punctures, and basic blood lab
tests required for entry-level positions in hospitals,
clinics, and other health care settings as a phlebotomy
technician in accordance with the regulations set forth
by the California Department of Health Services and
Laboratory Services. Students successfully completing the Certificate of Completion in Phlebotomy requirements are eligible to become California certified phlebotomy technicians. This course is designed to introduce these techniques. More experience is needed to become proficient. (FT) Associate Degree Credit.

290 Independent Study
Hours by Arrangement, 1-3 units
Grade Only

Limitation on Enrollment: Must obtain an Add Code from instructor for registration. Provides for additional research, academic or clinical experiences for students with special interest. The course consists of individualized research problems, conferences with the instructor at prearranged intervals and a final written report on the work completed. This course may be taken four times with different content for a maximum of six units. (FT) Transfer Credit: CSU and/or private coll/univ.

340A Principles of Phlebotomy
1 hours lecture, 3 hours lab, 2 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

Limitation on Enrollment: This course is not open to students with previous credit for or concurrent enrollment in Medical Assisting 150. This course instructs students in the performance of basic venipuncture, capillary puncture techniques and the basic blood lab tests required for entry-level positions in hospitals, clinics, and other health care settings as a phlebotomy technician. Course topics are in compliance with the regulations of the California Department of Health Services and Laboratory Services for California certification as a phlebotomy technician, including the role of the technician in the allied health field, principles of OSHA regulations and blood-borne pathogen control, patient processing review of clinical lab, and anatomy of blood and blood vessels. This course is open to students reviewing these principles. A certificate of completion in phlebotomy is awarded after successful completion of additional courses. (Refer to the college catalog). (FT) Associate Degree Credit

340B Phlebotomy Directed Clinical Practice
1 unit
Grade Only

Prerequisite: Medical Assisting 340A with a grade of “C” or better, or equivalent.

This course is an unpaid clinical experience designed for students who want to achieve a certificate of completion in phlebotomy. Students complete 50-100 blood draws and 25 skin sticks at an appropriate clinical site in accordance with the requirements needed for national certification. The certificate of completion in phlebotomy meets the requirements needed to attempt the appropriate certifying exam specified for national certification as a phlebotomy technician. The course is also open to students to gain additional experience in phlebotomy. Seventy-five hours at the clinical site must be completed to meet the requirements of this course. (FT) Associate Degree Credit.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

051 Installing, Configuring, and Administering Windows 2000 Professional
1.5 hours lecture, 3 hours lab, 2.5 units
Grade Only

Advisory: CBTE 113 with a grade of “C” or better, or equivalent. This course provides students with the knowledge and skills necessary to implement, administer, and troubleshoot Windows 2000 Professional as a desktop operating system in any network environment. This course follows Microsoft Official Curriculum and is intended to prepare students to take Microsoft MCSE Certification Exam 70-210. (FT) Associate Degree Credit.

052 Installing, Configuring, and Administering Microsoft Windows 2000 Server
1.5 hours lecture, 3 hours lab, 2.5 units
Grade Only

Prerequisite: MSFT 051 with a grade of “C” or better, or equivalent. This course offers students the opportunity to gain the knowledge and skills necessary to implement, administer, and troubleshoot Microsoft Windows 2000 Server as a member server of a domain in an active directory environment. This course follows Microsoft Official Curriculum and is intended to prepare students
to take Microsoft MCSE Exam 70-215. (FT) Associate Degree Credit.

053 Implementing and Administering a Microsoft Windows 2000 Network Infrastructure

1.5 hours lecture, 3 hours lab, 2.5 units
Grade Only

Prerequisite: MSFT 052 with a grade of “C” or better, or equivalent.

This course provides students with the knowledge and skills necessary to install, manage, monitor, configure, and troubleshoot DNS, DHCP, Remote Access, Network Protocols, IP Routing, and WINS in a Windows 2000 network infrastructure. This course follows the Official Microsoft Curriculum and is intended to prepare students to take Microsoft MCSE certification exam 70-216. (FT) Associate Degree Credit.

054 Implementing and Administering a MSFT Windows 2000 Directory Infrastructure

1.5 hours lecture, 3 hours lab, 2.5 units
Grade Only

Prerequisite: Microsoft 52 with a grade of “C” or better, or equivalent.

This course is intended to provide support professionals with the knowledge and skills necessary to install, configure, and troubleshoot the Windows 2000 active directory security solutions. This course follows the Official Microsoft Curriculum and is intended to prepare students to take Microsoft MCSE certification exam 70-217. (FT) Associate Degree Credit.

055 Designing a Microsoft Windows 2000 Directory Services Infrastructure

1.5 hours lecture, 3 hours lab, 2.5 units
Grade Only

Prerequisite: Microsoft 52 with a grade of “C” or better, or equivalent.

This course offers students the opportunity to gain the knowledge and skills necessary to analyze business requirements and design directory service architecture and design solutions for desktop management. This course follows the Official Microsoft Curriculum and is intended to prepare students to take Microsoft MCSE certification exam 70-219. (FT) Associate Degree Credit.

056 Designing a Microsoft Windows 2000 Network Infrastructure

1 hour lecture, 3 hours lab, 2 units
Grade Only

Prerequisite: MSFT 055 with a grade of “C” or better, or equivalent.

This course offers students the opportunity to gain the knowledge and skills necessary to analyze business requirements for a network infrastructure and design a network infrastructure that meets business requirements. This course follows the Official Microsoft Curriculum and is intended to prepare students to take Microsoft MCSE certification exam 70-221. (FT) Associate Degree Credit.

057 Designing Security for a Microsoft Windows 2000 Network

1.5 hours lecture, 3 hours lab, 2.5 units
Grade Only

Prerequisite: MSFT 056 with a grade of “C” or better, or equivalent.

This course presents an overview of the knowledge and skills necessary to analyze business requirements for security and to design a security solution that meets business requirements. This course follows the Official Microsoft Curriculum and is intended to prepare students to take Microsoft MCSE certification exam 70-220. (FT) Associate Degree Credit.

058 Managing a Microsoft Network Environment

4.5 hours lab, 1.5 units
Grade Only

This course provides students with the knowledge and skills necessary to install, manage, monitor, configure, and troubleshoot Dynamic Host Configuration (DHCP), Remote Access, and Network Protocols in a Windows network environment. This course follows Microsoft Official Curriculum (MOC) and is intended to prepare students to take Microsoft Certified Systems Engineer (MCSE) Certification Exam 70-218 (or current test). This course may be taken three times with new technologies. (FT) Associate Degree Credit.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.
101 Introduction to Multimedia  
2 hours lecture, 3 hours lab, 3 units  
This course provides an overview of the dynamic field of multimedia. Through lecture and demonstration, students learn about the design theory, processes, hardware, software, and career opportunities in multimedia production. This introductory course is required for the Associate in Science Degree in Multimedia and all certificates of completion in Multimedia. This course, or sections of this course, may be offered through distance education. (FT) Associate Degree Credit.

112 Multimedia Authoring  
3 hours lecture, 3 units  
Advisory: Multimedia 101 with a grade of “C” or better, or equivalent. 
This course is a guided digital studio approach to developing skills in digital image media design, time-based media design systems, and World Wide Web based media design. The student acquires the necessary skills to produce a project in each medium and presents the portfolio preparation of a selected project of interest. This course is required for the Associate Degree in Multimedia. (FT) Associate Degree Credit.

118 Multimedia Production  
2 hours lecture, 3 hours lab, 3 units  
Advisory: Multimedia 101 and 112, each with a grade of “C” or better, or equivalent. 
Multimedia Production is a hands-on course in multimedia project planning and production. Students work in teams to design and complete an interactive media project. Original visual and time-based media elements are incorporated, providing each student with a portfolio preparation that presents all skills obtained in the program. This course is intended for students preparing for careers in the multimedia industry. (FT) Associate Degree Credit.

120 Introduction to Video Game Development  
3 hours lecture, 3 units  
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5. 
This is an introduction to the dynamic field of video game development. It is designed for individuals who wish to enter designer positions in the video game industry. Students learn the history of video games and the elements of video game design and architecture. Students also learn the roles of various teams in the development process and the process of quality assurance testing of video games. This course may be offered via technologically mediated instruction. (FT) Transfer Credit: CSU and/or private coll/univ.

121 Digital Image Editing  
3 hours lecture, 3 units  
Advisory: Multimedia 112 with a grade of “C” or better, or equivalent. 
This pragmatic course develops skills in the advanced use of bitmapped media design software applications. The student develops expert skills in producing bitmapped media elements for the diverse range of applications. Students will present a portfolio of a selected project of interest. This course is intended for students who plan to pursue a career in the multimedia industry. (FT) Transfer Credit: CSU and/or private coll/univ.

122 Vector Image Editing  
3 hours lecture, 3 units  
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5. 
This course provides the students an exposure to the use of vector media design software applications in producing vector media elements for a diverse range of applications. This course and other multimedia courses are intended for multimedia, art, graphic design, and architecture students who plan to pursue a career in the multimedia industry or other related industries. (FT) Transfer Credit: CSU and/or private coll/univ.

123 Digital Video  
3 hours lecture, 3 units  
Advisory: Multimedia 112 with a grade of “C” or better, or equivalent. 
This is an advanced course on the use of Adobe Premier and Nonlinear Digital Video Editing Systems. The process of digital video development and production is covered as students work on projects using non-linear video editing techniques. Related topics include the history of film and traditional filmmaking. This course is intended for students pursuing careers in the multimedia industry. (FT) Transfer Credit: CSU and/or private coll/univ.
127 Writing for Multimedia  
2 hours lecture, 3 hours lab, 3 units  
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.  
This is a course in creative writing for media production. Students work in teams to design and complete writing projects in all industry formats. Students prepare and present a portfolio that displays all skills obtained in the course. This course is intended for students pursuing a career in the multimedia industry. (FT) Associate Degree Credit.

137 Introduction to 3D Animation I  
3 hours lecture, 3 units  
Advisory: Multimedia 112 with a grade of “C” or better, or equivalent.  
This course is a guided digital studio approach to developing skills in the use of 3D animation and 3D modeling software applications. The student acquires the necessary skills to produce and present the portfolio preparation of a selected project of interest. This course is intended for students pursuing a career in the multimedia industry. (FT) Transfer Credit: CSU and/or private coll/univ.

139 3D Character Animation II  
3 hours lecture, 3 units  
Advisory: Multimedia 137 with a grade of “C” or better, or equivalent.  
This course is a guided digital studio approach to production. This course combines exercises and individual and group projects to develop necessary skills and techniques in digital studio production. The course is intended for students who are preparing for more advanced study in 3D modeling and animation. (FT) Transfer Credit: CSU and/or private coll/univ.

141 3D Animation: Realism  
3 hours lecture, 3 units  
Advisory: Multimedia 139 with a grade of “C” or better, or equivalent.  
This course is an advanced study in character animation and feature length digital media production. Exercises, individual and group projects prepare the student for employment in the 3D modeling and animation industry. This course is intended for individuals pursuing careers in the 3D and animation segment of the multimedia industry. (FT) Transfer Credit: CSU and/or private coll/univ.

143 3D Animation: Production Studio  
3 hours lecture, 3 units  
Advisory: Multimedia 141 with a grade of “C” or better, or equivalent.  
This course is a balanced combination of hands-on sessions, exercises, individual and group projects. The course structure emphasizes the relationships among anatomy, motion, weight, and timing. This course prepares students for employment in the 3D modeling and animation industry. (FT) Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

100 Introduction to Music  
3 hours, 3 units  
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.  
This is a survey course designed to develop listening perception through lectures, recordings, films and concerts. The conceptual and stylistic differences in music from various periods and cultures will be examined through discussion of the elements of music as well as through discussions of ethnic, jazz, vocal instrumental and 20th century music. This course is designed to support students in all majors who are interested in satisfying the general education requirements for Arts and Humanities. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

101 Music History I: Middle Ages to Mid 18th Century  
3 hours, 3 units  
Advisory: Music 150A with a grade of “C” or better, or equivalent; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.  
This course is a study of Western (European) music from the Middle Ages through the middle of the 18th century. Emphasis is on aural and visual recognition of style, form, and other musical elements, examined through representative works of composers of each historical period. This course is designed for but not
limited to music majors. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

102 Music History II: Mid 18th to Early 20th Century

3 hours, 3 units
Advisory: Music 150A, with a grade of "C" or better, or equivalent; and English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is a study of Western (European) music from the middle of the 18th century through the early 20th century. Emphasis is on aural and visual recognition of style, form, and other musical elements examined through representative works of major composers of each historical period. This course is designed for but not limited to music majors. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

105 Music of Our Time

3 hours lecture, 3 units
Advisory: English 51 and 56 each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is a study of music history and music current affairs from 1900 to the present day. Methods and issues that innovative musical artists have faced or currently face are examined. The nature of the compositional act as it has evolved over the past 100 years is also explored. Students study a wide variety of styles, forms and media of musical output in this historical period from as many different perspectives as possible. This course is designed for both the general student as well as students who intend to further their music studies. (FT) Transfer credit: CSU and/or private coll/univ.; UC.

109 World Music

3 hours, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This music survey course explores the music cultures of Asia, the Middle East, Africa, Central and South America, the Caribbean and other areas with resident populations in San Diego. Musical practices and perspectives from several music cultures are studied with an emphasis on understanding and appreciation from non-ethnocentric viewpoints. Listening perception is developed through lectures and multimedia presentations. The course is intended to satisfy general education requirements for Arts and Humanities and satisfies the San Diego Community College District's Multicultural Course Studies requirement. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

110 Music for Elementary School Teachers

2.5 hours lecture, 1.5 hours lab, 3 units
Advisory: English 51 and English 56 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course prepares students to teach music as part of the curriculum in the elementary school classroom, the preschool, or day-care program. Students develop an understanding of musical concepts primarily by singing and/or playing an instrument and create lesson plans for teaching these concepts to children. (FT) Transfer Credit: CSU and/or private coll/univ.

111 Jazz — History and Development

3 hours, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
An introduction to jazz, its historical background and its development in the United States. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

115A Class Piano I

0.5 hours lecture, 1.5 hours lab, 1 unit
Advisory: English 51 and 56 each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course introduces basic skills to music majors whose theoretical and practical keyboard skills are deficient, and to non-music majors who have had little or no experience at the piano. This course focuses on developing repertoire, sight reading, transposition, harmonization, creative composition, and modulation techniques. (FT) Transfer credits: CSU and/or private coll/univ.; UC. (CAN MUS 22)

115B Class Piano II

0.5 hours lecture, 1.5 hours lab, 1 unit
Prerequisite: Music 115A with a grade of "C" or better, or equivalent.
This course is a continuation of Music 115 A, with an emphasis on moderately difficult techniques in developing repertoire, keyboard techniques, sight-reading, transposition, harmonization, creative composition, improvisation, ensemble playing, and modulation techniques. This course is appropriate for music majors whose theoretical and practical keyboard skills are deficient as well as for non-music majors. (FT) Transfer credit: CSU and/or private coll/univ.; UC. (CAN MUS 24)
115C Intermediate Piano
0.5 hour lecture, 1.5 hours lab, 1 unit
Advisory: Music 115B with a grade of “C” or better, or equivalent.
Study of practical and theoretical keyboard techniques for music majors, credential applications, and non-music majors with comparable skills. Course focuses on advanced skill development of repertoire, sight reading, transposition, harmonization, creative composition and modulation techniques. Transfer Credit: CSU and/or private coll/univ.; UC.

120A Beginning Voice Class
1 hour lecture, 2 hours lab, 1.5 units
For beginners in voice. Deals with the development of proper voice production. Includes the problems of breath control, resonance, articulation and vowel formation. Instruction in the development of the individual voice. Solo performances of simple songs in class. Transfer Credit: CSU and/or private coll/univ.; UC.

120B Intermediate Voice Class
1 hour lecture, 2 hours lab, 1.5 units
For intermediates in voice. Deals with the development of proper voice production. Includes the problems of breath control, resonance, articulation and vowel formation, with emphasis on interpretation and repertoire. Instruction in the development of the individual voice. A study and performance of the song cycle is included. Transfer Credit: CSU and/or private coll/univ.; UC.

123 Recital Hour
1.5 hours lab, 0.5 unit
Grade Only
This course offers a series of live musical events in a variety of styles, including traditional classical music as well as music from diverse cultures. Presentations feature well-known international performers, music faculty, and music student performers. Students in this course participate by active listening and completing a workbook that describes and assesses their musical experiences and perceptions. No musical experience is assumed or required. This course is required for music majors seeking an associate degree. The content of this course will differ each semester. This course may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.

125 Music, The Arts, and Humanity
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is a multi-cultural, multimedia approach to the living musical, expressive and ceremonial art forms and cultural context of the major continents. Cultures in the United States that have been traditionally under represented in the curriculum will be emphasized. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

130A College Chorus I
1 hour lecture, 2 hours lab, 1.5 units
Study and performance of a wide range of choral music from the Renaissance period to the present day. Some previous choral experience and music reading skills are highly recommended. Attendance at rehearsals and performances is required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

130B College Chorus II
1 hour lecture, 2 hours lab, 1.5 units
Study and performance of a wide range of choral music from the Renaissance period to the present day. Some previous choral experience and music reading skills are highly recommended. Attendance at rehearsals and performances is required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

130C College Chorus III
1 hour lecture, 2 hours lab, 1.5 units
Continuation of Music 130B. Study and performance of a wide range of choral music from the Renaissance period to the present day. Some previous choral experience and music reading skills are highly recommended. Attendance at rehearsals and performance is required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

130D College Chorus IV
1 hour lecture, 2 hours lab, 1.5 units
Continuation of Music 130C. Study and performance of a wide range of choral music from the Renaissance period to the present day. Some previous choral experience and music reading skills are highly recommended. Attendance at rehearsals and performance is required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.
132A Classical Guitar
0.5 hour lecture, 1.5 hours lab, 1 unit
Beginning instruction in classical guitar. Lectures followed by practical application on the instrument. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

132B Classical Guitar
0.5 hour lecture, 1.5 hours lab, 1 unit
Advisory: Music 132A with a grade of “C” or better, or equivalent.
A continuation of instruction in classical guitar. Lectures followed by practical application on the instrument. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

150A Basic Musicianship
3 hours, 3 units
This course is designed for music majors as well as non-music majors. It enables the student to develop perceptions in sight and sound as related to the symbols of rhythmic, melodic, and harmonic notation. It will also enable the student to develop skill in writing, major, minor, and chromatic scales, chord construction and intervals; and to identify terms used to indicate tempo and dynamics. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

158A Music Theory I
4 hours, 4 units
Prerequisite: Music 150A with a grade of "C" or better, or equivalent.
Advisory: Concurrent enrollment in Music 268A.
This course is an intensive study of diatonic harmony in major and minor modes and includes structural and stylistic analysis of music from the period 1600-1750. The emphasis is on development of four-part writing skills within the context of functional diatonic tonality; the interpretation of figured bass symbols, melodic construction and its interaction with harmony, rhythm and structure. This course is designed for the student pursuing music as a major or for the student interested in enhancing technical knowledge of music. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN MUS 2) (CAN MUS SEQ A = MUSI 158A+158B)

158B Music Theory II
4 hours, 4 units
Prerequisite: Music 158A with a grade of "C" or better, or equivalent.
Advisory: Concurrent enrollment in Music 268B. This course is a continuation of 158A.

It is an intensive study of diatonic harmony in major and minor modes and includes structural and stylistic analysis of music of the "common practice" period (1700-1900). The emphasis is on continued development of four-part writing skills using seventh and borrowed chords, the process of modulation; melodic construction using non-harmonic tones; analysis of Bach Chorales and of binary and ternary forms. This course is designed for the student pursuing music as a major or for the student interested in enhancing technical knowledge of music. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN MUS 4) (CAN MUS SEQ A = MUSI 158A+158B)

190 The Electronic Music Studio
2.5 hours lecture, 1.5 hours lab, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5. Completion of or concurrent enrollment in Music 150A.
This course is a study of recording and electronic music equipment. It is a prerequisite to future work in the electronic music studio and also prepares students for a major in music. The course demonstrates basic techniques using microphones, tape recorders, the mixing board, synthesizers, samplers and music applications such as sequencing on computers. Emphasis is on students' acquisition of basic skills needed for practical application and on acquiring knowledge of simple electronic and acoustic theory, including Musical Instrument Digital Interface (MIDI). Students design and create special projects using this equipment and proper protocol during lab hours and present their projects in class. (FT) Transfer Credit: CSU and/or private coll/univ.

201 Recording Arts
2.5 hours lecture, 1.5 hours lab, 3 units
Prerequisite: Music 190 with a grade of "C" or better, or equivalent.
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; completion of or concurrent enrollment in Music 150A.
This course is a study of advanced acoustics and electronic theory as applied to recording, mixing, and sound processing. The course will demonstrate various applications of advanced tape recording, microphone use, and mixing, such as tape editing, effects processing, music concrete composition, and other techniques for music composition. (FT) Transfer Credit: CSU.
202 Computer Music
2.5 hours lecture, 1.5 hours lab, 3 units
Prerequisite: Music 190 with a grade of “C” or better, or equivalent.
Advisory: Music 150A with a grade of “C” or better, or equivalent and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is a study of the application of contemporary digital technology to the practice of music performance and composition. The emphasis of this course is on the acquisition of computer skills to access and manipulate musical data via MIDI and other digital formats. These skills allow students to digitally sample sounds, control synthesizers and samplers, synchronize computers to tape, sequence music, transcribe and print musical scores and conceive new techniques for music composition. This course is designed for students who are interested in continuing their education in the Electronic Music Studio. (FT) Transfer Credit: CSU and/or private coll/univ.

205A Projects in Electronic Music
2.5 hours lecture, 1.5 hours lab, 3 units
Prerequisite: Music 190 with a grade of “C” or better, or equivalent.
Advisory: Music 150A with a grade of “C” or better, or equivalent; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is designed to allow students to pursue creative projects in an electronic music studio. Studies in advanced acoustic, electronic and/or digital manipulation of sound will enable students to analyze the nature of the music created. The emphasis will be on the students’ critical examination of their own personal tastes and musical styles, and on developing their creative potential. (FT) Transfer Credit: CSU and/or private coll/univ.

205B Projects in Electronic Music
2.5 hours lecture, 1.5 hours lab, 3 units
Prerequisite: Music 190 with a grade of “C” or better, or equivalent.
Advisory: Music 150A with a grade of “C” or better, or equivalent; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is a continuation of Music 205A, and is designed to allow students to further pursue creative projects in an electronic music studio. Further studies in advanced acoustic, electronic and/or digital manipulation of sound will enable students to analyze the nature of the music created. (FT) Transfer Credit: CSU.

206A Projects in Composition
3 hours lecture, 3 units
Prerequisite: Music 190 with a grade of “C” or better, or equivalent.
Advisory: Music 150A with a grade of “C” or better, or equivalent; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
In this course students learn to work efficiently as composers with the added support of constant positive feedback. This course is not limited to composing in a classical style but addresses broader issues common to all styles and genres. Included are such studies in compositional principles of form and structure, and other issues that enable students to analyze the nature of their musical creativity. The emphasis is on the students’ examining from a critical standpoint weaknesses and strengths in their own original compositions as well as that of their peers, and on the students’ developing their creative potential. Students have the option to create their music with the aid of recording facilities and computer workstations on campus if they have passed the Music 190 course. In addition to music majors and students with advanced knowledge of music, this course is intended for any students actively creating their own music. (FT) Transfer Credit: CSU and/or private coll/univ.

206B Projects in Composition
3 hours lecture, 3 units
Prerequisite: Music 190 with a grade of “C” or better, or equivalent.
Advisory: Music 150A with a grade of “C” or better, or equivalent; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is a companion course to Music 206A and is designed to allow students, with the aid of recording facilities and computer workstations running music software, to pursue their work as composers. This course is not limited to composing in a classical style but addresses broader issues common to all styles and genres. Included are such studies in compositional principles of balance, texture, dramatic emphasis and other issues that enable students to analyze the nature of their musical creativity. Upon completion of the Music 206 course sequence students have a portfolio of original music. (FT) Transfer Credit: CSU and/or private coll/univ.
212A Vocal Ensemble I (Men and Women)
1 hour lecture, 4 hours lab, 2 units
Emphasizing vocal ensemble singing, sight-reading and the study of vocal chamber music chosen from the Renaissance period to the present day, and including the popular idioms. Attendance at rehearsals and performances is required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

212B Vocal Ensemble II (Men and Women)
1 hour lecture, 4 hours lab, 2 units
Continuation of Music 212A. Emphasizing vocal ensemble singing, sight-reading and the study of vocal chamber music chosen from the Renaissance period to the present day, and including the popular idioms. Attendance at all rehearsals and performances is required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

212C Vocal Ensemble III (Men and Women)
1 hour lecture, 4 hours lab, 2 units
Continuation of Music 212B. Emphasizing vocal ensemble singing, sight-reading and the study of vocal chamber music chosen from the Renaissance period to the present day, and including the popular idioms. Attendance at all rehearsals and performances is required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

212D Vocal Ensemble IV (Men and Women)
1 hour lecture, 4 hours lab, 2 units
Continuation of Music 212C. Emphasizing vocal ensemble singing, sight-reading and the study of vocal chamber music chosen from the Renaissance period to the present day, and including the popular idioms. Attendance at all rehearsals and performances is required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

214A Concert Choir I (Men and Women)
1 hour lecture, 2 hours lab, 1.5 units
Emphasis on sight-reading skills and the study and performance of a wide range of choral music. Attendance at rehearsals and performances is required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

214B Concert Choir II (Men and Women)
1 hour lecture, 2 hours lab, 1.5 units
Continuation of Music 214A. Emphasis on sight-reading skills and the study and performance of a wide range of choral music. Attendance at rehearsals and performances is required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

214C Concert Choir III (Men and Women)
1 hour lecture, 2 hours lab, 1.5 units
Continuation of Music 214B. Emphasis on sight-reading skills and the study and performance of a wide range of choral music. Attendance at rehearsals and performances is required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

214D Concert Choir IV (Men and Women)
1 hour lecture, 2 hours lab, 1.5 units
Continuation of Music 214C. Emphasis on sight-reading skills and the study and performance of a wide range of choral music. Attendance at rehearsals and performances is required. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

215A Class Piano III
0.5 hours lecture, 1.5 hours lab, 1 unit
Prerequisite: Music 115B with a grade of "C" or better, or equivalent.
This course is an intermediate level of study of practical and theoretical keyboard techniques for music majors, credential applicants, and non-music majors with comparable skills. The course focuses on intermediate skill development of repertoire, keyboard technique, sight-reading, transposition, harmonization, creative composition, improvisation, ensemble playing, and modulation techniques. (FT) Transfer credit: CSU and/or private coll/univ.; UC.

215B Class Piano IV
0.5 hours lecture, 1.5 hours lab, 1 unit
Prerequisite: Music 215A with a grade of "C" or better, or equivalent.
This course is an advanced level of study of practical and theoretical keyboard techniques for music majors, credential applicants, and non-music majors with comparable skills. The course focuses on advanced skill development of repertoire, keyboard technique, sight-reading, transposition, harmonization, creative composition, improvisation, ensemble playing, and modulation techniques. (FT) Transfer credit: CSU and/or private coll/univ.; UC.

240A Advanced Voice Class
1 hour lecture, 2 hours lab, 1.5 units
Deals with the development of proper voice production. Includes the problems of breath control, resonance, articulation and vowel formation, with emphasis on interpretation. Repertoire is expanded to include study of art and classical songs. Recital performance in public. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.
240B Advanced Voice Class  
1 hour lecture, 2 hours lab, 1.5 units  
For advanced students in voice. Deals with development of proper voice production. Includes the problems of breath control, resonance, articulation and vowel formation, with emphasis on interpretation. Performance of art song in foreign language is also required. (FT) Transfer Credit: CSU and/or private coll/ univ.; UC.

250A Concert Band  
3 hours lab, 1 unit  
Advisory: Music 150A with a grade of “C” or better, or equivalent. Study and performance of concert and standard band literature as well as other literature to be arranged. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

250B Concert Band  
3 hours lab, 1 unit  
Advisory: Music 150A with a grade of “C” or better, or equivalent. Study and performance of concert and standard band literature as well as other literature to be arranged. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

250C Concert Band  
3 hours lab, 1 unit  
Advisory: Music 150A with a grade of “C” or better, or equivalent. Study and performance of concert and standard band literature as well as other literature to be arranged. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

250D Concert Band  
3 hours lab, 1 unit  
Advisory: Music 150A with a grade of “C” or better, or equivalent. Study and performance of concert and standard band literature as well as other literature to be arranged. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

252 Concert Jazz Band  
3-9 hours lab, 1-3 units  
Limitation on Enrollment: Audition/Try Out  
A selected group of limited membership devoted to the preparation and performance of the best contemporary jazz and stage band literature. Designed to meet the needs of the student desiring to enter the field of professional stage band work, but open to qualified students of any department of the college. The group gives public concerts and supplies music for college functions. Attendance at rehearsals and performances is an integral part of this course. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

253A Ensembles  
3-9 hours lab, 1-3 units  
Advisory: Music 150A with a grade of “C” or better, or equivalent. Music 253A is the study and performance of selected ensemble works. After audition each student is assigned to a like ensemble. These ensembles will be organized to meet the technical and aesthetic needs of the student. Special training will be given in ensemble technique and current performance practices. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

253B Ensembles  
3-9 hours lab, 1-3 units  
Advisory: Music 150A with a grade of “C” or better, or equivalent. A second level continuation of Music 253A; refer to Music 253A for detailed description. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

253C Ensembles  
3-9 hours lab, 1-3 units  
Advisory: Music 150A with a grade of “C” or better, or equivalent. A third level continuation of Music 253B; refer to Music 253A for detailed description. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

253D Ensembles  
3-9 hours lab, 1-3 units  
Advisory: Music 150A with a grade of “C” or better, or equivalent. A fourth level continuation of Music 253C; refer to Music 253A for detailed description. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

254 Instrumental Ensemble  
3 hours lab, 1 unit  
Advisory: Music 150A with a grade of “C” or better, or equivalent. A selected group of limited membership devoted to the preparation and performance of the best contemporary jazz and stage band literature. The group is a performance band. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.
258A Music Theory III  
4 hours, 4 units  
Prerequisite: Music 158B with a grade of "C" or better, or equivalent.  
Advisory: Concurrent enrollment in Music 269A.  
This course is a continuation of 158B. It includes a detailed structural analysis and study of compositional techniques in the music of the 18th and 19th centuries. The emphasis is on further development of writing skills using chromatic harmony including secondary dominants and altered chords; the analysis and writing of two-part tonal counterpoint; the analysis of Sonata-form, Rondo, Theme and Variations. This course is designed for the student pursuing music as a major or for the student interested in enhancing technical knowledge of music. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

258B Music Theory IV  
4 hours, 4 units  
Prerequisite: Music 258A with a grade of "C" or better, or equivalent.  
Advisory: Concurrent enrollment in Music 269B.  
This course is a continuation of 258A. It includes a detailed structural analysis and study of compositional techniques in the music of the 19th and 20th centuries. The emphasis is on the study of the new resources that emerged in the music of the late 19th and early 20th centuries including non-functional harmony, polytonality, atonality and serial techniques; analysis of music by Wagner, Debussy, Stravinsky and Schoenberg. This course is designed for the student pursuing music as a major or for the student interested in enhancing technical knowledge of music. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

268B Beginning Ear Training Laboratory II  
3 hours lab, 1 unit  
Prerequisite: Music 268A with a grade of "C" or better, or equivalent.  
This course is a continuation of Music 268A. The emphasis is on continued development of skills in sight singing melodies which contain seconds, thirds, fourths, fifths, sixths, sevenths, octaves and the tritone; melodic dictation containing triadic arpeggations, harmonic identification of all diatonic triads in major and minor keys; rhythmic dictation with half beat values, quarter beat values and syncopation. This course is designed for the student pursuing music as a major or for the student interested in enhancing technical knowledge and skills. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

269A Advanced Ear Training Laboratory III  
3 hours lab, 1 unit  
Prerequisite: Music 269A with a grade of "C" or better, or equivalent.  
This course is a continuation of Music 269A. The emphasis is on further development of skills in sight singing modal melodies and melodies containing larger leaps and nondiatonic tones; dictation of melodies with nondiatonic tones and modal melodies; harmonic identification of secondary dominants and augmented sixth and neapolitan sixth chords; rhythmic dictation with changing meters and super triplets. This course is designed for the student pursuing music as a major or for the student interested in enhancing technical knowledge and skills. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.
275A-B-C-D Applied Music
1 hour lecture, 6 hours lab, 2 units
Grade Only
Prerequisite: Music 150A with a grade of “C” or better, or equivalent.
Corequisite: Music 212A or 212B or 212C or 212D or Music 214A or 214B or 214C or 214D or Music 250A or 250B or 250C or 250D or Music 252 or 253 or 254.
This course provides individual instruction in vocal or instrumental music and is designed primarily for music majors. It includes two hours per week of recital instruction. A minimum of 15 lessons per semester, as well as 5 hours of on-campus practice per week must be verified. Regular performance in the weekly lecture-recital class and participation in music department recitals is required. Examination will be by faculty-jury at the end of each semester. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

276A Individual Study
Hours by Arrangement; 1 unit
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course consists of off-campus private instruction designed for music majors and those meeting teaching credential performance requirements in voice or on an instrument. This course is taught by approved off-campus instructors whose activities are coordinated and evaluated jointly with on-campus music faculty through weekly performance sessions and a final semester jury examination. For conditions of enrollment see a member of the music faculty. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

276B Individual Study
Hours by Arrangement; 1 unit
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Continuation of Music 276A; refer to Music 276A for detailed description. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

276C Individual Study
Hours by Arrangement; 1 unit
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Continuation of Music 276B; refer to Music 276A for detailed description. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

276D Individual Study
Hours by Arrangement; 1 unit
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Continuation of Music 276C; refer to Music 276A for detailed description. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

290 Independent Study
Hours by Arrangement; 1-3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: Must obtain an Add Code from instructor for registration.
Course is designed to meet individual needs or interests of students who wish to work on special projects in music. Special projects include all aspects of music and may involve topics which are broad in scope along with those that are narrow in scope. Special projects may include an unlimited number of diversified phases of the music curricula. This course may be taken four times with different content for a maximum of six units. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

The Nursery and Landscape Technology certificates and degree programs were deactivated in the fall of 1996. Students who are in this major are advised to contact the Architecture Department chairperson to explore options for completing the certificate or degree program.

105 Principles of Plant Growth
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is a study of plant growth and function including the basic principles of plant growth, soil and
fertilizer science. The growth of plants in relation to the environmental factors of temperature, water, and light and the cycles of vegetative and reproductive growth are covered. This course is designed for students who are studying for a Certificate of Completion in Urban Forestry or any person who would like to be more successful in growing plants. This course meets the Natural Sciences general education requirement for the associate degree at the San Diego Community College District. (FT) Transfer Credit: CSU and/or private coll/univ.

170 Plant Pest and Control
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5. This course is a study of insects, plant diseases, other pests attacking ornamentals, and environmental conditions injurious to vegetation. Control methods, materials, and practices are covered. A self-study of the California State pesticide applicator licensing laws and requirements is included. This course is designed for students who are studying for a Certificate of Completion in Urban Forestry or any person who would like to be more successful in identifying and controlling plant pests. (FT) Transfer Credit: CSU and/or private coll/univ.

150 Nutrition
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, and Mathematics 32, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5, R5 and M20. This course examines the scientific concepts of nutrition relating to the functioning of nutrients within the human body. Emphasis is placed on nutritional needs throughout the life cycle, food sources of nutrients, and current nutritional issues. Students utilize computer technology to analyze dietary intake and evaluate nutritional status. This course meets the Natural Sciences general education requirement for the associate degree at the San Diego Community College District. It also meets Area E requirement for transfer to California State Universities. (FT) Transfer Credit: CSU; UC. (CAN FCS 2)

152 Cultural Aspects of Foods/Nutrition
2 hours lecture, 2 units
Grade Only
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5. This course examines foods as an expression of cultural diversity. The foods, dietary habits, religious influences and overview of nutritional problems of ethnic groups within the United States are discussed and assessed. The emphasis is on contributions made by various groups to foods eaten within the United States. Transfer Credit: CSU and/or private coll/univ.

155 Advanced Nutrition
3 hours, 3 units
Grade Only
Prerequisite: Nutrition 150 with a grade of "C" or better, or equivalent. Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of "C" or better, or equivalent, or Assessment Skill Level M20. Continuation of the study of the functioning of nutrients in the basic life processes from a biochemical and cellular approach. Investigation of certain diets in relation to disease, current legislation relating to nutritional issues, and consumer nutritional practices. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Nutrition (NUTR) 150 and 155 combined: maximum credit, one course.

160 Foods for a Healthful Lifestyle
3 hours lecture, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of "C" or better, or equivalent, or Assessment Skill Level M20. This course emphasizes scientific concepts of nutrition and food relating to health promotion. Health benefits and food sources of nutrients, healthful food preparation and food technologies are discussed. This course is targeted for individuals who are interested in attaining or promoting good health through nutrition. (FT) Transfer Credit: CSU and/or private coll/univ.
170 Nutrition and Fitness

3 hours lecture, 3 units
Grade Only

Advisory: English 51 and 56 and Mathematics 32, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of "C" or better, or equivalent, or Assessment Skill Level M20.

This course is designed for the physically active person interested in the role nutrition plays to increase energy and enhance performance. Nutrient needs before, during, and after exercise are evaluated for their effect on optimal performance. Carbohydrate loading and a variety of supplements are discussed. Underwater weighing to determine body fat composition is available. This course is designed for both the recreational and competitive athlete and may be applied to the major or used as a transfer course. It may also be of interest to those with an interest in health and fitness. (FT) Transfer credit: CSU and/or private coll/univ.

180 Nutrition and Diet Therapy

3 hours, 3 units
Grade Only

Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of "C" or better, or equivalent, or Assessment Skill Level M20.

This course emphasizes concepts of nutrition relating to the functioning of nutrients within the human body and food sources of these nutrients, with special emphasis on nutritional assessment in specific disease conditions and therapeutic diets relevant to given conditions. An introduction to drug/nutrient interactions is also given. (FT) Transfer Credit: CSU and/or private coll/univ.

190 Computer Nutrition Practicum

1.5 hours lab, 0.5 unit
Grade Only

Corequisite: Nutrition 150.
Advisory: Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

This course introduces the use of a microcomputer and explores selected software programs for nutritional analysis, estimation of energy requirements and reading of food labels. (FT) Transfer Credit: CSU and/or private coll/univ.

270 Work Experience

Hours by Arrangement, 1-4 units
Grade Only

Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, including work experience.

Program of on-the-job learning experiences for students employed in a job related to their major. The combined maximum credit for all work experience courses from all disciplines may not exceed 16 units. Transfer Credit: CSU and/or private coll/univ.

290 Independent Study

Hours by Arrangement; 1-3 units
Grade Only

Limitation on Enrollment: Must obtain an Add Code from instructor for registration.

Designed to deal with current problems and topics of special interest in home economics. This course may be taken four times with different content for a maximum of six units. This course may be taken four times with different content for a maximum of six units. Transfer Credit: CSU and/or private coll/univ.

391 Directed Clinical Practicum

10 hours lab, 2 units
Grade Only

Prerequisite: Nutrition 150 with a grade of “C” or better, or equivalent.
Corequisite: Nutrition 180.

This course is a supervised application of previously learned knowledge and skills in the nutrition management and operation of a health care facility. Supervision of the student will be shared by the college faculty and staff of the affiliating institution. This is a required clinical training for students who want to obtain the Dietetic Service Supervisor Certificate, as regulated by the California State Department of Health Services. (FT) Credit for this course will not apply to the associate degree.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

Office Information Systems (OFCE)

See Computer Business Technology (CBTE) on page 222.
65 Orientation to College

0.5 - 1 hour lecture, 0.5 - 1 unit
Credit/No Credit

This course is designed to assist the new student in a successful transition to college. It is also helpful for the transfer student new to Mesa College and the continuing student who might be experiencing academic difficulty. Topics include campus resources and services, time management, and educational planning. Students are also acquainted with Policy 3100, which enumerates the rights and responsibilities of all San Diego Community College District students. (FT)

127 College Success Skills

3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5, or concurrent enrollment in English 51 and/or 56. This course examines the techniques used to enhance academic skills in order to achieve subject matter mastery and develop strategies for success in a diverse society. Critical thinking skills are interwoven throughout the course by exploring areas such as motivation and attitudes, stress management, creativity, interpersonal communication, and personal health. Topics from developmental psychology, learning theory and personality theory are presented as a foundation for this course. The course is designed for new or re-entry students and others who can benefit. (FT) Transfer Credit: CSU and/or private coll/univ.

130 Career-Life Planning

3 hours, 3 units
Advisory: Completion of or concurrent enrollment in English 51 and/or 56 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5. Limitation on Enrollment: This course is not open to students with credit for Personal Growth 30. This course is designed to assist students with self-exploration, career transitions and career-life planning in order to achieve success in a diverse society. Critical thinking skills will be utilized through a systematic approach to career development by examining values, interests, skills, life roles, personality type, personal self-management, decision-making and goal setting throughout the life span. The course is designed for new and re-entry students and others who can benefit. (FT) Transfer Credit: CSU and/or private coll/univ.

140 Life Skills and Personal Adjustment

1-3 hours lecture, 1-3 units

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5. Students learn and apply personal achievement principles, coping strategies, and life skills that develop each area of emotional, social, educational, and professional life. Emphasis is on gaining mastery in self-esteem and compassion, self-discipline, self-responsibility, self-assertion, and living a consciously balanced life in pursuit of defined educational, career, and life goals. (FT) Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

100 Logic and Critical Thinking

3 hours, 3 units
Advisory: English 101 or 105 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course explores the relationship of communications and critical thinking with a focus on good reasoning and the impediments to its mastery. This course emphasizes the development of skills in logical processes including familiarity with the more common fallacies. This course is designed for students learning to apply principles of critical thinking to the practical problems of everyday life. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN PHIL 6)

101 Symbolic Logic

3 hours, 3 units
Prerequisite: Mathematics 96 with a grade of "C" or better, or equivalent, or Assessment Skill Level M50 and Philosophy 100 with a grade of "C" or better, or equivalent.

Advisory: English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course studies the elements of symbolic logic, sentential calculus and quantification theory, identity, definite descriptions, natural deduction and structure.
of language. This course may be of interest to students pursuing studies in computer science. Transfer Credit: CSU and/or private coll/univ.; UC.

102A Introduction to Philosophy: Reality and Knowledge
3 hours, 3 units
Advisory: English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course provides an introductory study of the aims, methods, types and problems of philosophy and philosophical inquiry. Discussions and readings relating to the nature of reality and problems of knowledge are emphasized. Materials for this survey of philosophical activity, orientations and views of philosophers may be drawn from classical and contemporary thinkers. Students are encouraged to articulate, analyze and evaluate their own beliefs/positions in the context of meaningful philosophical inquiry. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN PHIL 2)

102B Introduction to Philosophy: Values
3 hours, 3 units
Advisory: English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course provides an introductory study of the aims, methods, types and problems of philosophy and philosophical inquiry focusing on values and their place in an individual's daily life. Materials for this survey of philosophical activity, orientations and views of philosophers may be drawn from classical and contemporary thinkers. Students are encouraged to articulate, analyze and evaluate their own beliefs/positions in the context of meaningful philosophical inquiry regarding value theory. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN PHIL 4)

103 Historical Introduction to Philosophy
3 hours, 3 units
Advisory: English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course provides an introductory study of the aims, methods, issues and problems associated with philosophy and philosophical activity from an historical perspective. Readings and discussions in the course emphasize a study of the philosophical endeavors of major philosophers in their historical contexts. Materials for this survey of philosophical activity, orientations and views of philosophers may be drawn from classical and contemporary thinkers. Students are encouraged to articulate, analyze and compare their own beliefs/positions with historically significant philosophical theories. This course may be of interest to students pursuing studies in History and Humanities. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN PHIL 8) (CAN PHIL SEQ A = PHIL 104A + 104B)

104A History of Western Philosophy
3 hours, 3 units
Advisory: English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course explores the issues and problems associated with philosophy and philosophical activity as they are illustrated in the history of Western philosophy. Studies in this course focus on representative thinkers of the Classical and/or Medieval periods, their cultural milieu, and their attempts to resolve perennial philosophical issues and problems. This course may be of interest to students pursuing studies in History and Humanities. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN PHIL 10) (CAN PHIL SEQ A = PHIL 104A + 104B)

104B History of Western Philosophy
3 hours, 3 units
Advisory: English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course explores the problems associated with philosophy and philosophical activity as they are illustrated in the history of Western philosophy from the Renaissance period through the 19th Century. Studies in this course focus on representative thinkers of the Renaissance and/or Modern periods, their cultural milieu, and their attempts to resolve perennial philosophical issues and problems. This course may be of interest to students pursuing studies in History and Humanities. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN PHIL 4) (CAN PHIL SEQ A = PHIL 104A + 104B)

105 Contemporary Philosophy
3 hours, 3 units
Advisory: English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course is designed to explore the issues and problems associated with philosophy and philosophical activity in the twentieth and twenty-first centuries. Studies in this course focus on materials and representative thinkers in the twentieth and twenty-first centuries which illustrate contemporary philosophical activity, schools of thought, themes, trends, specific issues, or individual thinkers. Students
are encouraged to engage in independent research, analysis and formulation. This course may be of interest to students interested in contemporary society and current events. (FT) Transfer Credit: CSU and/or private coll/ univ.; UC.

**106 Asian Philosophy**

3 hours, 3 units

*Prerequisite:* English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.

*Advisory:* English 101 or 105 with a grade of "C" or better, or equivalent or Assessment Skill Levels W6 and R6.

This course explores the aims, methods, issues and problems exemplified in Asian philosophy and philosophical activity. Studies in this course survey significant inquiries, orientations and perspectives exemplified in Asian philosophy as well as Asian perspectives on perennial questions relating to the nature of the universe, the status and meaning of mankind, and the qualities characterizing the good life. Students are encouraged to engage in independent research, analysis and formulation. This course may be of special interest to students pursuing studies in Pacific Rim or International Studies. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

**107 Reflections on Human Nature**

3 hours, 3 units

*Advisory:* English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course explores the issues and problems exemplified in process of meaningful philosophical activity relating to the topic of human nature. Studies in this course survey representative theories and philosophical reflections relating to the notions of human nature, the individual person, and human characteristics in general. Material for this survey may be drawn from classical and contemporary thinkers, scientific and religious orientations. Students are encouraged to engage in independent research, analysis and formulation. This course may be of interest to students pursuing studies in behavioral and/or social sciences. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

**108 Perspectives on Human Nature and Society**

3 hours, 3 units

*Advisory:* English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course explores the topics of human nature and human societal configurations. Material for study may be selected from classical and contemporary thinkers. Studies in this course survey representative theories and philosophical reflections that explore the relation between theories regarding human nature and the nature of society, the state, and government with an emphasis on experiential elements of meaningful human existence and notions of ideal society. This course may be of particular interest to students pursuing studies in behavioral, social or political science. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

**109 Issues in Social Philosophy**

3 hours, 3 units

*Advisory:* English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course explores the aims, methods, and problems exemplified in philosophical endeavors in social philosophy. Studies in this course survey representative theories and perspectives on issues of interest in social philosophy such as types of government, the issues of sovereignty, natural law and natural rights, the philosophy of law, issues of justice, and problems in social ethics. This course may be of special interest to students pursuing studies in pre-law and/or political, behavioral or social sciences. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

**110 Philosophy of Religion**

3 hours, 3 units

*Advisory:* English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.

This course explores the issues and problems associated with philosophy and philosophical activity concerning various facets of religious phenomena and religious orientations/beliefs. This course investigates and analyzes philosophical arguments relating to basic religious beliefs and experiences such as the conceptions of God and/or divinity in the monotheistic traditions and non-Western religions. This course may be of interest to students pursuing religious and cultural studies. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

**111 Philosophy in Literature**

3 hours, 3 units

*Advisory:* English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course is designed to provide an introduction to the aims, methods, issues and problems associated with philosophy and philosophical activity. In this course students read and analyze selected classical and/or contemporary literature which portrays or dramatizes perennial philosophical questions, issues and themes relating to such topics as the nature of reality, the notion of the self, the issue of choice and determinism, the problem of good and evil, and characteristics of the good life. This offering may be of interest to students pursuing studies in literature or in the behavioral and/or social sciences. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

112 Philosophy of Science  
3 hours, 3 units
Advisory: English 101 or 105, with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.
This is an introductory general education course exploring the presuppositions, concepts, principles, criteria and methodology of science and scientific investigation. The course is appropriate for students seeking a basic understanding of the nature of science and its philosophical underpinnings. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

125 Philosophy of Women in World Cultures  
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This is an introduction and exploration of the concepts of womanhood and feminism in the mythic, classic, medieval, and major modern philosophical traditions. The images, roles, and beliefs about women found in the humanities will be explored with respect to their impact and contemporary relevance. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

130 Philosophy of Art and Music  
3 hours lecture, 3 units
Advisory: English 101 or English 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.
This course employs philosophical methods to explore the concepts, principles, and criteria used in the creation and evaluation of art and music. In addition to students interested in philosophy, this course is designed for any student seeking to gain a better understanding of why we appreciate art and music and how we develop standards for evaluating them. A variety of arts may be discussed including painting, sculpture, architecture, design, music, dance, theatre, and literature. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

205 Critical Thinking and Writing in Philosophy  
3 hours lecture, 3 units
Prerequisite: English 101 or 105 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W6 and R6.
This critical thinking and writing seminar in Philosophy is designed to enhance the student's critical thinking, writing, and research skills in preparation for upper division academic activity. Issues addressed in this class may involve various areas of human experience and aspiration: metaphysical, cosmological, scientific, political, ethical, aesthetic, and religious. Together with the application of basic principles of deduction and induction, special attention is given to identifying and avoiding fallacies in reasoning and to techniques and aids to research, reasoning, and writing. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.
Students are strongly advised to consult a physician prior to participating in any physical education activity.

**Aquatic Activities**

A program which offers the student a choice from a variety of courses. Instruction and conditioning in all aspects of aquatics to provide a carry-over value for leisure life.

**106 Aquatic Fitness**

2 - 3 hours lab, 0.5 - 1 unit

This course covers instruction and conditioning in the four competitive swimming strokes through interval training stressing cardiovascular respiratory fitness in aquatic activities. The swimming program is set up to attain desired levels of cardiovascular efficiency. This course may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

**119 Springboard Diving**

2 hours lab, 0.5 unit or 3 hours lab, 1 unit

This course is designed as an introduction to springboard diving with. Progressive skill development in performing dives from five different categories. This course includes novice, beginning, intermediate and advanced levels. Standardized skill progressions are used for the forward, backward, inward, reverse and twisting dives. The concepts covered include springboard diving techniques and water safety. This course may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

**139 Lifeguard Training - Advanced Swimming**

2.5 hours lecture, 1.5 hours lab, 3 units

This course gives the most current instruction in the American Red Cross lifeguard training techniques and first aid and CPR skills required to gain eligibility for a lifeguarding position. Upon successful completion, a student will earn certifications in both American Red Cross Lifeguard Training and CPR for the Professional Rescuer. This course may be repeated as necessary to meet a legally mandated training requirement as a condition of continued or volunteer employment. Adequate swimming skills are necessary. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

**155 Swimming**

2 - 3 hours lab, 0.5 - 1 unit

This course emphasizes instruction and practice in the fundamental to advanced swimming strokes including water safety skills. Stroke analysis, conditioning and endurance are stressed in the progression of classes. Beginning and intermediate levels are available. This course may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

**163 Water Polo**

2 hours lab, 0.5 unit or 3 hours lab, 1 unit

This course is designed to emphasize the fundamental skill development related to the aquatic sport of water polo. Progressive skill development includes picking up a ball in the water, passing, receiving, shooting, dribbling, and playing in a game. Discussion includes proper offensive and defensive positioning, team strategies, and rules of play. This course may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

**164 Water Safety Instructor**

2.5 hours lecture, 1.5 hours lab, 3 units

This course gives the most current instruction in the American Red Cross (ARC) Water Safety Instructor (WSI) course. Upon successful completion, students earn WSI certification, which enables them to teach the Learn to Swim programs of the American Red Cross. This course may be repeated as necessary to meet a legally mandated training requirement as a condition of continued or volunteer employment. Adequate swimming skills are necessary. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

**Dance**

A program which offers the student instruction in a variety of dance forms. Classes range from the beginning level through the performance level.

**103 Aerobic Dance**

2 - 3 hours lab, 0.5 - 1 unit

Aerobic Dance is a rigorous exercise course designed to increase both the fitness level of participating students and their understanding of what constitutes a safe and effective exercise program. Instruction includes a balanced exercise program of aerobics, toning, stretching, and relaxation along with discussion of related health topics. This course may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC limitations. See a counselor.

**110 Ballet**

2 - 3 hours lab, 0.5 - 1 unit

Ballet is a course in traditional ballet technique focusing on correct body alignment and placement.
through repetition of barre and centre work. The class analyzes, discusses, and critiques the line, design, ballet technique, choreography and dynamics of ballet movements. This course, in combination with Dance 110, may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

135 Jazz Dance
2 - 3 hours lab, 0.5 - 1 unit
Jazz Dance is a course which explores a variety of jazz dance techniques focusing on the development of coordination, flexibility, balance, strength, correct body alignment and rhythmic perception. Dance combinations are performed to demonstrate technical ability at all skill levels. This course, in combination with Dance 135, may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

140 Modern Dance
2 hours lab, 0.5 unit or 3 hours lab, 1 unit
Modern Dance is a course that explores the fundamental concepts and techniques of modern dance including floor stretch, center work, locomotor sequences and dance combinations. The student demonstrates, defines and performs flexibility, coordination, rhythmic and dynamic perception, control and strength. The class critiques, discusses and analyzes line, design, technique, choreography and dynamic qualities through lectures, video tapes and concert critiques. This course, in combination with Dance 140, may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

178 Advanced Contemporary Dance
3 hours lab, 1 unit
Advisory: Physical Education 135 with a grade of “C” or better, or equivalent.
This course focuses on the movement principles of American dance masters Jack Cole, Bob Fosse, Luigi and Matt Mattox. Instruction includes student performance of various contemporary dance styles for videotaped analysis of technical proficiency. This course, in combination with Dance 178, may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

Individual Activities
A basic program which offers the student a choice of vigorous, competitive activity in individual sports and activities designed to provide carry-over value for leisure life. Instruction is in fundamental skills knowledge of rules and strategy, with emphasis on physical fitness.

108 Badminton
2 hours lab, 0.5 unit or 3 hours lab, 1 unit
Instruction and practice in the fundamentals of the grip, strokes, footwork, court coverage and rules of play. Singles and doubles strategy, offensive and defensive positioning and tournament play will be progressively incorporated at intermediate and advanced levels. This course may be taken four times for credit. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

115 Bowling
2 - 3 hours lab, 0.5 - 1 unit
This course is designed to develop skills necessary to improve student performance of the fundamentals of the stance, point of origin, approach, back swing, release and follow through, rules, scoring and etiquette in the game of bowling. Progressive instruction emphasizes individual skill development, spot bowling and participation in a league bowling situation. This course may be taken four times for credit. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

120 Fencing
2 hours lab, 0.5 unit or 3 hours lab, 1 unit
Basic techniques of fencing with French foil. On guard, advance, retreat, attach and parries (simple and compound), and basic rules. Simple and compound attacks, secondary attacks, counter attacks, circular parries and bouting will be stressed in intermediate and advanced classes. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

123 Fitness Activities
2 - 3 hours lab, 0.5 - 1 unit
This course includes instruction in the skills necessary to improve aerobic fitness and cardiovascular health. Through fitness topics covered, students will develop an individual fitness program. Aerobic exercise focuses primarily jogging, progressing to running for the development of comprehensive fitness. This course may be taken four times for credit. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.
126 Golf
2 hours lab, 0.5 unit or 3 hours lab, 1 unit
Instruction and practice in the fundamentals of grip, stance, alignment, backswing and downswing. Also covering the use of the various clubs, rules, scoring and the etiquette of the game. The “one basic golf swing” theory will be emphasized throughout the course. Outside assignments practicing at a driving range or golf course are allowed. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

132 Individual Conditioning
2 hours lab, 0.5 unit or 3 hours lab, 1 unit
Individually programmed instruction in the fundamental skills of weight training and aerobic activity. Progressive instruction involves more advanced levels of weight training and comprehensive aerobic development. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

142 Racquetball
2 hours lab, 0.5 unit or 3 hours lab, 1 unit
Instruction and practice in the fundamental skills of grip, strokes, footwork, court coverage and rules of play. Singles and doubles strategy, offensive and defensive positioning and tournament play will be progressively incorporated at the intermediate and advanced levels. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

154 Speedwalking
0.5 - 1.5 hours lecture, 1.5 hours lab, 1-2 units
Grade Only
This course covers the skills necessary to improve aerobic fitness and cardiovascular health through speedwalking, with comprehensive instruction in fitness principles and exercise technique. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

159 Tennis
2 hours lab, 0.5 unit or 3 hours lab, 1 unit
Instruction in the fundamental skills of the service, forehand and backhand strokes; court positioning, rules of the game and scoring. Progressive instruction includes the volley, overhead, singles and doubles strategy and tournament play. Instruction covering tennis scoring, court position, strategy, and strokes, including the forehand, backhand, serve, volley, and overhead. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

160 Track and Field
2 hours lab, 0.5 unit or 3 hours lab, 1 unit
Instruction in the fundamentals and techniques of running and field events emphasizing progressive individual development for each event. Intermediate and advanced levels emphasize a refinement of technique to maximize individual competitive performance. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

166 Weight Training
2 hours lab, 0.5 unit or 3 hours lab, 1 unit
This course is an introduction to progressive resistance training. It is designed for the student interested in developing strength, muscle endurance, and muscle tone. Instruction includes learning proper methods of weight training, various types of weight training programs, and safety factors. This course may be taken four times for credit. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

171 Men’s Gymnastics
2 - 3 hours lab, 0.5 - 1 unit
This course is designed to have the student demonstrate skills in gymnastics. Standardized progression of skills instruction is used in tumbling or floor exercise, parallel bars, horizontal bars, vaulting, still rings and pommel horse. The concepts covered include safety and injury prevention, balance and body alignment as they relate to the events taught, and preparing for gymnastics through movement/skill combinations in gymnastics routines. This course may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

172 Women’s Gymnastics
2 hours lab, 0.5 unit or 3 hours lab, 1 unit
This course is designed to have the student demonstrate skills in gymnastics. Standardized progression of skills instruction is used in tumbling or floor exercise, uneven parallel bars, balance beam and vaulting. The concepts covered include safety and injury prevention, balance and body alignment as it relates to the events taught, and preparing for gymnastics through movement/skill combinations in gymnastics routines. This course may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.
233 Kickboxing

2-3 hours lab, 0.5-1 unit
Grade Only

This course is designed for students to learn kickboxing. It includes solo training, partner training, equipment training, and controlled sparring as practiced by the Kali/Jeet Kune Do family, including JKD kickboxing, the arts of Muay Thai training, Savate, and Panantukan styles of kickboxing. Emphasis is placed on practice in the fundamentals of kickboxing including kickboxing safety skills and etiquette. Kick/strike analysis, balance flexibility, conditioning, muscular strength and endurance are stressed in the progression of the class. This course meets the SDCCD graduation requirements. This course may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

Team Sports

111 Baseball

2 hours lab, 0.5 unit or 3 hours lab, 1 unit
Instruction to develop the fundamental skills of throwing, catching, running, hitting, rules of play and strategy. Intermediate and advanced levels emphasize both individual and team skill development and strategies involved in competitive game situations. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

112 Basketball

2 hours lab, 0.5 unit or 3 hours lab, 1 unit
This course offers basic instruction in the fundamental skills of basketball and team offense and defense. Instruction includes terminology, rules and strategy of the game. This course may be taken four times for credit. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

125 Football

2 hours lab, 0.5 unit or 3 hours lab, 1 unit
Football explores the skills and techniques for team play including blocking, tackling, passing catching, running, and offensive and defensive positioning. Football emphasizes individual and team skills as well as strategies involved in game situations. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

141 Over-the-Line

3 hours lab, 1 unit
This course provides instruction in the skills of over-the-line including pitching, catching, and proper styles of batting. Rules of play, strategy, and game situations are introduced through various types of tournaments and contests. This course may be taken four times for credit. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

149 Soccer

2 hours lab, 0.5 unit or 3 hours lab, 1 unit
This course emphasizes progressive instruction and practice of basic fundamentals through advanced soccer skills. The topics covered include soccer techniques and skills, offensive and defensive strategies, rules, and officiating. This course may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

151 Softball

2 - 3 hours lab, 0.5 - 1 unit
This course provides instruction in the fundamental skills of throwing, catching, running, hitting, and rules of play of softball as well as individual and team skill development and strategies involved in competitive game situations. This course may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

161 Volleyball

2 hours lab, 0.5 unit or 3 hours lab, 1 unit
This course provides instruction and on-court experience in the skills, strategies, rules and behaviors necessary to play volleyball at the recreation level. This course may be taken four times for credit. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

Adapted Physical Education

181A Adapted Swimming

3 hours lab, 1 unit

Limitation on Enrollment: A physician’s medical release form is required. This course is not open to students with credit for Physical Education 181, 181C, or 181D. This course is designed for students with disabilities to learn how to swim through modified swimming strokes based on their abilities. Emphasis is placed on practice in the fundamental swimming strokes, including water safety skills. Stroke analysis, conditioning and endurance is stressed in the progression of the class. This course meets the SDCCD graduation requirements. This course may be taken four times for credit. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.
182 Adapted Weight Training
3 hours lab, 1 unit

Limitation on Enrollment: A physician's medical release form is required.
This course is designed for students with disabilities as an introduction to progressive resistance training. Emphasis is placed on developing cardiorespiratory and muscle endurance, muscle strength and flexibility and a healthy body composition through individualized safe and beneficial exercise programming. The course includes exercises that focus on relaxation, joint mobility, body maintenance, and activities for daily living. This course may be taken four times for credit. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

184 Adapted Physical Fitness
2-3 hours lab, 0.5-1 unit

Limitation on enrollment: A physician’s medical release form is required.
This course is designed for students with disabilities to provide opportunities for exercise and activities to improve cardiorespiratory endurance, flexibility, muscular endurance, strength, stress management and coordination. Activities can include walking, dance, rhythm activities, wheelchair pushing, jogging, relaxation training and exercises for joint mobility. This course may be repeated three times. (FT) Transfer Credit: CSU and/or private coll/univ., UC.

Intercollegiate Athletics

200 Intercollegiate Badminton I
Spring, 10 hours lab, 2 units
Grade Only

Advisory: Physical Education 108 with a grade of “C” or better, or equivalent, or previous competitive badminton experience.
This is a course for students competing in their first intercollegiate badminton season. The course is offered in the spring semester for women and may be taken two times for credit. (FT) Transfer Credit: CSU.

201 Intercollegiate Badminton II
Spring, 10 hours lab, 2 units
Grade Only

Advisory: Physical Education 200 with a grade of “C” or better, or equivalent.
This is a course for students competing in their second intercollegiate badminton season. The course is offered in the spring semester for women and may be taken two times for credit. (FT) Transfer Credit: CSU.

202 Intercollegiate Baseball I
Spring, 10 hours lab, 2 units

Intercollegiate varsity baseball competition. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

203 Intercollegiate Baseball II
Spring, 10 hours lab, 2 units

Intercollegiate varsity baseball. Second season of competition. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

204 Intercollegiate Basketball I
Fall/Spring
5 hours lab, 1 unit, 7.5 hours lab, 1.5 units
10 hours lab, 2 units

This course is intended for the first season of intercollegiate competition. Basketball skills and game strategies are at a more advanced level of participation than those of the Basketball 112 class. This course may be taken two times for credit. (FT) Transfer Credit: CSU and/or private coll/univ., UC.

205 Intercollegiate Basketball II
Fall/Spring
5 hours lab, 1 unit, 7.5 hours lab, 1.5 units
10 hours lab, 2 units

This course is intended for the second season of intercollegiate competition. Basketball skills and game strategies are at the advanced levels of participation. This course may be taken four times for credit. (FT) Transfer Credit: CSU and/or private coll/univ., UC.

206 Intercollegiate Cross-Country I
Fall, 10 hours lab, 2 units

Intercollegiate varsity cross-country competition. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

207 Intercollegiate Cross-Country II
Fall, 10 hours lab, 2 units

Intercollegiate varsity cross-country competition. Second season of competition. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

210 Intercollegiate Football I
Fall, 10 hours lab, 2 units

Advisory: Concurrent enrollment in PHYE 250A is recommended.
This course is designed for students in their first season of intercollegiate football. Topics include fundamental skills of play for offense/defense and special teams.
(FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

211 Intercollegiate Football II
Fall, 10 hours lab, 2 units
Advisory: Concurrent enrollment in PHYE 250B is recommended.
This course is designed for students in their first season of intercollegiate football. Topics include fundamental skills of play for offense/defense and special teams. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

214 Intercollegiate Soccer I
Fall, 10 hours lab, 2 units
Advisory: PHYE 149 with a grade of “C” or better, or equivalent and/or previous competitive soccer experience.
This is the first course of intercollegiate soccer competition. This course is offered separately for men and women. This course may be taken two times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

215 Intercollegiate Soccer II
Fall, 10 hours lab, 2 units
Advisory: PHYE 149 with a grade of “C” or better, or equivalent and/or previous competitive soccer experience. Concurrent enrollment in PHYE 257B is highly recommended.
This is the second course of intercollegiate soccer competition. This course is offered separately for men and women in the fall semester. This course may be taken two times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

216 Intercollegiate Softball I
Spring, 10 hours lab, 2 units
This is a course in which students competing in their first intercollegiate softball season learn and practice the techniques and strategies necessary for successful participation. Those topics covered are fundamental through advanced softball skills and offensive and defensive strategies. This course is offered in the spring semester and may be taken two times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

217 Intercollegiate Softball II
Spring, 10 hours lab, 2 units
This is a course in which students competing in their second intercollegiate softball competition learn and practice the techniques and strategies necessary for successful participation. Those topics covered are fundamental through advanced softball skills and offensive and defensive strategies. This course is offered in the spring semester and may be taken two times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

218 Intercollegiate Swimming I
Spring, 10 hours lab, 2 units
This course is designed for students to compete in men's and women's intercollegiate varsity swimming and diving competition. This course may be taken two times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

219 Intercollegiate Swimming II
Spring, 10 hours lab, 2 units
This course is designed for students to compete in a second semester of men's and women's intercollegiate swimming and diving competition. This course may be taken two times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

220 Intercollegiate Tennis I
Spring, 10 hours lab, 2 units
This is a course for students competing in their first intercollegiate tennis season. This course is offered in the spring semester for men and women and may be taken two times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

221 Intercollegiate Tennis II
Spring, 10 hours lab, 2 units
This is a course for students competing in their second semester of intercollegiate tennis season. This course is offered in the spring semester for men and women and may be taken two times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

222 Intercollegiate Track and Field I
Spring, 10 hours lab, 2 units
Intercollegiate varsity track and field competition. Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

223 Intercollegiate Track and Field II
Spring, 10 hours lab, 2 units
Intercollegiate varsity track and field competition. Second season of competition. Transfer Credit: CSU
and/or private coll/univ.; UC transfer limitations. See a counselor.

224 Intercollegiate Volleyball I
Fall (Women), Spring (Men),
10 hours lab, 2 units
Advisory: PHYE 161 with a grade of “C” or better, or equivalent and/or previous competitive volleyball experience.
This is the first course in intercollegiate volleyball competition. This course is offered in the fall semester for women and the spring semester for men and may be taken two times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

225 Intercollegiate Volleyball II
Fall (Women), Spring (Men),
10 hours lab, 2 units
Advisory: PHYE 224 with a grade of “C” or better, or equivalent. Concurrent enrollment in PHYE 255A is highly recommended.
This is the second course in intercollegiate volleyball competition. This course is offered in the fall semester for women and the spring semester for men and may be taken two times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

226 Intercollegiate Water Polo I
Fall, 10 hours lab, 2 units
This course is designed for men and women to compete in intercollegiate varsity water polo competition. This course may be taken two times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

227 Intercollegiate Water Polo II
Fall, 10 hours lab, 2 units
This course is designed for men and women to participate in intercollegiate varsity water polo competition. This course may be taken two times for credit. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

Fitness Specialist Certificate Courses

280 Applied Exercise Physiology
2 hours, 2 units
Advisory: Mathematics 95 with a grade of “C” or better, or equivalent, or Assessment Skill Level M40.
This course is designed for the student in the Fitness Specialist Certificate Program to study how the body functions under conditions of exercise stress and how fitness behaviors affect health and wellness. Emphasis is placed on muscular, cardiorespiratory, and other physiological processes that occur as a result of exercise conditioning, and the effect of disease. (FT) Associate Degree Credit.

281 Applied Kinesiology
2 hours, 2 units
Grade Only
This course is designed for the student in the Fitness Specialist Certificate Program to study movement as it relates to exercise under both normal and injury conditions. Students learn the practical implications of bones, joints, nerves, and muscle actions. Emphasis is placed on applying body alignment, range of motion, stabilization, and acceleration principles to the development of exercise programs. (FT) Associate Degree Credit.

282 Techniques of Weight Training
2 hours, 2 units
Grade Only
This course, part of the Fitness Specialist Certification Program, is designed to provide a thorough review for those intending to teach weight training. The course studies anatomy and physiology, training sequences, available equipment, and safety factors, including contraindications. (FT) Associate Degree Credit.

283 Exercise and Fitness Assessment
1.75 hour lecture, .75 hour lab, 2 units
Grade Only
This course is designed for the student in the Fitness Specialist Certificate Program to learn how to assess cardiorespiratory endurance, muscular strength and endurance, flexibility, body fat, pulmonary function, and blood pressure and evaluate the results. Emphasis is placed on determining the appropriate test, conducting the test, evaluating the results, and creating an exercise program. (FT) Associate Degree Credit.

284 Fitness and Sports Nutrition
2 hours, 2 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is part of the Fitness Specialist Certification Program. Students will study the basic principles of nutrition and the ramifications of nutrition on sports activities. (FT) Associate Degree Credit.
285 Exercise for Special Populations  
2 hours, 2 units  
Grade Only

This course is designed for the student in the Fitness Specialist Certificate to study the exercise implications for special populations related to age, medical condition and level of fitness. Emphasis is placed on cardiac conditions, diabetes, physical disabilities, HIV and AIDS, asthma, sensory impairments, seniors, children, athletes, mentally impaired and pregnant and post partum women and the issues and barriers to exercise. (FT) Associate Degree Credit.

286 Techniques of Exercise Leadership 
1.75 hours lecture, .75 hour lab, 2 units  
Grade Only

This course is designed for the student in the Fitness Specialist Certificate Program to study the principles and techniques involved in teaching group exercise and developing a personal trainer/client relationship Emphasis is placed on client assessment, communication skills, program design, exercise adherence, teaching strategies, and professional responsibility and liability. (FT) Associate Degree Credit.

287 Fitness Specialist Internship 
1 hour lecture, 6 hours lab, 2 units  
Grade Only

Prerequisite: Physical Education 280 and 281 and 283, each with a grade of "C" or better, or equivalent. This course is designed to provide students in the Fitness Specialist Certificate Program with practical experience in the field of exercise and fitness. Emphasis is placed on participant screening, evaluation, and exercise program design, self marketing, fitness specialist/client relationships and professional responsibility in a fitness setting. (FT) Associate Degree Credit.

Physical Education Theory Classes

240 Physical Education in the Elementary Schools 
3 hours lecture, 1 hour lab, 3 units  
Advisory: Completion of or concurrent enrollment in English 51 and 56, each with a grade of "C" or better, or equivalent, or W5 and R5.

This course includes a brief study of the growth, development and characteristics of the elementary school child. The elements of written lesson plans, units, evaluations and various forms of testing are covered. The teaching of fundamental skills, rhythms, dance and games based on sound physiological principles for this age group is emphasized. The positive impact of physical education on health and wellness in addition to academic achievement is explored. Actual teaching situations are experienced in the lab sessions. This course is designed to fulfill lower division preparation for the major for students interested in elementary education. (FT) Transfer Credit: CSU and/or private coll/univ.

241 Introduction to Exercise Science/Physical Education 
2 hours lecture, 2 units

Advisory: English 51 and 56 with grades of "C" or better, or equivalent, or Assessment Skill Levels W5, R5. This course is the introductory course for students majoring in Physical Education and is required for the Associate in Arts degree in Physical Education. It provides the student an opportunity to study the history, basic philosophy, basic principles, and professional career options of exercise science. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN KINE/PE 2)

242 Care and Prevention of Injuries 
Fall, Spring, 2 hours lecture, 1 hour lab, 2 units

Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5. Prevention and care of common athletic injuries is discussed. This course covers the theory and practice of emergency field care and basic athletic first aid. Bandaging and/or taping techniques are included. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN KINE/PE 4)

250A Professional Activities/Football I 
Fall, 1.5 hours lecture, 1.5 hours lab, 2 units

Advisory: Concurrent enrollment in: Physical Education 210 is recommended. This course is designed for students competing in their first intercollegiate football season. Emphasis is on theoretical concepts necessary for successful participation. Topics include analysis of fundamentals used on offense/defense, special teams and also strategies, rules, and officiating. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

250B Professional Activities/Football II 
Fall, 1.5 hours lecture, 1.5 hours lab, 2 units

This is a lecture/lab course with emphasis on advanced skills, strategy, tactics, rules officiating, and
organizational procedures in football. Concepts for social skills and team building techniques required for success at the intercollegiate level are also emphasized. This course is valuable to student athletes enrolled in PHYE 211, Intercollegiate Football II. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

251A Professional Activities/Basketball I  
Fall, 1.5 hours lecture, 1.5 hours lab, 2 units  
This lecture/lab course includes discussion of rules, game strategies, history, and game preparation. The physiological requirements for the intercollegiate athlete and importance of nutritional components for optimal performance are emphasized. This course benefits students who are enrolled in PHYE 204, Intercollegiate Basketball I. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

251B Professional Activities/Basketball II  
Fall, 1.5 hours lecture, 1.5 hours lab, 2 units  
This lecture/lab course includes activities and discussion of advanced team strategies, efficient basketball conditioning techniques, goals for game preparation and leadership qualities for basketball. Concepts for team building and social skills necessary for success at the intercollegiate level are also emphasized. This course benefits students who are enrolled in PHYE 205, Intercollegiate Basketball II. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

252A Professional Activities/Baseball I  
Spring, 1.5 hours lecture, 1.5 hours lab, 2 units  
Competency development with emphasis on skills, strategy, tactics, rules, officiating, facilities film review, and organizational procedures as it relates to school or college baseball. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

252B Professional Activities/Baseball II  
Spring, 1.5 hours lecture, 1.5 hours lab, 2 units  
Sophomore athletic eligibility status required. A continuation of Physical Education 252A with emphasis on advanced skills, strategy, tactics, rules officiating, and organizational procedures in baseball. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

253A Professional Activities/Softball I  
Spring, 1.5 hours lecture, 1.5 hours lab, 2 units  
Competency development with emphasis on advanced skill, strategy, tactics, rules, officiating, facilities, video review and organizational procedures as it relates to school or college softball. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

253B Professional Activities/Softball II  
Spring, 1.5 hours lecture, 1.5 hours lab, 2 units  
Competency development with emphasis on advanced skill, strategy, tactics, rules, officiating, facilities, video review and organizational procedures as it relates to school or college softball. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

254A Professional Activities/Track and Field I  
Spring, 1.5 hours lecture, 1.5 hours lab, 2 units  
Competency development with emphasis on skills, tactics, officiating, facilities, video review and organizational procedures for administrating a college track and field meet. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

254B Professional Activities/Track and Field II  
Spring, 1.5 hours lecture, 1.5 hours lab, 2 units  
Competency development with emphasis on advanced skills, tactics, officiating, facilities, video review and organizational procedures for administrating a college track and field meet. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

255A Professional Activities/Volleyball I  
Fall (Women), Spring (Men), 1.5 hours lecture, 1.5 hours lab, 2 units  
Advisory: Concurrent enrollment in PHYE 224 or 225. This is a course in which students competing in their first intercollegiate volleyball season learn the theoretical concepts necessary for successful participation. Topics covered include mechanical analysis of fundamental through advanced volleyball skills, offensive/defensive strategies, statistics, rules and officiating. The course is offered in the fall semester for women and the spring semester for men. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.
255B Professional Activities/Volleyball II  
Fall (Women), Spring (Men),  
1.5 hours lecture,  
1.5 hours lab, 2 units

Advisory: PHYE 255A with a grade of “C” or better, or equivalent and concurrent enrollment in PHYE 224. This is a course in which students competing in their second intercollegiate volleyball season learn the theoretical concepts necessary for successful participation. Topics covered include officiating, statistics, concepts for team building, goals for game preparation, leadership and social skills for success at the intercollegiate level. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

257A Professional Activities/Soccer I  
Fall, 1.5 hours lecture, 1.5 hours lab, 2 units  Grade Only

This course covers the theoretical concepts necessary for students to compete successfully in their first intercollegiate soccer season. Topics covered include mechanical analysis of fundamental through advanced soccer skills, offensive and defensive strategies, statistics, rules, and officiating. This course is offered separately for men and women. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

257B Professional Activities/Soccer II  
Fall, 1.5 hours lecture, 1.5 hours lab, 2 units  Grade Only

This is a lecture/lab course including activities and discussion of advanced team strategies, efficient conditioning techniques, goals for game preparation, and leadership qualities. Concepts for team building and social skills necessary for success at the intercollegiate level are emphasized. This course is offered separately for men and women in the fall semester. This course benefits students who are enrolled in PHYE 215, Intercollegiate Soccer II. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

258A Professional Activities/Cross Country I  
Fall, 1.5 hours lecture, 1.5 hours lab, 2 units  Grade Only

This course covers the development of advanced skills, biomechanics, exercise physiology, workout design, scouting, and procedures for administrating a college cross country meet. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

258B Professional Activities/Cross Country II  
Fall, 1.5 hours lecture, 1.5 hours lab, 2 units  Grade Only

This course covers the development of advanced skills, biomechanics, exercise physiology, workout design, scouting, and procedures for administrating a college cross country meet. (FT) Transfer Credit: CSU and/or private coll/univ.; UC transfer limitations. See a counselor.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

100 Survey of Physical Science  
3 hours, 3 units

Advisory: Concurrent enrollment in Physical Science 101.
Advisory: English 42 with a grade of “C” or better, or equivalent, or Assessment Skill Level R4; and Mathematics 32, with a grade of “C” or better, or equivalent, or Assessment Skill Level M20.

This course is an introductory survey of the fundamental concepts of astronomy, geology, chemistry and physics and the interrelationships among these disciplines. Emphasis is placed on the ways in which the physical sciences affect life on the planet and the role discipline plays in addressing issues and problems related to energy, ecology and environmental sustainability. This course is recommended for students planning to major in geography and/or planning to transfer to a four-year institution. Transfer Credit: CSU and/or private coll/univ.; UC Transfer Credit: No credit for Physical Science (PHYN) 100, 101 if taken after a college course in Chemistry or Physical Science.

101 Survey of Physical Science Laboratory  
3 hours lab, 1 unit

Advisory: Physical Science 100.
Laboratory experience to supplement Physical Science 100. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: No credit for Physical Science (PHYN) 100, 101 if taken after a college course in Chemistry or Physical Science.
This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

### PHYSICAL THERAPIST ASSISTANT (PHYR)

**110 Physical Therapy Introduction**  
2 hours lecture, 2 units  
**Grade Only**

*Advisory:* English 51 and 56 each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.

This course provides general information regarding the field of physical therapy (P.T.) to those persons who have been admitted into the program or who have an interest in the profession of P.T. The course focuses on the history and development of the profession, its relationship to the health care delivery system in the United States, the settings utilized in the delivery of therapy, and an exploration of the roles and functions of the workers in the field and their part on the healthcare team. The development of the professional organization (American Physical Therapy Association) and its purpose are presented as well as the general ethical, legal principles and state laws relating to the delivery of physical therapy. Medical terminology specific to P.T. and the need of the health care worker to develop a therapeutic presence are also presented.  
(FT) Associate Degree Credit.

**111 Physical Therapy Techniques I**  
2 hours lecture, 6 hours lab, 4 units  
**Grade Only**

*Corequisite:* Physical Therapist Assistant 114.  
*Limitation on Enrollment:* Entrance into the Physical Therapist Assistant program.

This course provides the future Physical Therapist Assistant (PTA) with an exposure to the duties that relate to the PTA scope of practice to include the principles and techniques of the application of cold, heat, therapeutic massage, basics of gait training with assistive devices for general orthopedic problems, hydrotherapy and basic dressing changes to include universal precautions, treatment preparation, client positioning and clinic maintenance. The course also fosters the development of communication skills and interpersonal relationships with clients and colleagues in the health care field. Open to students admitted to the PTA Program.  
(FT) Transfer Credit: CSU and/or private coll/univ.

**114 Introduction to Human Movement**  
2 hours lecture, 3 hours lab, 3 units  
**Grade Only**

*Corequisite:* Physical Therapist Assistant 110 and 111.  
*Limitation on Enrollment:* Entrance into the Physical Therapist Assistant program.

This course introduces the student Physical Therapist Assistant to the relationship between physical laws and the biomechanical principles of joint motion as well as the concepts of normal posture and human locomotion contrasted with obvious posture and gait deviations. The course also provides the students with the opportunity to apply kinesiological concepts to the body’s major joints in performing basic exercise applications with the client who has an orthopedic condition.  
(FT) Associate Degree Credit.

**122 Introduction to Pathology**  
3 hours, 3 units  
**Grade Only**

*Prerequisite:* Physical Therapist Assistant 114 with a grade of “C” or better, or equivalent.  
*Corequisite:* Physical Therapist 120 and 123 and 140A.  
*Limitation on Enrollment:* Special Admission - must be admitted to program.

This course is a continuation of Physical Therapy Techniques I with an emphasis on advanced skills and acute care. It explores the use of mechanical traction, electrotherapy and electromagnetic modalities as well as vasopneumatic compression, chest physical therapy, wound care, transfer and transportation of patients, gait techniques for specific diagnoses, and the identification of architectural barriers and basic wheelchair management. Students continue to use medical terms, charting skills, and role play to foster patient and family teaching as well as a deepening of self-awareness of communication skills.  
(FT) Transfer Credit: CSU and/or private coll/univ.

**120 Physical Therapy Techniques II**  
2 hours lecture, 6 hours lab, 4 units  
**Grade Only**

*Prerequisite:* Physical Therapist Assistant 111 with a grade of “C” or better, or equivalent.  
*Corequisite:* Physical Therapist Assistant 122, 123 and 140A.  
*Limitation on Enrollment:* Special Admission - must be admitted to program.

This course is a continuation of Physical Therapy Techniques I with an emphasis on advanced skills and acute care. It explores the use of mechanical traction, electrotherapy and electromagnetic modalities as well as vasopneumatic compression, chest physical therapy, wound care, transfer and transportation of patients, gait techniques for specific diagnoses, and the identification of architectural barriers and basic wheelchair management. Students continue to use medical terms, charting skills, and role play to foster patient and family teaching as well as a deepening of self-awareness of communication skills.  
(FT) Transfer Credit: CSU and/or private coll/univ.
general principles of tissue injury, inflammation and healing. (FT) Associate Degree Credit.

123 Introduction to Therapeutic Exercise  
0.5 hour lecture, 1.5 hours lab, 1 unit  
Grade Only  
Prerequisite: Physical Therapist Assistant 111 with a grade of "C" or better, or equivalent.  
Corequisite: Physical Therapist 120 and 122 and 140A.  
This is a course designed to introduce the student physical therapist assistant to the principles of therapeutic exercise and assessment skills. (FT) Associate Degree Credit.

134 Orthopedic Exercise and Rehab  
2 hours lecture, 6 hours lab, 4 units  
Grade Only  
Prerequisite: Physical Therapist Assistant 120 with a grade of "C" or better, or equivalent.  
Corequisite: Physical Therapist Assistant 134 and 140B.  
This course provides the student with a kinesiologically based approach to the clinical applications used in the treatment and rehabilitation of the client with orthopedic and related diagnoses. (FT) Associate Degree Credit.

135 Topics in Neurology and Rehab  
1.5 hours lecture, 4.5 hours lab, 3 units  
Grade Only  
Prerequisite: Physical Therapist Assistant 120 with a grade of "C" or better, or equivalent.  
Corequisite: Physical Therapist Assistant 134 and 140B.  
This course deals with the principles and clinical application of the functional activities and rehabilitation procedures relating to the management of therapy clients with amputations, cardiopulmonary conditions, and neurological diagnoses. (FT) Associate Degree Credit.

140A Directed Clinical Practice  
5 hours, 1 unit  
Grade Only  
Prerequisite: Physical Therapist Assistant 111 with a grade of "C" or better, or equivalent.  
Corequisite: Physical Therapist Assistant 120 and 122 and 123.  
This course is a supervised application of previously learned techniques and skills in the treatment of patients in a selected clinical facility affiliated with the college. Student practice will be coordinated by a member of the college staff. Supervision of the student will be shared by the staff of the affiliating institution and the college faculty. Associate Degree Credit.

140B Directed Clinical Practice  
5 hours, 1 unit  
Grade Only  
Prerequisite: Physical Therapist Assistant 120 with a grade of "C" or better, or equivalent.  
Corequisite: Physical Therapist Assistant 134 and 135.  
This course is a supervised application of previously learned techniques and skills in the treatment of patients in a selected clinical facility affiliated with the college. Student practice will be coordinated by a member of the college staff. Supervision of the student will be shared by the staff of the affiliating institution and the college faculty. Associate Degree Credit.

140C Directed Clinical Practice  
20 hours, 4 units  
Grade Only  
Prerequisite: Physical Therapist Assistant 140B with a grade of "C" or better, or equivalent.  
Corequisite: Physical Therapist Assistant 141.  
This course is a supervised application of previously learned techniques and skills in the treatment of patients in selected clinical facilities affiliated with the college. Student practice will be coordinated by a member of the college staff. Supervision of the student will be shared by the staff of the affiliating institution and the college faculty. Associate Degree Credit.

141 Organization of Physical Therapy  
2 hours, 2 units  
Grade Only  
Prerequisite: Physical Therapist Assistant 140B with a grade of "C" or better, or equivalent.  
Corequisite: Physical Therapist Assistant 140C.  
This course deals with the principles of organization, management, supervision, productivity levels and performance evaluations. Other topics include: the legal and ethical aspects of physical therapist assistants’ occupation as described in the state board and national association regulations and standards; federal, state and private insurance regulations; medications commonly used by those receiving physical therapy; professional liability insurance; job hunting skills; and the discussion of issues in the medical field as they impact physical therapy. (FT) Associate Degree Credit.

290 Independent Study  
Hours by Arrangement; 1-4 units  
Limitation on Enrollment: Must obtain an Add Code from instructor for registration.  
Provides for additional research, academic or clinical experiences for students with special interests. This
course may be taken four times with different content for a maximum of six units. Associate Degree Credit.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

100 Introductory Physics
3 hours lecture, 3 hours lab, 4 units
Advisory: Mathematics 95 with a grade of “C” or better, or equivalent, or Assessment Skill Level M40.
A one-semester physics course stressing concepts and applications and using a minimum of mathematics.
Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: No credit for Physics (PHYS) 100 if taken after a college course in Physics.

124A General Physics
3 hours lecture, 3 hours lab, 4 units
Prerequisite: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50.
Corequisite: Physics 120A or 124A.
Limitation on Enrollment: This course is not open to students with previous credit for Physics 120A and Physics 120B.
This course is an introductory survey of the concepts and principles of physics. Emphasis is placed on developing an understanding of the properties of matter, mechanics, heat and sound. This course is intended for students taking liberal arts and/or pre-professional courses that do not require Physics with calculus. (FT) Transfer Credit: CSU and/or private coll/univ.; UC Transfer Course List: Physics (PHYS) 120A,B, 121A,B and 124A,B and 195A,B,C combined: maximum credit, one series (per catalog) deduct credit for duplication of topics. (CAN PHYS 2)

124B General Physics
3 hours lecture, 3 hours lab, 4 units
Prerequisite: Physics 124A with a grade of “C” or better, or equivalent.
Corequisite: Physics 120B or 124B.
Limitation on Enrollment: This course is not open to students with previous credit for Physics 120B or 121B
This course is the second in a two-part, introductory survey of the concepts and principles of physics. Major topics are electricity, magnetism, light and modern physics. This course is intended for students taking liberal arts and/or pre-professional courses that do not require Physics with calculus. (FT) Transfer Credit: CSU and/or private coll/univ.; UC Transfer Course List: Physics (PHYS) 120A,B, 121A,B and 124A,B and 195A,B,C combined: maximum credit, one series (per catalog) deduct credit for duplication of topics. (CAN PHYS 4)

125A Problem-Solving for General Physics
1 hour, 1 unit
Prerequisite: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50.
Corequisite: Physics 120A or 124A.
Small group discussions of physics problems and problem solving methods. Transfer Credit: CSU and/or private coll/univ.

125B Problem-Solving for General Physics
1 hour, 1 unit
Prerequisite: Physics 124A with a grade of “C” or better, or equivalent.
Corequisite: Physics 120B or 124B.
Small group discussions of physics problems and problem solving methods. Transfer Credit: CSU and/or private coll/univ.

195A Mechanics
3 hours lecture, 3 hours lab, 4 units
Prerequisite: Mathematics 150 with a grade of “C” or better, or equivalent.
Corequisite: Mathematics 151 and Physics 196A.
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
The Physics 195A,B,C sequence is designed to give a foundation in calculus-based physics for engineering and science majors. Physics 195A deals primarily with the description of motion and its causes, and energy transfer processes. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Physics (PHYS) 120AB, 121AB and 124AB and 195ABC combined: maximum credit, one series (per catalog) deduct credit for duplication of topics. (CAN PHYS 8) (CAN PHYS SEQ B = 195A+195B+195C)

195B Electricity and Magnetism
3 hours lecture, 3 hours lab, 4 units
Grade Only
Prerequisite: Physics 195A with a grade of “C” or better, or equivalent.
Corequisite: Physics 196B.
This is the second of a three-semester calculus-based general physics sequence, intended to satisfy the transfer requirements of students planning to major in the physical sciences and in engineering. The topics of study include the basic principles and applications of electrostatics, magnetostatics, time-varying electric and magnetic phenomena, direct and alternating current circuits, elementary electronics and electromagnetic waves. Emphasis is placed on the mathematical analysis of physical problems. Transfer Credit: CSU and/or private coll/univ. UC transfer limitations; See a counselor. (CAN PHYS 12) (CAN PHYS SEQ B = 195A+195B+195C)

195C Waves, Light, and Modern Physics
3 hours lecture, 3 hours lab, 4 units
Prerequisite: Physics 195A with a grade of “C” or better, or equivalent.
Corequisite: Physics 196C.
The fundamental principles of physics in the areas of waves, the behavior of light, and an introduction to quantum physics and the atomic and nuclear properties of matter. Physics 195B and 195C may be taken concurrently only if Physics 195A was completed with a grade of “B” or better or with approval of department. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Physics (PHYS) 120AB, 121AB and 124AB and 195ABC combined: maximum credit, one series (per catalog) deduct credit for duplication of topics. (CAN PHYS 14) (CAN PHYS SEQ B = 195A+195B+195C)

196A Problems in Mechanics
1 hour, 1 unit
Corequisite: Physics 195A.
Advisory: Mathematics 150 with a grade of “C” or better, or equivalent; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Small group discussions of problem-solving methods in physics. Transfer Credit: CSU and/or private coll/univ.

196B Problems in Electricity and Magnetism
1 hour, 1 unit
Prerequisite: Physics 195A with a grade of “C” or better, or equivalent.
Corequisite: Physics 195B.
Small group discussions of problem-solving methods in physics. Transfer Credit: CSU and/or private coll/univ.

196C Problems in Light and Modern Physics
1 hour, 1 unit
Corequisite: Physics 195C.
Small group discussions of problem-solving methods in physics. Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

101 Introduction to Political Science
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A survey course designed to acquaint the student with selected concepts, theories, and methods of the political process, their history and application. NOTE: Completion of Political Science 101 will fulfill the SDCC District’s three-unit social science GE requirement. Political Science 101 is required for completion of the major in political science and is highly recommended for those students transferring to four-year institutions. (FT) Transfer Credit: CSU and/or private coll/univ., UC.

102 The American Political System
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This comprehensive survey course, designed for students intending to transfer to a four-year college or university, provides an in depth study of the American political system. Both national and California experiences are studied from the perspective of constitutional frameworks, institutions, issues, and policies. NOTE If used to satisfy the American Institutions requirement, Political Science 102 may not be used to satisfy the SDCC District’s three-unit social science requirement. Political Science 102 is required for completion of the major in political science. Political Science 102 may be offered in a self-paced format. The completion of the Political Science 101 and 102 sequence fulfills both the SDCC District’s American Institutions requirement and the SDCC District’s three-unit social science GE requirement. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN GOVT 2)
103 Comparative Politics

3 hours, 3 units

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

Limitation on Enrollment: This course is not open to students with credit for Political Science 130.

A general study of selected governments, their development, organization, administration, and politics. Transfer Credit: CSU and/or private coll/univ.; UC.

140 Contemporary International Politics

3 hours lecture, 3 units

Advisory: English 51 and English 56 each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.

This course is a study of world politics including the various approaches to international relations and international political economy. Emphasis is placed on the roles of nationalism, nation-states, transnationalism and international organizations in the making of contemporary world politics as well as on issues of national security, power and diplomacy, economic competition, international law and the environment. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

148 Politics of Change: Development and Revolution

3 hours, 3 units

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Completion of Political Science 101, 103, 140, or 172 with a grade of “C” or better, or equivalent.

This course provides a critical survey of the dominant theories and models of the process of political change, both evolutionary and revolutionary, focusing on the causes of change and its impact on the political systems and institutions of selected twentieth century nations. The emphasis is on a comparative approach, focusing on the process of political change in European and non-European societies. This course may be offered as a distance learning course. Transfer Credit: CSU and/or private coll/univ.; UC.

172 Twentieth Century Revolutionary Movements on Film

3 hours, 3 units

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

A film class designed to illustrate selected 20th century revolutionary movements on film. Four major movements are analyzed incorporating media produced by members of those revolutions when available. Transfer Credit: CSU and/or private coll/univ.; UC.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

101 General Psychology

3 hours, 3 units

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

A survey of the principle and concepts which are basic to understanding human behavior. Intends to give the individual some insight into his/her own motives and activities. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Psychology (PSYC) 101 combined with Black Studies (BLAS) 104 or with Chicano Studies (CHIC) 105: maximum credit, one course. (CAN PSY 2)

111 Psychological/Social Aspects of Aging, Death and Dying

3 hours, 3 units

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

This course explores the psychological, physiological and social factors influencing behavior during the later years of life. Through improving their understanding of the conditions and problems of growing older in today's world, students may increase their empathy with the aged in society as well as enhance their adaptation to their own aging process. (FT.) Transfer Credit: CSU and/or private coll/univ.

112 Interpersonal Relations

3 hours, 3 units

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

This course emphasizes humanistic/existential and behavioristic psychological theories as applied to the
understanding of self in relationship with others. A significant proportion of class time will be devoted to the practice of skills suggested by these theories. Transfer Credit: CSU and/or private coll/univ.; UC.

121 Introduction to Child Psychology  
3 hours, 3 units
An examination of child growth and development from conception through adolescence, including environmental management and interpersonal relations with special emphasis on the preschool years. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

123 Adolescent Psychology  
3 hours, 3 units
An exploration of an explosive period in human development. Major goals of this course are to understand the stresses experienced during the teenage years, and to investigate methods of coping with the individual adolescent. Transfer Credit: CSU and/or private coll/univ.; UC.

125 Introduction to Behavior Modification  
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
An introduction to the basic principles of behavior modification with specific emphasis on the practical application of these principles to help understand human behavior. Problems encountered by the individual in various aspects of his/her own life style will be given special interest. Transfer Credit: CSU and/or private coll/univ.

128 Biofeedback and Stress Management  
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Biofeedback is a theoretical and practical discipline that uses physiological monitors to increase awareness and control of normally subconscious glandular and muscular responses for the purpose of increasing physical and psychological health. Biological responses leading to health or illness will be discussed in terms of their physical and psychological bases. Methods of stress management will be discussed. Transfer Credit: CSU and/or private coll/univ.

133 Psychology of Women  
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skills Levels W5 and R5.
Psychology of Women is designed for students seeking an associate degree or those seeking elective credit for transferring to the CSU or UC systems or any student interested in women's issues. The course explores the nature of women's lives and the various roles that women play during their lives and takes an historical, ethnic and cross-cultural look at the treatment of women in the United States and abroad. Students examine women's sexuality, health, life span development and socio-political status in the world today. Transfer Credit: CSU and/or private coll/univ.; UC.

135 Marriage and Family Relationships  
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Discussion and evaluation of behaviors of courtship, engagement, marriage and family life; the contribution of science to an understanding of these experiences and the options available. Transfer Credit: CSU and/or private coll/univ.; UC.

137 Human Sexual Behavior  
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
An exploration of the psychological, social, and physiological dimensions of human sexual behavior. The course will review specific theories and research findings, and consider their relevance for individual sexual development and functioning. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Psychology (PSYC) 137 combined with Black Studies (BLAS) 165: maximum credit, one course.

155 Introduction to Personality  
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A survey of the basic theories of personality and their applications of psychotherapy and psychological testing. The basic theories include trait/type, psychoanalysis, humanism, and behavioral or social
learning approaches. Transfer Credit: CSU and/or private coll/univ.; UC.

161 Introduction to Counseling

3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Survey of basic counseling concepts used to maintain and change behavior. Emphasis on experiential learning in the skills of effective relating and problem-solving. Transfer Credit: CSU and/or private coll/univ.

165 Theories of Consciousness

3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A scientific and systematic introduction to the historical perspectives and concepts basic to the understanding of consciousness. Transfer Credit: CSU and/or private coll/univ.

207 Psychology of Religion

3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
An inquiry into psychological factors in personal religious experience and the values held by religious groups; a comparison of selected Eastern and Western approaches to human identity and social relationships. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

211 Learning

3 hours lecture, 3 units
Prerequisite: Psychology 101 with a grade of “C” or better, or equivalent.
This course is designed for students interested in studying the psychological development of humans in all their sociocultural diversity from conception to death. Students learn major theoretical positions related to growth and change. The course emphasizes the variety of factors that shape similarities and differences in life. Psychology majors wishing to transfer are advised to take this course. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

245 Abnormal Psychology

3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A study of troubled patterns of behavior: their origins, characteristics and treatments. Transfer Credit: CSU and/or private coll/univ.; UC.

255 Introduction to Psychological Research

3 hours, 3 units
Prerequisite: Psychology 101 with a grade of “C” or better, or equivalent.
This course is an introduction to scientific methodology in psychology, including descriptive, experimental, and applied research, as well as an introduction to psychological research reports. Transfer Credit: CSU and/or private coll/univ.; UC.

258 Behavioral Science Statistics

3 hours, 3 units
Prerequisite: Mathematics 96 with a grade of “C” or better, or equivalent, or Assessment Skill Level M50.
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Quantitative methods in the behavioral sciences. Frequency distributions, percentiles, central tendency and variability, application of the normal probability distribution, correlation, and elementary significance testing procedures. Transfer Credit: CSU and/or private coll/univ.; UC Transfer Credit: Psychology (PSYC) 258 combined with Mathematics 119 or Biology 200: maximum credit, one course. (CAN PSY 6)

260 Introduction to Physiological Psychology

3 hours lecture, 3 units
Prerequisite: Psychology 101 with a grade of “C” or better, or equivalent.
Subjects include behavior evolution, the nervous system, and endocrine glands as well as their relationship to perception, learning, motivation,
emotional, and personality. Transfer Credit: CSU and/or private coll/univ; UC. (CAN PSY 10)

262 Health Psychology

3 hours, 3 units

Prerequisite: Psychology 101 with a grade of “C” or better, or equivalent.

Limitation on Enrollment: This course is not open to students with credit for Psychology 265: Health Psychology.

The course will survey the various concepts and applications of psychology that are effective in areas of health, illness, treatment, and delivery of treatment. There will be an exploration of how psychological research and perspectives may be enlarged and extended in the medical area. (FT) Transfer Credit: CSU and/or private coll/univ.

276 Field Work in Psychological Services

2 hours lecture, 2-3 hours field work, 2-3 units

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

Supervised field experience enabling the student to be of service to the community as he/she learns about the operation of service agencies. In addition to the field experience, the student will be expected to attend a two-hour on-campus seminar each week. A suitable assignment must be available. Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

105 Basic Radiologic Technology

3 hours, 3 units

Grade Only

Corequisite: Radiologic Technology 251A.

This course introduces the student to medical imaging: history, role and function of the radiographer, professional organizations, ethical and legal principles, California Title 17, and relationship of the profession to the health care delivery system. Medical and radiographic terminology, basic radiation, and electrical protection of patient and self; basic technical principles are included. (FT) Transfer Credit: CSU and/or private coll/univ.

110 Recording Media and Processing

2 hours, 2 units

Grade Only

Corequisite: Radiologic Technology 251B.

This course provides the student with knowledge of recording media utilized to produce diagnostic images. Various media acquisition techniques, image processing and storage are discussed including PACS (picture archiving and communications systems). (FT) Transfer Credit: CSU and/or private coll/univ.

120A Radiographic Exposure

2 hours, 2 units

Grade Only

Corequisite: Radiologic Technology 251B.

This course provides the student with the knowledge of factors that govern and influence the production of the radiographic image on recording media. (FT) Transfer Credit: CSU and/or private coll/univ.

120B Radiographic Exposure Laboratory

3 hours, 1 unit

Grade Only

Corequisite: Radiologic Technology 251B.

This laboratory course provides the student with clinical applications of the theory and concepts of radiographic exposure of Radiologic Technology 120A. Principles and techniques of daily photographic quality assurance are introduced. (FT) Transfer Credit: CSU and/or private coll/univ.

130 Patient Care

2 hours, 2 units

Grade Only

Corequisite: Radiologic Technology 251A.

This course provides the student with basic concepts of integrated patient care within the radiology department including physical and psychological needs of the patient, venipuncture techniques with associated application in contrast media injection, treatments of complication and/or reaction to media injection. Routine and emergency patient care procedures are described as well as infection control procedures utilizing universal precautions. Common drug nomenclature and basic concepts of pharmacology are introduced. (FT) Transfer Credit: CSU and/or private coll/univ.
199 Radiographic Positioning I
1 hour lecture, 3 hours lab, 2 units
Corequisite: Radiologic Technology 251A.
This is a course designed to introduce the student to
the basic theories of standard radiographic positioning.
Positioning considerations for routine radiographic
procedures to image the upper and lower extremities,
bony thorax, abdomen, and pelvis are identified and
simulated in the laboratory setting. (FT) Transfer
Credit: CSU and/or private coll/univ.

200 Radiographic Positioning II
1 hour lecture, 3 hours lab, 2 units
Corequisite: Radiologic Technology 251B.
This is a course designed to relate the basic theories of
standard radiographic positioning and procedures
identified in RADT 199 to the standard radiographic
positioning and procedures of the vertebral column,
alimentary canal, urinary, biliary, and reproductive
systems. Positioning considerations for routine
procedures are identified and simulated in the
laboratory setting. The associated radiographic is
included. (FT) Transfer Credit: CSU and/or private coll/univ.

211 Radiographic Positioning III
1 hour lecture, 3 hours lab, 2 units
Corequisite: Radiologic Technology 252B.
This is an advanced level course in radiologic
procedures, radiographic positioning and radiographic
associated pathology for, special procedures,
mammography, pediatric, and interventional
radiography. (FT) Transfer Credit: CSU and/or private coll/univ.

220 Radiographic Technique
3 hours, 3 units
Corequisite: Radiologic Technology 252B.
This is an advanced level course designed to study the
theoretical and practical aspects relating to exposure
techniques and radiographic quality. Primary emphasis
is placed on problem solving and reasoning for practical
image quality and improvement. (FT) Transfer Credit:
CSU and/or private coll/univ.

230 Radiologic Science
2 hours, 2 units
Corequisite: Radiologic Technology 252B.
This is an advanced level course to provide the student
with a working knowledge of radiologic physics from x-
ray generating equipment, beam characteristics to x-ray
interaction. (FT) Transfer Credit: CSU and/or private coll/univ.

240 Radiation Biology
1 hour, 1 unit
Corequisite: Radiologic Technology 253A.
This is an advanced level course to study radiation
hazards and the potential consequences to both the
technologist and the patient. The most appropriate
means of minimizing the radiation dose is emphasized
with California’s Title 17 radiation regulations as a
foundation for discussion and application. (FT) Transfer
Credit: CSU and/or private coll/univ.

241 Sectional Anatomy
3 hours lab, 1 unit
Corequisite: Radiologic Technology 253A.
This is a course to provide the student radiographer
who possesses a background in general anatomy with
an orientation to sectional anatomy and to correlate
such with structures demonstrated on images from the
various imaging modalities. (FT) Transfer Credit: CSU
and/or private coll/univ.

242 Organization of Radiology
1 hour, 1 unit
Corequisite: Radiologic Technology 253B.
This advanced level course deals with the principles of
organization, management, supervision, productivity
levels and performance evaluations. Other topics
include the legal and ethical aspects of radiographers
as described in state licensure and national association
regulations and standards, professional resumes, and
the discussion of issues in the medical field as they
impact medical imaging. (FT) Transfer Credit: CSU and/
or private coll/univ.

243 CT and MRI Imaging
4 hours, 4 units
Corequisite: Radiologic Technology 253A.
This is a course to study the imaging modalities of
computed tomography and magnetic resonance
imaging. The underlying physical principles, imaging
methods, instrumentation, imaging manipulation and
clinical use of the modalities in diagnostic imaging are
explored. (FT) Associate Degree Credit.
248 Mammography I

1 hour, 1 unit

Grade Only

Corequisite: Radiologic Technology 253A.

Limitation on Enrollment: This course is not open to students with credit for Radiologic Technology 265: Mammography.

This is a comprehensive course to examine the basic principles of mammography and its clinical application in diagnosing breast disease. Essential background information in the early detection of breast cancer is also explored. (FT) Transfer Credit: CSU and/or private coll/univ.

251A Directed Clinical Practice

15 hours lab, 3 units

Grade Only

Prerequisite: Biology 160 and Computer Business Technology 110, each with a grade of “C” or better, or equivalent.

Corequisite: Radiologic Technology 105 and 130 and 199.

Limitation on Enrollment: student must be admitted to program.

This course introduces the student to the supervised clinical hospital experience of the radiographer program. With direct supervision, the student observes and begins to perform radiographic procedures and examinations while utilizing medical ethics and patient care principles. Supervision is shared by the staff of the clinical education center and college faculty. (FT) Transfer Credit: CSU and/or private coll/univ.

251B Directed Clinical Practice

20 hours lab, 4 units

Grade Only

Prerequisite: Radiologic Technology 105, 130, 199 and 251A, each with a grade of “C” or better, or equivalent.

Corequisite: Radiologic Technology 110, 120A, 120B and 200.

This is a course to provide supervised clinical experience that prepares the student for the professional patient interactions in applying concepts of procedures used in obtaining diagnostic radiographs of the vertebral column, alimentary tract, urinary, biliary and reproductive systems. Supervision is shared by the staff of the clinical education center and college faculty. (FT) Transfer Credit: CSU and/or private coll/univ.

252A Directed Clinical Practice

25 hours lab, 5 units

Grade Only

Prerequisite: Radiologic Technology 110, 120A, 120B, 200 and 251B, each with a grade of “C” or better, or equivalent.

This is a course to provide continued supervised clinical experience to demonstrate competency of recently taught radiographic procedures and examinations and to demonstrate continued competency of the exams previously evaluated. Supervision is shared by the staff of the clinical education center and college faculty. (FT) Transfer Credit: CSU and/or private coll/univ.

252B Directed Clinical Practice

25 hours lab, 5 units

Grade Only

Prerequisite: Radiologic Technology 252A with a grade of “C” or better, or equivalent.

Corequisite: Radiologic Technology 211 and 220 and 230.

This is a course to provide continued supervised clinical experience to demonstrate continued competency and to introduce advanced procedures including special procedures, interventional and pediatric radiography. Special emphasis is placed on image quality and improvement analysis. Supervision is shared by the staff of the clinical education center and college faculty. (FT) Transfer Credit: CSU and/or private coll/univ.

253A Directed Clinical Practice

25 hours lab, 5 units

Grade Only

Prerequisite: Radiologic Technology 211, 220, 230 and 252B, each with a grade of “C” or better, or equivalent.

Corequisite: Radiologic Technology 240, 241, 243 and 248.

This is a course to provide demonstration of required positioning and procedure competencies and to begin documentation of final competency prior to program completion. In addition, the student begins rotations to augment their clinical experience in areas such as CT, MRI, special procedures and outpatient clinical centers. Supervision of the student is shared by the staff of the clinical education center and college faculty. (FT) Transfer Credit: CSU and/or private coll/univ.

253B Directed Clinical Practice

25 hours lab, 5 units

Grade Only

Prerequisite: Radiologic Technology 240, 241, 243 and 253A, each with a grade of “C” or better, or equivalent.

Corequisite: Radiologic Technology 242.
This is a course to provide integration of all program objectives and to provide documentation of final competencies in preparation for licensure examinations and program completion. Supervision of the student is shared by the staff of the clinical education center and college faculty. (FT) Transfer Credit: CSU and/or private coll/univ.

**261A Limited Permit-Chest Category**

1 hour, 1 unit  
Grade Only  

Advisory: Possession of or eligibility for Limited Permit X-Ray Technician in California.  
This is a course to introduce radiographic anatomy and positioning of the chest and bony thorax. It is designed for the didactic curriculum requirements of the Radiologic Health Branch limited permit chest category. (FT) Credit does not apply to the associate degree.

**261B Limited Permit-Extremities**

2 hours, 2 units  
Grade Only  

Advisory: Possession of or eligibility for Limited Permit X-Ray Technician in California.  
This is a course to introduce radiographic anatomy and positioning of the extremities. It is designed for the didactic curriculum requirements of the Radiologic Health Branch limited permit extremity category. (FT) Credit does not apply to the associate degree.

**261C Limited Permit/Torso-Skeletal**

2 hours, 2 units  
Grade Only  

Advisory: Possession of or eligibility for Limited Permit X-Ray Technician in California.  
This is a course to introduce radiographic anatomy and positioning of the torso-skeleton. It is designed for the didactic curriculum requirements of the Radiologic Health Branch limited permit torso-skeleton category. (FT) Credit does not apply to the associate degree.

**262 Limited Permit Technical Factors**

3 hours, 3 units  
Grade Only  

Advisory: Possession of or eligibility for Limited Permit X-Ray Technician in California.  
This is a course to introduce the basic concepts of the production of medically useful radiographs. Basic radiologic physics, protection against the risk of bodily harm from radiation and factors that control radiographic quality are included in this course intended for students preparing to apply for limited permits under California's Radiologic Technology law. (FT) Credit does not apply to the associate degree.

**263 Limited Permit X-ray Techniques**

3 hours, 3 units  
Grade Only  

Advisory: Possession of or eligibility for Limited Permit X-Ray Technician in California.  
This is a course utilizing the content of RADT 262 to identify basic equipment operation and maintenance common to most X-ray installations, film processing, ethics, nursing procedures, and medical terminology. This course is intended for students preparing to apply for limited permits under California's Radiologic Technology law. (FT) Credit does not apply to the associate degree.

**101 Real Estate Principles**

3 hours, 3 units  
Grade Only  

This course covers the fundamentals of the economics of land ownership and use and the responsibility of broker, owner and purchaser; terminology and definitions and the varied vocational opportunities in the general field of real estate are also covered. Completion of this course is required prior to taking the exam for the California Real Estate Salesperson's License. This course also applies as an elective toward the State's educational requirements for the broker's examination. (FT) Transfer Credit: CSU and/or private coll/univ.

**105 Legal Aspects of Real Estate I**

3 hours, 3 units  
Grade Only  

This course studies California Real Estate law with emphasis on its practical application to legal problems arising from real estate transactions, statutory enactments and case law, legal instruments, zoning ordinances, and city and county planning decisions. Attention is given to California real estate law. This course applies toward the State's educational requirements for the broker's examination and as an elective for the salesperson's license. (FT) Transfer Credit: CSU and/or private coll/univ.

**110 Principles of Real Estate Appraisal I**

3 hours, 3 units  
Grade Only  

This course is an introductory course covering the purposes of appraisals, the appraisal process, and the different approaches, methods, and techniques used to determine the value of various types of property. Emphasis will be on residential and special purpose.
property. This course applies toward the State's educational requirements for the broker's examination and as an elective for the salesperson's license. (FT) Transfer Credit: CSU and/or private coll/uni.

115 Real Estate Finance I

3 hours, 3 units
Grade Only

This course analyzes the financing of real estate. Topics will include types of financing sources; loans and loan processing; governmental loans, methods of financing residential properties; with an overview of financing business, income, commercial and industrial properties; and property appraisal and taxation. This course applies toward the State's educational requirements for the broker's examination and as an elective for the salesperson's license. (FT) Transfer Credit: CSU and/or private coll/uni.

120 Real Estate Practice

3 hours, 3 units
Grade Only

This course examines the principles of real estate practice as they pertain to day-to-day operations in a real estate office. Topics include listings, valuations, prospecting, selling, financing, exchanges, taxation and specialized brokerage operations. Professional and ethical activities are stressed. This course applies toward the State's educational requirements for the broker's examination and as an elective for the salesperson's license. (FT) Transfer Credit: CSU and/or private coll/uni.

125 Real Estate Economics

3 hours, 3 units
Grade Only

This course deals with those trends and factors which affect the value of real estate; the nature and classification of land economics; the development of property, construction and subdivision, economic values and real estate evaluation; real estate cycles and business fluctuations; residential market trends; real property and special purpose property trends. This course applies toward the State's educational requirements for the broker's examination and as an elective for the salesperson's license. (FT) Transfer Credit: CSU and/or private coll/uni.

130 Real Property Management

3 hours, 3 units
Grade Only

This course is a practical approach to the principles and practices of managing income properties, including leasing, tenant relations, collections, and rent schedules; budgets and purchasing; market economics; landlord-tenant law, evictions, prohibited discrimination, property maintenance; taxation; and record keeping, and marketing. This course applies as an elective toward the State's educational requirements for the broker's examination and for the salesperson's license. (FT) Transfer Credit: CSU and/or private coll/uni.

140 Real Estate Appraisal II

3 hours, 3 units
Grade Only

This course examines appraisal principles and procedures for complex properties, emphasizing income producing properties. Highest and best use, market analysis, lease analysis, and depreciation estimates are also considered. This course applies as an elective toward the State's educational requirements for the broker's examination and toward the educational requirements for various appraisal licenses issued by the State's Office of Real Estate Appraisers (OREA). (FT) Transfer Credit: CSU and/or private coll/uni.

RUSSIAN (RUSS)

101 First Course in Russian

5 hours, 5 units

Advisory: English 56 with a grade of “C” or better, or equivalent, or Assessment Skill Level R5.
An introductory course stressing the correct pronunciation and the ability to speak, understand, read, and write the language of everyday life. Fundamentals of grammar and a rapid reading of Russian. (FT) Transfer Credit: CSU and/or private coll/uni.; UC. (CAN RUSS 2, CAN RUSS SEQ A = RUSS 101 + 102)

102 Second Course in Russian

5 hours, 5 units

Prerequisite: Russian 101 with a grade of “C” or better, or equivalent.
A continuation of Russian 101. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN RUSS SEQ A = RUSS 101 + 102)

201 Third Course in Russian
5 hours, 5 units
Prerequisite: Russian 102 or three years of high school Russian with a grade of "C" or better, or equivalent.
Advisory: Concurrent enrollment in Russian 296.
This is the third course in the Russian language sequence. In this interactive course, students use the language through speaking, listening, reading, and writing at the intermediate level. More complex language structures and vocabulary for communication are examined and explored as well as the literary and historical aspect of Russian culture. This course is appropriate for students interested in continuing their study of the Russian language and culture as well as for students who need to meet language proficiency or general education requirements in the humanities.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

125 Sociology of the Family
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is designed to investigate the structures and functions of the family institution historically, cross-culturally, and in American society. Attention is on changing gender roles, family stability, family structure and definitions of the family. In addition, emphasis is placed on the family's relationship to economic structures, political institutions, and belief systems. This course is useful for students contemplating majors or careers in sociology, counseling, psychology, social work, and related fields. (FT) Transfer Credit: CSU and/or private coll/univ.

201 Advanced Principles of Sociology
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
A course designed to continue the examination of the major ideas that have shaped contemporary sociology. Special attention is given to classical social thinkers and to the origin of sociology as a science. Transfer Credit: CSU and/or private coll/univ.; UC.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

100 First/Second Course in Spanish (Accelerated)
10 hours, 10 units
Advisory: English 43 with a grade of "C" or better, or equivalent, or Assessment Skill Level W4; concurrent enrollment in Spanish 296.
Limitation on Enrollment: This course is not open to students with credit for or concurrent enrollment in Spanish 101 or 102.
This course in Spanish is designed to serve as a combination of the two beginning Spanish courses, Spanish 101 and 102. This is an entry-level course to the Spanish language and cultures of the Spanish-speaking world. In this interactive course, students use the language through speaking, listening, reading, and writing. The students develop their receptive and productive competencies to the intermediate low or mid level. Language structures and vocabulary for communication are examined and explored in Spanish. (FT) Transfer Credit: CSU and/or private coll/univ.; UC Transfer Credit: Spanish (SPAN) 100 is equivalent to 101, 102 combined (per catalog): maximum credit, 10 units.

101 First Course in Spanish

Advisory: English 43 with a grade of “C” or better, or equivalent, or Assessment Skill Level W4.

Limitation on Enrollment: This course is not open to students with credit for or concurrent enrollment in Spanish 100.

This is an entry-level course designed to introduce students to the Spanish language and cultures of the Spanish-speaking world. In this interactive course, students learn and use the language by speaking, listening, reading, and writing at the novice level. Basic language structures and vocabulary for communication are examined and explored in Spanish. (FT) Transfer Credit: CSU; UC. (CAN SPAN 2) (CAN SPAN SEQ A = SPAN 101 + 102)

102 Second Course in Spanish

Prerequisite: Spanish 101 with a grade of “C” or better, or equivalent. Advisory: English 43 with a grade of “C” or better, or equivalent or Assessment Skill Level W4; concurrent enrollment in Spanish 296.

Limitation on Enrollment: This course is not open to students with credit for or concurrent enrollment in Spanish 100.

This is a continuation of Spanish 101. In this interactive course, students use listening, reading, speaking and writing at a more complex level. Students further develop their receptive and productive competencies to the intermediate low or mid level. Additional language structures and vocabulary for communication are examined and explored in Spanish. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Spanish (SPAN) 199 is equivalent to 102 and 201 combined (per catalog): maximum credit, 10 units. (CAN SPAN 4) (CAN SPAN SEQ A = SPAN 101 + 102)

199 Second/Third Course in Spanish Accelerated

10 hours, 10 units

Limitation on Enrollment: This course is not open to students with credit for or concurrent enrollment in Spanish 102 or 201.

This accelerated course provides an opportunity for those students who have succeeded in Spanish 101 (a regular beginning course) to move more rapidly toward their goals of achieving understanding, speaking, reading and writing proficiencies than would be possible by enrolling in a regular Spanish 102 course. The 199 course is equivalent to 102 and 201 combined. Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Spanish (SPAN) 199 is equivalent to 102 and 201 combined (per catalog): maximum credit, 10 units.

201 Third Course in Spanish

Prerequisite: Spanish 102 with a grade of “C” or better, or equivalent.

Limitation on Enrollment: This course is not open to students with credit for or concurrent enrollment in Spanish 199 or 200.

This course is the first semester of an intermediate level study of Spanish. It stresses further grammatical development in Spanish beyond second semester through oral and written communication. It also provides increased practice in readings of culturally relevant authentic materials. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Spanish (SPAN) 102,202 combined with Chicano Studies 203, 204: maximum credit, one sequence. (CAN SPAN 8) (CAN SPAN SEQ B = SPAN 201 + 202)

202 Fourth Course in Spanish

Prerequisite: Spanish 201 with a grade of “C” or better, or equivalent.

Limitation on Enrollment: This course is not open to students with credit for Spanish 200.

This course is offered as an advanced intermediate level course. It reviews and furthers grammatical features in Spanish through oral and written communication. It also provides increased practice in readings of culturally relevant authentic materials. (FT) Transfer Credit: CSU and/or private coll/univ. UC Transfer Credit: Spanish (SPAN) 102,202 combined with Chicano Studies 203, 204: maximum credit, one sequence. (CAN SPAN 10) (CAN SPAN SEQ B = SPAN 201 + 202)
210 Conversation and Composition Spanish I
3 hours, 3 units
Prerequisite: Spanish 102 with a grade of “C” or better, or equivalent.
This course further develops oral comprehension and fluency as well as written communication at a mid-intermediate level in Spanish through culturally relevant materials. Students increase vocabulary, dramatize everyday topics of conversation, interpret and describe materials, and compare and contrast Latin American and Spanish cultures with U.S. culture both orally and in writing. Writing strategies are emphasized and literature is introduced. This course is intended for students who want to enhance their skills in the Spanish language. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

211 Conversation and Composition Spanish II
3 hours, 3 units
Prerequisite: Spanish 210 with a grade of “C” or better, or equivalent.
This course further develops oral comprehension and fluency as well as written communication at an advanced intermediate level in Spanish through culturally relevant materials. Students further increase vocabulary, dramatize everyday topics of conversation, interpret and describe materials, and compare and contrast Latin American and Spanish cultures with U.S. culture, both orally and in writing. Pre-reading strategies introduced in Spanish 210 are used as a basis upon which to build course emphasis in reading. More literature is introduced. This course is intended for students who want to further enhance their skills in Spanish. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

SPECIAL EDUCATION
(See Disabled Students Programs and Services)

SPEECH COMMUNICATIONS (SPEE)

99 Voice and Diction for Non-native Speakers of English
3 hours, 3 units
This course emphasizes American English standards of pronunciation, listening comprehension, ear-training techniques, effective use of the vocal variables of the voice-rate, pitch force and quality, vocabulary building, conversation with emphasis on correct use of grammar, sentence structures, common American idioms, pronunciation and reading. (FT) Associate Degree Credit.

101 Voice and Articulation
3 hours lecture, 3 units
Grade Only
Advisory: English 51 and 56 with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This is an introduction to basic techniques of clear articulation to develop effective voice usage in standard American English. The emphasis in this course is on effective sound production and vocal quality. It is recommended for people who deal with the public such as selling and providing public services. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

103 Oral Communication
3 hours, 3 units
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for Chicano Studies 103, Black Studies 152, or Bilingual Studies 103.
This course offers a wide variety of reading, application and speaking assignments designed to expose students to all the major skills of speechmaking. Students focus on the following basic elements: ethics; analyzing the audience; visual aids; choosing a topic and specific purpose; outlining; listening; organizing a speech; delivery; small group communication; informative and persuasive speaking; speaker credibility; effective use of language; library research; and communication and/or speeches to entertain. All students give several speeches both with and without visual aids. This course is designed to prepare students for majors in Communications as well as for the general population.
Designated sections of this course are taught from a specific cultural perspective and are cross-listed under Bilingual Studies, Black Studies, and Chicano Studies in the catalog and class schedule. Transfer Credit: CSU and/or private coll/univ.; UC. (CAN SPCH 4) (CAN SPCH 2)

104 Advanced Public Communication
3 hours, 3 units
Prerequisite: Speech 103 with a grade of "C" or better, or equivalent.
This course covers theory, practice and critical analysis of public communication, including speeches on subjects of current interest both local and global. It includes an introduction to the relationship between rhetorical theory and criticism and rhetorical practice in public communication (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

111 Oral Interpretation
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and Speech 103 with a grade of "C" or better, or equivalent.
This course involves theory and practice in the interpretational performance of literature. The course concentrates on the development of analytical skills and emphasizes the use of verbal and nonverbal communication in the interpretation of various literary genres including prose, poetry and drama. Literature is selected from a wide variety of world cultures and is taught from a multicultural perspective. The course is designed for the transfer student intending to major in Speech Communications. Transfer Credit: CSU and/or private coll/univ.

117A Intercollegiate Forensics
3-9 hours lab, 1-3 units
Prerequisite: Speech 103 and 160, each with a grade of "C" or better, or equivalent, including high school and/or collegiate debate experience.
This course is for the student who is interested in intercollegiate forensics (speech and debate) competition. Special emphasis is given to the preparation of platform speeches (informative, persuasive and after-dinner) and novice intercollegiate debate. Students taking the course for one unit participate in one event and one tournament; for two units, two events and two tournaments; for three units, three events and three tournaments. (FT) Transfer Credit: CSU and/or private coll/univ.

117B Intercollegiate Forensics
3-9 hours lab, 1-3 units
Prerequisite: SPEE 117A with a grade of "C" or better, or equivalent.
This course is for the student who is interested in intercollegiate forensics (speech and debate) competition. Special emphasis is given to the preparation of oral interpretation events (poetry, prose and drama) and intercollegiate debate. Students taking the course for 1 unit participate in one event and one tournament; for two units, two events and two tournaments; for three units, three events and three tournaments. (FT) Transfer Credit: CSU and/or private coll/univ.

117C Intercollegiate Forensics
3-9 hours lab, 1-3 units
Prerequisite: SPEE 117B with a grade of "C" or better, or equivalent.
This course is for the student who is interested in intercollegiate forensics (speech and debate) competition. Special emphasis is given to limited preparation speech events (imromptu and extemporaneous) and debate. Students taking the course for one unit participate in one event and one tournament; for two units, two events and two tournaments; for three units, three events and three tournaments. (FT) Transfer Credit: CSU and/or private coll/univ.

117D Intercollegiate Forensics
3-9 hours lab, 1-3 units
Prerequisite: Speech 117C with a grade of "C" or better, or equivalent.
This course is for the student who is interested in intercollegiate forensics (speech and debate) competition. Special emphasis is given to the preparation of five (pentathlon) speech events, debate and team leadership. Students taking the course for one unit participate in one event and one tournament; for two units, two events and two tournaments; for three units, at least three events and three tournaments. (FT) Transfer Credit: CSU and/or private coll/univ.

135 Interpersonal Communication
3 hours lecture, 3 units
Advisory: English 51 and English 56 with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is designed to offer students an opportunity to investigate those areas of speech communication that are oriented toward interpersonal contexts. The
course emphasizes understanding the idea of "self-concept" as well as understanding others. The class addresses the skills and strategies needed to communicate effectively both verbally and nonverbally. The class also addresses interpersonal issues such as relational development and maintenance principles, effective listening behavior, reducing defensiveness, and conflict resolution. The course is intended for students interested in studying interpersonal communication, particularly majors in communication, fashion, allied health and business. This course is also intended for all students who are interested in further development of effective interpersonal skills in the work, volunteer and personal environments. (FT) Transfer Credit: CSU and/or private coll/univ. (CAN SPCH 8)

160 Argumentation
3 hours, 3 units

Prerequisite: Speech 103 with a grade of “C” or better, or equivalent.

This is a course in the construction and analysis of argument. The course emphasizes the essentials of argumentation: theory, research, and analyses of propositions, tests of evidence, construction and application of arguments to everyday life and public policy. (FT) Transfer Credit: CSU and/or private coll/univ.; UC. (CAN SPCH 6)

165 Service - Learning for Civic Leadership
2-3 hours lecture, 2-3 units

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

Limitation on Enrollment: This course is not open to students with credit for Speech 265:Community Service Learning for Civic Leadership.

This course explores the role of civic responsibility and leadership in American society and in the life of individuals. It is designed for all students interested in civic responsibility and involvement in service. This course provides an examination of volunteerism and provides students with opportunities to engage in experiential learning activities outside of the classroom. The focus of the course is on the preparation of students for future community leadership positions. The lectures provide for planning, orientation, reflection, and analysis; in addition, twelve hours of volunteer service work will be required for each unit of credit. Experiential learning activities include involvement in the Habitat for Humanity, America Reads, and other college-approved service projects and are integrated with reflection and analysis for the purpose of exploration and civic responsibility. (FT) Transfer Credit: CSU and/or private coll/univ.

170 Small Group Communication
3 hours, 3 units

Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and Speech 103 with a grade of "C" or better, or equivalent.

This course offers practical experience in the techniques of leading and participating in small group discussions. Small group techniques such as panels, symposiums, problem solving, conflict resolution, leadership skills and parliamentary procedures are covered. Community building through service learning is presented as a tool to creating collective consciousness and an altruistic philosophy. This course is designed for students intending to major in speech communications, business, international business, education, and all fields of study and certifications that require group and team building skills. (FT) Transfer Credit: CSU and/or private coll/univ. (CAN SPCH 10)

180 Intercultural Communication
3 hours, 3 units

Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5; and Speech 103 with a grade of "C" or better, or equivalent.

Intercultural communication is the study of communication between members of differing cultures. The discipline focuses on the relationship between culture and communication emphasizing social psychological variables, verbal and nonverbal language systems, cross-cultural communication breakdowns and conflict resolution. Practical application of intercultural communication principles to contemporary problems of cross-cultural and international communication will be stressed. This course is designed for students intending to major in speech communications, international business, business education, social sciences, nursing, mass communications, and all fields of study and certifications that require cross-cultural contact and/or awareness of cultural distinctions. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

290 Independent Study
Hours by Arrangement; 1-3 units

Limitation on Enrollment: Must obtain an Add Code from instructor for registration.

Advanced special work in debate, radio interpretation, public address. This course may be taken four times with different content for a maximum of six units.
This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

101 First Course in Tagalog
5 hours, 5 units
Advisory: English 43 with a grade of "C" or better, or equivalent, or Assessment Skill Level W4.
This course in Tagalog is the first in its language sequence. This is an entry-level course to the Filipino language and culture. In this interactive course, students use the language through speaking, listening, reading, and writing at the novice level. Basic language structures, appropriate forms of address, and vocabulary for communication are examined and explored. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

102 Second Course in Tagalog
5 hours, 5 units
Prerequisite: Tagalog 101 with a grade of "C" or better, or equivalent.
Advisory: Concurrent enrollment in TAGA 296. This course in Tagalog is the second in its language sequence. This course reinforces Filipino culture and Tagalog language concepts studied in the first semester course and introduces additional Filipino cultural and language structures at the low-intermediate level. This interactive course builds on the basic Tagalog language structures and adds new structures through speaking, listening, reading, and writing at the low-intermediate level of grammar mastery. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

201 Third Course in Tagalog
5 hours lecture, 5 units
Prerequisite: Tagalog 102 with a grade of "C" or better, or equivalent.
This is an intermediate course and is the third in its language sequence. In this interactive course, students use the language through speaking, listening, reading, and writing at the intermediate level. More complex language structures and vocabulary for communication are examined and explored. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

105 Introduction to Travel Services
3 hours, 3 units
Grade Only
Advisory: English 51 and 56 and Mathematics 32, each with a grade of "C" or better, or equivalent or Assessment Skill Levels W5, R5 and M20.
This course is an introduction to the various fields that make up the travel, tourism, and hospitality industry. A study of creation, marketing and distribution of the many travel products is undertaken. The importance of service to the customer is stressed in each of the fields studied. Students examine the infrastructure of the industry as well as the many career opportunities it presents. (FT) Transfer Credit: CSU and/or private coll/univ.

110 Domestic and International Ticketing
3 hours, 3 units
Grade Only
Advisory: Travel and Tourism 105 with a grade of "C" or better, or equivalent; and English 51 and 56, and Mathematics 32, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5, R5 and M20. This course provides instruction in the basic procedures of domestic and international airline ticketing. Students complete other necessary transactions such as refunds and exchanges on tickets. The primary goal for the class will be for students to build, fare, and ticket a standard airline reservation. (FT) Transfer Credit: CSU and/or private coll/univ.

111 Travel to Asia and the Pacific
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of "C" or better, or equivalent, or Assessment Skill Levels W5 and R5. This course is an in-depth study of the countries, major cities, points of interest, characteristics, and customs
of people throughout Asia and the Pacific. (FT) Transfer Credit: CSU and/or private coll/univ.

112 Travel to Western Hemisphere

3 hours, 3 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is an in-depth study of the countries, major cities, points of interest, characteristics, and customs of people throughout the Western Hemisphere. (FT) Transfer Credit: CSU and/or private coll/univ.

113 Travel to Europe and Africa

3 hours, 3 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is an in-depth study of the countries, major cities, points of interest, characteristics, and customs of people throughout Europe and Africa. (FT) Transfer Credit: CSU and/or private coll/univ.

115 Travel Agency Management

3 hours, 3 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A study of travel agency management requirements. Orientation to regulatory agencies, reporting and administrative forms, sales agreements, and agency appointment procedures, interrelationship of the travel agency with airlines, steamship companies, railroads, wholesalers, tour companies and operators. Methods of charter and group travel promotion. (FT) Transfer Credit: CSU and/or private coll/univ.

120 Travel Agents Computer Technology

3 hours, 3 units
Grade Only

Instruction in the use of computer systems for handling travel arrangements, including airline reservations, itinerary planning, in-flight services, hotel accommodations, ground transportation, etc. Classes are held at designated travel agencies. (FT) Transfer Credit: CSU and/or private coll/univ.

121 Cruises

3 hours, 3 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
Limitation on Enrollment: This course is not open to students with credit for Travel and Tourism 155.
This course is a study of cruise lines, steamships, sailing vessels, and barges. Profiles of each cruise line and the various air/sea packages available are analyzed. Instruction is given in the use of cruise manuals and resource materials. Students will practice qualifying clients and will use various sales techniques to close sales. (FT) Transfer Credit: CSU and/or private coll/univ.

130 Tourism and Visitor Services

3 hours, 3 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
A study of typical attractions, hotels, restaurants, and convention facilities available to the visitor, using San Diego as a model city. Familiarization with community service organizations and governmental agencies designed to aid the visitor. Methods of promoting tourism and arranging visitor services. (FT) Transfer Credit: CSU and/or private coll/univ.

132 Meeting and Convention Planning

3 hours, 3 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course is an introduction to the fields of meeting and convention planning. Information is given on the careers available and skills needed in this area. The difference in meetings and conventions are analyzed. The various steps taken to plan, organize, and produce meetings, conventions, or trade shows are discussed. (FT) Transfer Credit: CSU and/or private coll/univ.

145 Tours and Tour Guiding

3 hours, 3 units
Grade Only

Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.
This course provides instruction in the various aspects of tour development, tour operations and tour guiding.
Students examine the infrastructure of the organized tour industry and explore the career opportunities available to them. (FT) Transfer Credit: CSU and/or private coll/univ.

**180 Basic Sabre Reservations**

1.5 hours lecture, 1.5 hours lab, 2 units

*Grade Only*

**Advisory:** Travel and Tourism 110 with a grade of “C” or better, or equivalent; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

**Limitation on Enrollment:** This course is not open to students with credit for Travel and Tourism 120.

This course provides instruction in the basics of automation and selling skills in the travel industry. The major portion of the class is devoted to learning how to operate the SABRE (American Airlines) computer for all aspects of travel arrangements. The course also stresses participation in an interactive program of sales skills training. The practical application of travel industry knowledge, automation function and selling skills are emphasized. (FT) Transfer Credit: CSU and/or private coll/univ.

**182 Advanced SABRE Reservations**

1.5 hours lecture, 1.5 hours lab, 2 units

*Grade Only*

**Advisory:** Travel and Tourism 180 with a grade of “C” or better, or equivalent; and English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5.

**Limitation on Enrollment:** This course is not open to students with credit for Travel and Tourism 120.

This course provides instruction in accelerated reservations procedures for SABRE (American Airlines) including such auxiliary functions as booking hotels and rental cars. A major portion of the class is devoted to learning how to access various informational and organizational services in SABRE. Students will also participate in an interactive program of sales skills training. (FT) Transfer Credit: CSU and/or private coll/univ.

**270 Work Experience**

Hours by Arrangement, 1-4 units

*Grade Only*

**Limitation on Enrollment:** To receive credit a student must complete a minimum of seven units during the semester, including work experience.

Program of on-the-job learning experiences for students employed in a job related to their major. The combined maximum credit for all work experience courses from all disciplines may not exceed 16 units. Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

**101 First Course in Vietnamese**

5 hours lecture, 5 units

**Advisory:** English 56 with a grade of "C" or better, or equivalent, or R5.

This is the first course in Vietnamese with emphasis on understanding, speaking and reading the language of everyday life. In this interactive course, the elements of grammar are examined with practice in writing Vietnamese, using the subject matter relating to the culture and traditions. Basic language structures and vocabulary for communication are examined and explored in Vietnamese. This course may especially be of interest to students preparing for a career in education. (FT) Transfer Credit: CSU and/or private coll/univ.; UC.

**102 Second Course in Vietnamese**

5 hours lecture, 5 units

**Prerequisite:** Vietnamese 101 with a grade of "C" or better, or equivalent.

This is a continuation of Vietnamese 101. In this interactive course, students use listening, reading, speaking and writing at more complex levels. The students further develop their receptive and productive competencies to the intermediate low or mid level. The elements of grammar are examined with practice in writing Vietnamese, using the subject matter relating to the culture and traditions. This course is intended for students interested in languages and for those interested in further academic study of Vietnamese. (FT) Transfer credit: CSU and/or private coll/univ.; UC.
201 Third Course in Vietnamese  
5 hours, 5 units  
**Prerequisite:** Vietnamese 102 with a grade of “C” or better, or equivalent.  
**Advisory:** English 43 with a grade of “C” or better, or equivalent, or Assessment Skill Level W4; and concurrent enrollment in Vietnamese 296.  
This is an intermediate course and is the third in the Vietnamese language sequence. In this interactive course, students use the language through speaking, listening, reading, and writing at the intermediate level. More complex language structures and vocabulary for communication are examined and explored as well as literary and historical aspects of Vietnamese culture. (FT) Transfer Credit: CSU and/or private coll/univ.

This discipline may offer specialized instruction in one or more of the following areas: Supervised Tutoring (044), Special Topics (265), Independent Study (290), Individualized Instruction (296), Service Learning (277), Applied Applications and Software Skills (045L), or Work Experience (270). Detailed course descriptions are listed on page 182. Please refer to the class schedule and/or see the dean or department chair for availability.

## WATER AND WASTEWATER TECHNOLOGY (WATR)

### 101 Fundamentals-Water/Wastewater  
3 hours, 3 units  
**Grade Only**  
**Advisory:** English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20.  
This course is designed to give students a broad overview of the water and wastewater fields and the issues confronting the industry. The students will learn how source waters are obtained, treated, and distributed and how wastewater is collected, transported and disposed of in the area. Contemporary issues facing the water and wastewater industry will also be explored. (FT) Associate Degree Credit.

### 102 Calculations in Water and Wastewater Technology  
3 hours, 3 units  
**Grade Only**  
**Advisory:** English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20.  
The study of the mathematical principles in solving problems related to treatment systems including hydraulic volumes, dimensional analysis, primary and secondary sewage treatment, calculations and chemical dose rates as it relates to water/wastewater technology. Associate Degree Credit.

### 104 Basic Hydraulics  
3 hours, 3 units  
**Grade Only**  
**Advisory:** English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and Water/Wastewater 102 with a grade of “C” or better, or equivalent.  
A study of the hydraulics necessary in the operation of water and maintenance plants and systems. There will be consideration of the types of pumps used in water and/or wastewater service, their operational characteristics and maintenance, and the problems common to their use. Associate Degree Credit.

### 106 Introduction to Electrical and Instrumentation Processes  
3 hours, 3 units  
**Grade Only**  
**Advisory:** English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and Water/Wastewater 102 with a grade of “C” or better, or equivalent.  
An introductory course in basic electron theory and electrical principles. Electrical safety precautions, component identification, schematic interpretation, motors, transformers, relays, and test equipment will be studied. Automated process control devices and an overview of current technologies will be discussed. Associate Degree Credit.

### 110 Laboratory Analysis for Water/Wastewater Technology  
3 hours, 3 units  
**Grade Only**  
**Advisory:** English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and Water/Wastewater 102 with a grade of “C” or better, or equivalent.  
Examines basic fundamentals of laboratory analysis with emphasis on applied chemical and microbiological
procedures for water and wastewater plant operators. Course will include procedures and techniques used in physical, chemical, bacteriological and biological examination of water/wastewater. Associate Degree Credit.

112 Basic Plant Operations: Water Treatment
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and Water/Wastewater 102 with a grade of “C” or better, or equivalent.
Designed to study sources of water, public health aspects of water supply, chemical, physical and bacteriological standards of water quality, types of water treatment plants, water treatment procedures, operation, maintenance, storage and distribution. Associate Degree Credit.

114 Basic Plant Operations: Wastewater Treatment
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and Water/Wastewater 102 with a grade of “C” or better, or equivalent.
Designed to familiarize the student with wastewater collection systems and the essential safety procedures necessary to their operation, including preliminary and primary treatment processes and maintenance of a wastewater treatment plant. Associate Degree Credit.

117 Advanced Plant Operation: Water Treatment
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and Water/Wastewater 112 with a grade of “C” or better, or equivalent.
A course designed to study water quality control and treatment. Aspects of public health as they relate to water supply will be highlighted. Sources of contamination and methods of control will be emphasized as well as maintenance of water treatment facilities with safety cost and environment factors stressed. Associate Degree Credit.

120 Advanced Plant Operation: Wastewater Treatment
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20; and Water/Wastewater 114 with a grade of “C” or better, or equivalent.
Designed to familiarize the students with wastewater collection systems; treatment process units; equipment and facilities operation and maintenance; application of laboratory results to process control; and essential safety procedures necessary for operation and maintenance of wastewater facilities. Associate Degree Credit.

130 Water Distribution Systems
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20.
This course is designed to enable the student to understand the operation and maintenance of a waterworks distribution system. (FT) Associate Degree Credit.

132 Wastewater Collection Systems
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and R5; and Mathematics 32 with a grade of “C” or better, or equivalent, or Assessment Skill Level M20.
This course is designed to familiarize the student with the components of wastewater collection systems. The course will overview design installation, operation, monitoring, maintenance, and repair of sewer pipelines, pump stations, and related facilities. (FT) Associate Degree Credit.

134 Mechanical Maintenance
3 hours, 3 units
Grade Only
Advisory: English 51 and 56, each with a grade of “C” or better, or equivalent, or Assessment Skill Levels W5 and
OCCUPATIONAL WORK EXPERIENCE is a program of on-the-job learning experiences for students employed in jobs related to an occupationally oriented major. The goals and course assignments for completion of the courses are formulated with industry under the direction of the college instructor assigned to teach Work Experience 270. The grading system is the same as for other subjects offered by the college, and the time spent for preparation and training is comparable. Adequate records are maintained to determine satisfactory progress and attendance.

270 Occupational Work Experience (Parallel Plan)

*Hours by Arrangement; 1-4 units
Grade Only*

Limitation on Enrollment: To receive credit a student must complete a minimum of seven units during the semester, including work experience. During summer sessions, one other course must be taken concurrently. Failure to complete seven units during Fall/Spring and/or other class during Summer session will result in course credit being denied and/or removed.

A program of on-the-job learning experiences for students employed in a job related to an occupationally oriented major for which no work experience course is offered. One unit of credit is earned for each 75 hours of paid employment or 60 hours of volunteer work. This course may be taken four times for a maximum of 16 units. However, the combined maximum credit for all Work Experience courses from all disciplines may not exceed 16 units. Transfer Credit: CSU and/or private coll/univ.
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Institution/University</th>
<th>Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABBOTT, Donald R.</td>
<td>History</td>
<td>B.A., M.A., San Diego State University</td>
<td>History</td>
</tr>
<tr>
<td>ADAMS, Paul</td>
<td>Physical Education</td>
<td>B.A., San Diego State University</td>
<td>Physical Education</td>
</tr>
<tr>
<td>ADASKIN, Joan R.</td>
<td>Mathematics</td>
<td>A.B. Western Reserve University M.Ed., Boston University M.A.T., Brown University</td>
<td>Mathematics</td>
</tr>
<tr>
<td>ADELSON, Evan</td>
<td>Sociology</td>
<td>B.A. Haverford College, PA Ph.D. University of California, San Diego</td>
<td>Sociology</td>
</tr>
<tr>
<td>ADONA, Gabriel</td>
<td>Counselor</td>
<td>B.A., San Diego State University M.S., San Diego State University</td>
<td>Counselor</td>
</tr>
<tr>
<td>ADRIAN, Loretta</td>
<td>Dean, Student Affairs</td>
<td>B.A., University of Philippines M.A., University of Pacific</td>
<td>Dean, Student Affairs</td>
</tr>
<tr>
<td>ALEXANDER, Edward</td>
<td>Chemistry</td>
<td>B.S., City College of the City University of New York Ph.D., State University of New York, Buffalo</td>
<td>Chemistry</td>
</tr>
<tr>
<td>ALLRED, Christie</td>
<td>English/ESL</td>
<td>B.A., M.A., San Diego State University</td>
<td>English/ESL</td>
</tr>
<tr>
<td>AL-MUKHTAR, Temma Kadhim</td>
<td>Medical Assisting</td>
<td>M.S., Baghdad University, Baghdad, Iraq M.B.Ch.B, Al Mustansiyra Univ. Baghdad, Iraq</td>
<td>Medical Assisting</td>
</tr>
<tr>
<td>ALTHAUS, Christine</td>
<td>Disabled Student Programs and Services</td>
<td>B.A., University of California, Santa Barbara M.S., San Diego State University</td>
<td>Disabled Student Programs and Services</td>
</tr>
<tr>
<td>ALVARADO, Kathleen G.</td>
<td>Counselor</td>
<td>B.V.E., M.S., San Diego State University</td>
<td>Counselor</td>
</tr>
<tr>
<td>ARMSTRONG, Elizabeth</td>
<td>Vice President, Instruction</td>
<td>B.A. M.Sc., San Francisco State University</td>
<td>Vice President, Instruction</td>
</tr>
<tr>
<td>AVORH, John</td>
<td>Political Science</td>
<td>B.A., University of Ghana, Ghana M.A., Baylor University, Texas M.A., Syracuse University, NY Ph.D., Atlanta University, GA</td>
<td>Political Science</td>
</tr>
<tr>
<td>BAKER, Jill</td>
<td>Librarian</td>
<td>B.A., University of CA, Riverside M.L.S., San Jose State University</td>
<td>Librarian</td>
</tr>
<tr>
<td>BALICH, Michael S.</td>
<td>Architecture</td>
<td>B.Arch., California State Polytechnic College University</td>
<td>Architecture</td>
</tr>
<tr>
<td>BARRINGTON, Elizabeth</td>
<td>Health Education</td>
<td>A.A., Miramar College B.A., National University M.A., San Diego State University</td>
<td>Health Education</td>
</tr>
<tr>
<td>BASS, Alan L.</td>
<td>Mathematics</td>
<td>B.S., M.S., University of North Carolina, Wilmington</td>
<td>Mathematics</td>
</tr>
<tr>
<td>BAUTISTA, Manny</td>
<td>Physical Education, Cross Country</td>
<td>A.A., South Plains Community College, Levelland, Texas B.S., California Poly State University M.S., Kansas State University</td>
<td>Physical Education, Cross Country</td>
</tr>
<tr>
<td>BEAVER, Henry</td>
<td>Instructional Systems Specialist</td>
<td>B.A., Macalester College, St. Paul, Minnesota M.S., Mankato State University, Minnesota</td>
<td>Instructional Systems Specialist</td>
</tr>
<tr>
<td>BELEW, Sandra</td>
<td>Mathematics</td>
<td>B.A. University of California, San Diego M.A. University of California, San Diego</td>
<td>Mathematics</td>
</tr>
<tr>
<td>BERGLAND, Yvonne P. Dr.</td>
<td>Dean, Instructional Services and Economic Development</td>
<td>B.V.Ed., M.A., San Diego State University Ph.D., Ohio State University Registered Record Administrator, American Health Information Management Association</td>
<td>Dean, Instructional Services and Economic Development</td>
</tr>
<tr>
<td>BERMANN-ENN, Beate</td>
<td>Art History</td>
<td>B.A., M.A., California State University, Long Beach</td>
<td>Art History</td>
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<tr>
<td>BERRY, George (Jeff)</td>
<td>Spanish</td>
<td>B.A., M.A., San Diego State University</td>
<td>Spanish</td>
</tr>
<tr>
<td>BIBERMAN, Joseph</td>
<td>Disabled Students Programs &amp; Services, Adapted Computer Specialist</td>
<td>A.S., Pennsylvania Institute of Technology B.A., Temple University M.Ed., Temple University</td>
<td>Disabled Students Programs &amp; Services, Adapted Computer Specialist</td>
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<tr>
<td>BINGHAM, Leela</td>
<td>Spanish</td>
<td>B.A., M.A., San Diego State University</td>
<td>Spanish</td>
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<tr>
<td>BOYD, Arthur</td>
<td>Counselor</td>
<td>B.S., University of LaVerne M.A., National University M.S., San Diego State University Ph.D., La Salle University</td>
<td>Counselor</td>
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<tr>
<td>Name</td>
<td>Department/Program</td>
<td>B.A./M.A./Ph.D.</td>
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<tr>
<td>Bray, Nancy</td>
<td>Mathematics, Computer Science</td>
<td>Occidental College, San Diego State University</td>
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<tr>
<td>Brothers, William</td>
<td>Biology/Anatomy/Physiology</td>
<td>San Diego State University, San Diego State University</td>
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<tr>
<td>Browne, Henry D.</td>
<td>PE. (Football)</td>
<td>University of California, Los Angeles, San Diego State University</td>
<td></td>
</tr>
<tr>
<td>Broylolf, Anita M.</td>
<td>Art</td>
<td>Skidmore College, Claremont Graduate School</td>
<td></td>
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<tr>
<td>Buchanan, Barbara</td>
<td>American Sign Language</td>
<td>Gallaudet University, Washington, D.C.</td>
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<tr>
<td>Brown, Michael</td>
<td>Mathematics</td>
<td>Mathematics, Westmont College, University of California, San Diego</td>
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<tr>
<td>Brynolf, Anita M.</td>
<td>Art</td>
<td>Skidmore College, Claremont Graduate School</td>
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<tr>
<td>Coates, Pamela</td>
<td>Economics</td>
<td>Sangamon State University, Springfield, IL, University of Maryland, College Park</td>
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<tr>
<td>Cogan, Diane</td>
<td>English/Reading</td>
<td>Quincy College, Marquette University</td>
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<td>Conrad, Gail</td>
<td>Disabled Students Programs &amp; Services</td>
<td>San Jose State University, Humboldt State University</td>
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<tr>
<td>Cooper, Darius</td>
<td>English</td>
<td>Xavier College, Bombay, India, University of Southern California, Bombay, India</td>
<td></td>
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<td>Cost, Jennifer</td>
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<td>Humboldt University, San Diego State University</td>
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<tr>
<td>Craft, William</td>
<td>Dean, Learning Resources/Instructor Support</td>
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<td></td>
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<td>Crakes, Ailene</td>
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<td>California Polytechnic University, San Diego State University</td>
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</tbody>
</table>
CRESWELL, Laura  
Mathematics  
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C.P.A., State of California  

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Ph.D., Indiana University

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